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## Keynumbers and Keywords

## A=1

- $^1\text{n}$       2008JI05      NUCLEAR REACTIONS  $^1\text{H}(\pi^-, \pi^0)$ , E at 104-153 MeV / c; measured  $E\gamma$ ,  $I\gamma$ ,  $\sigma(\theta)$ . Compared results to available data and model calculations. JOUR PRLTA 101 102301
- 2008NA14      NUCLEAR REACTIONS  $^1\text{H}(e, e'K^+)$ ,  $E < 2.05$  GeV; measured polarized structure function, reconstructed mass, missing mass,  $\sigma$ , asymmetries. JOUR PRVCA 77 065208
- 2008ZU02      NUCLEAR REACTIONS  $^2\text{H}(n, np)$ ,  $E = 20-140$  MeV; measured  $E_p$ ,  $I_p$ , neutron Time-of-Flight, angular distributions, correlated neutron pairs. JOUR BRSPÉ 72 782
- $^1\text{H}$       2008AL21      NUCLEAR REACTIONS  $^1\text{H}(\alpha, \alpha')p\pi\pi$ ,  $E = 4.2$  GeV; measured  $\alpha$ -p,  $\alpha$ - $\pi$  $\alpha$ - $\pi$  coincidences,  $\sigma$ ,  $\sigma(\theta)$ ; analyzed invariant mass distributions; SPES4- $\pi$  facility. JOUR PANUE 71 1302
- 2008A001      NUCLEAR REACTIONS  $^1\text{H}(^{58}\text{Ti}, ^{58}\text{Ti}')$ ,  $(^{60}\text{Cr}, ^{60}\text{Cr}')$ ,  $(^{62}\text{Cr}, ^{62}\text{Cr}')$ ,  $E \approx 40$  MeV / nucleon; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin.  $^{58}\text{Ti}$ ,  $^{60,62}\text{Cr}$  deduced levels, J,  $\pi$ , deformation lengths. Inverse kinematics. JOUR NUPAB 805 400c
- 2008GE02      NUCLEAR REACTIONS  $^2\text{H}(\text{polarized } e, e'n)$ ,  $E = 850$  MeV; measured electron energies, neutron-electron-coin. n; deduced charge form factor. JOUR PRLTA 101 042501
- 2008HU08      NUCLEAR REACTIONS  $^2\text{H}(p, d)$ ,  $E < 50$  keV; measured screening energies, enhancement factors of host metals Li, Al, Zr, Pd, Ta. Comparison with theory and existing data. JOUR PRVCA 78 015803
- 2008K018      NUCLEAR REACTIONS  $^1\text{H}(p, p)$ ,  $E = 0.353, 0.500, 0.550$  GeV; measured  $E_p$ ,  $I_p$ ,  $\sigma(\theta)$ . JOUR PRLTA 101 102501
- 2008RA17      NUCLEAR REACTIONS  $^2\text{H}(\text{polarized } p, d)$ ,  $E = 135$  MeV;  $^1\text{H}(\text{polarized } d, d)$ ,  $E = 65$  MeV / nucleon; measured  $s(\theta)$ , vector and scalar analyzing powers, scattering angle. Comparison with existing data. JOUR PRVCA 78 014006
- 2008TA15      NUCLEAR REACTIONS  $^1\text{H}$ ,  $^{16}\text{O}$ ,  $^{23}\text{Na}$ ,  $^{27}\text{Al}$ ,  $^{28}\text{Si}(n, n')$ ,  $(n, \gamma)$ ,  $E = 14$  MeV; measured  $E\gamma$ ,  $I\gamma$  using a NaI(Tl) detector with multiple time-gated system for use with complex samples. JOUR JRNCD 276 639

## A=2

- $^2\text{H}$       2007AZZZ      NUCLEAR REACTIONS  $^1\text{H}$ ,  $^{12}\text{C}(d, p)$ , E at 9.0 GeV / c; measured analyzing powers. REPT JINR-P1-2007-46, Azhgirey
- 2008FIZZ      NUCLEAR REACTIONS  $^1,2\text{H}$ ,  $^{6,7}\text{Li}$ ,  $^9\text{Be}$ ,  $^{10,11}\text{B}$ ,  $^{12,13}\text{C}$ ,  $^{14,15}\text{N}$ ,  $^{16}\text{O}$ ,  $^{19}\text{F}$ ,  $^{23,23m}\text{Na}$ ,  $^{24,25,26}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{28,29,30}\text{Si}$ ,  $^{31}\text{P}$ ,  $^{32,33,34}\text{S}$ ,  $^{35,37}\text{Cl}$ ,  $^{39,40,41}\text{K}$ ,  $^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ ,  $E = \text{thermal}$ ; measured cross sections;  $^{10}\text{B}(n, \alpha)$ ,  $E = \text{thermal}$ ; measured cross sections;  $^{25}\text{Mg}(n, \gamma)$ ,  $E = \text{thermal}$ ;  $^{13}\text{C}(n, \gamma)$ ,  $E = \text{thermal}$ ;  $^{105}\text{Pd}(n, \gamma)$ ,  $E = \text{thermal}$ ; measured  $E\gamma$ ,  $I\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone

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**A=2 (continued)**

- 2008HA27 NUCLEAR REACTIONS  $^{12}\text{C}(^{16}\text{O}, ^{14}\text{O})$ ,  $E=234$  MeV; measured charged particle spectra.  $^{14}\text{C}$ ; deduced levels,  $J$ ,  $\pi$ , configurations, widths of excited states.  $^7\text{Li}(^9\text{Be}, ^{14}\text{C})$ ;  $^{14}\text{C}(^{13}\text{C}, ^{14}\text{C})$ ,  $(^{14}\text{C}, ^{14}\text{C})$ ;  $^9\text{Be}(^7\text{Li}, d)$ ;  $^{13}\text{C}(\text{polarized } p, \pi^+)$ ,  $(n, n)$ ; comparison of levels. JOUR PRVCA 78 014319
- 2008TA15 NUCLEAR REACTIONS  $^1\text{H}$ ,  $^{16}\text{O}$ ,  $^{23}\text{Na}$ ,  $^{27}\text{Al}$ ,  $^{28}\text{Si}(n, n')$ ,  $(n, \gamma)$ ,  $E=14$  MeV; measured  $E_\gamma$ ,  $I_\gamma$  using a NaI(Tl) detector with multiple time-gated system for use with complex samples. JOUR JRNCD 276 639
- 2008TS04 NUCLEAR REACTIONS  $^2\text{H}(\gamma, K^0)$ ,  $E=0.8-1.1$  GeV; measured mass spectra, momentum distributions,  $\sigma$ . JOUR PRVCA 78 014001
- 2008W004 NUCLEAR REACTIONS  $^2\text{H}$ , C, Ti,  $\text{Fe}(\gamma, K^+\pi^-)$ ,  $E=0.61-0.382$  GeV; measured invariant mass spectra; deduced mass, width of  $\rho$  meson. JOUR PRVCA 78 015201

**A=3**

- $^3\text{H}$  2008FIZZ NUCLEAR REACTIONS  $^{1,2}\text{H}$ ,  $^{6,7}\text{Li}$ ,  $^9\text{Be}$ ,  $^{10,11}\text{B}$ ,  $^{12,13}\text{C}$ ,  $^{14,15}\text{N}$ ,  $^{16}\text{O}$ ,  $^{19}\text{F}$ ,  $^{23,23m}\text{Na}$ ,  $^{24,25,26}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{28,29,30}\text{Si}$ ,  $^{31}\text{P}$ ,  $^{32,33,34}\text{S}$ ,  $^{35,37}\text{Cl}$ ,  $^{39,40,41}\text{K}$ ,  $^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ ,  $E=\text{thermal}$ ; measured cross sections;  $^{10}\text{B}(n, \alpha)$ ,  $E=\text{thermal}$ ; measured cross sections;  $^{25}\text{Mg}(n, \gamma)$ ,  $E=\text{thermal}$ ;  $^{13}\text{C}(n, \gamma)$ ,  $E=\text{thermal}$ ;  $^{105}\text{Pd}(n, \gamma)$ ,  $E=\text{thermal}$ ; measured  $E_\gamma$ ,  $I_\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone
- 2008OTZZ NUCLEAR REACTIONS  $^4\text{He}(^{12}\text{Be}, ^{13}\text{B})$ ,  $E=50$  MeV / nucleon; measured  $E_\gamma$ ,  $I_\gamma$ ,  $\gamma\gamma$ , (particle) $\gamma$ -coin,  $\sigma(\theta)$ .  $^{13}\text{B}$ ; deduced levels,  $J$ ,  $\pi$ . REPT RIKEN-NC-NP-24,Ota
- $^3\text{He}$  2008BY02 NUCLEAR REACTIONS  $^2\text{H}(d, n)$ ,  $E=2.3-6.2$  keV; measured  $E_n$ ,  $I_n$ ,  $\sigma$ ; deduced astrophysical S-factor. JOUR ZAANE 36 151

**A=4**

- $^4\text{H}$  2008NA19 NUCLEAR REACTIONS  $^4\text{He}$ ,  $^{6,7}\text{Li}(^7\text{Li}, ^7\text{Be})$ ,  $E=455$  MeV; measured charged-particle spectra,  $E$ ,  $I_\gamma$ , (particle) $\gamma$ -coin,  $\sigma(\theta)$  for giant dipole and spin-dipole resonances. Cluster excitations. JOUR PRVCA 78 014303
- $^4\text{He}$  2008BA24 NUCLEAR REACTIONS  $^4\text{He}(\gamma, \pi^0)$ ,  $E=25$  MeV; measured  $\sigma$ , angular distributions; deduced reduced isovector amplitudes.  $^{12}\text{C}(\gamma, \pi^0)$ ; analyzed  $\sigma$ , deduced reduced isovector amplitudes. JOUR PRVCA 77 064601
- 2008B024 NUCLEAR REACTIONS  $^4\text{He}$ ,  $^{12}\text{C}(e, e')$ ,  $E=1.6-2.5$  GeV;  $^{15}\text{N}(e, e')$ ,  $E=2.285$  GeV; measured  $\sigma$ . JOUR PRVCA 78 015202
- $^4\text{Li}$  2008IH01 NUCLEAR REACTIONS  $^4\text{He}(p, n)$ ,  $E=346$  MeV; measured  $\sigma$ , angular distributions, analyzing powers. Comparison with PWIA calculations. JOUR PRVCA 78 024607

KEYNUMBERS AND KEYWORDS

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**A=5**

No references found

**A=6**

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| $^6\text{He}$ | 2008NA19 | NUCLEAR REACTIONS $^4\text{He}$ , $^6,^7\text{Li}$ ( $^7\text{Li}$ , $^7\text{Be}$ ), E=455 MeV; measured charged-particle spectra, E, $I_\gamma$ , (particle) $\gamma$ -coin, $\sigma(\theta)$ for giant dipole and spin-dipole resonances. Cluster excitations. JOUR PRVCA 78 014303 |
| $^6\text{Li}$ | 2008HA19 | NUCLEAR REACTIONS C(p, X) $^6\text{Li}$ / $^7\text{Li}$ / $^7\text{Be}$ , E=70 MeV; measured E, double differential $\sigma$ ; Bragg curve counter; Energy loss. JOUR NIMAE 592 73   |

**A=7**

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| $^7\text{He}$ | 2008NA19 | NUCLEAR REACTIONS $^4\text{He}$ , $^6,^7\text{Li}$ ( $^7\text{Li}$ , $^7\text{Be}$ ), E=455 MeV; measured charged-particle spectra, E, $I_\gamma$ , (particle) $\gamma$ -coin, $\sigma(\theta)$ for giant dipole and spin-dipole resonances. Cluster excitations. JOUR PRVCA 78 014303  |
|               | 2008WUZZ | NUCLEAR REACTIONS $^2\text{H}$ ( $^8\text{Li}$ , $^3\text{He}$ ), E=76 MeV; measured particle spectra, $\sigma(\theta)$ , Q-value spectra; $^7\text{He}$ ; deduced levels. CONF Crete(FINUSTAR 2),Proc.P225,Wuosmaa   |
| $^7\text{Li}$ | 2008FIZZ | NUCLEAR REACTIONS $^1,^2\text{H}$ , $^6,^7\text{Li}$ , $^9\text{Be}$ , $^{10,11}\text{B}$ , $^{12,13}\text{C}$ , $^{14,15}\text{N}$ , $^{16}\text{O}$ , $^{19}\text{F}$ , $^{23,23m}\text{Na}$ , $^{24,25,26}\text{Mg}$ , $^{27}\text{Al}$ , $^{28,29,30}\text{Si}$ , $^{31}\text{P}$ , $^{32,33,34}\text{S}$ , $^{35,37}\text{Cl}$ , $^{39,40,41}\text{K}$ , $^{102,104,105,106,108,110}\text{Pd}$ (n, $\gamma$ ), E=thermal; measured cross sections; $^{10}\text{B}$ (n, $\alpha$ ), E=thermal; measured cross sections; $^{25}\text{Mg}$ (n, $\gamma$ ), E=thermal; $^{13}\text{C}$ (n, $\gamma$ ), E=thermal; $^{105}\text{Pd}$ (n, $\gamma$ ), E=thermal; measured $E_\gamma$ , $I_\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone |
|               | 2008HA19 | NUCLEAR REACTIONS C(p, X) $^6\text{Li}$ / $^7\text{Li}$ / $^7\text{Be}$ , E=70 MeV; measured E, double differential $\sigma$ ; Bragg curve counter; Energy loss. JOUR NIMAE 592 73  |
|               | 2008PA26 | NUCLEAR REACTIONS $^{208}\text{Pb}$ ( $^7\text{Li}$ , $^7\text{Li}$ ), E=18-28 MeV; measured reaction product spectra, scattering $\sigma$ ; $^7\text{Li}$ ; deduced dipole polarizability. Comparison with continuum discretized coupled channel calculations. JOUR PRVCA 78 021601  |
|               | 2008ZH20 | NUCLEAR REACTIONS $^{10}\text{B}$ (n, $\alpha$ ), E=4.0, 5.0; $^{238}\text{U}$ (n, F), E=4.0 MeV; measured $\sigma$ ; gridded ionization chamber; comparison with previous results and JENDL-3.3, ENDF / B-VII evaluations. JOUR ARISE 66 1427  |
| $^7\text{Be}$ | 2008HA19 | NUCLEAR REACTIONS C(p, X) $^6\text{Li}$ / $^7\text{Li}$ / $^7\text{Be}$ , E=70 MeV; measured E, double differential $\sigma$ ; Bragg curve counter; Energy loss. JOUR NIMAE 592 73  |

KEYNUMBERS AND KEYWORDS

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A=8

- <sup>8</sup>He      2008RY03      ATOMIC MASSES <sup>8</sup>He; measured mass using a penning trap. JOUR PRLTA 101 012501
- <sup>8</sup>Li      2008FIZZ      NUCLEAR REACTIONS <sup>1,2</sup>H, <sup>6,7</sup>Li, <sup>9</sup>Be, <sup>10,11</sup>B, <sup>12,13</sup>C, <sup>14,15</sup>N, <sup>16</sup>O, <sup>19</sup>F, <sup>23,23m</sup>Na, <sup>24,25,26</sup>Mg, <sup>27</sup>Al, <sup>28,29,30</sup>Si, <sup>31</sup>P, <sup>32,33,34</sup>S, <sup>35,37</sup>Cl, <sup>39,40,41</sup>K, <sup>102,104,105,106,108,110</sup>Pd(n,  $\gamma$ ), E=thermal; measured cross sections; <sup>10</sup>B(n,  $\alpha$ ), E=thermal; measured cross sections; <sup>25</sup>Mg(n,  $\gamma$ ), E=thermal; <sup>13</sup>C(n,  $\gamma$ ), E=thermal; <sup>105</sup>Pd(n,  $\gamma$ ), E=thermal; measured E $\gamma$ , I $\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007)  
Proc.P26,Firestone
- 2008GA17      NUCLEAR REACTIONS <sup>9</sup>Be(<sup>22</sup>Mg, <sup>23</sup>Al), (<sup>23</sup>Al, <sup>23</sup>Al'), E=150 MeV / nucleon; measured fragment spectra, E $\gamma$ , I $\gamma$ , (fragment) $\gamma$ -coin. <sup>23</sup>Al; deduced levels, spectroscopic factors. JOUR PYLBB 666 218
- <sup>8</sup>Be      2008SP04      NUCLEAR REACTIONS <sup>12</sup>C(<sup>36</sup>S, <sup>40</sup>Ar), E=70 MeV; measured E $\gamma$ , I $\gamma$ , particle spectra,  $\gamma\gamma$ -coin, (particle) $\gamma$ -coin, g-factors, B(E2). <sup>40</sup>Ar; measured half-lives of 2+ and 4+ states using Doppler-shift attenuation method; deduced levels, J,  $\pi$ . JOUR PRVCA 78 017304
- <sup>8</sup>B      2008K012      NUCLEAR REACTIONS <sup>1</sup>H(<sup>9</sup>C, 2p), (<sup>10</sup>C, 2p), (<sup>11</sup>C, 2p), (<sup>12</sup>C, 2p), (<sup>13</sup>C, 2p), (<sup>14</sup>C, 2p), (<sup>15</sup>C, 2p), (<sup>16</sup>C, 2p), E $\approx$ 250 MeV / nucleon; measured Ep, Ip, proton yields, separation energy and momentum distributions. Inverse kinematics. JOUR NUPAB 805 431c

A=9

- <sup>9</sup>Li      2008MAZY      RADIOACTIVITY <sup>9,11</sup>Li( $\beta^-$ ) [from Ta(p, X)]; measured  $\beta$ -delayed E $\alpha$ , I $\alpha$ ,  $\alpha\alpha$ -coin. <sup>9,11</sup>Be; deduced levels, partial decay branches. CONF Crete(FINUSTAR 2),Proc.P193,Madurga
- <sup>9</sup>Be      2008GA17      NUCLEAR REACTIONS <sup>9</sup>Be(<sup>22</sup>Mg, <sup>23</sup>Al), (<sup>23</sup>Al, <sup>23</sup>Al'), E=150 MeV / nucleon; measured fragment spectra, E $\gamma$ , I $\gamma$ , (fragment) $\gamma$ -coin. <sup>23</sup>Al; deduced levels, spectroscopic factors. JOUR PYLBB 666 218
- 2008MAZY      RADIOACTIVITY <sup>9,11</sup>Li( $\beta^-$ ) [from Ta(p, X)]; measured  $\beta$ -delayed E $\alpha$ , I $\alpha$ ,  $\alpha\alpha$ -coin. <sup>9,11</sup>Be; deduced levels, partial decay branches. CONF Crete(FINUSTAR 2),Proc.P193,Madurga
- 2008MAZZ      NUCLEAR REACTIONS <sup>9</sup>Be(<sup>48</sup>Ca, n<sup>47</sup>Ca), E=450 MeV / nucleon; measured E $\gamma$ , I $\gamma$ ; deduced momentum distributions; <sup>9</sup>Be(<sup>56</sup>Ti, n<sup>55</sup>Ti), E not given; measured E $\gamma$ , I $\gamma$ ; deduced momentum distributions. CONF Crete(FINUSTAR 2),Proc.P89,Maierbeck
- 2008ON02      NUCLEAR REACTIONS <sup>9</sup>Be(<sup>16</sup>C, <sup>16</sup>C'), E=40 MeV / nucleon; <sup>9</sup>Be(<sup>18</sup>C, <sup>18</sup>C'), (<sup>18</sup>C, <sup>11</sup>Be), (<sup>18</sup>C, <sup>16</sup>N), E=79 MeV / nucleon; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, half-lives using recoil shadow method. <sup>11</sup>Be, <sup>16</sup>N, <sup>16,18</sup>C; deduced levels, J,  $\pi$ , B(E2). <sup>14</sup>C, <sup>16,18,20,22</sup>O, <sup>34</sup>Si, <sup>38,40,46,48</sup>Ca; comparison of B(E2) values. JOUR PRVCA 78 014308
- 2008RI04      NUCLEAR REACTIONS <sup>9</sup>Be(<sup>44</sup>S, p<sup>43</sup>P), E=91.7 MeV / nucleon; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -, (particle) $\gamma$ -coin, partial  $\sigma$ , momentum distributions. <sup>43</sup>P; deduced levels, J,  $\pi$ . Comparison with shell-model calculations. JOUR PRVCA 78 011303

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**A=9 (continued)**

- 2008SU12 NUCLEAR REACTIONS  ${}^9\text{Be}({}^{18}\text{C}, \text{n}{}^{17}\text{C})$ , E not given; measured  $E\gamma$ ,  $I\gamma$ , lifetimes of low lying states using recoil shadow method.  ${}^{17}\text{C}$ ; deduced B(M1). JOUR PYLBB 666 222
- ${}^9\text{B}$  2008K012 NUCLEAR REACTIONS  ${}^1\text{H}({}^9\text{C}, 2\text{p})$ ,  $({}^{10}\text{C}, 2\text{p})$ ,  $({}^{11}\text{C}, 2\text{p})$ ,  $({}^{12}\text{C}, 2\text{p})$ ,  $({}^{13}\text{C}, 2\text{p})$ ,  $({}^{14}\text{C}, 2\text{p})$ ,  $({}^{15}\text{C}, 2\text{p})$ ,  $({}^{16}\text{C}, 2\text{p})$ ,  $E \approx 250$  MeV / nucleon; measured  $E_p$ ,  $I_p$ , proton yields, separation energy and momentum distributions. Inverse kinematics. JOUR NUPAB 805 431c

**A=10**

- ${}^{10}\text{Be}$  2008DI12 NUCLEAR REACTIONS  ${}^9\text{Be}({}^{22}\text{Mg}, {}^{21}\text{Mg})$ ,  $E=74$  MeV / nucleon; measured  $E\gamma$ ,  $I\gamma$ ,  $\sigma$ , momentum distributions.  ${}^{21}\text{Mg}$ ; deduced levels, J,  $\pi$ , spectroscopic factors.  ${}^{21}\text{F}$ ; calculated level energies, J,  $\pi$ . Comparison with model calculations. JOUR PRVCA 77 064309
- 2008FIZZ NUCLEAR REACTIONS  ${}^1,2\text{H}$ ,  ${}^{6,7}\text{Li}$ ,  ${}^9\text{Be}$ ,  ${}^{10,11}\text{B}$ ,  ${}^{12,13}\text{C}$ ,  ${}^{14,15}\text{N}$ ,  ${}^{16}\text{O}$ ,  ${}^{19}\text{F}$ ,  ${}^{23,23m}\text{Na}$ ,  ${}^{24,25,26}\text{Mg}$ ,  ${}^{27}\text{Al}$ ,  ${}^{28,29,30}\text{Si}$ ,  ${}^{31}\text{P}$ ,  ${}^{32,33,34}\text{S}$ ,  ${}^{35,37}\text{Cl}$ ,  ${}^{39,40,41}\text{K}$ ,  ${}^{102,104,105,106,108,110}\text{Pd}(\text{n}, \gamma)$ ,  $E=\text{thermal}$ ; measured cross sections;  ${}^{10}\text{B}(\text{n}, \alpha)$ ,  $E=\text{thermal}$ ; measured cross sections;  ${}^{25}\text{Mg}(\text{n}, \gamma)$ ,  $E=\text{thermal}$ ;  ${}^{13}\text{C}(\text{n}, \gamma)$ ,  $E=\text{thermal}$ ;  ${}^{105}\text{Pd}(\text{n}, \gamma)$ ,  $E=\text{thermal}$ ; measured  $E\gamma$ ,  $I\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone
- 2008HA27 RADIOACTIVITY  ${}^{14}\text{C}(\text{n})(\alpha)$ ; measured partial decay widths.  ${}^{10}\text{Be}$ ,  ${}^{13}\text{C}$ ; deduced levels, J,  $\pi$ , angular distributions, configurations. Comparison with model calculations. JOUR PRVCA 78 014319
- ${}^{10}\text{B}$  2008GL05 NUCLEAR REACTIONS  ${}^{12}\text{C}(\gamma, \pi^- \text{p})$ ,  $(\gamma, \pi^- 2\text{p})$ , E not given; measured yields of pion-proton pairs; analyzed mass and width of intermediate  ${}^{11}\text{B}$   $\Delta$  nucleus. JOUR BRSPE 72 766
- 2008K012 NUCLEAR REACTIONS  ${}^1\text{H}({}^9\text{C}, 2\text{p})$ ,  $({}^{10}\text{C}, 2\text{p})$ ,  $({}^{11}\text{C}, 2\text{p})$ ,  $({}^{12}\text{C}, 2\text{p})$ ,  $({}^{13}\text{C}, 2\text{p})$ ,  $({}^{14}\text{C}, 2\text{p})$ ,  $({}^{15}\text{C}, 2\text{p})$ ,  $({}^{16}\text{C}, 2\text{p})$ ,  $E \approx 250$  MeV / nucleon; measured  $E_p$ ,  $I_p$ , proton yields, separation energy and momentum distributions. Inverse kinematics. JOUR NUPAB 805 431c
- ${}^{10}\text{C}$  2008FI07 RADIOACTIVITY  ${}^{62}\text{Ga}(\beta^+)$ ; measured  $E\gamma$ ,  $I\gamma$ ,  $E\beta$ ,  $\beta\gamma$ -coin, branching ratios; deduced ft values.  ${}^{62}\text{Zn}$ ; deduced levels, J,  $\pi$ .  ${}^{10}\text{C}$ ,  ${}^{14}\text{O}$ ,  ${}^{22}\text{Mg}$ ,  ${}^{26m}\text{Al}$ ,  ${}^{34}\text{Ca}$ ,  ${}^{34}\text{Ar}$ ,  ${}^{38m}\text{K}$ ,  ${}^{42}\text{Sc}$ ,  ${}^{46}\text{V}$ ,  ${}^{50}\text{Mn}$ ,  ${}^{54}\text{Co}$ ,  ${}^{62}\text{Ga}$ ,  ${}^{74}\text{Rb}$ ; systematics of superallowed  $\beta$  decays and ft values. JOUR PRVCA 78 025502

**A=11**

- ${}^{11}\text{Li}$  2008MA34 RADIOACTIVITY  ${}^{11}\text{Li}(\beta^-)$ ; measured  $\beta$ -delayed charged-particle spectra.  ${}^{11}\text{Be}$  deduced subsequent break-up decay channels. JOUR NUPAB 810 1
- 2008MAZY RADIOACTIVITY  ${}^9,{}^{11}\text{Li}(\beta^-)$  [from  $\text{Ta}(\text{p}, \text{X})$ ]; measured  $\beta$ -delayed  $E\alpha$ ,  $I\alpha$ ,  $\alpha\alpha$ -coin.  ${}^9,{}^{11}\text{Be}$ ; deduced levels, partial decay branches. CONF Crete(FINUSTAR 2),Proc.P193,Madurga

KEYNUMBERS AND KEYWORDS

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**A=11 (continued)**

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|--------------------|----------|---|
|                    | 20080N02 | NUCLEAR REACTIONS ${}^9\text{Be}({}^{16}\text{C}, {}^{16}\text{C}')$ , E=40 MeV / nucleon; ${}^9\text{Be}({}^{18}\text{C}, {}^{18}\text{C}')$ , ( ${}^{18}\text{C}, {}^{11}\text{Be}$ ), ( ${}^{18}\text{C}, {}^{16}\text{N}$ ), E=79 MeV / nucleon; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, half-lives using recoil shadow method. ${}^{11}\text{Be}$ , ${}^{16}\text{N}$ , ${}^{16,18}\text{C}$ ; deduced levels, J, $\pi$ , B(E2). ${}^{14}\text{C}$ , ${}^{16,18,20,22}\text{O}$ , ${}^{34}\text{Si}$ , ${}^{38,40,46,48}\text{Ca}$ ; comparison of B(E2) values. JOUR PRVCA 78 014308   |
| ${}^{11}\text{Be}$ | 2008MA34 | RADIOACTIVITY ${}^{11}\text{Li}(\beta^-)$ ; measured $\beta$ -delayed charged-particle spectra. ${}^{11}\text{Be}$ deduced subsequent break-up decay channels. JOUR NUPAB 810 1   |
|                    | 2008MAZY | RADIOACTIVITY ${}^9,{}^{11}\text{Li}(\beta^-)$ [from Ta(p, X)]; measured $\beta$ -delayed $E\alpha$ , $I\alpha$ , $\alpha\alpha$ -coin. ${}^9,{}^{11}\text{Be}$ ; deduced levels, partial decay branches. CONF Crete(FINUSTAR 2),Proc.P193,Madurga  |
|                    | 20080N02 | NUCLEAR REACTIONS ${}^9\text{Be}({}^{16}\text{C}, {}^{16}\text{C}')$ , E=40 MeV / nucleon; ${}^9\text{Be}({}^{18}\text{C}, {}^{18}\text{C}')$ , ( ${}^{18}\text{C}, {}^{11}\text{Be}$ ), ( ${}^{18}\text{C}, {}^{16}\text{N}$ ), E=79 MeV / nucleon; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, half-lives using recoil shadow method. ${}^{11}\text{Be}$ , ${}^{16}\text{N}$ , ${}^{16,18}\text{C}$ ; deduced levels, J, $\pi$ , B(E2). ${}^{14}\text{C}$ , ${}^{16,18,20,22}\text{O}$ , ${}^{34}\text{Si}$ , ${}^{38,40,46,48}\text{Ca}$ ; comparison of B(E2) values. JOUR PRVCA 78 014308   |
| ${}^{11}\text{B}$  | 2007ARZT | NUCLEAR REACTIONS ${}^{12}\text{C}, {}^{197}\text{Au}({}^{11}\text{B}, \text{X})$ , E=33 MeV / nucleon; measured light fragment yields; ${}^{12}\text{C}, {}^{197}\text{Au}({}^{11}\text{B}, {}^{11}\text{B})$ , E=33 MeV / nucleon; measured $\sigma(\theta)$ ; ${}^{12}\text{C}, {}^{197}\text{Au}({}^{11}\text{B}, \alpha^7\text{Li})$ , E=33 MeV / nucleon; measured light fragment yields; ${}^{11}\text{B}$ ; analyzed break-up parameters. REPT JINR-P7-2007-8,Artyukh   |
|                    | 2008FIZZ | NUCLEAR REACTIONS ${}^1,{}^2\text{H}$ , ${}^{6,7}\text{Li}$ , ${}^9\text{Be}$ , ${}^{10,11}\text{B}$ , ${}^{12,13}\text{C}$ , ${}^{14,15}\text{N}$ , ${}^{16}\text{O}$ , ${}^{19}\text{F}$ , ${}^{23,23m}\text{Na}$ , ${}^{24,25,26}\text{Mg}$ , ${}^{27}\text{Al}$ , ${}^{28,29,30}\text{Si}$ , ${}^{31}\text{P}$ , ${}^{32,33,34}\text{S}$ , ${}^{35,37}\text{Cl}$ , ${}^{39,40,41}\text{K}$ , ${}^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ , E=thermal; measured cross sections; ${}^{10}\text{B}(n, \alpha)$ , E=thermal; measured cross sections; ${}^{25}\text{Mg}(n, \gamma)$ , E=thermal; ${}^{13}\text{C}(n, \gamma)$ , E=thermal; ${}^{105}\text{Pd}(n, \gamma)$ , E=thermal; measured $E\gamma$ , $I\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone |
|                    | 2008K012 | NUCLEAR REACTIONS ${}^1\text{H}({}^9\text{C}, 2p)$ , ( ${}^{10}\text{C}, 2p$ ), ( ${}^{11}\text{C}, 2p$ ), ( ${}^{12}\text{C}, 2p$ ), ( ${}^{13}\text{C}, 2p$ ), ( ${}^{14}\text{C}, 2p$ ), ( ${}^{15}\text{C}, 2p$ ), ( ${}^{16}\text{C}, 2p$ ), E $\approx$ 250 MeV / nucleon; measured $E_p$ , $I_p$ , proton yields, separation energy and momentum distributions. Inverse kinematics. JOUR NUPAB 805 431c  |
| ${}^{11}\text{C}$  | 2008GL05 | NUCLEAR REACTIONS ${}^{12}\text{C}(\gamma, \pi^-p)$ , ( $\gamma, \pi^-2p$ ), E not given; measured yields of pion-proton pairs; analyzed mass and width of intermediate ${}^{11}\text{B}$ $\Delta$ nucleus. JOUR BRSPE 72 766   |

**A=12**

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| ${}^{12}\text{B}$ | 2008FIZZ | NUCLEAR REACTIONS ${}^1,{}^2\text{H}$ , ${}^{6,7}\text{Li}$ , ${}^9\text{Be}$ , ${}^{10,11}\text{B}$ , ${}^{12,13}\text{C}$ , ${}^{14,15}\text{N}$ , ${}^{16}\text{O}$ , ${}^{19}\text{F}$ , ${}^{23,23m}\text{Na}$ , ${}^{24,25,26}\text{Mg}$ , ${}^{27}\text{Al}$ , ${}^{28,29,30}\text{Si}$ , ${}^{31}\text{P}$ , ${}^{32,33,34}\text{S}$ , ${}^{35,37}\text{Cl}$ , ${}^{39,40,41}\text{K}$ , ${}^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ , E=thermal; measured cross sections; ${}^{10}\text{B}(n, \alpha)$ , E=thermal; measured cross sections; ${}^{25}\text{Mg}(n, \gamma)$ , E=thermal; ${}^{13}\text{C}(n, \gamma)$ , E=thermal; ${}^{105}\text{Pd}(n, \gamma)$ , E=thermal; measured $E\gamma$ , $I\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone |
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KEYNUMBERS AND KEYWORDS

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**A=12 (continued)**

- 2008K012 NUCLEAR REACTIONS  $^1\text{H}(^9\text{C}, 2\text{p})$ ,  $(^{10}\text{C}, 2\text{p})$ ,  $(^{11}\text{C}, 2\text{p})$ ,  $(^{12}\text{C}, 2\text{p})$ ,  $(^{13}\text{C}, 2\text{p})$ ,  $(^{14}\text{C}, 2\text{p})$ ,  $(^{15}\text{C}, 2\text{p})$ ,  $(^{16}\text{C}, 2\text{p})$ ,  $E \approx 250$  MeV / nucleon; measured  $E_p$ ,  $I_p$ , proton yields, separation energy and momentum distributions. Inverse kinematics. JOUR NUPAB 805 431c
- 2008W0ZZ NUCLEAR REACTIONS  $^{12}\text{C}(d, ^2\text{He})$ ,  $E^* = 0-17.5$  MeV; measured  $\sigma(\theta)$ , analyzing power;  $^{12}\text{B}$ ; deduced spin-dipole resonance parameters. CONF Crete(FINUSTAR 2), Proc.P243, Wortche
- $^{12}\text{C}$  2007ARZT NUCLEAR REACTIONS  $^{12}\text{C}, ^{197}\text{Au}(^{11}\text{B}, \text{X})$ ,  $E = 33$  MeV / nucleon; measured light fragment yields;  $^{12}\text{C}, ^{197}\text{Au}(^{11}\text{B}, ^{11}\text{B})$ ,  $E = 33$  MeV / nucleon; measured  $\sigma(\theta)$ ;  $^{12}\text{C}, ^{197}\text{Au}(^{11}\text{B}, \alpha^7\text{Li})$ ,  $E = 33$  MeV / nucleon; measured light fragment yields;  $^{11}\text{B}$ ; analyzed break-up parameters. REPT JINR-P7-2007-8, Artyukh
- 2008BA24 NUCLEAR REACTIONS  $^4\text{He}(\gamma, \pi^0)$ ,  $E = 25$  MeV; measured  $\sigma$ , angular distributions; deduced reduced isovector amplitudes.  $^{12}\text{C}(\gamma, \pi^0)$ ; analyzed  $\sigma$ , deduced reduced isovector amplitudes. JOUR PRVCA 77 064601
- 2008B024 NUCLEAR REACTIONS  $^4\text{He}, ^{12}\text{C}(e, e')$ ,  $E = 1.6-2.5$  GeV;  $^{15}\text{N}(e, e')$ ,  $E = 2.285$  GeV; measured  $\sigma$ . JOUR PRVCA 78 015202
- 2008MU15 NUCLEAR REACTIONS  $^{15}\text{N}(^3\text{He}, d)$ ,  $E = 25.74$  MeV; measured deuteron spectra, asymptotic normalization coefficients, angular distributions.  $^{15}\text{N}(p, \gamma)$ ,  $(p, \alpha)$ ; deduced astrophysical S-factors, resonance parameters. JOUR PRVCA 78 015804
- 2008PIZZ NUCLEAR REACTIONS  $^2\text{H}(^{15}\text{N}, n\alpha)$ ,  $E = 60$  MeV; measured  $\sigma(\theta)$ ;  $^{15}\text{N}(p, \alpha)^{12}\text{C}$ ; deduced  $\sigma$ , astrophysical S-factor. Trojan-horse method. Compared results to direct measurements. CONF Crete(FINUSTAR 2), Proc.P155, Pizzone

**A=13**

- $^{13}\text{B}$  2008K012 NUCLEAR REACTIONS  $^1\text{H}(^9\text{C}, 2\text{p})$ ,  $(^{10}\text{C}, 2\text{p})$ ,  $(^{11}\text{C}, 2\text{p})$ ,  $(^{12}\text{C}, 2\text{p})$ ,  $(^{13}\text{C}, 2\text{p})$ ,  $(^{14}\text{C}, 2\text{p})$ ,  $(^{15}\text{C}, 2\text{p})$ ,  $(^{16}\text{C}, 2\text{p})$ ,  $E \approx 250$  MeV / nucleon; measured  $E_p$ ,  $I_p$ , proton yields, separation energy and momentum distributions. Inverse kinematics. JOUR NUPAB 805 431c
- 20080TZZ NUCLEAR REACTIONS  $^4\text{He}(^{12}\text{Be}, ^{13}\text{B})$ ,  $E = 50$  MeV / nucleon; measured  $E_\gamma$ ,  $I_\gamma$ ,  $\gamma\gamma$ , (particle) $\gamma$ -coin,  $\sigma(\theta)$ .  $^{13}\text{B}$ ; deduced levels, J,  $\pi$ . REPT RIKEN-NC-NP-24, Ota
- $^{13}\text{C}$  2006RE19 ATOMIC MASSES  $^{13}\text{C}, ^{14}\text{N}, ^{28}\text{Si}, ^{31}\text{P}$ ; measured masses and ratio of ionic masses using Penning trap measurement. JOUR IMSPF 251 125
- 2007AZZZ NUCLEAR REACTIONS  $^1\text{H}, ^{12}\text{C}(d, p)$ ,  $E$  at 9.0 GeV / c; measured analyzing powers. REPT JINR-P1-2007-46, Azhgirey
- 2008FIZZ NUCLEAR REACTIONS  $^1,2\text{H}, ^{6,7}\text{Li}, ^9\text{Be}, ^{10,11}\text{B}, ^{12,13}\text{C}, ^{14,15}\text{N}, ^{16}\text{O}, ^{19}\text{F}, ^{23,23m}\text{Na}, ^{24,25,26}\text{Mg}, ^{27}\text{Al}, ^{28,29,30}\text{Si}, ^{31}\text{P}, ^{32,33,34}\text{S}, ^{35,37}\text{Cl}, ^{39,40,41}\text{K}, ^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ ,  $E = \text{thermal}$ ; measured cross sections;  $^{10}\text{B}(n, \alpha)$ ,  $E = \text{thermal}$ ; measured cross sections;  $^{25}\text{Mg}(n, \gamma)$ ,  $E = \text{thermal}$ ;  $^{13}\text{C}(n, \gamma)$ ,  $E = \text{thermal}$ ;  $^{105}\text{Pd}(n, \gamma)$ ,  $E = \text{thermal}$ ; measured  $E_\gamma$ ,  $I_\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26, Firestone



**A=13 (continued)**

- 2008HA27 NUCLEAR REACTIONS  $^{12}\text{C}(^{16}\text{O}, ^{14}\text{O})$ ,  $E=234$  MeV; measured charged particle spectra.  $^{14}\text{C}$ ; deduced levels,  $J$ ,  $\pi$ , configurations, widths of excited states.  $^7\text{Li}(^9\text{Be}, ^{14}\text{C})$ ;  $^{14}\text{C}(^{13}\text{C}, ^{14}\text{C})$ ,  $(^{14}\text{C}, ^{14}\text{C})$ ;  $^9\text{Be}(^7\text{Li}, d)$ ;  $^{13}\text{C}(\text{polarized } p, \pi^+)$ ,  $(n, n)$ ; comparison of levels. JOUR PRVCA 78 014319
- 2008HA27 RADIOACTIVITY  $^{14}\text{C}(n)(\alpha)$ ; measured partial decay widths.  $^{10}\text{Be}$ ,  $^{13}\text{C}$ ; deduced levels,  $J$ ,  $\pi$ , angular distributions, configurations. Comparison with model calculations. JOUR PRVCA 78 014319
- 2008HE11 NUCLEAR REACTIONS  $^{13}\text{C}(\alpha, n)$ ,  $E(\text{cm})=320-700$  keV;  $^{13}\text{C}(\alpha, \alpha)$ ,  $E=2.6-6.2$  MeV; measured radii,  $\sigma$ ,  $\sigma(\theta)$ , S-factor.  $^{17}\text{O}$ ; deduced levels,  $J$ ,  $\pi$ , resonance parameters.  $^{16}\text{O}(n, n)$ ,  $(n, \alpha\gamma)$ ; analyzed  $\sigma$ . R-matrix analysis. JOUR PRVCA 78 025803

**A=14**

- $^{14}\text{B}$  2008K012 NUCLEAR REACTIONS  $^1\text{H}(^9\text{C}, 2p)$ ,  $(^{10}\text{C}, 2p)$ ,  $(^{11}\text{C}, 2p)$ ,  $(^{12}\text{C}, 2p)$ ,  $(^{13}\text{C}, 2p)$ ,  $(^{14}\text{C}, 2p)$ ,  $(^{15}\text{C}, 2p)$ ,  $(^{16}\text{C}, 2p)$ ,  $E \approx 250$  MeV / nucleon; measured  $E_p$ ,  $I_p$ , proton yields, separation energy and momentum distributions. Inverse kinematics. JOUR NUPAB 805 431c
- $^{14}\text{C}$  2008FIZZ NUCLEAR REACTIONS  $^{1,2}\text{H}$ ,  $^{6,7}\text{Li}$ ,  $^9\text{Be}$ ,  $^{10,11}\text{B}$ ,  $^{12,13}\text{C}$ ,  $^{14,15}\text{N}$ ,  $^{16}\text{O}$ ,  $^{19}\text{F}$ ,  $^{23,23m}\text{Na}$ ,  $^{24,25,26}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{28,29,30}\text{Si}$ ,  $^{31}\text{P}$ ,  $^{32,33,34}\text{S}$ ,  $^{35,37}\text{Cl}$ ,  $^{39,40,41}\text{K}$ ,  $^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ ,  $E=\text{thermal}$ ; measured cross sections;  $^{10}\text{B}(n, \alpha)$ ,  $E=\text{thermal}$ ; measured cross sections;  $^{25}\text{Mg}(n, \gamma)$ ,  $E=\text{thermal}$ ;  $^{13}\text{C}(n, \gamma)$ ,  $E=\text{thermal}$ ;  $^{105}\text{Pd}(n, \gamma)$ ,  $E=\text{thermal}$ ; measured  $E\gamma$ ,  $I\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone
- 2008GIZZ NUCLEAR REACTIONS  $^9\text{Be}(^9\text{Be}, p\gamma)$ ,  $(^9\text{Be}, 2p)$ ,  $(^9\text{Be}, \alpha)$ ,  $E=30, 35, 40$  MeV;  $^{18}\text{O}(^{11}\text{B}, p)$ ,  $(^{11}\text{B}, 2p)$ ,  $(^{11}\text{B}, \alpha)$ ,  $E=50, 55, 60$  MeV;  $^{18}\text{O}(^{12}\text{C}, p)$ ,  $(^{12}\text{C}, 2p)$ ,  $(^{12}\text{C}, \alpha)$ ,  $E=50, 55, 60$  MeV; measured  $E\gamma$ ,  $I\gamma$ , yields. CONF Yosemite(CNR 2007) Proc.P77,Gibelin
- 2008HA27 NUCLEAR REACTIONS  $^{12}\text{C}(^{16}\text{O}, ^{14}\text{O})$ ,  $E=234$  MeV; measured charged particle spectra.  $^{14}\text{C}$ ; deduced levels,  $J$ ,  $\pi$ , configurations, widths of excited states.  $^7\text{Li}(^9\text{Be}, ^{14}\text{C})$ ;  $^{14}\text{C}(^{13}\text{C}, ^{14}\text{C})$ ,  $(^{14}\text{C}, ^{14}\text{C})$ ;  $^9\text{Be}(^7\text{Li}, d)$ ;  $^{13}\text{C}(\text{polarized } p, \pi^+)$ ,  $(n, n)$ ; comparison of levels. JOUR PRVCA 78 014319
- 2008HA27 RADIOACTIVITY  $^{14}\text{C}(n)(\alpha)$ ; measured partial decay widths.  $^{10}\text{Be}$ ,  $^{13}\text{C}$ ; deduced levels,  $J$ ,  $\pi$ , angular distributions, configurations. Comparison with model calculations. JOUR PRVCA 78 014319
- 2008ON02 NUCLEAR REACTIONS  $^9\text{Be}(^{16}\text{C}, ^{16}\text{C}')$ ,  $E=40$  MeV / nucleon;  $^9\text{Be}(^{18}\text{C}, ^{18}\text{C}')$ ,  $(^{18}\text{C}, ^{11}\text{Be})$ ,  $(^{18}\text{C}, ^{16}\text{N})$ ,  $E=79$  MeV / nucleon; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin, half-lives using recoil shadow method.  $^{11}\text{Be}$ ,  $^{16}\text{N}$ ,  $^{16,18}\text{C}$ ; deduced levels,  $J$ ,  $\pi$ ,  $B(E2)$ .  $^{14}\text{C}$ ,  $^{16,18,20,22}\text{O}$ ,  $^{34}\text{Si}$ ,  $^{38,40,46,48}\text{Ca}$ ; comparison of  $B(E2)$  values. JOUR PRVCA 78 014308
- $^{14}\text{N}$  2006RE19 ATOMIC MASSES  $^{13}\text{C}$ ,  $^{14}\text{N}$ ,  $^{28}\text{Si}$ ,  $^{31}\text{P}$ ; measured masses and ratio of ionic masses using Penning trap measurement. JOUR IMSPF 251 125

KEYNUMBERS AND KEYWORDS

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**A=14 (continued)**

- <sup>14</sup>O      2008FI07      RADIOACTIVITY <sup>62</sup>Ga( $\beta^+$ ); measured  $E\gamma$ ,  $I\gamma$ ,  $E\beta$ ,  $\beta\gamma$ -coin, branching ratios; deduced ft values. <sup>62</sup>Zn; deduced levels, J,  $\pi$ . <sup>10</sup>C, <sup>14</sup>O, <sup>22</sup>Mg, <sup>26m</sup>Al, <sup>34</sup>Ca, <sup>34</sup>Ar, <sup>38m</sup>K, <sup>42</sup>Sc, <sup>46</sup>V, <sup>50</sup>Mn, <sup>54</sup>Co, <sup>62</sup>Ga, <sup>74</sup>Rb; systematics of superallowed  $\beta$  decays and ft values. JOUR PRVCA 78 025502
- 2008FU07      NUCLEAR REACTIONS <sup>14</sup>O( $\alpha$ ,  $\alpha$ ), E=2-5 MeV; measured  $\sigma$ ,  $\sigma(\theta)$ . <sup>18</sup>Ne; deduced levels, J,  $\pi$ , resonance parameters, excitation spectrum. JOUR PRVCA 77 064314
- 2008MU13      RADIOACTIVITY <sup>16</sup>Ne, <sup>19</sup>Mg(2p); measured decay product trajectories, angular correlations, angular distributions, three-body correlations. <sup>15</sup>F, <sup>16</sup>Ne, <sup>18</sup>Na, <sup>19</sup>Mg; deduced levels, J,  $\pi$ . JOUR PRVCA 77 061303

**A=15**

- <sup>15</sup>B      2008K012      NUCLEAR REACTIONS <sup>1</sup>H(<sup>9</sup>C, 2p), (<sup>10</sup>C, 2p), (<sup>11</sup>C, 2p), (<sup>12</sup>C, 2p), (<sup>13</sup>C, 2p), (<sup>14</sup>C, 2p), (<sup>15</sup>C, 2p), (<sup>16</sup>C, 2p), E $\approx$ 250 MeV / nucleon; measured  $E_p$ ,  $I_p$ , proton yields, separation energy and momentum distributions. Inverse kinematics. JOUR NUPAB 805 431c
- <sup>15</sup>N      2008BE18      NUCLEAR REACTIONS <sup>14</sup>N(n,  $\gamma$ ), E=low; measured  $E\gamma$ ,  $I\gamma$  using cold neutron source. <sup>27</sup>Al, <sup>207</sup>Pb(n,  $\gamma$ ), E=thermal; calculated  $\sigma$ . Effect on PGAA results discussed. JOUR JRNCD 276 609
- 2008B024      NUCLEAR REACTIONS <sup>4</sup>He, <sup>12</sup>C(e, e'), E=1.6-2.5 GeV; <sup>15</sup>N(e, e'), E=2.285 GeV; measured  $\sigma$ . JOUR PRVCA 78 015202
- 2008FIZZ      NUCLEAR REACTIONS <sup>1,2</sup>H, <sup>6,7</sup>Li, <sup>9</sup>Be, <sup>10,11</sup>B, <sup>12,13</sup>C, <sup>14,15</sup>N, <sup>16</sup>O, <sup>19</sup>F, <sup>23,23m</sup>Na, <sup>24,25,26</sup>Mg, <sup>27</sup>Al, <sup>28,29,30</sup>Si, <sup>31</sup>P, <sup>32,33,34</sup>S, <sup>35,37</sup>Cl, <sup>39,40,41</sup>K, <sup>102,104,105,106,108,110</sup>Pd(n,  $\gamma$ ), E=thermal; measured cross sections; <sup>10</sup>B(n,  $\alpha$ ), E=thermal; measured cross sections; <sup>25</sup>Mg(n,  $\gamma$ ), E=thermal; <sup>13</sup>C(n,  $\gamma$ ), E=thermal; <sup>105</sup>Pd(n,  $\gamma$ ), E=thermal; measured  $E\gamma$ ,  $I\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone
- <sup>15</sup>O      2008MA36      NUCLEAR REACTIONS <sup>14</sup>N(p,  $\gamma$ ), E=359, 380, 399 keV; measured  $E\gamma$ ,  $I\gamma$ ,  $\sigma$  ratios; deduced astrophysical S-factors. R-matrix analysis for capture to g.s. of <sup>15</sup>O. JOUR PRVCA 78 022802
- <sup>15</sup>F      2008MU13      RADIOACTIVITY <sup>16</sup>Ne, <sup>19</sup>Mg(2p); measured decay product trajectories, angular correlations, angular distributions, three-body correlations. <sup>15</sup>F, <sup>16</sup>Ne, <sup>18</sup>Na, <sup>19</sup>Mg; deduced levels, J,  $\pi$ . JOUR PRVCA 77 061303

**A=16**

- <sup>16</sup>C      2008GIZZ      NUCLEAR REACTIONS <sup>9</sup>Be(<sup>9</sup>Be, p $\gamma$ ), (<sup>9</sup>Be, 2p), (<sup>9</sup>Be,  $\alpha$ ), E=30, 35, 40 MeV; <sup>18</sup>O(<sup>11</sup>B, p), (<sup>11</sup>B, 2p), (<sup>11</sup>B,  $\alpha$ ), E=50, 55, 60 MeV; <sup>18</sup>O(<sup>12</sup>C, p), (<sup>12</sup>C, 2p), (<sup>12</sup>C,  $\alpha$ ), E=50, 55, 60 MeV; measured  $E\gamma$ ,  $I\gamma$ , yields. CONF Yosemite(CNR 2007) Proc.P77,Gibelin

KEYNUMBERS AND KEYWORDS

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A=16 (*continued*)

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| 20080N02                   | NUCLEAR REACTIONS ${}^9\text{Be}({}^{16}\text{C}, {}^{16}\text{C}')$ , E=40 MeV / nucleon; ${}^9\text{Be}({}^{18}\text{C}, {}^{18}\text{C}')$ , ( ${}^{18}\text{C}, {}^{11}\text{Be}$ ), ( ${}^{18}\text{C}, {}^{16}\text{N}$ ), E=79 MeV / nucleon; measured E $\gamma$ , I $\gamma$ , $\gamma\gamma$ -coin, half-lives using recoil shadow method. ${}^{11}\text{Be}$ , ${}^{16}\text{N}$ , ${}^{16,18}\text{C}$ ; deduced levels, J, $\pi$ , B(E2). ${}^{14}\text{C}$ , ${}^{16,18,20,22}\text{O}$ , ${}^{34}\text{Si}$ , ${}^{38,40,46,48}\text{Ca}$ ; comparison of B(E2) values. JOUR PRVCA 78 014308  |
| ${}^{16}\text{N}$ 2008BU12 | RADIOACTIVITY ${}^{22}\text{Na}(\beta^+)$ , ${}^{198}\text{Au}(\beta^-)$ ; measured T $_{1/2}$ , temperature dependence not observed. ${}^{16}\text{N}(\beta^-)$ ; calculated $\beta$ -delayed E $\alpha$ , I $\alpha$ using GEANT4 code. JOUR NUPAB 805 462c  |
| 2008FIZZ                   | NUCLEAR REACTIONS ${}^1,2\text{H}$ , ${}^6,7\text{Li}$ , ${}^9\text{Be}$ , ${}^{10,11}\text{B}$ , ${}^{12,13}\text{C}$ , ${}^{14,15}\text{N}$ , ${}^{16}\text{O}$ , ${}^{19}\text{F}$ , ${}^{23,23m}\text{Na}$ , ${}^{24,25,26}\text{Mg}$ , ${}^{27}\text{Al}$ , ${}^{28,29,30}\text{Si}$ , ${}^{31}\text{P}$ , ${}^{32,33,34}\text{S}$ , ${}^{35,37}\text{Cl}$ , ${}^{39,40,41}\text{K}$ , ${}^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ , E=thermal; measured cross sections; ${}^{10}\text{B}(n, \alpha)$ , E=thermal; measured cross sections; ${}^{25}\text{Mg}(n, \gamma)$ , E=thermal; ${}^{13}\text{C}(n, \gamma)$ , E=thermal; ${}^{105}\text{Pd}(n, \gamma)$ , E=thermal; measured E $\gamma$ , I $\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone |
| 20080N02                   | NUCLEAR REACTIONS ${}^9\text{Be}({}^{16}\text{C}, {}^{16}\text{C}')$ , E=40 MeV / nucleon; ${}^9\text{Be}({}^{18}\text{C}, {}^{18}\text{C}')$ , ( ${}^{18}\text{C}, {}^{11}\text{Be}$ ), ( ${}^{18}\text{C}, {}^{16}\text{N}$ ), E=79 MeV / nucleon; measured E $\gamma$ , I $\gamma$ , $\gamma\gamma$ -coin, half-lives using recoil shadow method. ${}^{11}\text{Be}$ , ${}^{16}\text{N}$ , ${}^{16,18}\text{C}$ ; deduced levels, J, $\pi$ , B(E2). ${}^{14}\text{C}$ , ${}^{16,18,20,22}\text{O}$ , ${}^{34}\text{Si}$ , ${}^{38,40,46,48}\text{Ca}$ ; comparison of B(E2) values. JOUR PRVCA 78 014308  |
| ${}^{16}\text{O}$ 2008BU12 | NUCLEAR REACTIONS ${}^4\text{He}({}^{12}\text{C}, \gamma)$ , E not given; ${}^1\text{H}({}^{26}\text{Al}, \gamma)$ , E not given; ${}^4\text{He}({}^{40}\text{Ca}, \gamma)$ , E(cm)=2.18-4.15 MeV; measured E $\gamma$ , I $\gamma$ ; deduced astrophysical S-factor. JOUR NUPAB 805 462c  |
| 2008BU12                   | RADIOACTIVITY ${}^{22}\text{Na}(\beta^+)$ , ${}^{198}\text{Au}(\beta^-)$ ; measured T $_{1/2}$ , temperature dependence not observed. ${}^{16}\text{N}(\beta^-)$ ; calculated $\beta$ -delayed E $\alpha$ , I $\alpha$ using GEANT4 code. JOUR NUPAB 805 462c  |
| 2008BUZX                   | NUCLEAR REACTIONS ${}^{15}\text{N}({}^3\text{He}, d)$ , E=25.74 MeV; measured reaction product spectra, $\sigma(\theta)$ ; deduced spectroscopic factors, proton ANC; ${}^{15}\text{N}(p, \gamma)$ ; deduced astrophysical S-factor. CONF Crete(FINUSTAR 2),Proc.P323,Burjan   |
| 2008FUZZ                   | NUCLEAR REACTIONS ${}^4\text{He}({}^{14}\text{O}, p)$ , ( ${}^{14}\text{O}, 2p$ ), E=32.7 MeV; measured E $p$ , I $p$ , pp-coin; ${}^{18}\text{Ne}$ ; deduced 2p decay cross sections. CONF Yosemite(CNR 2007) Proc.P144,Fu  |
| 2008HE11                   | NUCLEAR REACTIONS ${}^{13}\text{C}(\alpha, n)$ , E(cm)=320-700 keV; ${}^{13}\text{C}(\alpha, \alpha)$ , E=2.6-6.2 MeV; measured radii, $\sigma$ , $\sigma(\theta)$ , S-factor. ${}^{17}\text{O}$ ; deduced levels, J, $\pi$ , resonance parameters. ${}^{16}\text{O}(n, n)$ , ( $n, \alpha\gamma$ ); analyzed $\sigma$ . R-matrix analysis. JOUR PRVCA 78 025803   |
| 2008MU15                   | NUCLEAR REACTIONS ${}^{15}\text{N}({}^3\text{He}, d)$ , E=25.74 MeV; measured deuteron spectra, asymptotic normalization coefficients, angular distributions. ${}^{15}\text{N}(p, \gamma)$ , ( $p, \alpha$ ); deduced astrophysical S-factors, resonance parameters. JOUR PRVCA 78 015804  |
| 20080N02                   | NUCLEAR REACTIONS ${}^9\text{Be}({}^{16}\text{C}, {}^{16}\text{C}')$ , E=40 MeV / nucleon; ${}^9\text{Be}({}^{18}\text{C}, {}^{18}\text{C}')$ , ( ${}^{18}\text{C}, {}^{11}\text{Be}$ ), ( ${}^{18}\text{C}, {}^{16}\text{N}$ ), E=79 MeV / nucleon; measured E $\gamma$ , I $\gamma$ , $\gamma\gamma$ -coin, half-lives using recoil shadow method. ${}^{11}\text{Be}$ , ${}^{16}\text{N}$ , ${}^{16,18}\text{C}$ ; deduced levels, J, $\pi$ , B(E2). ${}^{14}\text{C}$ , ${}^{16,18,20,22}\text{O}$ , ${}^{34}\text{Si}$ , ${}^{38,40,46,48}\text{Ca}$ ; comparison of B(E2) values. JOUR PRVCA 78 014308  |

KEYNUMBERS AND KEYWORDS

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**A=16 (continued)**

- 2008SFZZ RADIOACTIVITY  $^{18}\text{Ne}(2p)$ ; measured  $E_p$ ,  $I_p$ , (fragment)proton-coin, correlations; $^{18}\text{Ne}$ ; deduced level energies. CONF Crete(FINUSTAR 2),Proc.P208,Sfienti
- 2008TA15 NUCLEAR REACTIONS  $^1\text{H}$ ,  $^{16}\text{O}$ ,  $^{23}\text{Na}$ ,  $^{27}\text{Al}$ ,  $^{28}\text{Si}(n, n')$ ,  $(n, \gamma)$ ,  $E=14$  MeV; measured  $E_\gamma$ ,  $I_\gamma$  using a NaI(Tl) detector with multiple time-gated system for use with complex samples. JOUR JRNCD 276 639
- $^{16}\text{Ne}$  2008MU13 RADIOACTIVITY  $^{16}\text{Ne}$ ,  $^{19}\text{Mg}(2p)$ ; measured decay product trajectories, angular correlations, angular distributions, three-body correlations.  $^{15}\text{F}$ ,  $^{16}\text{Ne}$ ,  $^{18}\text{Na}$ ,  $^{19}\text{Mg}$ ; deduced levels,  $J$ ,  $\pi$ . JOUR PRVCA 77 061303

**A=17**

- $^{17}\text{C}$  2008SU12 NUCLEAR REACTIONS  $^9\text{Be}(^{18}\text{C}, n^{17}\text{C})$ ,  $E$  not given; measured  $E_\gamma$ ,  $I_\gamma$ , lifetimes of low lying states using recoil shadow method.  $^{17}\text{C}$ ; deduced  $B(M1)$ . JOUR PYLBB 666 222
- $^{17}\text{N}$  2008GIZZ NUCLEAR REACTIONS  $^9\text{Be}(^9\text{Be}, p\gamma)$ ,  $(^9\text{Be}, 2p)$ ,  $(^9\text{Be}, \alpha)$ ,  $E=30, 35, 40$  MeV;  $^{18}\text{O}(^{11}\text{B}, p)$ ,  $(^{11}\text{B}, 2p)$ ,  $(^{11}\text{B}, \alpha)$ ,  $E=50, 55, 60$  MeV;  $^{18}\text{O}(^{12}\text{C}, p)$ ,  $(^{12}\text{C}, 2p)$ ,  $(^{12}\text{C}, \alpha)$ ,  $E=50, 55, 60$  MeV; measured  $E_\gamma$ ,  $I_\gamma$ , yields. CONF Yosemite(CNR 2007) Proc.P77,Gibelin
- $^{17}\text{O}$  2008FIZZ NUCLEAR REACTIONS  $^1,2\text{H}$ ,  $^{6,7}\text{Li}$ ,  $^9\text{Be}$ ,  $^{10,11}\text{B}$ ,  $^{12,13}\text{C}$ ,  $^{14,15}\text{N}$ ,  $^{16}\text{O}$ ,  $^{19}\text{F}$ ,  $^{23,23m}\text{Na}$ ,  $^{24,25,26}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{28,29,30}\text{Si}$ ,  $^{31}\text{P}$ ,  $^{32,33,34}\text{S}$ ,  $^{35,37}\text{Cl}$ ,  $^{39,40,41}\text{K}$ ,  $^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ ,  $E=\text{thermal}$ ; measured cross sections;  $^{10}\text{B}(n, \alpha)$ ,  $E=\text{thermal}$ ; measured cross sections;  $^{25}\text{Mg}(n, \gamma)$ ,  $E=\text{thermal}$ ;  $^{13}\text{C}(n, \gamma)$ ,  $E=\text{thermal}$ ;  $^{105}\text{Pd}(n, \gamma)$ ,  $E=\text{thermal}$ ; measured  $E_\gamma$ ,  $I_\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone
- 2008HE11 NUCLEAR REACTIONS  $^{13}\text{C}(\alpha, n)$ ,  $E(\text{cm})=320-700$  keV;  $^{13}\text{C}(\alpha, \alpha)$ ,  $E=2.6-6.2$  MeV; measured radii,  $\sigma$ ,  $\sigma(\theta)$ ,  $S$ -factor.  $^{17}\text{O}$ ; deduced levels,  $J$ ,  $\pi$ , resonance parameters.  $^{16}\text{O}(n, n)$ ,  $(n, \alpha\gamma)$ ; analyzed  $\sigma$ . R-matrix analysis. JOUR PRVCA 78 025803
- 2008TA15 NUCLEAR REACTIONS  $^1\text{H}$ ,  $^{16}\text{O}$ ,  $^{23}\text{Na}$ ,  $^{27}\text{Al}$ ,  $^{28}\text{Si}(n, n')$ ,  $(n, \gamma)$ ,  $E=14$  MeV; measured  $E_\gamma$ ,  $I_\gamma$  using a NaI(Tl) detector with multiple time-gated system for use with complex samples. JOUR JRNCD 276 639
- $^{17}\text{F}$  2008FUZZ NUCLEAR REACTIONS  $^4\text{He}(^{14}\text{O}, p)$ ,  $(^{14}\text{O}, 2p)$ ,  $E=32.7$  MeV; measured  $E_p$ ,  $I_p$ , pp-coin;  $^{18}\text{Ne}$ ; deduced  $2p$  decay cross sections. CONF Yosemite(CNR 2007) Proc.P144,Fu
- $^{17}\text{Ne}$  2008MU13 RADIOACTIVITY  $^{16}\text{Ne}$ ,  $^{19}\text{Mg}(2p)$ ; measured decay product trajectories, angular correlations, angular distributions, three-body correlations.  $^{15}\text{F}$ ,  $^{16}\text{Ne}$ ,  $^{18}\text{Na}$ ,  $^{19}\text{Mg}$ ; deduced levels,  $J$ ,  $\pi$ . JOUR PRVCA 77 061303

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**A=18**

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| $^{18}\text{C}$  | 2008ON02 | NUCLEAR REACTIONS $^9\text{Be}(^{16}\text{C}, ^{16}\text{C}')$ , E=40 MeV / nucleon; $^9\text{Be}(^{18}\text{C}, ^{18}\text{C}')$ , ( $^{18}\text{C}, ^{11}\text{Be}$ ), ( $^{18}\text{C}, ^{16}\text{N}$ ), E=79 MeV / nucleon; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, half-lives using recoil shadow method. $^{11}\text{Be}$ , $^{16}\text{N}$ , $^{16,18}\text{C}$ ; deduced levels, J, $\pi$ , B(E2). $^{14}\text{C}$ , $^{16,18,20,22}\text{O}$ , $^{34}\text{Si}$ , $^{38,40,46,48}\text{Ca}$ ; comparison of B(E2) values. JOUR PRVCA 78 014308 |
| $^{18}\text{O}$  | 2008ON02 | NUCLEAR REACTIONS $^9\text{Be}(^{16}\text{C}, ^{16}\text{C}')$ , E=40 MeV / nucleon; $^9\text{Be}(^{18}\text{C}, ^{18}\text{C}')$ , ( $^{18}\text{C}, ^{11}\text{Be}$ ), ( $^{18}\text{C}, ^{16}\text{N}$ ), E=79 MeV / nucleon; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, half-lives using recoil shadow method. $^{11}\text{Be}$ , $^{16}\text{N}$ , $^{16,18}\text{C}$ ; deduced levels, J, $\pi$ , B(E2). $^{14}\text{C}$ , $^{16,18,20,22}\text{O}$ , $^{34}\text{Si}$ , $^{38,40,46,48}\text{Ca}$ ; comparison of B(E2) values. JOUR PRVCA 78 014308 |
| $^{18}\text{Ne}$ | 2008FU07 | NUCLEAR REACTIONS $^{14}\text{O}(\alpha, \alpha)$ , E=2-5 MeV; measured $\sigma$ , $\sigma(\theta)$ . $^{18}\text{Ne}$ ; deduced levels, J, $\pi$ , resonance parameters, excitation spectrum. JOUR PRVCA 77 064314   |
|                  | 2008FUZZ | NUCLEAR REACTIONS $^4\text{He}(^{14}\text{O}, \text{p})$ , ( $^{14}\text{O}, 2\text{p}$ ), E=32.7 MeV; measured $E\text{p}$ , $I\text{p}$ , $\text{pp}$ -coin; $^{18}\text{Ne}$ ; deduced 2p decay cross sections. CONF Yosemite(CNR 2007) Proc.P144,Fu   |
|                  | 2008SFZZ | RADIOACTIVITY $^{18}\text{Ne}(2\text{p})$ ; measured $E\text{p}$ , $I\text{p}$ , (fragment)proton-coin, correlations; $^{18}\text{Ne}$ ; deduced level energies. CONF Crete(FINUSTAR 2),Proc.P208,Sfienti   |
| $^{18}\text{Na}$ | 2008MU13 | RADIOACTIVITY $^{16}\text{Ne}$ , $^{19}\text{Mg}(2\text{p})$ ; measured decay product trajectories, angular correlations, angular distributions, three-body correlations. $^{15}\text{F}$ , $^{16}\text{Ne}$ , $^{18}\text{Na}$ , $^{19}\text{Mg}$ ; deduced levels, J, $\pi$ . JOUR PRVCA 77 061303  |

**A=19**

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| $^{19}\text{Mg}$ | 2008MU13 | RADIOACTIVITY $^{16}\text{Ne}$ , $^{19}\text{Mg}(2\text{p})$ ; measured decay product trajectories, angular correlations, angular distributions, three-body correlations. $^{15}\text{F}$ , $^{16}\text{Ne}$ , $^{18}\text{Na}$ , $^{19}\text{Mg}$ ; deduced levels, J, $\pi$ . JOUR PRVCA 77 061303 |
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**A=20**

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| $^{20}\text{O}$ | 2008ON02 | NUCLEAR REACTIONS $^9\text{Be}(^{16}\text{C}, ^{16}\text{C}')$ , E=40 MeV / nucleon; $^9\text{Be}(^{18}\text{C}, ^{18}\text{C}')$ , ( $^{18}\text{C}, ^{11}\text{Be}$ ), ( $^{18}\text{C}, ^{16}\text{N}$ ), E=79 MeV / nucleon; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, half-lives using recoil shadow method. $^{11}\text{Be}$ , $^{16}\text{N}$ , $^{16,18}\text{C}$ ; deduced levels, J, $\pi$ , B(E2). $^{14}\text{C}$ , $^{16,18,20,22}\text{O}$ , $^{34}\text{Si}$ , $^{38,40,46,48}\text{Ca}$ ; comparison of B(E2) values. JOUR PRVCA 78 014308  |
| $^{20}\text{F}$ | 2008FIZZ | NUCLEAR REACTIONS $^1,2\text{H}$ , $^6,7\text{Li}$ , $^9\text{Be}$ , $^{10,11}\text{B}$ , $^{12,13}\text{C}$ , $^{14,15}\text{N}$ , $^{16}\text{O}$ , $^{19}\text{F}$ , $^{23,23m}\text{Na}$ , $^{24,25,26}\text{Mg}$ , $^{27}\text{Al}$ , $^{28,29,30}\text{Si}$ , $^{31}\text{P}$ , $^{32,33,34}\text{S}$ , $^{35,37}\text{Cl}$ , $^{39,40,41}\text{K}$ , $^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ , E=thermal; measured cross sections; $^{10}\text{B}(n, \alpha)$ , E=thermal; measured cross sections; $^{25}\text{Mg}(n, \gamma)$ , E=thermal; $^{13}\text{C}(n, \gamma)$ , E=thermal; $^{105}\text{Pd}(n, \gamma)$ , E=thermal; measured $E\gamma$ , $I\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone |

KEYNUMBERS AND KEYWORDS

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**A=20 (continued)**

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| <sup>20</sup> Ne | 2006K063 | RADIOACTIVITY <sup>26m</sup> Al, <sup>38m</sup> K( $\beta^+$ ); measured recoil energy spectrum in $\beta$ decay, $\beta\nu(\theta)$ . <sup>20</sup> Ne, <sup>23</sup> Na, <sup>39</sup> K; measured excitation, and ion beam properties on the WITCH set-up. Penning trap method. <sup>35</sup> Ar; measured half-life and time-of-flight spectrum. JOUR IMSPF 251 159 |
|                  | 2008SPZZ | NUCLEAR REACTIONS <sup>12</sup> C( <sup>12</sup> C, $\alpha$ ), <sup>12</sup> C( <sup>12</sup> C, p), E(cm)=2.1-4.75 MeV; measured I $\gamma$ , E $\gamma$ ; deduced S-factors for p and $\alpha$ channels. Compared results to previous data. CONF Crete(FINUSTAR 2),Proc.P144,Spillane  |
| <sup>20</sup> Mg | 2008IW04 | NUCLEAR REACTIONS C, Pb( <sup>20</sup> Mg, <sup>20</sup> Mg'), E=28 MeV / nucleon; measured E $\gamma$ , I $\gamma$ , (particle) $\gamma$ -coin, angular distributions. <sup>20</sup> Mg; deduced B(E2). JOUR PRVCA 78 024306   |
|                  | 2008IWZZ | NUCLEAR REACTIONS Pb( <sup>20</sup> Mg, <sup>20</sup> Mg'), E=58 MeV / nucleon; measured E $\gamma$ , I $\gamma$ , (particle) $\gamma$ -coin. <sup>20</sup> Mg; deduced B(E2). REPT RIKEN-NC-NP-22,Iwasa  |

**A=21**

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| <sup>21</sup> F  | 2008DI12 | NUCLEAR REACTIONS <sup>9</sup> Be( <sup>22</sup> Mg, <sup>21</sup> Mg), E=74 MeV / nucleon; measured E $\gamma$ , I $\gamma$ , $\sigma$ , momentum distributions. <sup>21</sup> Mg; deduced levels, J, $\pi$ , spectroscopic factors. <sup>21</sup> F; calculated level energies, J, $\pi$ . Comparison with model calculations. JOUR PRVCA 77 064309 |
| <sup>21</sup> Ne | 2008RE07 | NUCLEAR REACTIONS <sup>20</sup> Ne, <sup>27</sup> Al, <sup>40</sup> Ar, <sup>84</sup> Kr, <sup>131,132</sup> Xe, <sup>208</sup> Pb, <sup>235,238</sup> U(n, $\gamma$ ), E=low; measured E $\gamma$ , I $\gamma$ using cold neutron source and an "invisible container". JOUR JRNCD 276 825  |
| <sup>21</sup> Mg | 2008DI12 | NUCLEAR REACTIONS <sup>9</sup> Be( <sup>22</sup> Mg, <sup>21</sup> Mg), E=74 MeV / nucleon; measured E $\gamma$ , I $\gamma$ , $\sigma$ , momentum distributions. <sup>21</sup> Mg; deduced levels, J, $\pi$ , spectroscopic factors. <sup>21</sup> F; calculated level energies, J, $\pi$ . Comparison with model calculations. JOUR PRVCA 77 064309 |

**A=22**

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| <sup>22</sup> O  | 2008ON02 | NUCLEAR REACTIONS <sup>9</sup> Be( <sup>16</sup> C, <sup>16</sup> C'), E=40 MeV / nucleon; <sup>9</sup> Be( <sup>18</sup> C, <sup>18</sup> C'), ( <sup>18</sup> C, <sup>11</sup> Be), ( <sup>18</sup> C, <sup>16</sup> N), E=79 MeV / nucleon; measured E $\gamma$ , I $\gamma$ , $\gamma\gamma$ -coin, half-lives using recoil shadow method. <sup>11</sup> Be, <sup>16</sup> N, <sup>16,18</sup> C; deduced levels, J, $\pi$ , B(E2). <sup>14</sup> C, <sup>16,18,20,22</sup> O, <sup>34</sup> Si, <sup>38,40,46,48</sup> Ca; comparison of B(E2) values. JOUR PRVCA 78 014308 |
| <sup>22</sup> Ne | 2008BU12 | RADIOACTIVITY <sup>22</sup> Na( $\beta^+$ ), <sup>198</sup> Au( $\beta^-$ ); measured T <sub>1/2</sub> , temperature dependence not observed. <sup>16</sup> N( $\beta^-$ ); calculated $\beta$ -delayed E $\alpha$ , I $\alpha$ using GEANT4 code. JOUR NUPAB 805 462c   |
|                  | 2008HU08 | RADIOACTIVITY <sup>22</sup> Na( $\beta^+$ ), <sup>198</sup> Au( $\beta^-$ ), <sup>210</sup> Po( $\alpha$ ); analyzed the effect of host metals on half-lives. JOUR PRVCA 78 015803   |
|                  | 2008RU05 | RADIOACTIVITY <sup>22</sup> Na( $\beta^+$ ), <sup>196</sup> Au(EC), <sup>198</sup> Au( $\beta^-$ ); measured half-life and its dependence on temperature. JOUR PRVCA 77 065502   |
| <sup>22</sup> Na | 2008BU12 | RADIOACTIVITY <sup>22</sup> Na( $\beta^+$ ), <sup>198</sup> Au( $\beta^-$ ); measured T <sub>1/2</sub> , temperature dependence not observed. <sup>16</sup> N( $\beta^-$ ); calculated $\beta$ -delayed E $\alpha$ , I $\alpha$ using GEANT4 code. JOUR NUPAB 805 462c   |



KEYNUMBERS AND KEYWORDS

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**A=22 (continued)**

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| 2008HU08         | RADIOACTIVITY $^{22}\text{Na}(\beta^+)$ , $^{198}\text{Au}(\beta^-)$ , $^{210}\text{Po}(\alpha)$ ; analyzed the effect of host metals on half-lives. JOUR PRVCA 78 015803  |
| 2008RU05         | RADIOACTIVITY $^{22}\text{Na}(\beta^+)$ , $^{196}\text{Au}(\text{EC})$ , $^{198}\text{Au}(\beta^-)$ ; measured half-life and its dependence on temperature. JOUR PRVCA 77 065502   |
| $^{22}\text{Mg}$ | 2006J014 ATOMIC MASSES $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ , $^{98,99,100,101,102,103,104,105,106}\text{Nb}$ , $^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay. $^{22}\text{Mg}$ , $^{34}\text{Ar}$ , $^{46}\text{V}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; reviewed superallowed $\beta$ decay Ft values. $^{92}\text{Br}$ ; measured time of flight spectrum. $^{102}\text{Nb}$ ; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204 |
| 2008FI07         | RADIOACTIVITY $^{62}\text{Ga}(\beta^+)$ ; measured $E\gamma$ , $I\gamma$ , $E\beta$ , $\beta\gamma$ -coin, branching ratios; deduced ft values. $^{62}\text{Zn}$ ; deduced levels, J, $\pi$ . $^{10}\text{C}$ , $^{14}\text{O}$ , $^{22}\text{Mg}$ , $^{26m}\text{Al}$ , $^{34}\text{Ca}$ , $^{34}\text{Ar}$ , $^{38m}\text{K}$ , $^{42}\text{Sc}$ , $^{46}\text{V}$ , $^{50}\text{Mn}$ , $^{54}\text{Co}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; systematics of superallowed $\beta$ decays and ft values. JOUR PRVCA 78 025502  |

**A=23**

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| $^{23}\text{Na}$ | 2006K063 RADIOACTIVITY $^{26m}\text{Al}$ , $^{38m}\text{K}(\beta^+)$ ; measured recoil energy spectrum in $\beta$ decay, $\beta\nu(\theta)$ . $^{20}\text{Ne}$ , $^{23}\text{Na}$ , $^{39}\text{K}$ ; measured excitation, and ion beam properties on the WITCH set-up. Penning trap method. $^{35}\text{Ar}$ ; measured half-life and time-of-flight spectrum. JOUR IMSPF 251 159  |
| 2007KRZY         | NUCLEAR REACTIONS $^{127}\text{I}(\text{d}, \text{X})^{111}\text{In}$ / $^{119}\text{Te}$ / $^{121}\text{I}$ / $^{122}\text{Sb}$ / $^{123}\text{I}$ / $^{124}\text{I}$ / $^{125}\text{Xe}$ / $^{126}\text{I}$ , $E=2.52$ GeV; measured yields; $^{129}\text{I}(\text{d}, \text{X})^{121}\text{Te}$ / $^{124}\text{I}$ / $^{126}\text{I}$ / $^{130}\text{I}$ , $E=2.52$ GeV; measured yields; $^{237}\text{Np}(\text{d}, \text{X})^{97}\text{Zr}$ / $^{99}\text{Mo}$ / $^{132}\text{Te}$ / $^{133}\text{I}$ / $^{238}\text{Np}$ , $E=2.52$ GeV; measured yields; $^{238}\text{Pu}(\text{d}, \text{X})^{97}\text{Zr}$ / $^{135}\text{Xe}$ , $E\approx 2.5$ GeV; measured yields; $^{239}\text{Pu}(\text{d}, \text{X})^{103}\text{Ru}$ / $^{128}\text{Sb}$ / $^{132}\text{Te}$ / $^{133}\text{I}$ / $^{135}\text{I}$ / $^{135}\text{Xe}$ / $^{140}\text{Ba}$ / $^{143}\text{Ce}$ / $^{91}\text{Sr}$ / $^{97}\text{Zr}$ , $E\approx 2.5$ GeV; measured yields; $^{26}\text{Al}(\text{n}, \alpha)$ , $^{197}\text{Au}(\text{n}, \gamma)$ , $^{197}\text{Au}(\text{n}, 2\text{n})$ , $^{197}\text{Au}(\text{n}, 4\text{n})$ , $E$ not given; measured radial distributions of production rates of daughter nuclei; $^{89}\text{Y}(\text{n}, 2\text{n})$ , $^{89}\text{Y}(\text{n}, 3\text{n})$ , $^{89}\text{Y}(\text{n}, 4\text{n})$ , $E$ not given; measured production rates of daughter nuclei. activation detector for transmutation setup; $^{238}\text{U}$ , $\text{Pb}(\text{n}, \text{f})$ , $^{238}\text{U}$ , $\text{Pb}(\text{n}, \gamma)$ , $E$ not given; measured $\sigma$ . REPT JINR-E1-2007-7, Krivopustov |
| 2008SPZZ         | NUCLEAR REACTIONS $^{12}\text{C}(^{12}\text{C}, \alpha)$ , $^{12}\text{C}(^{12}\text{C}, \text{p})$ , $E(\text{cm})=2.1-4.75$ MeV; measured $I\gamma$ , $E\gamma$ ; deduced S-factors for p and $\alpha$ channels. Compared results to previous data. CONF Crete(FINUSTAR 2), Proc.P144, Spillane   |
| 2008TA15         | NUCLEAR REACTIONS $^1\text{H}$ , $^{16}\text{O}$ , $^{23}\text{Na}$ , $^{27}\text{Al}$ , $^{28}\text{Si}(\text{n}, \text{n}')$ , $(\text{n}, \gamma)$ , $E=14$ MeV; measured $E\gamma$ , $I\gamma$ using a NaI(Tl) detector with multiple time-gated system for use with complex samples. JOUR JRNCD 276 639  |



KEYNUMBERS AND KEYWORDS

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**A=23 (continued)**

<sup>23</sup>Al      2008GA17      NUCLEAR REACTIONS <sup>9</sup>Be(<sup>22</sup>Mg, <sup>23</sup>Al), (<sup>23</sup>Al, <sup>23</sup>Al'), E=150 MeV / nucleon; measured fragment spectra, E $\gamma$ , I $\gamma$ , (fragment) $\gamma$ -coin. <sup>23</sup>Al; deduced levels, spectroscopic factors. JOUR PYLBB 666 218

**A=24**

<sup>24</sup>Na      2005LI66      RADIOACTIVITY <sup>24</sup>Na( $\beta^-$ ), <sup>42</sup>K( $\beta^-$ ), <sup>198</sup>Au( $\beta^-$ ); measured E $\gamma$ , I $\gamma$ , isotopic T<sub>1/2</sub>. JOUR JRNC D 263 311

2008FIZZ      NUCLEAR REACTIONS <sup>1,2</sup>H, <sup>6,7</sup>Li, <sup>9</sup>Be, <sup>10,11</sup>B, <sup>12,13</sup>C, <sup>14,15</sup>N, <sup>16</sup>O, <sup>19</sup>F, <sup>23,23m</sup>Na, <sup>24,25,26</sup>Mg, <sup>27</sup>Al, <sup>28,29,30</sup>Si, <sup>31</sup>P, <sup>32,33,34</sup>S, <sup>35,37</sup>Cl, <sup>39,40,41</sup>K, <sup>102,104,105,106,108,110</sup>Pd(n,  $\gamma$ ), E=thermal; measured cross sections; <sup>10</sup>B(n,  $\alpha$ ), E=thermal; measured cross sections; <sup>25</sup>Mg(n,  $\gamma$ ), E=thermal; <sup>13</sup>C(n,  $\gamma$ ), E=thermal; <sup>105</sup>Pd(n,  $\gamma$ ), E=thermal; measured E $\gamma$ , I $\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone

2008J006      NUCLEAR REACTIONS <sup>27</sup>Al, <sup>28</sup>Si, <sup>29</sup>Si, <sup>46,47</sup>Ti, <sup>54</sup>Fe, <sup>58</sup>Ni, <sup>64</sup>Zn(n, p), <sup>27</sup>Al, <sup>30</sup>Si(n,  $\alpha$ ), <sup>197</sup>Au(n,  $\gamma$ ), E= reactor; measured E $\gamma$ , I $\gamma$ , fast neutron spectrum averaged  $\sigma$ ; comparator method. JOUR ARISE 66 1377

2008TA15      NUCLEAR REACTIONS <sup>1</sup>H, <sup>16</sup>O, <sup>23</sup>Na, <sup>27</sup>Al, <sup>28</sup>Si(n, n'), (n,  $\gamma$ ), E=14 MeV; measured E $\gamma$ , I $\gamma$  using a NaI(Tl) detector with multiple time-gated system for use with complex samples. JOUR JRNC D 276 639

<sup>24</sup>Mg      2005LI66      RADIOACTIVITY <sup>24</sup>Na( $\beta^-$ ), <sup>42</sup>K( $\beta^-$ ), <sup>198</sup>Au( $\beta^-$ ); measured E $\gamma$ , I $\gamma$ , isotopic T<sub>1/2</sub>. JOUR JRNC D 263 311

2006FR27      ATOMIC MASSES <sup>24,26</sup>Mg, <sup>40,48</sup>Ca; measured masses of hydrogen-and lithium-like ions of Mg and Ca with SMILETRAP (Penning trap) mass spectrometer; analyzed binding energies. Comparisons with previous results. <sup>204</sup>Hg; measured time of flight spectrum. JOUR IMSPF 251 281

<sup>24</sup>Al      2008ZE05      NUCLEAR REACTIONS <sup>24</sup>Mg(<sup>3</sup>He, t), E=420 MeV; measured triton spectra,  $\sigma(\theta)$ . <sup>24</sup>Al; deduced levels, J,  $\pi$ , angular momenta, GT strengths. Comparison with model calculations and <sup>24</sup>Mg(p, n) data. JOUR PRVCA 78 014314

**A=25**

<sup>25</sup>Ne      2008BEZX      NUCLEAR REACTIONS <sup>208</sup>Pb(<sup>22</sup>Ne, X), E=150 MeV; <sup>208</sup>Pb(<sup>24</sup>Ne, X), E=190 MeV; measured  $\delta E$ -E; measured  $\gamma$ -coin; <sup>25</sup>Ne; measured  $\gamma$  transitions CONF Crete(FINUSTAR 2),Proc.P300,Benzoni

<sup>25</sup>Na      2008GIZZ      NUCLEAR REACTIONS <sup>9</sup>Be(<sup>9</sup>Be, p $\gamma$ ), (<sup>9</sup>Be, 2p), (<sup>9</sup>Be,  $\alpha$ ), E=30, 35, 40 MeV; <sup>18</sup>O(<sup>11</sup>B, p), (<sup>11</sup>B, 2p), (<sup>11</sup>B,  $\alpha$ ), E=50, 55, 60 MeV; <sup>18</sup>O(<sup>12</sup>C, p), (<sup>12</sup>C, 2p), (<sup>12</sup>C,  $\alpha$ ), E=50, 55, 60 MeV; measured E $\gamma$ , I $\gamma$ , yields. CONF Yosemite(CNR 2007) Proc.P77,Gibelin

KEYNUMBERS AND KEYWORDS

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**A=25 (continued)**

- <sup>25</sup>Mg      2008FIZZ      NUCLEAR REACTIONS <sup>1,2</sup>H, <sup>6,7</sup>Li, <sup>9</sup>Be, <sup>10,11</sup>B, <sup>12,13</sup>C, <sup>14,15</sup>N, <sup>16</sup>O, <sup>19</sup>F, <sup>23,23m</sup>Na, <sup>24,25,26</sup>Mg, <sup>27</sup>Al, <sup>28,29,30</sup>Si, <sup>31</sup>P, <sup>32,33,34</sup>S, <sup>35,37</sup>Cl, <sup>39,40,41</sup>K, <sup>102,104,105,106,108,110</sup>Pd(n,  $\gamma$ ), E=thermal; measured cross sections; <sup>10</sup>B(n,  $\alpha$ ), E=thermal; measured cross sections; <sup>25</sup>Mg(n,  $\gamma$ ), E=thermal; <sup>13</sup>C(n,  $\gamma$ ), E=thermal; <sup>105</sup>Pd(n,  $\gamma$ ), E=thermal; measured E $\gamma$ , I $\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone
- 2008GU12      NUCLEAR REACTIONS <sup>27</sup>Al(d, p)<sup>28</sup>Al, E= 1.3 - 2.3 MeV; <sup>27</sup>Al(d,  $\alpha$ )<sup>25</sup>Mg, E=1.5-2.4 MeV; measured Ep, E $\alpha$ ,  $\sigma$ (E); comparison with previous results, model predictions. JOUR NIMBE 266 3535

**A=26**

- <sup>26</sup>Mg      2006FR27      ATOMIC MASSES <sup>24,26</sup>Mg, <sup>40,48</sup>Ca; measured masses of hydrogen-and lithium-like ions of Mg and Ca with SMILETRAP (Penning trap) mass spectrometer; analyzed binding energies. Comparisons with previous results. <sup>204</sup>Hg; measured time of flight spectrum. JOUR IMSPF 251 281
- 2006K063      RADIOACTIVITY <sup>26m</sup>Al, <sup>38m</sup>K( $\beta^+$ ); measured recoil energy spectrum in  $\beta$  decay,  $\beta\nu(\theta)$ . <sup>20</sup>Ne, <sup>23</sup>Na, <sup>39</sup>K; measured excitation, and ion beam properties on the WITCH set-up. Penning trap method. <sup>35</sup>Ar; measured half-life and time-of-flight spectrum. JOUR IMSPF 251 159
- 2008FIZZ      NUCLEAR REACTIONS <sup>1,2</sup>H, <sup>6,7</sup>Li, <sup>9</sup>Be, <sup>10,11</sup>B, <sup>12,13</sup>C, <sup>14,15</sup>N, <sup>16</sup>O, <sup>19</sup>F, <sup>23,23m</sup>Na, <sup>24,25,26</sup>Mg, <sup>27</sup>Al, <sup>28,29,30</sup>Si, <sup>31</sup>P, <sup>32,33,34</sup>S, <sup>35,37</sup>Cl, <sup>39,40,41</sup>K, <sup>102,104,105,106,108,110</sup>Pd(n,  $\gamma$ ), E=thermal; measured cross sections; <sup>10</sup>B(n,  $\alpha$ ), E=thermal; measured cross sections; <sup>25</sup>Mg(n,  $\gamma$ ), E=thermal; <sup>13</sup>C(n,  $\gamma$ ), E=thermal; <sup>105</sup>Pd(n,  $\gamma$ ), E=thermal; measured E $\gamma$ , I $\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone
- 2008GIZZ      NUCLEAR REACTIONS <sup>9</sup>Be(<sup>9</sup>Be, p $\gamma$ ), (<sup>9</sup>Be, 2p), (<sup>9</sup>Be,  $\alpha$ ), E=30, 35, 40 MeV; <sup>18</sup>O(<sup>11</sup>B, p), (<sup>11</sup>B, 2p), (<sup>11</sup>B,  $\alpha$ ), E=50, 55, 60 MeV; <sup>18</sup>O(<sup>12</sup>C, p), (<sup>12</sup>C, 2p), (<sup>12</sup>C,  $\alpha$ ), E=50, 55, 60 MeV; measured E $\gamma$ , I $\gamma$ , yields. CONF Yosemite(CNR 2007) Proc.P77,Gibelin
- <sup>26</sup>Al      2006K063      RADIOACTIVITY <sup>26m</sup>Al, <sup>38m</sup>K( $\beta^+$ ); measured recoil energy spectrum in  $\beta$  decay,  $\beta\nu(\theta)$ . <sup>20</sup>Ne, <sup>23</sup>Na, <sup>39</sup>K; measured excitation, and ion beam properties on the WITCH set-up. Penning trap method. <sup>35</sup>Ar; measured half-life and time-of-flight spectrum. JOUR IMSPF 251 159
- 2008FI07      RADIOACTIVITY <sup>62</sup>Ga( $\beta^+$ ); measured E $\gamma$ , I $\gamma$ , E $\beta$ ,  $\beta\gamma$ -coin, branching ratios; deduced ft values. <sup>62</sup>Zn; deduced levels, J,  $\pi$ . <sup>10</sup>C, <sup>14</sup>O, <sup>22</sup>Mg, <sup>26m</sup>Al, <sup>34</sup>Ca, <sup>34</sup>Ar, <sup>38m</sup>K, <sup>42</sup>Sc, <sup>46</sup>V, <sup>50</sup>Mn, <sup>54</sup>Co, <sup>62</sup>Ga, <sup>74</sup>Rb; systematics of superallowed  $\beta$  decays and ft values. JOUR PRVCA 78 025502
- <sup>26</sup>Si      2008KW01      NUCLEAR REACTIONS <sup>28</sup>Si( $\alpha$ , <sup>6</sup>He), E=120 MeV; measured charged particle spectra,  $\sigma(\theta)$ . <sup>26</sup>Si; deduced level energies. JOUR KPSJA 53 1141

## A=27

- <sup>27</sup>Na 2008GIZZ NUCLEAR REACTIONS <sup>9</sup>Be(<sup>9</sup>Be, p $\gamma$ ), (<sup>9</sup>Be, 2p), (<sup>9</sup>Be,  $\alpha$ ), E=30, 35, 40 MeV; <sup>18</sup>O(<sup>11</sup>B, p), (<sup>11</sup>B, 2p), (<sup>11</sup>B,  $\alpha$ ), E=50, 55, 60 MeV; <sup>18</sup>O(<sup>12</sup>C, p), (<sup>12</sup>C, 2p), (<sup>12</sup>C,  $\alpha$ ), E=50, 55, 60 MeV; measured E $\gamma$ , I $\gamma$ , yields. CONF Yosemite(CNR 2007) Proc.P77,Gibelin
- <sup>27</sup>Mg 2008FIZZ NUCLEAR REACTIONS <sup>1,2</sup>H, <sup>6,7</sup>Li, <sup>9</sup>Be, <sup>10,11</sup>B, <sup>12,13</sup>C, <sup>14,15</sup>N, <sup>16</sup>O, <sup>19</sup>F, <sup>23,23m</sup>Na, <sup>24,25,26</sup>Mg, <sup>27</sup>Al, <sup>28,29,30</sup>Si, <sup>31</sup>P, <sup>32,33,34</sup>S, <sup>35,37</sup>Cl, <sup>39,40,41</sup>K, <sup>102,104,105,106,108,110</sup>Pd(n,  $\gamma$ ), E=thermal; measured cross sections; <sup>10</sup>B(n,  $\alpha$ ), E=thermal; measured cross sections; <sup>25</sup>Mg(n,  $\gamma$ ), E=thermal; <sup>13</sup>C(n,  $\gamma$ ), E=thermal; <sup>105</sup>Pd(n,  $\gamma$ ), E=thermal; measured E $\gamma$ , I $\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone
- 2008FU08 NUCLEAR REACTIONS <sup>27</sup>Al, <sup>28</sup>Si, <sup>29</sup>Si, <sup>41</sup>K, <sup>51</sup>V, <sup>61</sup>Ni, <sup>65</sup>Cu, <sup>64,67</sup>Zn, <sup>69</sup>Ga, <sup>79</sup>Br, <sup>92</sup>Mo(n, p), E=3.5-5.9 MeV; <sup>69</sup>Ga, <sup>93</sup>Nb(n,  $\alpha$ ), E=3.5-5.9 MeV; measured E $\gamma$ , I $\gamma$ , cross sections using the activation technique. JOUR ANEND 35 1652
- 2008J006 NUCLEAR REACTIONS <sup>27</sup>Al, <sup>28</sup>Si, <sup>29</sup>Si, <sup>46,47</sup>Ti, <sup>54</sup>Fe, <sup>58</sup>Ni, <sup>64</sup>Zn(n, p), <sup>27</sup>Al, <sup>30</sup>Si(n,  $\alpha$ ), <sup>197</sup>Au(n,  $\gamma$ ), E= reactor; measured E $\gamma$ , I $\gamma$ , fast neutron spectrum averaged  $\sigma$ ; comparator method. JOUR ARISE 66 1377
- <sup>27</sup>Al 2008TA15 NUCLEAR REACTIONS <sup>1</sup>H, <sup>16</sup>O, <sup>23</sup>Na, <sup>27</sup>Al, <sup>28</sup>Si(n, n'), (n,  $\gamma$ ), E=14 MeV; measured E $\gamma$ , I $\gamma$  using a NaI(Tl) detector with multiple time-gated system for use with complex samples. JOUR JRNC D 276 639
- <sup>27</sup>Si 2008BU12 NUCLEAR REACTIONS <sup>4</sup>He(<sup>12</sup>C,  $\gamma$ ), E not given; <sup>1</sup>H(<sup>26</sup>Al,  $\gamma$ ), E not given; <sup>4</sup>He(<sup>40</sup>Ca,  $\gamma$ ), E(cm)=2.18-4.15 MeV; measured E $\gamma$ , I $\gamma$ ; deduced astrophysical S-factor. JOUR NUPAB 805 462c

## A=28

- <sup>28</sup>Mg 2008GIZZ NUCLEAR REACTIONS <sup>9</sup>Be(<sup>9</sup>Be, p $\gamma$ ), (<sup>9</sup>Be, 2p), (<sup>9</sup>Be,  $\alpha$ ), E=30, 35, 40 MeV; <sup>18</sup>O(<sup>11</sup>B, p), (<sup>11</sup>B, 2p), (<sup>11</sup>B,  $\alpha$ ), E=50, 55, 60 MeV; <sup>18</sup>O(<sup>12</sup>C, p), (<sup>12</sup>C, 2p), (<sup>12</sup>C,  $\alpha$ ), E=50, 55, 60 MeV; measured E $\gamma$ , I $\gamma$ , yields. CONF Yosemite(CNR 2007) Proc.P77,Gibelin
- <sup>28</sup>Al 2008BE18 NUCLEAR REACTIONS <sup>14</sup>N(n,  $\gamma$ ), E=low; measured E $\gamma$ , I $\gamma$  using cold neutron source. <sup>27</sup>Al, <sup>207</sup>Pb(n,  $\gamma$ ), E=thermal; calculated  $\sigma$ . Effect on PGAA results discussed. JOUR JRNC D 276 609
- 2008FIZZ NUCLEAR REACTIONS <sup>1,2</sup>H, <sup>6,7</sup>Li, <sup>9</sup>Be, <sup>10,11</sup>B, <sup>12,13</sup>C, <sup>14,15</sup>N, <sup>16</sup>O, <sup>19</sup>F, <sup>23,23m</sup>Na, <sup>24,25,26</sup>Mg, <sup>27</sup>Al, <sup>28,29,30</sup>Si, <sup>31</sup>P, <sup>32,33,34</sup>S, <sup>35,37</sup>Cl, <sup>39,40,41</sup>K, <sup>102,104,105,106,108,110</sup>Pd(n,  $\gamma$ ), E=thermal; measured cross sections; <sup>10</sup>B(n,  $\alpha$ ), E=thermal; measured cross sections; <sup>25</sup>Mg(n,  $\gamma$ ), E=thermal; <sup>13</sup>C(n,  $\gamma$ ), E=thermal; <sup>105</sup>Pd(n,  $\gamma$ ), E=thermal; measured E $\gamma$ , I $\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone

KEYNUMBERS AND KEYWORDS

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**A=28 (continued)**

- 2008FU08 NUCLEAR REACTIONS  $^{27}\text{Al}$ ,  $^{28}\text{Si}$ ,  $^{29}\text{Si}$ ,  $^{41}\text{K}$ ,  $^{51}\text{V}$ ,  $^{61}\text{Ni}$ ,  $^{65}\text{Cu}$ ,  $^{64,67}\text{Zn}$ ,  $^{69}\text{Ga}$ ,  $^{79}\text{Br}$ ,  $^{92}\text{Mo}(\text{n}, \text{p})$ ,  $E=3.5\text{-}5.9\text{ MeV}$ ;  $^{69}\text{Ga}$ ,  $^{93}\text{Nb}(\text{n}, \alpha)$ ,  $E=3.5\text{-}5.9\text{ MeV}$ ; measured  $E\gamma$ ,  $I\gamma$ , cross sections using the activation technique. JOUR ANEND 35 1652
- 2008GU12 NUCLEAR REACTIONS  $^{27}\text{Al}(\text{d}, \text{p})^{28}\text{Al}$ ,  $E=1.3\text{ - }2.3\text{ MeV}$ ;  $^{27}\text{Al}(\text{d}, \alpha)^{25}\text{Mg}$ ,  $E=1.5\text{-}2.4\text{ MeV}$ ; measured  $E\text{p}$ ,  $E\alpha$ ,  $\sigma(E)$ ; comparison with previous results, model predictions. JOUR NIMBE 266 3535
- 2008J006 NUCLEAR REACTIONS  $^{27}\text{Al}$ ,  $^{28}\text{Si}$ ,  $^{29}\text{Si}$ ,  $^{46,47}\text{Ti}$ ,  $^{54}\text{Fe}$ ,  $^{58}\text{Ni}$ ,  $^{64}\text{Zn}(\text{n}, \text{p})$ ,  $^{27}\text{Al}$ ,  $^{30}\text{Si}(\text{n}, \alpha)$ ,  $^{197}\text{Au}(\text{n}, \gamma)$ ,  $E=\text{reactor}$ ; measured  $E\gamma$ ,  $I\gamma$ , fast neutron spectrum averaged  $\sigma$ ; comparator method. JOUR ARISE 66 1377
- 2008RE07 NUCLEAR REACTIONS  $^{20}\text{Ne}$ ,  $^{27}\text{Al}$ ,  $^{40}\text{Ar}$ ,  $^{84}\text{Kr}$ ,  $^{131,132}\text{Xe}$ ,  $^{208}\text{Pb}$ ,  $^{235,238}\text{U}(\text{n}, \gamma)$ ,  $E=\text{low}$ ; measured  $E\gamma$ ,  $I\gamma$  using cold neutron source and an "invisible container". JOUR JRNCD 276 825
- 2008RU04 NUCLEAR REACTIONS  $^{98,100}\text{Mo}(\gamma, \gamma')$ ,  $E<15\text{ MeV}$ ; measured  $E\gamma$ ,  $I\gamma$ , photoabsorption  $\sigma$ , giant resonances, angular distributions, distribution of mean branching ratios, dipole strength functions; deduced multipolarities.  $^{27}\text{Al}$ ,  $^{28}\text{Si}$ ,  $^{56}\text{Fe}$ ,  $^{63}\text{Cu}$ ,  $^{70,72,73,74}\text{Ge}(\text{n}, \gamma)$ ,  $E=\text{thermal}$ ; measured  $E\gamma$ ,  $I\gamma$ .  $^{99,101}\text{Mo}(\gamma, \text{n})$ ; analyzed cross sections.  $^{97}\text{Mo}(\text{n}, \gamma)$ ,  $^{98}\text{Mo}(\text{}^3\text{He}, \text{}^3\text{He}'\gamma)$ ; comparisons. JOUR PRVCA 77 064321
- 2008TA15 NUCLEAR REACTIONS  $^1\text{H}$ ,  $^{16}\text{O}$ ,  $^{23}\text{Na}$ ,  $^{27}\text{Al}$ ,  $^{28}\text{Si}(\text{n}, \text{n}')$ ,  $(\text{n}, \gamma)$ ,  $E=14\text{ MeV}$ ; measured  $E\gamma$ ,  $I\gamma$  using a NaI(Tl) detector with multiple time-gated system for use with complex samples. JOUR JRNCD 276 639
- $^{28}\text{Si}$  2006BE65 ATOMIC MASSES  $^{28}\text{Si}$ ,  $^{209}\text{Bi}$ ; measured masses using Penning trap method relative to  $^{12}\text{C}$ . Accurate determination of the Avogadro constant and mass standard. JOUR IMSPF 251 220
- 2006RE19 ATOMIC MASSES  $^{13}\text{C}$ ,  $^{14}\text{N}$ ,  $^{28}\text{Si}$ ,  $^{31}\text{P}$ ; measured masses and ratio of ionic masses using Penning trap measurement. JOUR IMSPF 251 125
- 2008TA15 NUCLEAR REACTIONS  $^1\text{H}$ ,  $^{16}\text{O}$ ,  $^{23}\text{Na}$ ,  $^{27}\text{Al}$ ,  $^{28}\text{Si}(\text{n}, \text{n}')$ ,  $(\text{n}, \gamma)$ ,  $E=14\text{ MeV}$ ; measured  $E\gamma$ ,  $I\gamma$  using a NaI(Tl) detector with multiple time-gated system for use with complex samples. JOUR JRNCD 276 639
- 2008VOZY NUCLEAR REACTIONS  $^{27}\text{Al}$ ,  $^{59}\text{Co}$ ,  $^{65}\text{Cu}(\text{d}, \text{n})$ ,  $E=7.5\text{ MeV}$ ; measured neutron time of flight; deduced level densities.  $^{59}\text{Co}(\text{p}, \gamma)$ ,  $E=1.9\text{ MeV}$ ; measured  $E\gamma$ ,  $I\gamma$ ;  $^{57}\text{Fe}(\text{}^3\text{He}, \text{}^3\text{He}')$ ,  $E=10\text{ MeV}$ ; measured charged particle energies and angular distributions; deduced  $\gamma$  strength functions. CONF Yosemite(CNR 2007) Proc.P61,Voinov

**A=29**

- $^{29}\text{Al}$  2008FU08 NUCLEAR REACTIONS  $^{27}\text{Al}$ ,  $^{28}\text{Si}$ ,  $^{29}\text{Si}$ ,  $^{41}\text{K}$ ,  $^{51}\text{V}$ ,  $^{61}\text{Ni}$ ,  $^{65}\text{Cu}$ ,  $^{64,67}\text{Zn}$ ,  $^{69}\text{Ga}$ ,  $^{79}\text{Br}$ ,  $^{92}\text{Mo}(\text{n}, \text{p})$ ,  $E=3.5\text{-}5.9\text{ MeV}$ ;  $^{69}\text{Ga}$ ,  $^{93}\text{Nb}(\text{n}, \alpha)$ ,  $E=3.5\text{-}5.9\text{ MeV}$ ; measured  $E\gamma$ ,  $I\gamma$ , cross sections using the activation technique. JOUR ANEND 35 1652

KEYNUMBERS AND KEYWORDS

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**A=29 (continued)**

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| 2008GIZZ                  | NUCLEAR REACTIONS $^9\text{Be}(^9\text{Be}, p\gamma)$ , $(^9\text{Be}, 2p)$ , $(^9\text{Be}, \alpha)$ , E=30, 35, 40 MeV; $^{18}\text{O}(^{11}\text{B}, p)$ , $(^{11}\text{B}, 2p)$ , $(^{11}\text{B}, \alpha)$ , E=50, 55, 60 MeV; $^{18}\text{O}(^{12}\text{C}, p)$ , $(^{12}\text{C}, 2p)$ , $(^{12}\text{C}, \alpha)$ , E=50, 55, 60 MeV; measured $E\gamma$ , $I\gamma$ , yields. CONF Yosemite(CNR 2007) Proc.P77,Gibelin  |
| 2008J006                  | NUCLEAR REACTIONS $^{27}\text{Al}$ , $^{28}\text{Si}$ , $^{29}\text{Si}$ , $^{46,47}\text{Ti}$ , $^{54}\text{Fe}$ , $^{58}\text{Ni}$ , $^{64}\text{Zn}(n, p)$ , $^{27}\text{Al}$ , $^{30}\text{Si}(n, \alpha)$ , $^{197}\text{Au}(n, \gamma)$ , E= reactor; measured $E\gamma$ , $I\gamma$ , fast neutron spectrum averaged $\sigma$ ; comparator method. JOUR ARISE 66 1377   |
| $^{29}\text{Si}$ 2008FIZZ | NUCLEAR REACTIONS $^1,2\text{H}$ , $^{6,7}\text{Li}$ , $^9\text{Be}$ , $^{10,11}\text{B}$ , $^{12,13}\text{C}$ , $^{14,15}\text{N}$ , $^{16}\text{O}$ , $^{19}\text{F}$ , $^{23,23m}\text{Na}$ , $^{24,25,26}\text{Mg}$ , $^{27}\text{Al}$ , $^{28,29,30}\text{Si}$ , $^{31}\text{P}$ , $^{32,33,34}\text{S}$ , $^{35,37}\text{Cl}$ , $^{39,40,41}\text{K}$ , $^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ , E=thermal; measured cross sections; $^{10}\text{B}(n, \alpha)$ , E=thermal; measured cross sections; $^{25}\text{Mg}(n, \gamma)$ , E=thermal; $^{13}\text{C}(n, \gamma)$ , E=thermal; $^{105}\text{Pd}(n, \gamma)$ , E=thermal; measured $E\gamma$ , $I\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone |
| 2008RU04                  | NUCLEAR REACTIONS $^{98,100}\text{Mo}(\gamma, \gamma')$ , E<15 MeV; measured $E\gamma$ , $I\gamma$ , photoabsorption $\sigma$ , giant resonances, angular distributions, distribution of mean branching ratios, dipole strength functions; deduced multipolarities. $^{27}\text{Al}$ , $^{28}\text{Si}$ , $^{56}\text{Fe}$ , $^{63}\text{Cu}$ , $^{70,72,73,74}\text{Ge}(n, \gamma)$ , E=thermal; measured $E\gamma$ , $I\gamma$ . $^{99,101}\text{Mo}(\gamma, n)$ , analyzed cross sections. $^{97}\text{Mo}(n, \gamma)$ , $^{98}\text{Mo}(^3\text{He}, ^3\text{He}'\gamma)$ ; comparisons. JOUR PRVCA 77 064321  |
| 2008TA15                  | NUCLEAR REACTIONS $^1\text{H}$ , $^{16}\text{O}$ , $^{23}\text{Na}$ , $^{27}\text{Al}$ , $^{28}\text{Si}(n, n')$ , $(n, \gamma)$ , E=14 MeV; measured $E\gamma$ , $I\gamma$ using a NaI(Tl) detector with multiple time-gated system for use with complex samples. JOUR JRNCD 276 639  |

**A=30**

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| $^{30}\text{Na}$ 2008ET01 | NUCLEAR REACTIONS $^{209}\text{Bi}(^{30}\text{Na}, ^{30}\text{Na}')$ , E=80.1 MeV / nucleon; measured $E\gamma$ , $I\gamma$ , (particle) $\gamma$ -coin, $\sigma(\theta)$ . $^{30}\text{Na}$ ; deduced B(E2). Comparison with shell-model calculations. JOUR PRVCA 78 017302   |
| $^{30}\text{Si}$ 2008FIZZ | NUCLEAR REACTIONS $^1,2\text{H}$ , $^{6,7}\text{Li}$ , $^9\text{Be}$ , $^{10,11}\text{B}$ , $^{12,13}\text{C}$ , $^{14,15}\text{N}$ , $^{16}\text{O}$ , $^{19}\text{F}$ , $^{23,23m}\text{Na}$ , $^{24,25,26}\text{Mg}$ , $^{27}\text{Al}$ , $^{28,29,30}\text{Si}$ , $^{31}\text{P}$ , $^{32,33,34}\text{S}$ , $^{35,37}\text{Cl}$ , $^{39,40,41}\text{K}$ , $^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ , E=thermal; measured cross sections; $^{10}\text{B}(n, \alpha)$ , E=thermal; measured cross sections; $^{25}\text{Mg}(n, \gamma)$ , E=thermal; $^{13}\text{C}(n, \gamma)$ , E=thermal; $^{105}\text{Pd}(n, \gamma)$ , E=thermal; measured $E\gamma$ , $I\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone |

KEYNUMBERS AND KEYWORDS

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**A=31**

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| $^{31}\text{Si}$ | 2008FIZZ | NUCLEAR REACTIONS $^1,2\text{H}$ , $^{6,7}\text{Li}$ , $^9\text{Be}$ , $^{10,11}\text{B}$ , $^{12,13}\text{C}$ , $^{14,15}\text{N}$ , $^{16}\text{O}$ , $^{19}\text{F}$ , $^{23,23m}\text{Na}$ , $^{24,25,26}\text{Mg}$ , $^{27}\text{Al}$ , $^{28,29,30}\text{Si}$ , $^{31}\text{P}$ , $^{32,33,34}\text{S}$ , $^{35,37}\text{Cl}$ , $^{39,40,41}\text{K}$ , $^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ , E=thermal; measured cross sections; $^{10}\text{B}(n, \alpha)$ , E=thermal; measured cross sections; $^{25}\text{Mg}(n, \gamma)$ , E=thermal; $^{13}\text{C}(n, \gamma)$ , E=thermal; $^{105}\text{Pd}(n, \gamma)$ , E=thermal; measured $E\gamma$ , $I\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007)<br>Proc.P26,Firestone |
|                  | 2008PA27 | NUCLEAR REACTIONS $^{16}\text{O}(^{16}\text{O}, n)$ , $(^{16}\text{O}, p)$ , E=29 MeV; measured $E\gamma$ , $I\gamma$ , half-lives using Doppler Shift Attenuation method. $^{31}\text{S}$ , $^{31}\text{P}$ ; deduced B(E1). $^{31}\text{Si}$ , $^{31}\text{P}$ , $^{31,35}\text{S}$ , $^{35}\text{Cl}$ , $^{35}\text{Ar}$ ; analyzed B(E1), isospin mixing. JOUR PRVCA 78 024301  |
| $^{31}\text{P}$  | 2006RE19 | ATOMIC MASSES $^{13}\text{C}$ , $^{14}\text{N}$ , $^{28}\text{Si}$ , $^{31}\text{P}$ ; measured masses and ratio of ionic masses using Penning trap measurement. JOUR IMSPF 251 125   |
|                  | 2008PA27 | NUCLEAR REACTIONS $^{16}\text{O}(^{16}\text{O}, n)$ , $(^{16}\text{O}, p)$ , E=29 MeV; measured $E\gamma$ , $I\gamma$ , half-lives using Doppler Shift Attenuation method. $^{31}\text{S}$ , $^{31}\text{P}$ ; deduced B(E1). $^{31}\text{Si}$ , $^{31}\text{P}$ , $^{31,35}\text{S}$ , $^{35}\text{Cl}$ , $^{35}\text{Ar}$ ; analyzed B(E1), isospin mixing. JOUR PRVCA 78 024301  |
| $^{31}\text{S}$  | 2008BH08 | RADIOACTIVITY $^{32}\text{Ar}(\beta^+)$ [from $^9\text{Be}(^{36}\text{Ar}, X)$ , E=100 MeV / nucleon]; measured $E\gamma$ , $I\gamma$ , $E_p$ , $I_p$ , $p\gamma$ -coin. $^{32}\text{Ar}$ ; deduced superallowed decay branching ratio, ft value, isospin symmetry breaking correction. $^{32}\text{Cl}$ ; deduced levels, J, $\pi$ . $^{31}\text{S}$ ; deduced levels, $\pi$ . Comparison with theoretical data. JOUR PRVCA 77 065503  |
|                  | 2008PA27 | NUCLEAR REACTIONS $^{16}\text{O}(^{16}\text{O}, n)$ , $(^{16}\text{O}, p)$ , E=29 MeV; measured $E\gamma$ , $I\gamma$ , half-lives using Doppler Shift Attenuation method. $^{31}\text{S}$ , $^{31}\text{P}$ ; deduced B(E1). $^{31}\text{Si}$ , $^{31}\text{P}$ , $^{31,35}\text{S}$ , $^{35}\text{Cl}$ , $^{35}\text{Ar}$ ; analyzed B(E1), isospin mixing. JOUR PRVCA 78 024301  |

**A=32**

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| $^{32}\text{P}$ | 2008FIZZ | NUCLEAR REACTIONS $^1,2\text{H}$ , $^{6,7}\text{Li}$ , $^9\text{Be}$ , $^{10,11}\text{B}$ , $^{12,13}\text{C}$ , $^{14,15}\text{N}$ , $^{16}\text{O}$ , $^{19}\text{F}$ , $^{23,23m}\text{Na}$ , $^{24,25,26}\text{Mg}$ , $^{27}\text{Al}$ , $^{28,29,30}\text{Si}$ , $^{31}\text{P}$ , $^{32,33,34}\text{S}$ , $^{35,37}\text{Cl}$ , $^{39,40,41}\text{K}$ , $^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ , E=thermal; measured cross sections; $^{10}\text{B}(n, \alpha)$ , E=thermal; measured cross sections; $^{25}\text{Mg}(n, \gamma)$ , E=thermal; $^{13}\text{C}(n, \gamma)$ , E=thermal; $^{105}\text{Pd}(n, \gamma)$ , E=thermal; measured $E\gamma$ , $I\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007)<br>Proc.P26,Firestone |
| $^{32}\text{S}$ | 2008KIZZ | NUCLEAR REACTIONS $^{12}\text{C}(^{20}\text{Ne}, X)^{32}\text{S}$ , $^{12}\text{C}(^{24}\text{Mg}, X)^{36}\text{Ar}$ , $^{24}\text{Mg}(^{20}\text{Ne}, X)^{44}\text{Ti}$ , $^{24}\text{Mg}(^{36}\text{Ar}, X)^{60}\text{Zn}$ , $E^* \approx 50$ MeV; measured $E\gamma$ , $I\gamma$ , cross sections; deduced GDR Strength functions, isospin mixing probability. CONF Crete(FINUSTAR 2),Proc.P371,Kicinska-Habior  |
|                 | 2008MUZZ | NUCLEAR REACTIONS $^{170}\text{Er}(^{13}\text{C}, X)$ , E=70, 80 MeV; $^{24}\text{Mg}(^{16}\text{O}, 2\alpha)$ , E=50 MeV; measured $E\gamma$ , $I\gamma$ , $E\alpha$ , $I\alpha$ , $\alpha\gamma\gamma$ -coin. CONF Crete(FINUSTAR 2),Proc.P404,Mullins  |

KEYNUMBERS AND KEYWORDS

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**A=32 (continued)**

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| $^{32}\text{Cl}$ | 2008BH08 | RADIOACTIVITY $^{32}\text{Ar}(\beta^+)$ [from $^9\text{Be}(^{36}\text{Ar}, \text{X})$ , E=100 MeV / nucleon]; measured $E_\gamma$ , $I_\gamma$ , $E_p$ , $I_p$ , $p\gamma$ -coin. $^{32}\text{Ar}$ ; deduced superallowed decay branching ratio, ft value, isospin symmetry breaking correction. $^{32}\text{Cl}$ ; deduced levels, J, $\pi$ . $^{31}\text{S}$ ; deduced levels, $\pi$ . Comparison with theoretical data. JOUR PRVCA 77 065503 |
|                  | 2008BH08 | ATOMIC MASSES $^{32}\text{Cl}$ ; measured masses. Q-value method. JOUR PRVCA 77 065503  |
| $^{32}\text{Ar}$ | 2008BH08 | RADIOACTIVITY $^{32}\text{Ar}(\beta^+)$ [from $^9\text{Be}(^{36}\text{Ar}, \text{X})$ , E=100 MeV / nucleon]; measured $E_\gamma$ , $I_\gamma$ , $E_p$ , $I_p$ , $p\gamma$ -coin. $^{32}\text{Ar}$ ; deduced superallowed decay branching ratio, ft value, isospin symmetry breaking correction. $^{32}\text{Cl}$ ; deduced levels, J, $\pi$ . $^{31}\text{S}$ ; deduced levels, $\pi$ . Comparison with theoretical data. JOUR PRVCA 77 065503 |

**A=33**

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| $^{33}\text{S}$ | 2008FIZZ | NUCLEAR REACTIONS $^1,2\text{H}$ , $^{6,7}\text{Li}$ , $^9\text{Be}$ , $^{10,11}\text{B}$ , $^{12,13}\text{C}$ , $^{14,15}\text{N}$ , $^{16}\text{O}$ , $^{19}\text{F}$ , $^{23,23m}\text{Na}$ , $^{24,25,26}\text{Mg}$ , $^{27}\text{Al}$ , $^{28,29,30}\text{Si}$ , $^{31}\text{P}$ , $^{32,33,34}\text{S}$ , $^{35,37}\text{Cl}$ , $^{39,40,41}\text{K}$ , $^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ , E=thermal; measured cross sections; $^{10}\text{B}(n, \alpha)$ , E=thermal; measured cross sections; $^{25}\text{Mg}(n, \gamma)$ , E=thermal; $^{13}\text{C}(n, \gamma)$ , E=thermal; $^{105}\text{Pd}(n, \gamma)$ , E=thermal; measured $E_\gamma$ , $I_\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone |
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**A=34**

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| $^{34}\text{Si}$ | 2008ON02 | NUCLEAR REACTIONS $^9\text{Be}(^{16}\text{C}, ^{16}\text{C}')$ , E=40 MeV / nucleon; $^9\text{Be}(^{18}\text{C}, ^{18}\text{C}')$ , $(^{18}\text{C}, ^{11}\text{Be})$ , $(^{18}\text{C}, ^{16}\text{N})$ , E=79 MeV / nucleon; measured $E_\gamma$ , $I_\gamma$ , $\gamma\gamma$ -coin, half-lives using recoil shadow method. $^{11}\text{Be}$ , $^{16}\text{N}$ , $^{16,18}\text{C}$ ; deduced levels, J, $\pi$ , B(E2). $^{14}\text{C}$ , $^{16,18,20,22}\text{O}$ , $^{34}\text{Si}$ , $^{38,40,46,48}\text{Ca}$ ; comparison of B(E2) values. JOUR PRVCA 78 014308  |
| $^{34}\text{S}$  | 2008FIZZ | NUCLEAR REACTIONS $^1,2\text{H}$ , $^{6,7}\text{Li}$ , $^9\text{Be}$ , $^{10,11}\text{B}$ , $^{12,13}\text{C}$ , $^{14,15}\text{N}$ , $^{16}\text{O}$ , $^{19}\text{F}$ , $^{23,23m}\text{Na}$ , $^{24,25,26}\text{Mg}$ , $^{27}\text{Al}$ , $^{28,29,30}\text{Si}$ , $^{31}\text{P}$ , $^{32,33,34}\text{S}$ , $^{35,37}\text{Cl}$ , $^{39,40,41}\text{K}$ , $^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ , E=thermal; measured cross sections; $^{10}\text{B}(n, \alpha)$ , E=thermal; measured cross sections; $^{25}\text{Mg}(n, \gamma)$ , E=thermal; $^{13}\text{C}(n, \gamma)$ , E=thermal; $^{105}\text{Pd}(n, \gamma)$ , E=thermal; measured $E_\gamma$ , $I_\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone |



KEYNUMBERS AND KEYWORDS

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**A=34 (continued)**

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| $^{34}\text{Ar}$ | 2006J014 | ATOMIC MASSES $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ ,<br>$^{98,99,100,101,102,103,104,105,106}\text{Nb}$ ,<br>$^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay. $^{22}\text{Mg}$ , $^{34}\text{Ar}$ , $^{46}\text{V}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; reviewed superallowed $\beta$ decay Ft values. $^{92}\text{Br}$ ; measured time of flight spectrum. $^{102}\text{Nb}$ ; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204 |
|                  | 2008FI07 | RADIOACTIVITY $^{62}\text{Ga}(\beta^+)$ ; measured $E\gamma$ , $I\gamma$ , $E\beta$ , $\beta\gamma$ -coin, branching ratios; deduced ft values. $^{62}\text{Zn}$ ; deduced levels, J, $\pi$ . $^{10}\text{C}$ , $^{14}\text{O}$ , $^{22}\text{Mg}$ , $^{26m}\text{Al}$ , $^{34}\text{Ca}$ , $^{34}\text{Ar}$ , $^{38m}\text{K}$ , $^{42}\text{Sc}$ , $^{46}\text{V}$ , $^{50}\text{Mn}$ , $^{54}\text{Co}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; systematics of superallowed $\beta$ decays and ft values. JOUR PRVCA 78 025502   |
| $^{34}\text{Ca}$ | 2008FI07 | RADIOACTIVITY $^{62}\text{Ga}(\beta^+)$ ; measured $E\gamma$ , $I\gamma$ , $E\beta$ , $\beta\gamma$ -coin, branching ratios; deduced ft values. $^{62}\text{Zn}$ ; deduced levels, J, $\pi$ . $^{10}\text{C}$ , $^{14}\text{O}$ , $^{22}\text{Mg}$ , $^{26m}\text{Al}$ , $^{34}\text{Ca}$ , $^{34}\text{Ar}$ , $^{38m}\text{K}$ , $^{42}\text{Sc}$ , $^{46}\text{V}$ , $^{50}\text{Mn}$ , $^{54}\text{Co}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; systematics of superallowed $\beta$ decays and ft values. JOUR PRVCA 78 025502   |

**A=35**

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| $^{35}\text{S}$  | 2008FIZZ | NUCLEAR REACTIONS $^{1,2}\text{H}$ , $^{6,7}\text{Li}$ , $^9\text{Be}$ , $^{10,11}\text{B}$ , $^{12,13}\text{C}$ , $^{14,15}\text{N}$ , $^{16}\text{O}$ , $^{19}\text{F}$ , $^{23,23m}\text{Na}$ , $^{24,25,26}\text{Mg}$ , $^{27}\text{Al}$ , $^{28,29,30}\text{Si}$ , $^{31}\text{P}$ , $^{32,33,34}\text{S}$ , $^{35,37}\text{Cl}$ , $^{39,40,41}\text{K}$ , $^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ , E=thermal; measured cross sections; $^{10}\text{B}(n, \alpha)$ , E=thermal; measured cross sections; $^{25}\text{Mg}(n, \gamma)$ , E=thermal; $^{13}\text{C}(n, \gamma)$ , E=thermal; $^{105}\text{Pd}(n, \gamma)$ , E=thermal; measured $E\gamma$ , $I\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone |
|                  | 2008PA27 | NUCLEAR REACTIONS $^{16}\text{O}(^{16}\text{O}, n)$ , $(^{16}\text{O}, p)$ , E=29 MeV; measured $E\gamma$ , $I\gamma$ , half-lives using Doppler Shift Attenuation method. $^{31}\text{S}$ , $^{31}\text{P}$ ; deduced B(E1). $^{31}\text{Si}$ , $^{31}\text{P}$ , $^{31,35}\text{S}$ , $^{35}\text{Cl}$ , $^{35}\text{Ar}$ ; analyzed B(E1), isospin mixing. JOUR PRVCA 78 024301   |
| $^{35}\text{Cl}$ | 2008PA27 | NUCLEAR REACTIONS $^{16}\text{O}(^{16}\text{O}, n)$ , $(^{16}\text{O}, p)$ , E=29 MeV; measured $E\gamma$ , $I\gamma$ , half-lives using Doppler Shift Attenuation method. $^{31}\text{S}$ , $^{31}\text{P}$ ; deduced B(E1). $^{31}\text{Si}$ , $^{31}\text{P}$ , $^{31,35}\text{S}$ , $^{35}\text{Cl}$ , $^{35}\text{Ar}$ ; analyzed B(E1), isospin mixing. JOUR PRVCA 78 024301   |
| $^{35}\text{Ar}$ | 2006K063 | RADIOACTIVITY $^{26m}\text{Al}$ , $^{38m}\text{K}(\beta^+)$ ; measured recoil energy spectrum in $\beta$ decay, $\beta\nu(\theta)$ . $^{20}\text{Ne}$ , $^{23}\text{Na}$ , $^{39}\text{K}$ ; measured excitation, and ion beam properties on the WITCH set-up. Penning trap method. $^{35}\text{Ar}$ ; measured half-life and time-of-flight spectrum. JOUR IMSPF 251 159  |
|                  | 2008PA27 | NUCLEAR REACTIONS $^{16}\text{O}(^{16}\text{O}, n)$ , $(^{16}\text{O}, p)$ , E=29 MeV; measured $E\gamma$ , $I\gamma$ , half-lives using Doppler Shift Attenuation method. $^{31}\text{S}$ , $^{31}\text{P}$ ; deduced B(E1). $^{31}\text{Si}$ , $^{31}\text{P}$ , $^{31,35}\text{S}$ , $^{35}\text{Cl}$ , $^{35}\text{Ar}$ ; analyzed B(E1), isospin mixing. JOUR PRVCA 78 024301   |

**A=36**

- <sup>36</sup>Cl      2008FIZZ      NUCLEAR REACTIONS <sup>1,2</sup>H, <sup>6,7</sup>Li, <sup>9</sup>Be, <sup>10,11</sup>B, <sup>12,13</sup>C, <sup>14,15</sup>N, <sup>16</sup>O, <sup>19</sup>F, <sup>23,23m</sup>Na, <sup>24,25,26</sup>Mg, <sup>27</sup>Al, <sup>28,29,30</sup>Si, <sup>31</sup>P, <sup>32,33,34</sup>S, <sup>35,37</sup>Cl, <sup>39,40,41</sup>K, <sup>102,104,105,106,108,110</sup>Pd(n,  $\gamma$ ), E=thermal; measured cross sections; <sup>10</sup>B(n,  $\alpha$ ), E=thermal; measured cross sections; <sup>25</sup>Mg(n,  $\gamma$ ), E=thermal; <sup>13</sup>C(n,  $\gamma$ ), E=thermal; <sup>105</sup>Pd(n,  $\gamma$ ), E=thermal; measured E $\gamma$ , I $\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007)  
Proc.P26,Firestone
- <sup>36</sup>Ar      2008KIZZ      NUCLEAR REACTIONS <sup>12</sup>C(<sup>20</sup>Ne, X)<sup>32</sup>S, <sup>12</sup>C(<sup>24</sup>Mg, X)<sup>36</sup>Ar, <sup>24</sup>Mg(<sup>20</sup>Ne, X)<sup>44</sup>Ti, <sup>24</sup>Mg(<sup>36</sup>Ar, X)<sup>60</sup>Zn, E\*  $\approx$ 50 MeV; measured E $\gamma$ , I $\gamma$ , cross sections; deduced GDR Strength functions, isospin mixing probability. CONF Crete(FINUSTAR 2),Proc.P371,Kicinska-Habior

**A=37**

No references found

**A=38**

- <sup>38</sup>Cl      2008FIZZ      NUCLEAR REACTIONS <sup>1,2</sup>H, <sup>6,7</sup>Li, <sup>9</sup>Be, <sup>10,11</sup>B, <sup>12,13</sup>C, <sup>14,15</sup>N, <sup>16</sup>O, <sup>19</sup>F, <sup>23,23m</sup>Na, <sup>24,25,26</sup>Mg, <sup>27</sup>Al, <sup>28,29,30</sup>Si, <sup>31</sup>P, <sup>32,33,34</sup>S, <sup>35,37</sup>Cl, <sup>39,40,41</sup>K, <sup>102,104,105,106,108,110</sup>Pd(n,  $\gamma$ ), E=thermal; measured cross sections; <sup>10</sup>B(n,  $\alpha$ ), E=thermal; measured cross sections; <sup>25</sup>Mg(n,  $\gamma$ ), E=thermal; <sup>13</sup>C(n,  $\gamma$ ), E=thermal; <sup>105</sup>Pd(n,  $\gamma$ ), E=thermal; measured E $\gamma$ , I $\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007)  
Proc.P26,Firestone
- 2008KL02      NUCLEAR REACTIONS <sup>40</sup>Ar( $\mu^-$ ,  $\nu$ ), ( $\mu^-$ ,  $n\nu$ ), ( $\mu^-$ ,  $2n\nu$ ), E not given; measured E $\gamma$ , I $\gamma$ , muon lifetime, isotopic yields. JOUR BRSPE 72 735
- <sup>38</sup>Ar      2006K063      RADIOACTIVITY <sup>26m</sup>Al, <sup>38m</sup>K( $\beta^+$ ); measured recoil energy spectrum in  $\beta$  decay,  $\beta\nu(\theta)$ . <sup>20</sup>Ne, <sup>23</sup>Na, <sup>39</sup>K; measured excitation, and ion beam properties on the WITCH set-up. Penning trap method. <sup>35</sup>Ar; measured half-life and time-of-flight spectrum. JOUR IMSPF 251 159
- <sup>38</sup>K      2006K063      RADIOACTIVITY <sup>26m</sup>Al, <sup>38m</sup>K( $\beta^+$ ); measured recoil energy spectrum in  $\beta$  decay,  $\beta\nu(\theta)$ . <sup>20</sup>Ne, <sup>23</sup>Na, <sup>39</sup>K; measured excitation, and ion beam properties on the WITCH set-up. Penning trap method. <sup>35</sup>Ar; measured half-life and time-of-flight spectrum. JOUR IMSPF 251 159
- 2008FI07      RADIOACTIVITY <sup>62</sup>Ga( $\beta^+$ ); measured E $\gamma$ , I $\gamma$ , E $\beta$ ,  $\beta\gamma$ -coin, branching ratios; deduced ft values. <sup>62</sup>Zn; deduced levels, J,  $\pi$ . <sup>10</sup>C, <sup>14</sup>O, <sup>22</sup>Mg, <sup>26m</sup>Al, <sup>34</sup>Ca, <sup>34</sup>Ar, <sup>38m</sup>K, <sup>42</sup>Sc, <sup>46</sup>V, <sup>50</sup>Mn, <sup>54</sup>Co, <sup>62</sup>Ga, <sup>74</sup>Rb; systematics of superallowed  $\beta$  decays and ft values. JOUR PRVCA 78 025502

**A=38 (continued)**

<sup>38</sup>Ca      2008ON02      NUCLEAR REACTIONS <sup>9</sup>Be(<sup>16</sup>C, <sup>16</sup>C'), E=40 MeV / nucleon; <sup>9</sup>Be(<sup>18</sup>C, <sup>18</sup>C'), (<sup>18</sup>C, <sup>11</sup>Be), (<sup>18</sup>C, <sup>16</sup>N), E=79 MeV / nucleon; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, half-lives using recoil shadow method. <sup>11</sup>Be, <sup>16</sup>N, <sup>16,18</sup>C; deduced levels, J,  $\pi$ , B(E2). <sup>14</sup>C, <sup>16,18,20,22</sup>O, <sup>34</sup>Si, <sup>38,40,46,48</sup>Ca; comparison of B(E2) values. JOUR PRVCA 78 014308

**A=39**

<sup>39</sup>Cl      2008KL02      NUCLEAR REACTIONS <sup>40</sup>Ar( $\mu^-$ ,  $\nu$ ), ( $\mu^-$ ,  $n\nu$ ), ( $\mu^-$ ,  $2n\nu$ ), E not given; measured E $\gamma$ , I $\gamma$ , muon lifetime, isotopic yields. JOUR BRSPE 72 735

<sup>39</sup>K      2006K063      RADIOACTIVITY <sup>26m</sup>Al, <sup>38m</sup>K( $\beta^+$ ); measured recoil energy spectrum in  $\beta$  decay,  $\beta\nu(\theta)$ . <sup>20</sup>Ne, <sup>23</sup>Na, <sup>39</sup>K; measured excitation, and ion beam properties on the WITCH set-up. Penning trap method. <sup>35</sup>Ar; measured half-life and time-of-flight spectrum. JOUR IMSPF 251 159

**A=40**

<sup>40</sup>Cl      2008KL02      NUCLEAR REACTIONS <sup>40</sup>Ar( $\mu^-$ ,  $\nu$ ), ( $\mu^-$ ,  $n\nu$ ), ( $\mu^-$ ,  $2n\nu$ ), E not given; measured E $\gamma$ , I $\gamma$ , muon lifetime, isotopic yields. JOUR BRSPE 72 735

<sup>40</sup>Ar      2008SP04      NUCLEAR REACTIONS <sup>12</sup>C(<sup>36</sup>S, <sup>40</sup>Ar), E=70 MeV; measured E $\gamma$ , I $\gamma$ , particle spectra,  $\gamma\gamma$ -coin, (particle) $\gamma$ -coin, g-factors, B(E2). <sup>40</sup>Ar; measured half-lives of 2+ and 4+ states using Doppler-shift attenuation method; deduced levels, J,  $\pi$ . JOUR PRVCA 78 017304

            2008SY01      RADIOACTIVITY <sup>60</sup>Co, <sup>137</sup>Cs( $\beta^-$ ), <sup>40</sup>K( $\beta^+$ ); measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin. Effect of shielding and (anti-)coincidence techniques on detector background discussed. JOUR JRNC D 276 779

<sup>40</sup>K      2008FIZZ      NUCLEAR REACTIONS <sup>1,2</sup>H, <sup>6,7</sup>Li, <sup>9</sup>Be, <sup>10,11</sup>B, <sup>12,13</sup>C, <sup>14,15</sup>N, <sup>16</sup>O, <sup>19</sup>F, <sup>23,23m</sup>Na, <sup>24,25,26</sup>Mg, <sup>27</sup>Al, <sup>28,29,30</sup>Si, <sup>31</sup>P, <sup>32,33,34</sup>S, <sup>35,37</sup>Cl, <sup>39,40,41</sup>K, <sup>102,104,105,106,108,110</sup>Pd(n,  $\gamma$ ), E=thermal; measured cross sections; <sup>10</sup>B(n,  $\alpha$ ), E=thermal; measured cross sections; <sup>25</sup>Mg(n,  $\gamma$ ), E=thermal; <sup>13</sup>C(n,  $\gamma$ ), E=thermal; <sup>105</sup>Pd(n,  $\gamma$ ), E=thermal; measured E $\gamma$ , I $\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone

            2008SY01      RADIOACTIVITY <sup>60</sup>Co, <sup>137</sup>Cs( $\beta^-$ ), <sup>40</sup>K( $\beta^+$ ); measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin. Effect of shielding and (anti-)coincidence techniques on detector background discussed. JOUR JRNC D 276 779

<sup>40</sup>Ca      2006FR27      ATOMIC MASSES <sup>24,26</sup>Mg, <sup>40,48</sup>Ca; measured masses of hydrogen-and lithium-like ions of Mg and Ca with SMILETRAP (Penning trap) mass spectrometer; analyzed binding energies. Comparisons with previous results. <sup>204</sup>Hg; measured time of flight spectrum. JOUR IMSPF 251 281

KEYNUMBERS AND KEYWORDS

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**A=40 (continued)**

20080N02 NUCLEAR REACTIONS  $^9\text{Be}(^{16}\text{C}, ^{16}\text{C}')$ ,  $E=40$  MeV / nucleon;  $^9\text{Be}(^{18}\text{C}, ^{18}\text{C}')$ ,  $(^{18}\text{C}, ^{11}\text{Be})$ ,  $(^{18}\text{C}, ^{16}\text{N})$ ,  $E=79$  MeV / nucleon; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin, half-lives using recoil shadow method.  $^{11}\text{Be}$ ,  $^{16}\text{N}$ ,  $^{16,18}\text{C}$ ; deduced levels,  $J$ ,  $\pi$ ,  $B(E2)$ .  $^{14}\text{C}$ ,  $^{16,18,20,22}\text{O}$ ,  $^{34}\text{Si}$ ,  $^{38,40,46,48}\text{Ca}$ ; comparison of  $B(E2)$  values. JOUR PRVCA 78 014308

**A=41**

$^{41}\text{Ar}$  2008FU08 NUCLEAR REACTIONS  $^{27}\text{Al}$ ,  $^{28}\text{Si}$ ,  $^{29}\text{Si}$ ,  $^{41}\text{K}$ ,  $^{51}\text{V}$ ,  $^{61}\text{Ni}$ ,  $^{65}\text{Cu}$ ,  $^{64,67}\text{Zn}$ ,  $^{69}\text{Ga}$ ,  $^{79}\text{Br}$ ,  $^{92}\text{Mo}(n, p)$ ,  $E=3.5\text{-}5.9$  MeV;  $^{69}\text{Ga}$ ,  $^{93}\text{Nb}(n, \alpha)$ ,  $E=3.5\text{-}5.9$  MeV; measured  $E\gamma$ ,  $I\gamma$ , cross sections using the activation technique. JOUR ANEND 35 1652

2008RE07 NUCLEAR REACTIONS  $^{20}\text{Ne}$ ,  $^{27}\text{Al}$ ,  $^{40}\text{Ar}$ ,  $^{84}\text{Kr}$ ,  $^{131,132}\text{Xe}$ ,  $^{208}\text{Pb}$ ,  $^{235,238}\text{U}(n, \gamma)$ ,  $E=\text{low}$ ; measured  $E\gamma$ ,  $I\gamma$  using cold neutron source and an "invisible container". JOUR JRNCD 276 825

$^{41}\text{K}$  2008FIZZ NUCLEAR REACTIONS  $^1,2\text{H}$ ,  $^{6,7}\text{Li}$ ,  $^9\text{Be}$ ,  $^{10,11}\text{B}$ ,  $^{12,13}\text{C}$ ,  $^{14,15}\text{N}$ ,  $^{16}\text{O}$ ,  $^{19}\text{F}$ ,  $^{23,23m}\text{Na}$ ,  $^{24,25,26}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{28,29,30}\text{Si}$ ,  $^{31}\text{P}$ ,  $^{32,33,34}\text{S}$ ,  $^{35,37}\text{Cl}$ ,  $^{39,40,41}\text{K}$ ,  $^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ ,  $E=\text{thermal}$ ; measured cross sections;  $^{10}\text{B}(n, \alpha)$ ,  $E=\text{thermal}$ ; measured cross sections;  $^{25}\text{Mg}(n, \gamma)$ ,  $E=\text{thermal}$ ;  $^{13}\text{C}(n, \gamma)$ ,  $E=\text{thermal}$ ;  $^{105}\text{Pd}(n, \gamma)$ ,  $E=\text{thermal}$ ; measured  $E\gamma$ ,  $I\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone

2008V008 NUCLEAR REACTIONS  $^{40}\text{Ar}(p, \gamma)^{41}\text{K}$ ,  $E=450\text{-}2700$  keV; measured  $E\gamma$ ,  $I\gamma$ , excitation function, resonance strengths.  $^{41}\text{K}$ ; deduced level energies and radiative widths. JOUR BRSPE 72 761

**A=42**

$^{42}\text{K}$  2005LI66 RADIOACTIVITY  $^{24}\text{Na}(\beta^-)$ ,  $^{42}\text{K}(\beta^-)$ ,  $^{198}\text{Au}(\beta^-)$ ; measured  $E\gamma$ ,  $I\gamma$ , isotopic  $T_{1/2}$ . JOUR JRNCD 263 311

2008FIZZ NUCLEAR REACTIONS  $^1,2\text{H}$ ,  $^{6,7}\text{Li}$ ,  $^9\text{Be}$ ,  $^{10,11}\text{B}$ ,  $^{12,13}\text{C}$ ,  $^{14,15}\text{N}$ ,  $^{16}\text{O}$ ,  $^{19}\text{F}$ ,  $^{23,23m}\text{Na}$ ,  $^{24,25,26}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{28,29,30}\text{Si}$ ,  $^{31}\text{P}$ ,  $^{32,33,34}\text{S}$ ,  $^{35,37}\text{Cl}$ ,  $^{39,40,41}\text{K}$ ,  $^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ ,  $E=\text{thermal}$ ; measured cross sections;  $^{10}\text{B}(n, \alpha)$ ,  $E=\text{thermal}$ ; measured cross sections;  $^{25}\text{Mg}(n, \gamma)$ ,  $E=\text{thermal}$ ;  $^{13}\text{C}(n, \gamma)$ ,  $E=\text{thermal}$ ;  $^{105}\text{Pd}(n, \gamma)$ ,  $E=\text{thermal}$ ; measured  $E\gamma$ ,  $I\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone

$^{42}\text{Ca}$  2005LI66 RADIOACTIVITY  $^{24}\text{Na}(\beta^-)$ ,  $^{42}\text{K}(\beta^-)$ ,  $^{198}\text{Au}(\beta^-)$ ; measured  $E\gamma$ ,  $I\gamma$ , isotopic  $T_{1/2}$ . JOUR JRNCD 263 311

$^{42}\text{Sc}$  2008FI07 RADIOACTIVITY  $^{62}\text{Ga}(\beta^+)$ ; measured  $E\gamma$ ,  $I\gamma$ ,  $E\beta$ ,  $\beta\gamma$ -coin, branching ratios; deduced ft values.  $^{62}\text{Zn}$ ; deduced levels,  $J$ ,  $\pi$ .  $^{10}\text{C}$ ,  $^{14}\text{O}$ ,  $^{22}\text{Mg}$ ,  $^{26m}\text{Al}$ ,  $^{34}\text{Ca}$ ,  $^{34}\text{Ar}$ ,  $^{38m}\text{K}$ ,  $^{42}\text{Sc}$ ,  $^{46}\text{V}$ ,  $^{50}\text{Mn}$ ,  $^{54}\text{Co}$ ,  $^{62}\text{Ga}$ ,  $^{74}\text{Rb}$ ; systematics of superallowed  $\beta$  decays and ft values. JOUR PRVCA 78 025502

KEYNUMBERS AND KEYWORDS

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**A=43**

<sup>43</sup>P      2008RI04      NUCLEAR REACTIONS <sup>9</sup>Be(<sup>44</sup>S, p<sup>43</sup>P), E=91.7 MeV / nucleon; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -, (particle) $\gamma$ -coin, partial  $\sigma$ , momentum distributions. <sup>43</sup>P; deduced levels, J,  $\pi$ . Comparison with shell-model calculations. JOUR PRVCA 78 011303

**A=44**

<sup>44</sup>Sc      2008LAZX      NUCLEAR REACTIONS <sup>45</sup>Sc, <sup>51</sup>V(<sup>3</sup>He, <sup>3</sup>He' $\gamma$ ), <sup>45</sup>Sc, <sup>51</sup>V(<sup>3</sup>He,  $\alpha\gamma$ ), E=30, 38 MeV; measured E $\gamma$ , I $\gamma$ , (particle) $\gamma$ -coin. <sup>44,45</sup>Sc, <sup>50,51</sup>V; deduced level densities,  $\gamma$  strength functions. CONF Crete(FINUSTAR 2),Proc.P380,Larsen

          2008LAZZ      NUCLEAR REACTIONS <sup>45</sup>Sc, <sup>51</sup>V(<sup>3</sup>He, <sup>3</sup>He'), E=30, 38 MeV; <sup>45</sup>Sc, <sup>51</sup>V(<sup>3</sup>He,  $\alpha\gamma$ ), E=30, 38 MeV;measured E $\gamma$ , I $\gamma$ ; deduced level densities and  $\gamma$  strength function. CONF Yosemite(CNR 2007) Proc.P70,Larsen

<sup>44</sup>Ti      2008BU12      NUCLEAR REACTIONS <sup>4</sup>He(<sup>12</sup>C,  $\gamma$ ), E not given; <sup>1</sup>H(<sup>26</sup>Al,  $\gamma$ ), E not given; <sup>4</sup>He(<sup>40</sup>Ca,  $\gamma$ ), E(cm)=2.18-4.15 MeV; measured E $\gamma$ , I $\gamma$ ; deduced astrophysical S-factor. JOUR NUPAB 805 462c

          2008KIZZ      NUCLEAR REACTIONS <sup>12</sup>C(<sup>20</sup>Ne, X)<sup>32</sup>S, <sup>12</sup>C(<sup>24</sup>Mg, X)<sup>36</sup>Ar, <sup>24</sup>Mg(<sup>20</sup>Ne, X)<sup>44</sup>Ti, <sup>24</sup>Mg(<sup>36</sup>Ar, X)<sup>60</sup>Zn, E\*  $\approx$ 50 MeV; measured E $\gamma$ , I $\gamma$ , cross sections; deduced GDR Strength functions, isospin mixing probability. CONF Crete(FINUSTAR 2),Proc.P371,Kicinska-Habior

**A=45**

<sup>45</sup>Sc      2008LAZX      NUCLEAR REACTIONS <sup>45</sup>Sc, <sup>51</sup>V(<sup>3</sup>He, <sup>3</sup>He' $\gamma$ ), <sup>45</sup>Sc, <sup>51</sup>V(<sup>3</sup>He,  $\alpha\gamma$ ), E=30, 38 MeV; measured E $\gamma$ , I $\gamma$ , (particle) $\gamma$ -coin. <sup>44,45</sup>Sc, <sup>50,51</sup>V; deduced level densities,  $\gamma$  strength functions. CONF Crete(FINUSTAR 2),Proc.P380,Larsen

          2008LAZZ      NUCLEAR REACTIONS <sup>45</sup>Sc, <sup>51</sup>V(<sup>3</sup>He, <sup>3</sup>He'), E=30, 38 MeV; <sup>45</sup>Sc, <sup>51</sup>V(<sup>3</sup>He,  $\alpha\gamma$ ), E=30, 38 MeV;measured E $\gamma$ , I $\gamma$ ; deduced level densities and  $\gamma$  strength function. CONF Yosemite(CNR 2007) Proc.P70,Larsen

**A=46**

<sup>46</sup>Ca      2008ON02      NUCLEAR REACTIONS <sup>9</sup>Be(<sup>16</sup>C, <sup>16</sup>C'), E=40 MeV / nucleon;<sup>9</sup>Be(<sup>18</sup>C, <sup>18</sup>C'), (<sup>18</sup>C, <sup>11</sup>Be), (<sup>18</sup>C, <sup>16</sup>N), E=79 MeV / nucleon; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, half-lives using recoil shadow method. <sup>11</sup>Be, <sup>16</sup>N, <sup>16,18</sup>C; deduced levels, J,  $\pi$ , B(E2). <sup>14</sup>C, <sup>16,18,20,22</sup>O, <sup>34</sup>Si, <sup>38,40,46,48</sup>Ca; comparison of B(E2) values. JOUR PRVCA 78 014308

<sup>46</sup>Sc      2008J006      NUCLEAR REACTIONS <sup>27</sup>Al, <sup>28</sup>Si, <sup>29</sup>Si, <sup>46,47</sup>Ti, <sup>54</sup>Fe, <sup>58</sup>Ni, <sup>64</sup>Zn(n, p), <sup>27</sup>Al, <sup>30</sup>Si(n,  $\alpha$ ), <sup>197</sup>Au(n,  $\gamma$ ), E= reactor; measured E $\gamma$ , I $\gamma$ , fast neutron spectrum averaged  $\sigma$ ; comparator method. JOUR ARISE 66 1377

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**A=46 (continued)**

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| $^{46}\text{Ti}$ | 2008FE15 | NUCLEAR REACTIONS $^{45}\text{Sc}(p, \gamma)$ , $E=1.2\text{-}3.1$ MeV; measured $E\gamma$ , $I\gamma$ , partial $\sigma(E)$ from average spectrum; $^{46}\text{Ti}$ ; deduced levels, $E1$ radiative strength functions; comparison with semiphenomenological and microscopic model calculations. JOUR PANUE 71 1325   |
| $^{46}\text{V}$  | 2006J014 | ATOMIC MASSES $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ , $^{98,99,100,101,102,103,104,105,106}\text{Nb}$ , $^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay. $^{22}\text{Mg}$ , $^{34}\text{Ar}$ , $^{46}\text{V}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; reviewed superallowed $\beta$ decay $Ft$ values. $^{92}\text{Br}$ ; measured time of flight spectrum. $^{102}\text{Nb}$ ; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204 |
|                  | 2008FI07 | RADIOACTIVITY $^{62}\text{Ga}(\beta^+)$ ; measured $E\gamma$ , $I\gamma$ , $E\beta$ , $\beta\gamma$ -coin, branching ratios; deduced $ft$ values. $^{62}\text{Zn}$ ; deduced levels, $J$ , $\pi$ . $^{10}\text{C}$ , $^{14}\text{O}$ , $^{22}\text{Mg}$ , $^{26m}\text{Al}$ , $^{34}\text{Ca}$ , $^{34}\text{Ar}$ , $^{38m}\text{K}$ , $^{42}\text{Sc}$ , $^{46}\text{V}$ , $^{50}\text{Mn}$ , $^{54}\text{Co}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; systematics of superallowed $\beta$ decays and $ft$ values. JOUR PRVCA 78 025502  |

**A=47**

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| $^{47}\text{Ar}$ | 2008BH09 | NUCLEAR REACTIONS $^{48}\text{Ca}(^{238}\text{U}, X)^{47}\text{Ar} / ^{48}\text{Ar}$ , $E=1.31$ GeV; measured $E\gamma$ , $I\gamma$ , (particle) $\gamma$ , $\gamma\gamma$ -coin. $^{47,48}\text{Ar}$ ; deduced levels, $J$ , $\pi$ . JOUR PRLTA 101 032501  |
| $^{47}\text{Sc}$ | 2008J006 | NUCLEAR REACTIONS $^{27}\text{Al}$ , $^{28}\text{Si}$ , $^{29}\text{Si}$ , $^{46,47}\text{Ti}$ , $^{54}\text{Fe}$ , $^{58}\text{Ni}$ , $^{64}\text{Zn}(n, p)$ , $^{27}\text{Al}$ , $^{30}\text{Si}(n, \alpha)$ , $^{197}\text{Au}(n, \gamma)$ , $E=$ reactor; measured $E\gamma$ , $I\gamma$ , fast neutron spectrum averaged $\sigma$ ; comparator method. JOUR ARISE 66 1377 |

**A=48**

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| $^{48}\text{Ar}$ | 2008BH09 | NUCLEAR REACTIONS $^{48}\text{Ca}(^{238}\text{U}, X)^{47}\text{Ar} / ^{48}\text{Ar}$ , $E=1.31$ GeV; measured $E\gamma$ , $I\gamma$ , (particle) $\gamma$ , $\gamma\gamma$ -coin. $^{47,48}\text{Ar}$ ; deduced levels, $J$ , $\pi$ . JOUR PRLTA 101 032501   |
| $^{48}\text{Ca}$ | 2006FR27 | ATOMIC MASSES $^{24,26}\text{Mg}$ , $^{40,48}\text{Ca}$ ; measured masses of hydrogen-and lithium-like ions of Mg and Ca with SMILETRAP (Penning trap) mass spectrometer; analyzed binding energies. Comparisons with previous results. $^{204}\text{Hg}$ ; measured time of flight spectrum. JOUR IMSPF 251 281  |
|                  | 2008ON02 | NUCLEAR REACTIONS $^9\text{Be}(^{16}\text{C}, ^{16}\text{C}')$ , $E=40$ MeV / nucleon; $^9\text{Be}(^{18}\text{C}, ^{18}\text{C}')$ , $(^{18}\text{C}, ^{11}\text{Be})$ , $(^{18}\text{C}, ^{16}\text{N})$ , $E=79$ MeV / nucleon; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, half-lives using recoil shadow method. $^{11}\text{Be}$ , $^{16}\text{N}$ , $^{16,18}\text{C}$ ; deduced levels, $J$ , $\pi$ , $B(E2)$ . $^{14}\text{C}$ , $^{16,18,20,22}\text{O}$ , $^{34}\text{Si}$ , $^{38,40,46,48}\text{Ca}$ ; comparison of $B(E2)$ values. JOUR PRVCA 78 014308 |

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**A=49**

No references found

**A=50**

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| $^{50}\text{V}$  | 2008LAZX | NUCLEAR REACTIONS $^{45}\text{Sc}$ , $^{51}\text{V}(^3\text{He}, ^3\text{He}'\gamma)$ , $^{45}\text{Sc}$ , $^{51}\text{V}(^3\text{He}, \alpha\gamma)$ , E=30, 38 MeV; measured $E\gamma$ , $I\gamma$ , (particle) $\gamma$ -coin. $^{44,45}\text{Sc}$ , $^{50,51}\text{V}$ ; deduced level densities, $\gamma$ strength functions. CONF Crete(FINUSTAR 2),Proc.P380,Larsen  |
|                  | 2008LAZZ | NUCLEAR REACTIONS $^{45}\text{Sc}$ , $^{51}\text{V}(^3\text{He}, ^3\text{He}')$ , E=30, 38 MeV; $^{45}\text{Sc}$ , $^{51}\text{V}(^3\text{He}, \alpha\gamma)$ , E=30, 38 MeV; measured $E\gamma$ , $I\gamma$ ; deduced level densities and $\gamma$ strength function. CONF Yosemite(CNR 2007) Proc.P70,Larsen  |
| $^{50}\text{Mn}$ | 2008FI07 | RADIOACTIVITY $^{62}\text{Ga}(\beta^+)$ ; measured $E\gamma$ , $I\gamma$ , $E\beta$ , $\beta\gamma$ -coin, branching ratios; deduced ft values. $^{62}\text{Zn}$ ; deduced levels, J, $\pi$ . $^{10}\text{C}$ , $^{14}\text{O}$ , $^{22}\text{Mg}$ , $^{26m}\text{Al}$ , $^{34}\text{Ca}$ , $^{34}\text{Ar}$ , $^{38m}\text{K}$ , $^{42}\text{Sc}$ , $^{46}\text{V}$ , $^{50}\text{Mn}$ , $^{54}\text{Co}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; systematics of superallowed $\beta$ decays and ft values. JOUR PRVCA 78 025502 |

**A=51**

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| $^{51}\text{Ti}$ | 2008FU08 | NUCLEAR REACTIONS $^{27}\text{Al}$ , $^{28}\text{Si}$ , $^{29}\text{Si}$ , $^{41}\text{K}$ , $^{51}\text{V}$ , $^{61}\text{Ni}$ , $^{65}\text{Cu}$ , $^{64,67}\text{Zn}$ , $^{69}\text{Ga}$ , $^{79}\text{Br}$ , $^{92}\text{Mo}(n, p)$ , E=3.5-5.9 MeV; $^{69}\text{Ga}$ , $^{93}\text{Nb}(n, \alpha)$ , E=3.5-5.9 MeV; measured $E\gamma$ , $I\gamma$ , cross sections using the activation technique. JOUR ANEND 35 1652 |
| $^{51}\text{V}$  | 2008LAZX | NUCLEAR REACTIONS $^{45}\text{Sc}$ , $^{51}\text{V}(^3\text{He}, ^3\text{He}'\gamma)$ , $^{45}\text{Sc}$ , $^{51}\text{V}(^3\text{He}, \alpha\gamma)$ , E=30, 38 MeV; measured $E\gamma$ , $I\gamma$ , (particle) $\gamma$ -coin. $^{44,45}\text{Sc}$ , $^{50,51}\text{V}$ ; deduced level densities, $\gamma$ strength functions. CONF Crete(FINUSTAR 2),Proc.P380,Larsen  |
|                  | 2008LAZZ | NUCLEAR REACTIONS $^{45}\text{Sc}$ , $^{51}\text{V}(^3\text{He}, ^3\text{He}')$ , E=30, 38 MeV; $^{45}\text{Sc}$ , $^{51}\text{V}(^3\text{He}, \alpha\gamma)$ , E=30, 38 MeV; measured $E\gamma$ , $I\gamma$ ; deduced level densities and $\gamma$ strength function. CONF Yosemite(CNR 2007) Proc.P70,Larsen  |

**A=52**

No references found

**A=53**

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| $^{53}\text{Fe}$ | 2008RU07 | NUCLEAR REACTIONS $^9\text{Be}(^{58}\text{Ni}, X)$ , E=550 MeV / nucleon; measured time correlated $\beta$ -delayed $E\gamma$ , $I\gamma$ . $^{53}\text{Fe}$ , $^{53}\text{Co}$ deduced levels, J, $\pi$ , $T_{1/2}$ . Comparison with shell model calculations. JOUR ZAANE 36 131 |
| $^{53}\text{Co}$ | 2008RU07 | NUCLEAR REACTIONS $^9\text{Be}(^{58}\text{Ni}, X)$ , E=550 MeV / nucleon; measured time correlated $\beta$ -delayed $E\gamma$ , $I\gamma$ . $^{53}\text{Fe}$ , $^{53}\text{Co}$ deduced levels, J, $\pi$ , $T_{1/2}$ . Comparison with shell model calculations. JOUR ZAANE 36 131 |



KEYNUMBERS AND KEYWORDS

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**A=53 (continued)**

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|                  | 2008RU09 | RADIOACTIVITY $^{54}\text{Ni}(p)$ ; measured $E\gamma$ , $I\gamma$ from $10^+$ isomer decay. $^{53}\text{Co}$ ; deduced levels, J, $\pi$ . JOUR PRVCA 78 021301                                       |
| $^{53}\text{Ni}$ | 2008BRZY | NUCLEAR REACTIONS $\text{Be}(^{56}\text{Ni}, X)^{53}\text{Ni}$ , E not given; measured $I\gamma$ , $E\gamma$ ; $^{53}\text{Ni}$ ; deduced levels, J, $\pi$ . CONF Crete(FINUSTAR 2), Proc.P347, Brown |

**A=54**

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|------------------|----------|---|
| $^{54}\text{Mn}$ | 2008J006 | NUCLEAR REACTIONS $^{27}\text{Al}$ , $^{28}\text{Si}$ , $^{29}\text{Si}$ , $^{46,47}\text{Ti}$ , $^{54}\text{Fe}$ , $^{58}\text{Ni}$ , $^{64}\text{Zn}(n, p)$ , $^{27}\text{Al}$ , $^{30}\text{Si}(n, \alpha)$ , $^{197}\text{Au}(n, \gamma)$ , E= reactor; measured $E\gamma$ , $I\gamma$ , fast neutron spectrum averaged $\sigma$ ; comparator method. JOUR ARISE 66 1377  |
|                  | 2008KI14 | NUCLEAR REACTIONS $^{51}\text{V}(^{20}\text{Ne}, X)^{54}\text{Mn}$ , E=145 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin; $^{54}\text{Mn}$ ; deduced levels, J, $\pi$ , $\gamma$ -ray polarization, DCO ratio; clover detector array; calculated and compared yrast and non-yrast levels with shell model calculations using OXBASH code. JOUR JPGPE 35 095104   |
| $^{54}\text{Fe}$ | 2008RU09 | NUCLEAR REACTIONS $^9\text{Be}(^{58}\text{Ni}, X)$ , E=550 MeV / nucleon; measured $E\gamma$ , $I\gamma$ , (fragment) $\gamma$ -coin. $^{54}\text{Ni}$ ; deduced levels, J, $\pi$ , B(E2), B(E4), half-life of $10^+$ state, magnetic dipole moments, electric quadrupole moments. $^{54}\text{Fe}$ , $^{54}\text{Ni}$ ; systematics of $10^+$ isomer decay properties. JOUR PRVCA 78 021301  |
| $^{54}\text{Co}$ | 2008FI07 | RADIOACTIVITY $^{62}\text{Ga}(\beta^+)$ ; measured $E\gamma$ , $I\gamma$ , $E\beta$ , $\beta\gamma$ -coin, branching ratios; deduced ft values. $^{62}\text{Zn}$ ; deduced levels, J, $\pi$ . $^{10}\text{C}$ , $^{14}\text{O}$ , $^{22}\text{Mg}$ , $^{26m}\text{Al}$ , $^{34}\text{Ca}$ , $^{34}\text{Ar}$ , $^{38m}\text{K}$ , $^{42}\text{Sc}$ , $^{46}\text{V}$ , $^{50}\text{Mn}$ , $^{54}\text{Co}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; systematics of superallowed $\beta$ decays and ft values. JOUR PRVCA 78 025502 |
| $^{54}\text{Ni}$ | 2008RU09 | NUCLEAR REACTIONS $^9\text{Be}(^{58}\text{Ni}, X)$ , E=550 MeV / nucleon; measured $E\gamma$ , $I\gamma$ , (fragment) $\gamma$ -coin. $^{54}\text{Ni}$ ; deduced levels, J, $\pi$ , B(E2), B(E4), half-life of $10^+$ state, magnetic dipole moments, electric quadrupole moments. $^{54}\text{Fe}$ , $^{54}\text{Ni}$ ; systematics of $10^+$ isomer decay properties. JOUR PRVCA 78 021301  |
|                  | 2008RU09 | RADIOACTIVITY $^{54}\text{Ni}(p)$ ; measured $E\gamma$ , $I\gamma$ from $10^+$ isomer decay. $^{53}\text{Co}$ ; deduced levels, J, $\pi$ . JOUR PRVCA 78 021301   |

**A=55**

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| $^{55}\text{Co}$ | 2008J004 | RADIOACTIVITY $^{56}\text{Ni}(p)$ ; measured proton spectra. $^{55}\text{Co}$ ; deduced levels, J, $\pi$ . JOUR PRVCA 77 064316 |
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**A=56**

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| $^{56}\text{Ni}$ | 2008J004 | NUCLEAR REACTIONS $^{28}\text{Si}(^{36}\text{Ar}, 2\alpha)$ , E=142, 143, 148 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular distributions, multipolarities. $^{56}\text{Ni}$ ; deduced levels, J, $\pi$ , bands, deformation parameters. Comparison with cranked Nilsson-Strutinsky calculations. JOUR PRVCA 77 064316 |
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KEYNUMBERS AND KEYWORDS

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**A=56 (continued)**

- 2008J004 RADIOACTIVITY  $^{56}\text{Ni}(p)$ ; measured proton spectra.  $^{55}\text{Co}$ ; deduced levels, J,  $\pi$ . JOUR PRVCA 77 064316
- 2008OR02 NUCLEAR REACTIONS  $^{58,60}\text{Ni}(n, n'\gamma)E=1.6, 1.8$  MeV; measured  $E\gamma, I\gamma$ , half-life of  $2^+$  states.  $^{58}\text{Ni}, ^{60}\text{Ni}$ ; deduced  $B(E2)$  values. Doppler shift attenuation method.  $^{56,62,64,66,68}\text{Ni}$ ; calculated lifetimes,  $B(E2)$ . JOUR PRVCA 77 064301

**A=57**

- $^{57}\text{Fe}$  2008RU04 NUCLEAR REACTIONS  $^{98,100}\text{Mo}(\gamma, \gamma')$ ,  $E < 15$  MeV; measured  $E\gamma, I\gamma$ , photoabsorption  $\sigma$ , giant resonances, angular distributions, distribution of mean branching ratios, dipole strength functions; deduced multipolarities.  $^{27}\text{Al}, ^{28}\text{Si}, ^{56}\text{Fe}, ^{63}\text{Cu}, ^{70,72,73,74}\text{Ge}(n, \gamma)$ ,  $E = \text{thermal}$ ; measured  $E\gamma, I\gamma$ .  $^{99,101}\text{Mo}(\gamma, n)$ ; analyzed cross sections.  $^{97}\text{Mo}(n, \gamma), ^{98}\text{Mo}(^3\text{He}, ^3\text{He}'\gamma)$ ; comparisons. JOUR PRVCA 77 064321
- 2008VOZY NUCLEAR REACTIONS  $^{27}\text{Al}, ^{59}\text{Co}, ^{65}\text{Cu}(d, n)$ ,  $E = 7.5$  MeV; measured neutron time of flight; deduced level densities.  $^{59}\text{Co}(p, \gamma)$ ,  $E = 1.9$  MeV; measured  $E\gamma, I\gamma$ ;  $^{57}\text{Fe}(^3\text{He}, ^3\text{He}')$ ,  $E = 10$  MeV; measured charged particle energies and angular distributions; deduced  $\gamma$  strength functions. CONF Yosemite(CNR 2007) Proc.P61,Voinov
- $^{57}\text{Cu}$  2008ST12 NUCLEAR MOMENTS  $^{58,59}\text{Cu}$ ; measured magnetic moments, isotope shifts. In-source laser spectrometry. Comparison with theoretical data.  $^{57,60,61,62,63,64,65,66,67,68,69}\text{Cu}$ ; comparison between theory and experiments. JOUR PRVCA 77 067302

**A=58**

- $^{58}\text{Ti}$  2008A001 NUCLEAR REACTIONS  $^1\text{H}(^{58}\text{Ti}, ^{58}\text{Ti}')$ ,  $(^{60}\text{Cr}, ^{60}\text{Cr}')$ ,  $(^{62}\text{Cr}, ^{62}\text{Cr}')$ ,  $E \approx 40$  MeV / nucleon; measured  $E\gamma, I\gamma, \gamma\gamma$ -coin.  $^{58}\text{Ti}, ^{60,62}\text{Cr}$  deduced levels, J,  $\pi$ , deformation lengths. Inverse kinematics. JOUR NUPAB 805 400c
- $^{58}\text{Co}$  2008J006 NUCLEAR REACTIONS  $^{27}\text{Al}, ^{28}\text{Si}, ^{29}\text{Si}, ^{46,47}\text{Ti}, ^{54}\text{Fe}, ^{58}\text{Ni}, ^{64}\text{Zn}(n, p), ^{27}\text{Al}, ^{30}\text{Si}(n, \alpha), ^{197}\text{Au}(n, \gamma)$ ,  $E = \text{reactor}$ ; measured  $E\gamma, I\gamma$ , fast neutron spectrum averaged  $\sigma$ ; comparator method. JOUR ARISE 66 1377
- $^{58}\text{Ni}$  2008AG11 NUCLEAR REACTIONS  $^{58}\text{Ni}(^8\text{B}, p^7\text{Be})$ ,  $E = 25.0, 26.9, 28.4$  MeV; measured light fragments energy spectra, single angle excitation function,  $\sigma(\theta)$ ; Comparison with CDCC calculation. JOUR PANUE 71 1163
- 2008EKZZ NUCLEAR REACTIONS  $^{58}\text{Ni}(^{106}\text{Sn}, ^{106}\text{Sn}')$ ,  $^{58}\text{Ni}(^{108}\text{Sn}, ^{108}\text{Sn}')$ ,  $^{58}\text{Ni}(^{110}\text{Sn}, ^{110}\text{Sn}')$ ,  $E = 2.8$  MeV / nucleon; measured  $E\gamma, I\gamma$ ;  $^{106,108,110}\text{Sn}$ ; deduced  $B(E2)$ . Compared results with existing data. CONF Crete(FINUSTAR 2),Proc.P296,Ekstrom

KEYNUMBERS AND KEYWORDS

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**A=58 (continued)**

- 2008KRZZ NUCLEAR REACTIONS  $^{58}\text{Ni}(^{122}\text{Cd}, ^{122}\text{Cd}')$ ,  $(^{124}\text{Cd}, ^{124}\text{Cd}')$ ,  $(^{126}\text{Cd}, ^{126}\text{Cd}')$ ,  $(^{138}\text{Xe}, ^{138}\text{Xe}')$ ,  $(^{140}\text{Xe}, ^{140}\text{Xe}')$ ,  $(^{142}\text{Xe}, ^{142}\text{Xe}')$ ,  $(^{144}\text{Xe}, ^{144}\text{Xe}')$ ,  $(^{140}\text{Ba}, ^{140}\text{Ba}')$ ,  $E=2.85$  MeV / nucleon; measured  $E\gamma$ ,  $I\gamma$ , g-factor;  $^{122,124,126}\text{Cd}$ ,  $^{138,140,142,144}\text{Xe}$ ,  $^{140}\text{Ba}$ ; deduced  $B(E2)$ . Compared results to existing data, systematics and model calculations. CONF Crete(FINUSTAR 2), Proc.P84,Kroll
- 2008OR02 NUCLEAR REACTIONS  $^{58,60}\text{Ni}(n, n'\gamma)E=1.6, 1.8$  MeV; measured  $E\gamma$ ,  $I\gamma$ , half-life of  $2^+$  states.  $^{58}\text{Ni}$ ,  $^{60}\text{Ni}$ ; deduced  $B(E2)$  values. Doppler shift attenuation method.  $^{56,62,64,66,68}\text{Ni}$ ; calculated lifetimes,  $B(E2)$ . JOUR PRVCA 77 064301
- $^{58}\text{Cu}$  2008ST12 NUCLEAR MOMENTS  $^{58,59}\text{Cu}$ ; measured magnetic moments, isotope shifts. In-source laser spectrometry. Comparison with theoretical data.  $^{57,60,61,62,63,64,65,66,67,68,69}\text{Cu}$ ; comparison between theory and experiments. JOUR PRVCA 77 067302

**A=59**

- $^{59}\text{Mn}$  2008VA08 NUCLEAR REACTIONS  $^{238}\text{U}(^{70}\text{Zn}, X)$ ,  $E=460$  MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin.  $^{59,60,61,62,63}\text{Mn}$ ; deduced levels,  $J$ ,  $\pi$ . Comparison with large scale shell model calculations. JOUR PRVCA 78 024302
- $^{59}\text{Co}$  2008BEZZ NUCLEAR REACTIONS  $^{59}\text{Co}(^6\text{Li}, ^6\text{Li})$ ,  $E=12, 18, 26, 30$  MeV; measured particle spectra,  $\sigma(\theta)$ ; deduced potential parameters.  $^{59}\text{Co}(^6\text{Li}, d\alpha)$ ,  $E=41$  MeV; measured  $\sigma(\theta)$ . Compared results to coupled channel calculations. CONF Crete(FINUSTAR 2), Proc.P233,Beck
- $^{59}\text{Cu}$  2008ST12 NUCLEAR MOMENTS  $^{58,59}\text{Cu}$ ; measured magnetic moments, isotope shifts. In-source laser spectrometry. Comparison with theoretical data.  $^{57,60,61,62,63,64,65,66,67,68,69}\text{Cu}$ ; comparison between theory and experiments. JOUR PRVCA 77 067302

**A=60**

- $^{60}\text{Cr}$  2008A001 NUCLEAR REACTIONS  $^1\text{H}(^{58}\text{Ti}, ^{58}\text{Ti}')$ ,  $(^{60}\text{Cr}, ^{60}\text{Cr}')$ ,  $(^{62}\text{Cr}, ^{62}\text{Cr}')$ ,  $E\approx 40$  MeV / nucleon; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin.  $^{58}\text{Ti}$ ,  $^{60,62}\text{Cr}$  deduced levels,  $J$ ,  $\pi$ , deformation lengths. Inverse kinematics. JOUR NUPAB 805 400c
- $^{60}\text{Mn}$  2008VA08 NUCLEAR REACTIONS  $^{238}\text{U}(^{70}\text{Zn}, X)$ ,  $E=460$  MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin.  $^{59,60,61,62,63}\text{Mn}$ ; deduced levels,  $J$ ,  $\pi$ . Comparison with large scale shell model calculations. JOUR PRVCA 78 024302
- $^{60}\text{Co}$  2008P005 RADIOACTIVITY  $^{60}\text{Co}$ ,  $^{137}\text{Cs}(\beta^-)$ ; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin. Effect of shielding, (anti-)coincidence techniques and depth on detector background discussed. JOUR JRNC D 276 771
- 2008SY01 RADIOACTIVITY  $^{60}\text{Co}$ ,  $^{137}\text{Cs}(\beta^-)$ ,  $^{40}\text{K}(\beta^+)$ ; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin. Effect of shielding and (anti-)coincidence techniques on detector background discussed. JOUR JRNC D 276 779

KEYNUMBERS AND KEYWORDS

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**A=60 (continued)**

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| $^{60}\text{Ni}$ | 2008OR02 | NUCLEAR REACTIONS $^{58,60}\text{Ni}(n, n'\gamma)E=1.6, 1.8$ MeV; measured $E\gamma, I\gamma$ , half-life of $2^+$ states. $^{58}\text{Ni}, ^{60}\text{Ni}$ ; deduced $B(E2)$ values. Doppler shift attenuation method. $^{56,62,64,66,68}\text{Ni}$ ; calculated lifetimes, $B(E2)$ . JOUR PRVCA 77 064301   |
|                  | 2008P005 | RADIOACTIVITY $^{60}\text{Co}, ^{137}\text{Cs}(\beta^-)$ ; measured $E\gamma, I\gamma, \gamma\gamma$ -coin. Effect of shielding, (anti-)coincidence techniques and depth on detector background discussed. JOUR JRNC D 276 771  |
|                  | 2008SY01 | RADIOACTIVITY $^{60}\text{Co}, ^{137}\text{Cs}(\beta^-), ^{40}\text{K}(\beta^+)$ ; measured $E\gamma, I\gamma, \gamma\gamma$ -coin. Effect of shielding and (anti-)coincidence techniques on detector background discussed. JOUR JRNC D 276 779   |
|                  | 2008VOZY | NUCLEAR REACTIONS $^{27}\text{Al}, ^{59}\text{Co}, ^{65}\text{Cu}(d, n), E=7.5$ MeV; measured neutron time of flight; deduced level densities. $^{59}\text{Co}(p, \gamma), E=1.9$ MeV; measured $E\gamma, I\gamma; ^{57}\text{Fe}(^3\text{He}, ^3\text{He}'), E=10$ MeV; measured charged particle energies and angular distributions; deduced $\gamma$ strength functions. CONF Yosemite(CNR 2007) Proc.P61,Voinov |
| $^{60}\text{Cu}$ | 2008ST12 | NUCLEAR MOMENTS $^{58,59}\text{Cu}$ ; measured magnetic moments, isotope shifts. In-source laser spectrometry. Comparison with theoretical data. $^{57,60,61,62,63,64,65,66,67,68,69}\text{Cu}$ ; comparison between theory and experiments. JOUR PRVCA 77 067302   |
| $^{60}\text{Zn}$ | 2008KIZZ | NUCLEAR REACTIONS $^{12}\text{C}(^{20}\text{Ne}, X)^{32}\text{S}, ^{12}\text{C}(^{24}\text{Mg}, X)^{36}\text{Ar}, ^{24}\text{Mg}(^{20}\text{Ne}, X)^{44}\text{Ti}, ^{24}\text{Mg}(^{36}\text{Ar}, X)^{60}\text{Zn}, E^* \approx 50$ MeV; measured $E\gamma, I\gamma$ , cross sections; deduced GDR Strength functions, isospin mixing probability. CONF Crete(FINUSTAR 2),Proc.P371,Kicinska-Habior                 |

**A=61**

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| $^{61}\text{Mn}$ | 2008VA08 | NUCLEAR REACTIONS $^{238}\text{U}(^{70}\text{Zn}, X), E=460$ MeV; measured $E\gamma, I\gamma, \gamma\gamma$ -coin. $^{59,60,61,62,63}\text{Mn}$ ; deduced levels, $J, \pi$ . Comparison with large scale shell model calculations. JOUR PRVCA 78 024302   |
| $^{61}\text{Co}$ | 2008FU08 | NUCLEAR REACTIONS $^{27}\text{Al}, ^{28}\text{Si}, ^{29}\text{Si}, ^{41}\text{K}, ^{51}\text{V}, ^{61}\text{Ni}, ^{65}\text{Cu}, ^{64,67}\text{Zn}, ^{69}\text{Ga}, ^{79}\text{Br}, ^{92}\text{Mo}(n, p), E=3.5-5.9$ MeV; $^{69}\text{Ga}, ^{93}\text{Nb}(n, \alpha), E=3.5-5.9$ MeV; measured $E\gamma, I\gamma$ , cross sections using the activation technique. JOUR ANEND 35 1652   |
| $^{61}\text{Ni}$ | 2008ZH15 | NUCLEAR REACTIONS $^{64}\text{Zn}(n, \alpha), E=2.54, 4.00, 5.50$ MeV; measured $E\alpha, I\alpha, \sigma(\theta)$ . JOUR NSENA 160 123   |
| $^{61}\text{Cu}$ | 2008AN06 | NUCLEAR REACTIONS $^{28}\text{Si}(^{36}\text{Ar}, 3p), E=142, 143, 148$ MeV; measured $E\gamma, I\gamma, E_n, I_n$ , charged-particle spectra, (proton) $\gamma$ -, $\gamma\gamma$ -coin. $^{61}\text{Cu}$ deduced energy levels, $J, \pi$ , band structure, configurations, transition intensities and multipolarities using directional correlations of oriented states analysis. Comparison with shell model and cranked Nilsson-Strutinsky calculations. Gammasphere and Microball arrays. Enriched target. JOUR ZAANE 36 251 |
|                  | 2008ST12 | NUCLEAR MOMENTS $^{58,59}\text{Cu}$ ; measured magnetic moments, isotope shifts. In-source laser spectrometry. Comparison with theoretical data. $^{57,60,61,62,63,64,65,66,67,68,69}\text{Cu}$ ; comparison between theory and experiments. JOUR PRVCA 77 067302   |

**A=62**

- <sup>62</sup>Cr 2008A001 NUCLEAR REACTIONS <sup>1</sup>H(<sup>58</sup>Ti, <sup>58</sup>Ti'), (<sup>60</sup>Cr, <sup>60</sup>Cr'), (<sup>62</sup>Cr, <sup>62</sup>Cr'), E≈40 MeV / nucleon; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin. <sup>58</sup>Ti, <sup>60,62</sup>Cr deduced levels, J,  $\pi$ , deformation lengths. Inverse kinematics. JOUR NUPAB 805 400c
- <sup>62</sup>Mn 2008VA08 NUCLEAR REACTIONS <sup>238</sup>U(<sup>70</sup>Zn, X), E=460 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin. <sup>59,60,61,62,63</sup>Mn; deduced levels, J,  $\pi$ . Comparison with large scale shell model calculations. JOUR PRVCA 78 024302
- <sup>62</sup>Ni 2008OR02 NUCLEAR REACTIONS <sup>58,60</sup>Ni(n, n' $\gamma$ )E=1.6, 1.8 MeV; measured E $\gamma$ , I $\gamma$ , half-life of 2<sup>+</sup> states. <sup>58</sup>Ni, <sup>60</sup>Ni; deduced B(E2) values. Doppler shift attenuation method. <sup>56,62,64,66,68</sup>Ni; calculated lifetimes, B(E2). JOUR PRVCA 77 064301
- <sup>62</sup>Cu 2008ST12 NUCLEAR MOMENTS <sup>58,59</sup>Cu; measured magnetic moments, isotope shifts. In-source laser spectrometry. Comparison with theoretical data. <sup>57,60,61,62,63,64,65,66,67,68,69</sup>Cu; comparison between theory and experiments. JOUR PRVCA 77 067302
- <sup>62</sup>Zn 2008BE21 RADIOACTIVITY <sup>62</sup>Ga( $\beta^+$ ) [from <sup>64</sup>Zn(p, X), E=48 MeV]; measured E $\gamma$ , I $\gamma$ , E $\beta$ , I $\beta$ ,  $\gamma\gamma$ -,  $\beta\gamma$ -coin; deduced absolute  $\gamma$ -ray transition probabilities and  $\beta$ -decay branching ratio. JOUR ZAANE 36 121
- 2008FI07 RADIOACTIVITY <sup>62</sup>Ga( $\beta^+$ ); measured E $\gamma$ , I $\gamma$ , E $\beta$ ,  $\beta\gamma$ -coin, branching ratios; deduced ft values. <sup>62</sup>Zn; deduced levels, J,  $\pi$ . <sup>10</sup>C, <sup>14</sup>O, <sup>22</sup>Mg, <sup>26m</sup>Al, <sup>34</sup>Ca, <sup>34</sup>Ar, <sup>38m</sup>K, <sup>42</sup>Sc, <sup>46</sup>V, <sup>50</sup>Mn, <sup>54</sup>Co, <sup>62</sup>Ga, <sup>74</sup>Rb; systematics of superallowed  $\beta$  decays and ft values. JOUR PRVCA 78 025502
- <sup>62</sup>Ga 2006J014 ATOMIC MASSES <sup>96,97,98,99,100,101,102,103,104,105,106</sup>Zr, <sup>98,99,100,101,102,103,104,105,106</sup>Nb, <sup>99,100,101,102,103,104,105,106,107,108,109,110</sup>Mo; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. <sup>117</sup>Pd; measured conversion electrons from isomer decay. <sup>22</sup>Mg, <sup>34</sup>Ar, <sup>46</sup>V, <sup>62</sup>Ga, <sup>74</sup>Rb; reviewed superallowed  $\beta$  decay Ft values. <sup>92</sup>Br; measured time of flight spectrum. <sup>102</sup>Nb; measured  $\gamma$  rays following  $\beta^-$  decay. JOUR IMSPF 251 204
- 2008BE21 RADIOACTIVITY <sup>62</sup>Ga( $\beta^+$ ) [from <sup>64</sup>Zn(p, X), E=48 MeV]; measured E $\gamma$ , I $\gamma$ , E $\beta$ , I $\beta$ ,  $\gamma\gamma$ -,  $\beta\gamma$ -coin; deduced absolute  $\gamma$ -ray transition probabilities and  $\beta$ -decay branching ratio. JOUR ZAANE 36 121
- 2008FI07 RADIOACTIVITY <sup>62</sup>Ga( $\beta^+$ ); measured E $\gamma$ , I $\gamma$ , E $\beta$ ,  $\beta\gamma$ -coin, branching ratios; deduced ft values. <sup>62</sup>Zn; deduced levels, J,  $\pi$ . <sup>10</sup>C, <sup>14</sup>O, <sup>22</sup>Mg, <sup>26m</sup>Al, <sup>34</sup>Ca, <sup>34</sup>Ar, <sup>38m</sup>K, <sup>42</sup>Sc, <sup>46</sup>V, <sup>50</sup>Mn, <sup>54</sup>Co, <sup>62</sup>Ga, <sup>74</sup>Rb; systematics of superallowed  $\beta$  decays and ft values. JOUR PRVCA 78 025502

**A=63**

- <sup>63</sup>Mn 2008VA08 NUCLEAR REACTIONS <sup>238</sup>U(<sup>70</sup>Zn, X), E=460 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin. <sup>59,60,61,62,63</sup>Mn; deduced levels, J,  $\pi$ . Comparison with large scale shell model calculations. JOUR PRVCA 78 024302

KEYNUMBERS AND KEYWORDS

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**A=63 (continued)**

- <sup>63</sup>Ni      2008TA23      NUCLEAR REACTIONS <sup>63</sup>Cu(n, p), E< 14.9 MeV; measured  $E\beta$ ,  $I\beta$ ,  $\sigma(E)$ ; radiochemical separation; liquid scintillation counting; comparison with JENDL-3.3, ENDF / B-VI and FENDL / A-2.0. JOUR ARISE 66 1321
- <sup>63</sup>Cu      2008ST12      NUCLEAR MOMENTS <sup>58,59</sup>Cu; measured magnetic moments, isotope shifts. In-source laser spectrometry. Comparison with theoretical data. <sup>57,60,61,62,63,64,65,66,67,68,69</sup>Cu; comparison between theory and experiments. JOUR PRVCA 77 067302

**A=64**

- <sup>64</sup>Ni      2008OR02      NUCLEAR REACTIONS <sup>58,60</sup>Ni(n, n' $\gamma$ )E=1.6, 1.8 MeV; measured  $E\gamma$ ,  $I\gamma$ , half-life of 2<sup>+</sup> states. <sup>58</sup>Ni, <sup>60</sup>Ni; deduced B(E2) values. Doppler shift attenuation method. <sup>56,62,64,66,68</sup>Ni; calculated lifetimes, B(E2). JOUR PRVCA 77 064301
- <sup>64</sup>Cu      2008FU08      NUCLEAR REACTIONS <sup>27</sup>Al, <sup>28</sup>Si, <sup>29</sup>Si, <sup>41</sup>K, <sup>51</sup>V, <sup>61</sup>Ni, <sup>65</sup>Cu, <sup>64,67</sup>Zn, <sup>69</sup>Ga, <sup>79</sup>Br, <sup>92</sup>Mo(n, p), E=3.5-5.9 MeV; <sup>69</sup>Ga, <sup>93</sup>Nb(n,  $\alpha$ ), E=3.5-5.9 MeV; measured  $E\gamma$ ,  $I\gamma$ , cross sections using the activation technique. JOUR ANEND 35 1652
- 2008GR10      NUCLEAR REACTIONS <sup>64</sup>Zn(d, <sup>2</sup>He), E=183 MeV; measured charged particle energies, angular distributions,  $\sigma(\theta)$ . <sup>64</sup>Cu; deduced levels, J,  $\pi$ , Gamow-Teller strengths. <sup>64</sup>Ni(<sup>3</sup>He, t); analyzed Gamow-Teller strength distribution. Comparison with shell model calculations. JOUR PRVCA 77 064303
- 2008J006      NUCLEAR REACTIONS <sup>27</sup>Al, <sup>28</sup>Si, <sup>29</sup>Si, <sup>46,47</sup>Ti, <sup>54</sup>Fe, <sup>58</sup>Ni, <sup>64</sup>Zn(n, p), <sup>27</sup>Al, <sup>30</sup>Si(n,  $\alpha$ ), <sup>197</sup>Au(n,  $\gamma$ ), E= reactor; measured  $E\gamma$ ,  $I\gamma$ , fast neutron spectrum averaged  $\sigma$ ; comparator method. JOUR ARISE 66 1377
- 2008RU04      NUCLEAR REACTIONS <sup>98,100</sup>Mo( $\gamma$ ,  $\gamma'$ ), E<15 MeV; measured  $E\gamma$ ,  $I\gamma$ , photoabsorption  $\sigma$ , giant resonances, angular distributions, distribution of mean branching ratios, dipole strength functions; deduced multipolarities. <sup>27</sup>Al, <sup>28</sup>Si, <sup>56</sup>Fe, <sup>63</sup>Cu, <sup>70,72,73,74</sup>Ge(n,  $\gamma$ ), E=thermal; measured  $E\gamma$ ,  $I\gamma$ . <sup>99,101</sup>Mo( $\gamma$ , n); analyzed cross sections. <sup>97</sup>Mo(n,  $\gamma$ ), <sup>98</sup>Mo(<sup>3</sup>He, <sup>3</sup>He' $\gamma$ ); comparisons. JOUR PRVCA 77 064321
- 2008SA20      NUCLEAR REACTIONS Ni(p, n)<sup>64</sup>Cu, E=15, 16 MeV; measured  $E\gamma$ ,  $I\gamma$  using chemical separation. <sup>64</sup>Cu; deduced yield. JOUR RAACA 96 399
- 2008ST12      NUCLEAR MOMENTS <sup>58,59</sup>Cu; measured magnetic moments, isotope shifts. In-source laser spectrometry. Comparison with theoretical data. <sup>57,60,61,62,63,64,65,66,67,68,69</sup>Cu; comparison between theory and experiments. JOUR PRVCA 77 067302
- <sup>64</sup>Zn      2008G023      ATOMIC MASSES <sup>64</sup>Ga, <sup>64</sup>Zn, <sup>68</sup>Se, <sup>68</sup>As, <sup>68</sup>Ge, <sup>72</sup>Se, <sup>76</sup>Rb, <sup>76</sup>Kr, <sup>80</sup>Sr, <sup>80</sup>Y; measured atomic masses using a time-of-flight technique. <sup>68</sup>Se; deduced Q value for proton capture. JOUR PRVCA 78 014311
- 2008HUZX      NUCLEAR REACTIONS <sup>64</sup>Zn(<sup>18</sup>O, <sup>18</sup>O'), E $\approx$ 24-36 MeV; measured quasielastic excitation function; deduced barrier distributions; compared results to model calculations. CONF Crete(FINUSTAR 2),Proc.P362,Huiza



KEYNUMBERS AND KEYWORDS

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**A=64 (continued)**

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| 2008HUZY                  | NUCLEAR REACTIONS $^{64}\text{Zn}(^{16}\text{O}, ^{16}\text{O}')$ , $E(\text{cm}) \approx 24\text{-}36$ MeV; measured quasielastic excitation function; deduced barrier distribution; $^{64}\text{Zn}(^{16}\text{O}, ^{16}\text{O})$ , $E(\text{cm}) \approx 24\text{-}36$ MeV; measured elastic scattering $\sigma(\theta)$ ; $^{64}\text{Zn}(^{16}\text{O}, \gamma)$ , $E(\text{cm}) \approx 30\text{-}55$ MeV; measured $\sigma$ ; compared results to coupled channel calculations. CONF Crete(FINUSTAR 2), Proc.P203,Huiza |
| $^{64}\text{Ga}$ 2008G023 | ATOMIC MASSES $^{64}\text{Ga}$ , $^{64}\text{Zn}$ , $^{68}\text{Se}$ , $^{68}\text{As}$ , $^{68}\text{Ge}$ , $^{72}\text{Se}$ , $^{76}\text{Rb}$ , $^{76}\text{Kr}$ , $^{80}\text{Sr}$ , $^{80}\text{Y}$ ; measured atomic masses using a time-of-flight technique. $^{68}\text{Se}$ ; deduced Q value for proton capture. JOUR PRVCA 78 014311   |

**A=65**

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| $^{65}\text{Ni}$ 2008FU08 | NUCLEAR REACTIONS $^{27}\text{Al}$ , $^{28}\text{Si}$ , $^{29}\text{Si}$ , $^{41}\text{K}$ , $^{51}\text{V}$ , $^{61}\text{Ni}$ , $^{65}\text{Cu}$ , $^{64,67}\text{Zn}$ , $^{69}\text{Ga}$ , $^{79}\text{Br}$ , $^{92}\text{Mo}(n, p)$ , $E=3.5\text{-}5.9$ MeV; $^{69}\text{Ga}$ , $^{93}\text{Nb}(n, \alpha)$ , $E=3.5\text{-}5.9$ MeV; measured $E\gamma$ , $I\gamma$ , cross sections using the activation technique. JOUR ANEND 35 1652 |
| $^{65}\text{Cu}$ 2008ST12 | NUCLEAR MOMENTS $^{58,59}\text{Cu}$ ; measured magnetic moments, isotope shifts. In-source laser spectrometry. Comparison with theoretical data. $^{57,60,61,62,63,64,65,66,67,68,69}\text{Cu}$ ; comparison between theory and experiments. JOUR PRVCA 77 067302   |

**A=66**

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| $^{66}\text{Ni}$ 2008OR02 | NUCLEAR REACTIONS $^{58,60}\text{Ni}(n, n'\gamma)E=1.6, 1.8$ MeV; measured $E\gamma$ , $I\gamma$ , half-life of $2^+$ states. $^{58}\text{Ni}$ , $^{60}\text{Ni}$ ; deduced $B(E2)$ values. Doppler shift attenuation method. $^{56,62,64,66,68}\text{Ni}$ ; calculated lifetimes, $B(E2)$ . JOUR PRVCA 77 064301   |
| $^{66}\text{Cu}$ 2008CH18 | NUCLEAR REACTIONS $^{65}\text{Cu}(^6\text{He}, ^5\text{He})$ , $(^6\text{He}, \alpha)$ , $E=22.6$ MeV; measured $E\alpha$ , $I\alpha$ , $E\gamma$ , $I\gamma$ , $n\alpha\gamma$ -coin, $1n$ , $2n$ transfer $\sigma(\theta)$ . Coupled channel analysis. JOUR PRLTA 101 032701  |
| 2008FU08                  | NUCLEAR REACTIONS $^{27}\text{Al}$ , $^{28}\text{Si}$ , $^{29}\text{Si}$ , $^{41}\text{K}$ , $^{51}\text{V}$ , $^{61}\text{Ni}$ , $^{65}\text{Cu}$ , $^{64,67}\text{Zn}$ , $^{69}\text{Ga}$ , $^{79}\text{Br}$ , $^{92}\text{Mo}(n, p)$ , $E=3.5\text{-}5.9$ MeV; $^{69}\text{Ga}$ , $^{93}\text{Nb}(n, \alpha)$ , $E=3.5\text{-}5.9$ MeV; measured $E\gamma$ , $I\gamma$ , cross sections using the activation technique. JOUR ANEND 35 1652 |
| 2008ST12                  | NUCLEAR MOMENTS $^{58,59}\text{Cu}$ ; measured magnetic moments, isotope shifts. In-source laser spectrometry. Comparison with theoretical data. $^{57,60,61,62,63,64,65,66,67,68,69}\text{Cu}$ ; comparison between theory and experiments. JOUR PRVCA 77 067302   |
| $^{66}\text{Zn}$ 2008VOZY | NUCLEAR REACTIONS $^{27}\text{Al}$ , $^{59}\text{Co}$ , $^{65}\text{Cu}(d, n)$ , $E=7.5$ MeV; measured neutron time of flight; deduced level densities. $^{59}\text{Co}(p, \gamma)$ , $E=1.9$ MeV; measured $E\gamma$ , $I\gamma$ ; $^{57}\text{Fe}(^3\text{He}, ^3\text{He}')$ , $E=10$ MeV; measured charged particle energies and angular distributions; deduced $\gamma$ strength functions. CONF Yosemite(CNR 2007) Proc.P61,Voinov      |



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KEYNUMBERS AND KEYWORDS

**A=67**

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| $^{67}\text{Cu}$ | 2008CH18 | NUCLEAR REACTIONS $^{65}\text{Cu}(^6\text{He}, ^5\text{He})$ , ( $^6\text{He}, \alpha$ ), $E=22.6$ MeV; measured $E\alpha$ , $I\alpha$ , $E\gamma$ , $I\gamma$ , $n\alpha\gamma$ -coin, $1n$ , $2n$ transfer $\sigma(\theta)$ . Coupled channel analysis. JOUR PRLTA 101 032701   |
|                  | 2008FU08 | NUCLEAR REACTIONS $^{27}\text{Al}$ , $^{28}\text{Si}$ , $^{29}\text{Si}$ , $^{41}\text{K}$ , $^{51}\text{V}$ , $^{61}\text{Ni}$ , $^{65}\text{Cu}$ , $^{64,67}\text{Zn}$ , $^{69}\text{Ga}$ , $^{79}\text{Br}$ , $^{92}\text{Mo}(n, p)$ , $E=3.5-5.9$ MeV; $^{69}\text{Ga}$ , $^{93}\text{Nb}(n, \alpha)$ , $E=3.5-5.9$ MeV; measured $E\gamma$ , $I\gamma$ , cross sections using the activation technique. JOUR ANEND 35 1652 |
|                  | 2008ST12 | NUCLEAR MOMENTS $^{58,59}\text{Cu}$ ; measured magnetic moments, isotope shifts. In-source laser spectrometry. Comparison with theoretical data. $^{57,60,61,62,63,64,65,66,67,68,69}\text{Cu}$ ; comparison between theory and experiments. JOUR PRVCA 77 067302   |

**A=68**

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| $^{68}\text{Ni}$ | 2008OR02 | NUCLEAR REACTIONS $^{58,60}\text{Ni}(n, n'\gamma)E=1.6, 1.8$ MeV; measured $E\gamma$ , $I\gamma$ , half-life of $2^+$ states. $^{58}\text{Ni}$ , $^{60}\text{Ni}$ ; deduced $B(E2)$ values. Doppler shift attenuation method. $^{56,62,64,66,68}\text{Ni}$ ; calculated lifetimes, $B(E2)$ . JOUR PRVCA 77 064301                                 |
| $^{68}\text{Cu}$ | 2008ST12 | NUCLEAR MOMENTS $^{58,59}\text{Cu}$ ; measured magnetic moments, isotope shifts. In-source laser spectrometry. Comparison with theoretical data. $^{57,60,61,62,63,64,65,66,67,68,69}\text{Cu}$ ; comparison between theory and experiments. JOUR PRVCA 77 067302   |
| $^{68}\text{Ge}$ | 2008G023 | ATOMIC MASSES $^{64}\text{Ga}$ , $^{64}\text{Zn}$ , $^{68}\text{Se}$ , $^{68}\text{As}$ , $^{68}\text{Ge}$ , $^{72}\text{Se}$ , $^{76}\text{Rb}$ , $^{76}\text{Kr}$ , $^{80}\text{Sr}$ , $^{80}\text{Y}$ ; measured atomic masses using a time-of-flight technique. $^{68}\text{Se}$ ; deduced $Q$ value for proton capture. JOUR PRVCA 78 014311 |
| $^{68}\text{As}$ | 2008G023 | ATOMIC MASSES $^{64}\text{Ga}$ , $^{64}\text{Zn}$ , $^{68}\text{Se}$ , $^{68}\text{As}$ , $^{68}\text{Ge}$ , $^{72}\text{Se}$ , $^{76}\text{Rb}$ , $^{76}\text{Kr}$ , $^{80}\text{Sr}$ , $^{80}\text{Y}$ ; measured atomic masses using a time-of-flight technique. $^{68}\text{Se}$ ; deduced $Q$ value for proton capture. JOUR PRVCA 78 014311 |
| $^{68}\text{Se}$ | 2008G023 | ATOMIC MASSES $^{64}\text{Ga}$ , $^{64}\text{Zn}$ , $^{68}\text{Se}$ , $^{68}\text{As}$ , $^{68}\text{Ge}$ , $^{72}\text{Se}$ , $^{76}\text{Rb}$ , $^{76}\text{Kr}$ , $^{80}\text{Sr}$ , $^{80}\text{Y}$ ; measured atomic masses using a time-of-flight technique. $^{68}\text{Se}$ ; deduced $Q$ value for proton capture. JOUR PRVCA 78 014311 |

**A=69**

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| $^{69}\text{Cu}$ | 2008ST12 | NUCLEAR MOMENTS $^{58,59}\text{Cu}$ ; measured magnetic moments, isotope shifts. In-source laser spectrometry. Comparison with theoretical data. $^{57,60,61,62,63,64,65,66,67,68,69}\text{Cu}$ ; comparison between theory and experiments. JOUR PRVCA 77 067302   |
| $^{69}\text{Zn}$ | 2008FU08 | NUCLEAR REACTIONS $^{27}\text{Al}$ , $^{28}\text{Si}$ , $^{29}\text{Si}$ , $^{41}\text{K}$ , $^{51}\text{V}$ , $^{61}\text{Ni}$ , $^{65}\text{Cu}$ , $^{64,67}\text{Zn}$ , $^{69}\text{Ga}$ , $^{79}\text{Br}$ , $^{92}\text{Mo}(n, p)$ , $E=3.5-5.9$ MeV; $^{69}\text{Ga}$ , $^{93}\text{Nb}(n, \alpha)$ , $E=3.5-5.9$ MeV; measured $E\gamma$ , $I\gamma$ , cross sections using the activation technique. JOUR ANEND 35 1652 |
| $^{69}\text{Ga}$ | 2008LAZY | NUCLEAR REACTIONS $^{65}\text{Cu}(\alpha, \gamma)$ , $E(\text{cm})=4.9-7.6$ MeV; measured $\sigma$ ; Compared results to statistical model calculations using MOST and to NonSMOKER codes. CONF Crete(FINUSTAR 2),Proc.P179,Lagoyannis  |

KEYNUMBERS AND KEYWORDS

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**A=70**

<sup>70</sup>Br      2006KA74      RADIOACTIVITY <sup>105</sup>Sn(EC), ( $\beta^+$ ), (ECp), ( $\beta^+$ ); measured E $\beta$ , I $\beta$ ,  $\beta$ -delayed E $\gamma$ , I $\gamma$ ,  $\beta\gamma$ -,  $\gamma\gamma$ -coin, x-ray spectrum; deduced Q values. Total absorption spectrometer (TAS). <sup>70m</sup>Br, <sup>96,97,98</sup>Ag, <sup>100,102,103</sup>In, <sup>103</sup>Sn, <sup>113</sup>Xe, <sup>117</sup>Ba; reviewed Q values. JOUR IMSPF 251 138

**A=71**

<sup>71</sup>Ge      2008RU04      NUCLEAR REACTIONS <sup>98,100</sup>Mo( $\gamma$ ,  $\gamma'$ ), E<15 MeV; measured E $\gamma$ , I $\gamma$ , photoabsorption  $\sigma$ , giant resonances, angular distributions, distribution of mean branching ratios, dipole strength functions; deduced multipolarities. <sup>27</sup>Al, <sup>28</sup>Si, <sup>56</sup>Fe, <sup>63</sup>Cu, <sup>70,72,73,74</sup>Ge(n,  $\gamma$ ), E=thermal; measured E $\gamma$ , I $\gamma$ . <sup>99,101</sup>Mo( $\gamma$ , n); analyzed cross sections. <sup>97</sup>Mo(n,  $\gamma$ ), <sup>98</sup>Mo(<sup>3</sup>He, <sup>3</sup>He' $\gamma$ ); comparisons. JOUR PRVCA 77 064321

**A=72**

<sup>72</sup>Ga      2008BU10      NUCLEAR REACTIONS <sup>71</sup>Ga, <sup>75</sup>As, <sup>164</sup>Dy, <sup>170</sup>Er(n,  $\gamma$ ), E=spectrum; measured E $\gamma$ , I $\gamma$ ; deduced effective resonance energy using Am-Be neutron source. Comparison with calculations. JOUR ANEND 35 1433

2008UD05      NUCLEAR REACTIONS <sup>71</sup>Ga(n,  $\gamma$ ), E=0.0536 eV; measured E $\gamma$ , I $\gamma$ , cross section using activation technique. JOUR NUPBB 266 3341

<sup>72</sup>Ge      2008SH15      RADIOACTIVITY <sup>72</sup>As( $\beta^+$ ), (EC) [from <sup>72</sup>Ge(p, n), E=16 MeV]; measured E $\gamma$ , I $\gamma$ , log ft. <sup>72</sup>Ge; deduced levels, J,  $\pi$ . JOUR IMPEE 17 1061

<sup>72</sup>As      2008SH15      RADIOACTIVITY <sup>72</sup>As( $\beta^+$ ), (EC) [from <sup>72</sup>Ge(p, n), E=16 MeV]; measured E $\gamma$ , I $\gamma$ , log ft. <sup>72</sup>Ge; deduced levels, J,  $\pi$ . JOUR IMPEE 17 1061

<sup>72</sup>Se      2008G023      ATOMIC MASSES <sup>64</sup>Ga, <sup>64</sup>Zn, <sup>68</sup>Se, <sup>68</sup>As, <sup>68</sup>Ge, <sup>72</sup>Se, <sup>76</sup>Rb, <sup>76</sup>Kr, <sup>80</sup>Sr, <sup>80</sup>Y; measured atomic masses using a time-of-flight technique. <sup>68</sup>Se; deduced Q value for proton capture. JOUR PRVCA 78 014311

**A=73**

<sup>73</sup>Ga      2008LI25      RADIOACTIVITY <sup>73</sup>Ga( $\beta^-$ ), <sup>73</sup>As(EC); measured E $\gamma$ , I $\gamma$ . <sup>73</sup>Ge deduced neutrino-induced production close to a power reactor. JOUR JPGPE 35 077001

<sup>73</sup>Ge      2008LI25      RADIOACTIVITY <sup>73</sup>Ga( $\beta^-$ ), <sup>73</sup>As(EC); measured E $\gamma$ , I $\gamma$ . <sup>73</sup>Ge deduced neutrino-induced production close to a power reactor. JOUR JPGPE 35 077001

2008RU04      NUCLEAR REACTIONS <sup>98,100</sup>Mo( $\gamma$ ,  $\gamma'$ ), E<15 MeV; measured E $\gamma$ , I $\gamma$ , photoabsorption  $\sigma$ , giant resonances, angular distributions, distribution of mean branching ratios, dipole strength functions; deduced multipolarities. <sup>27</sup>Al, <sup>28</sup>Si, <sup>56</sup>Fe, <sup>63</sup>Cu, <sup>70,72,73,74</sup>Ge(n,  $\gamma$ ), E=thermal; measured E $\gamma$ , I $\gamma$ . <sup>99,101</sup>Mo( $\gamma$ , n); analyzed cross sections. <sup>97</sup>Mo(n,  $\gamma$ ), <sup>98</sup>Mo(<sup>3</sup>He, <sup>3</sup>He' $\gamma$ ); comparisons. JOUR PRVCA 77 064321

KEYNUMBERS AND KEYWORDS

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**A=73 (continued)**

<sup>73</sup>As      2008LI25      RADIOACTIVITY <sup>73</sup>Ga( $\beta^-$ ), <sup>73</sup>As(EC); measured  $E_\gamma$ ,  $I_\gamma$ . <sup>73</sup>Ge deduced neutrino-induced production close to a power reactor. JOUR JPGPE 35 077001

**A=74**

<sup>74</sup>Ge      2008GY02      RADIOACTIVITY <sup>74</sup>As( $\beta^-$ ), (EC) [from <sup>74</sup>Ge(p, n)<sup>74</sup>As, E=10.2 MeV]; measured  $E_\gamma$ ,  $I_\gamma$ ,  $T_{1/2}$  and  $\beta^-$ ,  $\beta^+$  / EC decay branching ratios for source embedded in several materials; deduced upper limit for possible host material dependence. JOUR EULEE 83 42001

            2008RU04      NUCLEAR REACTIONS <sup>98,100</sup>Mo( $\gamma$ ,  $\gamma'$ ), E<15 MeV; measured  $E_\gamma$ ,  $I_\gamma$ , photoabsorption  $\sigma$ , giant resonances, angular distributions, distribution of mean branching ratios, dipole strength functions; deduced multipolarities. <sup>27</sup>Al, <sup>28</sup>Si, <sup>56</sup>Fe, <sup>63</sup>Cu, <sup>70,72,73,74</sup>Ge(n,  $\gamma$ ), E=thermal; measured  $E_\gamma$ ,  $I_\gamma$ . <sup>99,101</sup>Mo( $\gamma$ , n); analyzed cross sections. <sup>97</sup>Mo(n,  $\gamma$ ), <sup>98</sup>Mo(<sup>3</sup>He, <sup>3</sup>He' $\gamma$ ); comparisons. JOUR PRVCA 77 064321

<sup>74</sup>As      2008GY02      RADIOACTIVITY <sup>74</sup>As( $\beta^-$ ), (EC) [from <sup>74</sup>Ge(p, n)<sup>74</sup>As, E=10.2 MeV]; measured  $E_\gamma$ ,  $I_\gamma$ ,  $T_{1/2}$  and  $\beta^-$ ,  $\beta^+$  / EC decay branching ratios for source embedded in several materials; deduced upper limit for possible host material dependence. JOUR EULEE 83 42001

            2008ZI03      NUCLEAR REACTIONS <sup>76,77,78,80,82</sup>Se, <sup>106,110,111,112,114,116</sup>Cd( $\mu^-$ ,  $n\nu$ ), E not given; <sup>76</sup>Se( $\mu^-$ ,  $2n\nu$ ), E not given; measured  $E_\gamma$ ,  $I_\gamma$ , capture rates, lifetimes, yields. JOUR BRSP 72 737

<sup>74</sup>Se      2008GY02      RADIOACTIVITY <sup>74</sup>As( $\beta^-$ ), (EC) [from <sup>74</sup>Ge(p, n)<sup>74</sup>As, E=10.2 MeV]; measured  $E_\gamma$ ,  $I_\gamma$ ,  $T_{1/2}$  and  $\beta^-$ ,  $\beta^+$  / EC decay branching ratios for source embedded in several materials; deduced upper limit for possible host material dependence. JOUR EULEE 83 42001

<sup>74</sup>Rb      2006J014      ATOMIC MASSES <sup>96,97,98,99,100,101,102,103,104,105,106</sup>Zr, <sup>98,99,100,101,102,103,104,105,106</sup>Nb, <sup>99,100,101,102,103,104,105,106,107,108,109,110</sup>Mo; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. <sup>117</sup>Pd; measured conversion electrons from isomer decay. <sup>22</sup>Mg, <sup>34</sup>Ar, <sup>46</sup>V, <sup>62</sup>Ga, <sup>74</sup>Rb; reviewed superallowed  $\beta$  decay Ft values. <sup>92</sup>Br; measured time of flight spectrum. <sup>102</sup>Nb; measured  $\gamma$  rays following  $\beta^-$  decay. JOUR IMSPF 251 204

            2006LU19      ATOMIC MASSES <sup>74</sup>Rb; measured mass with the MISTRAL radiofrequency transmission spectrometer. Wigner energy of N=Z nuclei. Comparisons with experimental data. A=10-100; systematics of n-p interactions. JOUR IMSPF 251 286

            2008FI07      RADIOACTIVITY <sup>62</sup>Ga( $\beta^+$ ); measured  $E_\gamma$ ,  $I_\gamma$ ,  $E_\beta$ ,  $\beta\gamma$ -coin, branching ratios; deduced ft values. <sup>62</sup>Zn; deduced levels, J,  $\pi$ . <sup>10</sup>C, <sup>14</sup>O, <sup>22</sup>Mg, <sup>26m</sup>Al, <sup>34</sup>Ca, <sup>34</sup>Ar, <sup>38m</sup>K, <sup>42</sup>Sc, <sup>46</sup>V, <sup>50</sup>Mn, <sup>54</sup>Co, <sup>62</sup>Ga, <sup>74</sup>Rb; systematics of superallowed  $\beta$  decays and ft values. JOUR PRVCA 78 025502

KEYNUMBERS AND KEYWORDS

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**A=75**

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| $^{75}\text{Ge}$ | 2008RU04 | NUCLEAR REACTIONS $^{98,100}\text{Mo}(\gamma, \gamma')$ , $E < 15$ MeV; measured $E_\gamma$ , $I_\gamma$ , photoabsorption $\sigma$ , giant resonances, angular distributions, distribution of mean branching ratios, dipole strength functions; deduced multipolarities. $^{27}\text{Al}$ , $^{28}\text{Si}$ , $^{56}\text{Fe}$ , $^{63}\text{Cu}$ , $^{70,72,73,74}\text{Ge}(n, \gamma)$ , $E = \text{thermal}$ ; measured $E_\gamma$ , $I_\gamma$ . $^{99,101}\text{Mo}(\gamma, n)$ ; analyzed cross sections. $^{97}\text{Mo}(n, \gamma)$ , $^{98}\text{Mo}(^3\text{He}, ^3\text{He}'\gamma)$ ; comparisons. JOUR PRVCA 77 064321 |
| $^{75}\text{As}$ | 2008ZI03 | NUCLEAR REACTIONS $^{76,77,78,80,82}\text{Se}$ , $^{106,110,111,112,114,116}\text{Cd}(\mu^-, n\nu)$ , $E$ not given; $^{76}\text{Se}(\mu^-, 2n\nu)$ , $E$ not given; measured $E_\gamma$ , $I_\gamma$ , capture rates, lifetimes, yields. JOUR BRSPE 72 737   |

**A=76**

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| $^{76}\text{Zn}$ | 2008HA23 | ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and $N=50$ shell gap. JOUR PRLTA 101 052502 |
| $^{76}\text{Ge}$ | 2008IW03 | NUCLEAR REACTIONS $\text{Pb}(^{76}\text{Ge}, ^{76}\text{Ge}')$ , $(^{80}\text{Ge}, ^{80}\text{Ge}')$ , $E=37$ MeV / nucleon; measured $E_\gamma$ , $I_\gamma$ , $\sigma$ . $^{76,80}\text{Ge}$ ; deduced levels, $J$ , $\pi$ , $B(E2)$ . Comparison with large scale shell model calculations. JOUR PRVCA 78 021304  |
| $^{76}\text{As}$ | 2008BU10 | NUCLEAR REACTIONS $^{71}\text{Ga}$ , $^{75}\text{As}$ , $^{164}\text{Dy}$ , $^{170}\text{Er}(n, \gamma)$ , $E = \text{spectrum}$ ; measured $E_\gamma$ , $I_\gamma$ ; deduced effective resonance energy using Am-Be neutron source. Comparison with calculations. JOUR ANEND 35 1433  |
|                  | 2008ZI03 | NUCLEAR REACTIONS $^{76,77,78,80,82}\text{Se}$ , $^{106,110,111,112,114,116}\text{Cd}(\mu^-, n\nu)$ , $E$ not given; $^{76}\text{Se}(\mu^-, 2n\nu)$ , $E$ not given; measured $E_\gamma$ , $I_\gamma$ , capture rates, lifetimes, yields. JOUR BRSPE 72 737  |
| $^{76}\text{Kr}$ | 2008G023 | ATOMIC MASSES $^{64}\text{Ga}$ , $^{64}\text{Zn}$ , $^{68}\text{Se}$ , $^{68}\text{As}$ , $^{68}\text{Ge}$ , $^{72}\text{Se}$ , $^{76}\text{Rb}$ , $^{76}\text{Kr}$ , $^{80}\text{Sr}$ , $^{80}\text{Y}$ ; measured atomic masses using a time-of-flight technique. $^{68}\text{Se}$ ; deduced $Q$ value for proton capture. JOUR PRVCA 78 014311          |
| $^{76}\text{Rb}$ | 2008G023 | ATOMIC MASSES $^{64}\text{Ga}$ , $^{64}\text{Zn}$ , $^{68}\text{Se}$ , $^{68}\text{As}$ , $^{68}\text{Ge}$ , $^{72}\text{Se}$ , $^{76}\text{Rb}$ , $^{76}\text{Kr}$ , $^{80}\text{Sr}$ , $^{80}\text{Y}$ ; measured atomic masses using a time-of-flight technique. $^{68}\text{Se}$ ; deduced $Q$ value for proton capture. JOUR PRVCA 78 014311          |

**A=77**

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| $^{77}\text{Cu}$ | 2006HA62 | ATOMIC MASSES $^{77,78,79}\text{Cu}$ , $^{83,84,85,86}\text{Ge}$ ; measured mass excesses. Isotopes produced from $^{238}\text{U}(p, F)$ reaction at beam energy 42 MeV using ISOL method. Proposed technique for measuring mass differences developed at the Holifield Radioactive Ion Beam Facility (HRIBF). JOUR IMSPF 251 119                          |
| $^{77}\text{Zn}$ | 2008HA23 | ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and $N=50$ shell gap. JOUR PRLTA 101 052502 |

KEYNUMBERS AND KEYWORDS

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**A=77 (continued)**

<sup>77</sup>As      2008ZI03      NUCLEAR REACTIONS <sup>76,77,78,80,82</sup>Se, <sup>106,110,111,112,114,116</sup>Cd( $\mu^-$ ,  $n\nu$ ), E not given; <sup>76</sup>Se( $\mu^-$ ,  $2n\nu$ ), E not given; measured E $\gamma$ , I $\gamma$ , capture rates, lifetimes, yields. JOUR BRSPE 72 737

**A=78**

<sup>78</sup>Cu      2006HA62      ATOMIC MASSES <sup>77,78,79</sup>Cu, <sup>83,84,85,86</sup>Ge; measured mass excesses. Isotopes produced from <sup>238</sup>U(p, F) reaction at beam energy 42 MeV using ISOL method. Proposed technique for measuring mass differences developed at the Holifield Radioactive Ion Beam Facility (HRIBF). JOUR IMSPF 251 119

<sup>78</sup>Zn      2008HA23      ATOMIC MASSES <sup>76,77,78,79,80</sup>Zn, <sup>78,79,80,81,82,83</sup>Ga, <sup>80,81,82,83,84,85</sup>Ge, <sup>81,82,83,84,85,86,87</sup>As, <sup>84,85,86,87,88,89</sup>Se; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502

2008VAZY      NUCLEAR REACTIONS <sup>120</sup>Sn(<sup>74</sup>Zn, <sup>74</sup>Zn'), E=2.87 MeV / nucleon; <sup>120</sup>Sn(<sup>76</sup>Zn, <sup>76</sup>Zn'), <sup>108</sup>Pd(<sup>78</sup>Zn, <sup>78</sup>Zn'), E=2.83 MeV / nucleon; <sup>108</sup>Pd(<sup>80</sup>Zn, <sup>80</sup>Zn'), E=2.79 MeV / nucleon; measured E $\gamma$ , I $\gamma$ ; <sup>78,80</sup>Zn; deduced levels, B(E2); Calculated level energies, B(E2) using the Shell model. CONF Crete(FINUSTAR 2),Proc.P291, Van de Walle

<sup>78</sup>Ga      2008HA23      ATOMIC MASSES <sup>76,77,78,79,80</sup>Zn, <sup>78,79,80,81,82,83</sup>Ga, <sup>80,81,82,83,84,85</sup>Ge, <sup>81,82,83,84,85,86,87</sup>As, <sup>84,85,86,87,88,89</sup>Se; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502

<sup>78</sup>Se      2008HE10      NUCLEAR REACTIONS <sup>79,81</sup>Br, <sup>85,87</sup>Rb(n,  $\gamma$ ), E=0-120 keV; measured E $\gamma$ , I $\gamma$ ,  $\sigma$ . <sup>78,80,82</sup>Se, <sup>79,81</sup>Br, <sup>80,82,83,84,86</sup>Kr; <sup>85,87</sup>Rb, <sup>86,87,88</sup>Sr, <sup>89</sup>Y, <sup>90</sup>Zr; deduced total s-process abundances. JOUR PRVCA 78 025802

<sup>78</sup>Kr      2006RI15      ATOMIC MASSES <sup>78,80,82,83,84</sup>Kr; measured masses using the LEBIT Penning trap mass spectrometer. Comparison with 2003 mass evaluation. JOUR IMSPF 251 300

**A=79**

<sup>79</sup>Cu      2006HA62      ATOMIC MASSES <sup>77,78,79</sup>Cu, <sup>83,84,85,86</sup>Ge; measured mass excesses. Isotopes produced from <sup>238</sup>U(p, F) reaction at beam energy 42 MeV using ISOL method. Proposed technique for measuring mass differences developed at the Holifield Radioactive Ion Beam Facility (HRIBF). JOUR IMSPF 251 119

<sup>79</sup>Zn      2008HA23      ATOMIC MASSES <sup>76,77,78,79,80</sup>Zn, <sup>78,79,80,81,82,83</sup>Ga, <sup>80,81,82,83,84,85</sup>Ge, <sup>81,82,83,84,85,86,87</sup>As, <sup>84,85,86,87,88,89</sup>Se; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502

KEYNUMBERS AND KEYWORDS

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**A=79 (continued)**

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| $^{79}\text{Ga}$ | 2008HA23 | ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502  |
| $^{79}\text{As}$ | 2008ZI03 | NUCLEAR REACTIONS $^{76,77,78,80,82}\text{Se}$ , $^{106,110,111,112,114,116}\text{Cd}(\mu^-, n\nu)$ , E not given; $^{76}\text{Se}(\mu^-, 2n\nu)$ , E not given; measured $E_\gamma$ , $I_\gamma$ , capture rates, lifetimes, yields. JOUR BRSPPE 72 737  |
| $^{79}\text{Se}$ | 2008FU08 | NUCLEAR REACTIONS $^{27}\text{Al}$ , $^{28}\text{Si}$ , $^{29}\text{Si}$ , $^{41}\text{K}$ , $^{51}\text{V}$ , $^{61}\text{Ni}$ , $^{65}\text{Cu}$ , $^{64,67}\text{Zn}$ , $^{69}\text{Ga}$ , $^{79}\text{Br}$ , $^{92}\text{Mo}(n, p)$ , E=3.5-5.9 MeV; $^{69}\text{Ga}$ , $^{93}\text{Nb}(n, \alpha)$ , E=3.5-5.9 MeV; measured $E_\gamma$ , $I_\gamma$ , cross sections using the activation technique. JOUR ANEND 35 1652 |
| $^{79}\text{Br}$ | 2008HE10 | NUCLEAR REACTIONS $^{79,81}\text{Br}$ , $^{85,87}\text{Rb}(n, \gamma)$ , E=0-120 keV; measured $E_\gamma$ , $I_\gamma$ , $\sigma$ . $^{78,80,82}\text{Se}$ , $^{79,81}\text{Br}$ , $^{80,82,83,84,86}\text{Kr}$ ; $^{85,87}\text{Rb}$ , $^{86,87,88}\text{Sr}$ , $^{89}\text{Y}$ , $^{90}\text{Zr}$ ; deduced total s-process abundances. JOUR PRVCA 78 025802  |

**A=80**

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| $^{80}\text{Zn}$ | 2008HA23 | ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502  |
|                  | 2008VAZY | NUCLEAR REACTIONS $^{120}\text{Sn}(^{74}\text{Zn}, ^{74}\text{Zn}')$ , E=2.87 MeV / nucleon; $^{120}\text{Sn}(^{76}\text{Zn}, ^{76}\text{Zn}')$ , $^{108}\text{Pd}(^{78}\text{Zn}, ^{78}\text{Zn}')$ , E=2.83 MeV / nucleon; $^{108}\text{Pd}(^{80}\text{Zn}, ^{80}\text{Zn}')$ , E=2.79 MeV / nucleon; measured $E_\gamma$ , $I_\gamma$ ; $^{78,80}\text{Zn}$ ; deduced levels, B(E2); Calculated level energies, B(E2) using the Shell model. CONF Crete(FINUSTAR 2), Proc.P291, Van de Walle |
| $^{80}\text{Ga}$ | 2008HA23 | ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502  |
| $^{80}\text{Ge}$ | 2008HA23 | ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502  |
|                  | 2008IW03 | NUCLEAR REACTIONS $\text{Pb}(^{76}\text{Ge}, ^{76}\text{Ge}')$ , $(^{80}\text{Ge}, ^{80}\text{Ge}')$ , E=37 MeV / nucleon; measured $E_\gamma$ , $I_\gamma$ , $\sigma$ . $^{76,80}\text{Ge}$ ; deduced levels, J, $\pi$ , B(E2). Comparison with large scale shell model calculations. JOUR PRVCA 78 021304   |
| $^{80}\text{Se}$ | 2008HE10 | NUCLEAR REACTIONS $^{79,81}\text{Br}$ , $^{85,87}\text{Rb}(n, \gamma)$ , E=0-120 keV; measured $E_\gamma$ , $I_\gamma$ , $\sigma$ . $^{78,80,82}\text{Se}$ , $^{79,81}\text{Br}$ , $^{80,82,83,84,86}\text{Kr}$ ; $^{85,87}\text{Rb}$ , $^{86,87,88}\text{Sr}$ , $^{89}\text{Y}$ , $^{90}\text{Zr}$ ; deduced total s-process abundances. JOUR PRVCA 78 025802  |



KEYNUMBERS AND KEYWORDS

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**A=80 (continued)**

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| $^{80}\text{Br}$ | 2008HE10 | NUCLEAR REACTIONS $^{79,81}\text{Br}$ , $^{85,87}\text{Rb}(n, \gamma)$ , $E=0-120$ keV; measured $E\gamma$ , $I\gamma$ , $\sigma$ . $^{78,80,82}\text{Se}$ , $^{79,81}\text{Br}$ , $^{80,82,83,84,86}\text{Kr}$ ; $^{85,87}\text{Rb}$ , $^{86,87,88}\text{Sr}$ , $^{89}\text{Y}$ , $^{90}\text{Zr}$ ; deduced total s-process abundances. JOUR PRVCA 78 025802   |
| $^{80}\text{Kr}$ | 2006RI15 | ATOMIC MASSES $^{78,80,82,83,84}\text{Kr}$ ; measured masses using the LEBIT Penning trap mass spectrometer. Comparison with 2003 mass evaluation. JOUR IMSPF 251 300  |
|                  | 2008HE10 | NUCLEAR REACTIONS $^{79,81}\text{Br}$ , $^{85,87}\text{Rb}(n, \gamma)$ , $E=0-120$ keV; measured $E\gamma$ , $I\gamma$ , $\sigma$ . $^{78,80,82}\text{Se}$ , $^{79,81}\text{Br}$ , $^{80,82,83,84,86}\text{Kr}$ ; $^{85,87}\text{Rb}$ , $^{86,87,88}\text{Sr}$ , $^{89}\text{Y}$ , $^{90}\text{Zr}$ ; deduced total s-process abundances. JOUR PRVCA 78 025802   |
| $^{80}\text{Sr}$ | 2008G023 | ATOMIC MASSES $^{64}\text{Ga}$ , $^{64}\text{Zn}$ , $^{68}\text{Se}$ , $^{68}\text{As}$ , $^{68}\text{Ge}$ , $^{72}\text{Se}$ , $^{76}\text{Rb}$ , $^{76}\text{Kr}$ , $^{80}\text{Sr}$ , $^{80}\text{Y}$ ; measured atomic masses using a time-of-flight technique. $^{68}\text{Se}$ ; deduced Q value for proton capture. JOUR PRVCA 78 014311  |
|                  | 2008HUZY | NUCLEAR REACTIONS $^{64}\text{Zn}(^{16}\text{O}, ^{16}\text{O}')$ , $E(\text{cm})\approx 24-36$ MeV; measured quasielastic excitation function; deduced barrier distribution; $^{64}\text{Zn}(^{16}\text{O}, ^{16}\text{O})$ , $E(\text{cm})\approx 24-36$ MeV; measured elastic scattering $\sigma(\theta)$ ; $^{64}\text{Zn}(^{16}\text{O}, \gamma)$ , $E(\text{cm})\approx 30-55$ MeV; measured $\sigma$ ; compared results to coupled channel calculations. CONF Crete(FINUSTAR 2), Proc.P203, Huiza |
| $^{80}\text{Y}$  | 2008G023 | ATOMIC MASSES $^{64}\text{Ga}$ , $^{64}\text{Zn}$ , $^{68}\text{Se}$ , $^{68}\text{As}$ , $^{68}\text{Ge}$ , $^{72}\text{Se}$ , $^{76}\text{Rb}$ , $^{76}\text{Kr}$ , $^{80}\text{Sr}$ , $^{80}\text{Y}$ ; measured atomic masses using a time-of-flight technique. $^{68}\text{Se}$ ; deduced Q value for proton capture. JOUR PRVCA 78 014311  |

**A=81**

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| $^{81}\text{Ga}$ | 2008HA23 | ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and $N=50$ shell gap. JOUR PRLTA 101 052502  |
|                  | 2008SAZY | NUCLEAR REACTIONS $^{238}\text{U}(^{82}\text{Se}, ^{84}\text{Se})$ , $(^{82}\text{Se}, ^{82}\text{Ge})$ , $(^{82}\text{Se}, ^{83}\text{As})$ , $(^{82}\text{Se}, ^{81}\text{Ga})$ , $E=505, 515$ MeV; measured $E\gamma$ , $I\gamma$ , $\gamma$ asymmetry; $^{81}\text{Ga}$ , $^{82}\text{Ge}$ , $^{83}\text{As}$ , $^{84}\text{Se}$ ; deduced levels, $J$ , $\pi$ . CONF Crete(FINUSTAR 2), Proc.P139, Sahin |
| $^{81}\text{Ge}$ | 2008HA23 | ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and $N=50$ shell gap. JOUR PRLTA 101 052502  |
| $^{81}\text{As}$ | 2008HA23 | ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and $N=50$ shell gap. JOUR PRLTA 101 052502  |
|                  | 2008ZI03 | NUCLEAR REACTIONS $^{76,77,78,80,82}\text{Se}$ , $^{106,110,111,112,114,116}\text{Cd}(\mu^-, n\nu)$ , $E$ not given; $^{76}\text{Se}(\mu^-, 2n\nu)$ , $E$ not given; measured $E\gamma$ , $I\gamma$ , capture rates, lifetimes, yields. JOUR BRSPE 72 737   |



KEYNUMBERS AND KEYWORDS

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**A=81 (continued)**

<sup>81</sup>Br      2008HE10      NUCLEAR REACTIONS <sup>79,81</sup>Br, <sup>85,87</sup>Rb(n,  $\gamma$ ), E=0-120 keV; measured E $\gamma$ , I $\gamma$ ,  $\sigma$ . <sup>78,80,82</sup>Se, <sup>79,81</sup>Br, <sup>80,82,83,84,86</sup>Kr; <sup>85,87</sup>Rb, <sup>86,87,88</sup>Sr, <sup>89</sup>Y, <sup>90</sup>Zr; deduced total s-process abundances. JOUR PRVCA 78 025802

**A=82**

<sup>82</sup>Ga      2008HA23      ATOMIC MASSES <sup>76,77,78,79,80</sup>Zn, <sup>78,79,80,81,82,83</sup>Ga, <sup>80,81,82,83,84,85</sup>Ge, <sup>81,82,83,84,85,86,87</sup>As, <sup>84,85,86,87,88,89</sup>Se; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502

<sup>82</sup>Ge      2008HA23      ATOMIC MASSES <sup>76,77,78,79,80</sup>Zn, <sup>78,79,80,81,82,83</sup>Ga, <sup>80,81,82,83,84,85</sup>Ge, <sup>81,82,83,84,85,86,87</sup>As, <sup>84,85,86,87,88,89</sup>Se; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502

2008SAZY      NUCLEAR REACTIONS <sup>238</sup>U(<sup>82</sup>Se, <sup>84</sup>Se), (<sup>82</sup>Se, <sup>82</sup>Ge), (<sup>82</sup>Se, <sup>83</sup>As), (<sup>82</sup>Se, <sup>81</sup>Ga), E=505, 515 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma$  asymmetry; <sup>81</sup>Ga, <sup>82</sup>Ge, <sup>83</sup>As, <sup>84</sup>Se; deduced levels, J,  $\pi$ . CONF Crete(FINUSTAR 2), Proc.P139,Sahin

<sup>82</sup>As      2008HA23      ATOMIC MASSES <sup>76,77,78,79,80</sup>Zn, <sup>78,79,80,81,82,83</sup>Ga, <sup>80,81,82,83,84,85</sup>Ge, <sup>81,82,83,84,85,86,87</sup>As, <sup>84,85,86,87,88,89</sup>Se; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502

<sup>82</sup>Se      2008HE10      NUCLEAR REACTIONS <sup>79,81</sup>Br, <sup>85,87</sup>Rb(n,  $\gamma$ ), E=0-120 keV; measured E $\gamma$ , I $\gamma$ ,  $\sigma$ . <sup>78,80,82</sup>Se, <sup>79,81</sup>Br, <sup>80,82,83,84,86</sup>Kr; <sup>85,87</sup>Rb, <sup>86,87,88</sup>Sr, <sup>89</sup>Y, <sup>90</sup>Zr; deduced total s-process abundances. JOUR PRVCA 78 025802

<sup>82</sup>Br      2008HE10      NUCLEAR REACTIONS <sup>79,81</sup>Br, <sup>85,87</sup>Rb(n,  $\gamma$ ), E=0-120 keV; measured E $\gamma$ , I $\gamma$ ,  $\sigma$ . <sup>78,80,82</sup>Se, <sup>79,81</sup>Br, <sup>80,82,83,84,86</sup>Kr; <sup>85,87</sup>Rb, <sup>86,87,88</sup>Sr, <sup>89</sup>Y, <sup>90</sup>Zr; deduced total s-process abundances. JOUR PRVCA 78 025802

<sup>82</sup>Kr      2006RI15      ATOMIC MASSES <sup>78,80,82,83,84</sup>Kr; measured masses using the LEBIT Penning trap mass spectrometer. Comparison with 2003 mass evaluation. JOUR IMSPF 251 300

2008HE10      NUCLEAR REACTIONS <sup>79,81</sup>Br, <sup>85,87</sup>Rb(n,  $\gamma$ ), E=0-120 keV; measured E $\gamma$ , I $\gamma$ ,  $\sigma$ . <sup>78,80,82</sup>Se, <sup>79,81</sup>Br, <sup>80,82,83,84,86</sup>Kr; <sup>85,87</sup>Rb, <sup>86,87,88</sup>Sr, <sup>89</sup>Y, <sup>90</sup>Zr; deduced total s-process abundances. JOUR PRVCA 78 025802

KEYNUMBERS AND KEYWORDS

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**A=83**

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| $^{83}\text{Ga}$ | 2008HA23 | ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502   |
| $^{83}\text{Ge}$ | 2006HA62 | ATOMIC MASSES $^{77,78,79}\text{Cu}$ , $^{83,84,85,86}\text{Ge}$ ; measured mass excesses. Isotopes produced from $^{238}\text{U}(\text{p}, \text{F})$ reaction at beam energy 42 MeV using ISOL method. Proposed technique for measuring mass differences developed at the Holifield Radioactive Ion Beam Facility (HRIBF). JOUR IMSPF 251 119  |
|                  | 2008HA23 | ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502   |
| $^{83}\text{As}$ | 2008HA23 | ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502   |
|                  | 2008SAZY | NUCLEAR REACTIONS $^{238}\text{U}(\text{}^{82}\text{Se}, \text{}^{84}\text{Se})$ , $(\text{}^{82}\text{Se}, \text{}^{82}\text{Ge})$ , $(\text{}^{82}\text{Se}, \text{}^{83}\text{As})$ , $(\text{}^{82}\text{Se}, \text{}^{81}\text{Ga})$ , E=505, 515 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma$ asymmetry; $^{81}\text{Ga}$ , $^{82}\text{Ge}$ , $^{83}\text{As}$ , $^{84}\text{Se}$ ; deduced levels, J, $\pi$ . CONF Crete(FINUSTAR 2),Proc.P139,Sahin |
| $^{83}\text{Kr}$ | 2006RI15 | ATOMIC MASSES $^{78,80,82,83,84}\text{Kr}$ ; measured masses using the LEBIT Penning trap mass spectrometer. Comparison with 2003 mass evaluation. JOUR IMSPF 251 300  |
|                  | 2008HE10 | NUCLEAR REACTIONS $^{79,81}\text{Br}$ , $^{85,87}\text{Rb}(\text{n}, \gamma)$ , E=0-120 keV; measured $E\gamma$ , $I\gamma$ , $\sigma$ . $^{78,80,82}\text{Se}$ , $^{79,81}\text{Br}$ , $^{80,82,83,84,86}\text{Kr}$ ; $^{85,87}\text{Rb}$ , $^{86,87,88}\text{Sr}$ , $^{89}\text{Y}$ , $^{90}\text{Zr}$ ; deduced total s-process abundances. JOUR PRVCA 78 025802  |

**A=84**

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| $^{84}\text{Ge}$ | 2006HA62 | ATOMIC MASSES $^{77,78,79}\text{Cu}$ , $^{83,84,85,86}\text{Ge}$ ; measured mass excesses. Isotopes produced from $^{238}\text{U}(\text{p}, \text{F})$ reaction at beam energy 42 MeV using ISOL method. Proposed technique for measuring mass differences developed at the Holifield Radioactive Ion Beam Facility (HRIBF). JOUR IMSPF 251 119          |
|                  | 2008HA23 | ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502 |

KEYNUMBERS AND KEYWORDS

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**A=84 (continued)**

$^{84}\text{As}$	2008HA23	ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502
$^{84}\text{Se}$	2008HA23	ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502
	2008SAZY	NUCLEAR REACTIONS $^{238}\text{U}(^{82}\text{Se}, ^{84}\text{Se})$ , $(^{82}\text{Se}, ^{82}\text{Ge})$ , $(^{82}\text{Se}, ^{83}\text{As})$ , $(^{82}\text{Se}, ^{81}\text{Ga})$ , E=505, 515 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma$ asymmetry; $^{81}\text{Ga}$ , $^{82}\text{Ge}$ , $^{83}\text{As}$ , $^{84}\text{Se}$ ; deduced levels, J, $\pi$ . CONF Crete(FINUSTAR 2),Proc.P139,Sahin
$^{84}\text{Br}$	2008ASZZ	NUCLEAR REACTIONS $^{208}\text{Pb}(^{16}\text{O}, \text{xf})^{84}\text{Br} / ^{85}\text{Br}$ , E=85 MeV; measured $E\gamma$ , $I\gamma$ ; $^{84,85}\text{Br}$ ; deduced levels, J, $\pi$ , bands. CONF Crete(FINUSTAR 2),Proc.P134,Astier
$^{84}\text{Kr}$	2006RI15	ATOMIC MASSES $^{78,80,82,83,84}\text{Kr}$ ; measured masses using the LEBIT Penning trap mass spectrometer. Comparison with 2003 mass evaluation. JOUR IMSPF 251 300
	2008HE10	NUCLEAR REACTIONS $^{79,81}\text{Br}$ , $^{85,87}\text{Rb}(n, \gamma)$ , E=0-120 keV; measured $E\gamma$ , $I\gamma$ , $\sigma$ . $^{78,80,82}\text{Se}$ , $^{79,81}\text{Br}$ , $^{80,82,83,84,86}\text{Kr}$ ; $^{85,87}\text{Rb}$ , $^{86,87,88}\text{Sr}$ , $^{89}\text{Y}$ , $^{90}\text{Zr}$ ; deduced total s-process abundances. JOUR PRVCA 78 025802

**A=85**

$^{85}\text{Ge}$	2006HA62	ATOMIC MASSES $^{77,78,79}\text{Cu}$ , $^{83,84,85,86}\text{Ge}$ ; measured mass excesses. Isotopes produced from $^{238}\text{U}(p, F)$ reaction at beam energy 42 MeV using ISOL method. Proposed technique for measuring mass differences developed at the Holifield Radioactive Ion Beam Facility (HRIBF). JOUR IMSPF 251 119
	2008HA23	ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502
$^{85}\text{As}$	2008HA23	ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502
$^{85}\text{Se}$	2008HA23	ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502

KEYNUMBERS AND KEYWORDS

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**A=85 (continued)**

- <sup>85</sup>Br      2008ASZZ      NUCLEAR REACTIONS <sup>208</sup>Pb(<sup>16</sup>O, xf)<sup>84</sup>Br / <sup>85</sup>Br, E=85 MeV; measured E $\gamma$ , I $\gamma$ ; <sup>84,85</sup>Br; deduced levels, J,  $\pi$ , bands. CONF Crete(FINUSTAR 2),Proc.P134,Astier
- <sup>85</sup>Kr      2008RE07      NUCLEAR REACTIONS <sup>20</sup>Ne, <sup>27</sup>Al, <sup>40</sup>Ar, <sup>84</sup>Kr, <sup>131,132</sup>Xe, <sup>208</sup>Pb, <sup>235,238</sup>U(n,  $\gamma$ ), E=low; measured E $\gamma$ , I $\gamma$  using cold neutron source and an "invisible container". JOUR JRNCD 276 825
- <sup>85</sup>Rb      2008HE10      NUCLEAR REACTIONS <sup>79,81</sup>Br, <sup>85,87</sup>Rb(n,  $\gamma$ ), E=0-120 keV; measured E $\gamma$ , I $\gamma$ ,  $\sigma$ . <sup>78,80,82</sup>Se, <sup>79,81</sup>Br, <sup>80,82,83,84,86</sup>Kr; <sup>85,87</sup>Rb, <sup>86,87,88</sup>Sr, <sup>89</sup>Y, <sup>90</sup>Zr; deduced total s-process abundances. JOUR PRVCA 78 025802

**A=86**

- <sup>86</sup>Ge      2006HA62      ATOMIC MASSES <sup>77,78,79</sup>Cu, <sup>83,84,85,86</sup>Ge; measured mass excesses. Isotopes produced from <sup>238</sup>U(p, F) reaction at beam energy 42 MeV using ISOL method. Proposed technique for measuring mass differences developed at the Holifield Radioactive Ion Beam Facility (HRIBF). JOUR IMSPF 251 119
- <sup>86</sup>As      2008HA23      ATOMIC MASSES <sup>76,77,78,79,80</sup>Zn, <sup>78,79,80,81,82,83</sup>Ga, <sup>80,81,82,83,84,85</sup>Ge, <sup>81,82,83,84,85,86,87</sup>As, <sup>84,85,86,87,88,89</sup>Se; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502
- <sup>86</sup>Se      2008HA23      ATOMIC MASSES <sup>76,77,78,79,80</sup>Zn, <sup>78,79,80,81,82,83</sup>Ga, <sup>80,81,82,83,84,85</sup>Ge, <sup>81,82,83,84,85,86,87</sup>As, <sup>84,85,86,87,88,89</sup>Se; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502
- <sup>86</sup>Kr      2008HE10      NUCLEAR REACTIONS <sup>79,81</sup>Br, <sup>85,87</sup>Rb(n,  $\gamma$ ), E=0-120 keV; measured E $\gamma$ , I $\gamma$ ,  $\sigma$ . <sup>78,80,82</sup>Se, <sup>79,81</sup>Br, <sup>80,82,83,84,86</sup>Kr; <sup>85,87</sup>Rb, <sup>86,87,88</sup>Sr, <sup>89</sup>Y, <sup>90</sup>Zr; deduced total s-process abundances. JOUR PRVCA 78 025802
- <sup>86</sup>Rb      2008AG10      NUCLEAR REACTIONS <sup>89</sup>Y, <sup>107,109</sup>Ag(n, n'), E=14.6 MeV; <sup>89</sup>Y(n, 2n), E=14.6 MeV; <sup>107,109</sup>Ag, <sup>139</sup>La(n, p), E=14.6 MeV; <sup>89</sup>Y(n,  $\alpha$ ), E=14.6 MeV; measured E $\gamma$ , I $\gamma$ , cross sections using the activation technique. Compared results to model calculations. JOUR ANEND 35 1713
- 2008HE10      NUCLEAR REACTIONS <sup>79,81</sup>Br, <sup>85,87</sup>Rb(n,  $\gamma$ ), E=0-120 keV; measured E $\gamma$ , I $\gamma$ ,  $\sigma$ . <sup>78,80,82</sup>Se, <sup>79,81</sup>Br, <sup>80,82,83,84,86</sup>Kr; <sup>85,87</sup>Rb, <sup>86,87,88</sup>Sr, <sup>89</sup>Y, <sup>90</sup>Zr; deduced total s-process abundances. JOUR PRVCA 78 025802
- <sup>86</sup>Sr      2008HE10      NUCLEAR REACTIONS <sup>79,81</sup>Br, <sup>85,87</sup>Rb(n,  $\gamma$ ), E=0-120 keV; measured E $\gamma$ , I $\gamma$ ,  $\sigma$ . <sup>78,80,82</sup>Se, <sup>79,81</sup>Br, <sup>80,82,83,84,86</sup>Kr; <sup>85,87</sup>Rb, <sup>86,87,88</sup>Sr, <sup>89</sup>Y, <sup>90</sup>Zr; deduced total s-process abundances. JOUR PRVCA 78 025802

KEYNUMBERS AND KEYWORDS

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**A=86 (continued)**

<sup>86</sup>Y      2007KRZY      NUCLEAR REACTIONS <sup>127</sup>I(d, X)<sup>111</sup>In / <sup>119</sup>Te / <sup>121</sup>I / <sup>122</sup>Sb / <sup>123</sup>I / <sup>124</sup>I / <sup>125</sup>Xe / <sup>126</sup>I, E=2.52 GeV; measured yields; <sup>129</sup>I(d, X)<sup>121</sup>Te / <sup>124</sup>I / <sup>126</sup>I / <sup>130</sup>I, E=2.52 GeV; measured yields; <sup>237</sup>Np(d, X)<sup>97</sup>Zr / <sup>99</sup>Mo / <sup>132</sup>Te / <sup>133</sup>I / <sup>238</sup>Np, E=2.52 GeV; measured yields; <sup>238</sup>Pu(d, X)<sup>97</sup>Zr / <sup>135</sup>Xe, E≈2.5 GeV; measured yields; <sup>239</sup>Pu(d, X)<sup>103</sup>Ru / <sup>128</sup>Sb / <sup>132</sup>Te / <sup>133</sup>I / <sup>135</sup>I / <sup>135</sup>Xe / <sup>140</sup>Ba / <sup>143</sup>Ce / <sup>91</sup>Sr / <sup>97</sup>Zr, E≈2.5 GeV; measured yields; <sup>26</sup>Al(n, α), <sup>197</sup>Au(n, γ), <sup>197</sup>Au(n, 2n), <sup>197</sup>Au(n, 4n), E not given; measured radial distributions of production rates of daughter nuclei; <sup>89</sup>Y(n, 2n), <sup>89</sup>Y(n, 3n), <sup>89</sup>Y(n, 4n), E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; <sup>238</sup>U, Pb(n, f), <sup>238</sup>U, Pb(n, γ), E not given; measured σ. REPT JINR-E1-2007-7,Krivopustov

**A=87**

<sup>87</sup>As      2008HA23      ATOMIC MASSES <sup>76,77,78,79,80</sup>Zn, <sup>78,79,80,81,82,83</sup>Ga, <sup>80,81,82,83,84,85</sup>Ge, <sup>81,82,83,84,85,86,87</sup>As, <sup>84,85,86,87,88,89</sup>Se; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502

<sup>87</sup>Se      2008HA23      ATOMIC MASSES <sup>76,77,78,79,80</sup>Zn, <sup>78,79,80,81,82,83</sup>Ga, <sup>80,81,82,83,84,85</sup>Ge, <sup>81,82,83,84,85,86,87</sup>As, <sup>84,85,86,87,88,89</sup>Se; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502

<sup>87</sup>Rb      2008HE10      NUCLEAR REACTIONS <sup>79,81</sup>Br, <sup>85,87</sup>Rb(n, γ), E=0-120 keV; measured Eγ, Iγ, σ. <sup>78,80,82</sup>Se, <sup>79,81</sup>Br, <sup>80,82,83,84,86</sup>Kr; <sup>85,87</sup>Rb, <sup>86,87,88</sup>Sr, <sup>89</sup>Y, <sup>90</sup>Zr; deduced total s-process abundances. JOUR PRVCA 78 025802

<sup>87</sup>Sr      2008HE10      NUCLEAR REACTIONS <sup>79,81</sup>Br, <sup>85,87</sup>Rb(n, γ), E=0-120 keV; measured Eγ, Iγ, σ. <sup>78,80,82</sup>Se, <sup>79,81</sup>Br, <sup>80,82,83,84,86</sup>Kr; <sup>85,87</sup>Rb, <sup>86,87,88</sup>Sr, <sup>89</sup>Y, <sup>90</sup>Zr; deduced total s-process abundances. JOUR PRVCA 78 025802

<sup>87</sup>Y      2007KRZY      NUCLEAR REACTIONS <sup>127</sup>I(d, X)<sup>111</sup>In / <sup>119</sup>Te / <sup>121</sup>I / <sup>122</sup>Sb / <sup>123</sup>I / <sup>124</sup>I / <sup>125</sup>Xe / <sup>126</sup>I, E=2.52 GeV; measured yields; <sup>129</sup>I(d, X)<sup>121</sup>Te / <sup>124</sup>I / <sup>126</sup>I / <sup>130</sup>I, E=2.52 GeV; measured yields; <sup>237</sup>Np(d, X)<sup>97</sup>Zr / <sup>99</sup>Mo / <sup>132</sup>Te / <sup>133</sup>I / <sup>238</sup>Np, E=2.52 GeV; measured yields; <sup>238</sup>Pu(d, X)<sup>97</sup>Zr / <sup>135</sup>Xe, E≈2.5 GeV; measured yields; <sup>239</sup>Pu(d, X)<sup>103</sup>Ru / <sup>128</sup>Sb / <sup>132</sup>Te / <sup>133</sup>I / <sup>135</sup>I / <sup>135</sup>Xe / <sup>140</sup>Ba / <sup>143</sup>Ce / <sup>91</sup>Sr / <sup>97</sup>Zr, E≈2.5 GeV; measured yields; <sup>26</sup>Al(n, α), <sup>197</sup>Au(n, γ), <sup>197</sup>Au(n, 2n), <sup>197</sup>Au(n, 4n), E not given; measured radial distributions of production rates of daughter nuclei; <sup>89</sup>Y(n, 2n), <sup>89</sup>Y(n, 3n), <sup>89</sup>Y(n, 4n), E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; <sup>238</sup>U, Pb(n, f), <sup>238</sup>U, Pb(n, γ), E not given; measured σ. REPT JINR-E1-2007-7,Krivopustov

KEYNUMBERS AND KEYWORDS

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**A=88**

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| $^{88}\text{Se}$ | 2008HA23 | ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502   |
| $^{88}\text{Rb}$ | 2008HE10 | NUCLEAR REACTIONS $^{79,81}\text{Br}$ , $^{85,87}\text{Rb}(n, \gamma)$ , E=0-120 keV; measured $E\gamma$ , $I\gamma$ , $\sigma$ . $^{78,80,82}\text{Se}$ , $^{79,81}\text{Br}$ , $^{80,82,83,84,86}\text{Kr}$ ; $^{85,87}\text{Rb}$ , $^{86,87,88}\text{Sr}$ , $^{89}\text{Y}$ , $^{90}\text{Zr}$ ; deduced total s-process abundances. JOUR PRVCA 78 025802   |
| $^{88}\text{Sr}$ | 2008G025 | NUCLEAR REACTIONS $^{88}\text{Sr}(n, n'\gamma)$ , E not given; measured $E\gamma$ , $I\gamma$ , $I\gamma(\theta)$ , lifetimes; deduced levels, mixing ratios, B(E2), B(M1); HPGe detector; DSA method. JOUR PANUE 71 1339  |
|                  | 2008HE10 | NUCLEAR REACTIONS $^{79,81}\text{Br}$ , $^{85,87}\text{Rb}(n, \gamma)$ , E=0-120 keV; measured $E\gamma$ , $I\gamma$ , $\sigma$ . $^{78,80,82}\text{Se}$ , $^{79,81}\text{Br}$ , $^{80,82,83,84,86}\text{Kr}$ ; $^{85,87}\text{Rb}$ , $^{86,87,88}\text{Sr}$ , $^{89}\text{Y}$ , $^{90}\text{Zr}$ ; deduced total s-process abundances. JOUR PRVCA 78 025802   |
| $^{88}\text{Y}$  | 2007KRZY | NUCLEAR REACTIONS $^{127}\text{I}(d, X)^{111}\text{In}$ / $^{119}\text{Te}$ / $^{121}\text{I}$ / $^{122}\text{Sb}$ / $^{123}\text{I}$ / $^{124}\text{I}$ / $^{125}\text{Xe}$ / $^{126}\text{I}$ , E=2.52 GeV; measured yields; $^{129}\text{I}(d, X)^{121}\text{Te}$ / $^{124}\text{I}$ / $^{126}\text{I}$ / $^{130}\text{I}$ , E=2.52 GeV; measured yields; $^{237}\text{Np}(d, X)^{97}\text{Zr}$ / $^{99}\text{Mo}$ / $^{132}\text{Te}$ / $^{133}\text{I}$ / $^{238}\text{Np}$ , E=2.52 GeV; measured yields; $^{238}\text{Pu}(d, X)^{97}\text{Zr}$ / $^{135}\text{Xe}$ , E $\approx$ 2.5 GeV; measured yields; $^{239}\text{Pu}(d, X)^{103}\text{Ru}$ / $^{128}\text{Sb}$ / $^{132}\text{Te}$ / $^{133}\text{I}$ / $^{135}\text{I}$ / $^{135}\text{Xe}$ / $^{140}\text{Ba}$ / $^{143}\text{Ce}$ / $^{91}\text{Sr}$ / $^{97}\text{Zr}$ , E $\approx$ 2.5 GeV; measured yields; $^{26}\text{Al}(n, \alpha)$ , $^{197}\text{Au}(n, \gamma)$ , $^{197}\text{Au}(n, 2n)$ , $^{197}\text{Au}(n, 4n)$ , E not given; measured radial distributions of production rates of daughter nuclei; $^{89}\text{Y}(n, 2n)$ , $^{89}\text{Y}(n, 3n)$ , $^{89}\text{Y}(n, 4n)$ , E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; $^{238}\text{U}$ , $\text{Pb}(n, f)$ , $^{238}\text{U}$ , $\text{Pb}(n, \gamma)$ , E not given; measured $\sigma$ . REPT JINR-E1-2007-7, Krivopustov |
|                  | 2008AG10 | NUCLEAR REACTIONS $^{89}\text{Y}$ , $^{107,109}\text{Ag}(n, n')$ , E=14.6 MeV; $^{89}\text{Y}(n, 2n)$ , E=14.6 MeV; $^{107,109}\text{Ag}$ , $^{139}\text{La}(n, p)$ , E=14.6 MeV; $^{89}\text{Y}(n, \alpha)$ , E=14.6 MeV; measured $E\gamma$ , $I\gamma$ , cross sections using the activation technique. Compared results to model calculations. JOUR ANEND 35 1713  |

**A=89**

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| $^{89}\text{Se}$ | 2008HA23 | ATOMIC MASSES $^{76,77,78,79,80}\text{Zn}$ , $^{78,79,80,81,82,83}\text{Ga}$ , $^{80,81,82,83,84,85}\text{Ge}$ , $^{81,82,83,84,85,86,87}\text{As}$ , $^{84,85,86,87,88,89}\text{Se}$ ; measured mass excess using the JYFLTRAP mass spectrometer and the IGISOL facility. Deduced neutron separation energies and N=50 shell gap. JOUR PRLTA 101 052502 |
| $^{89}\text{Kr}$ | 2008HW03 | RADIOACTIVITY $^{252}\text{Cf}(\text{SF})$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. $^{89,91}\text{Kr}$ , $^{159}\text{Sm}$ ; deduced levels, J, $\pi$ , bands, configurations. $^{90,92}\text{Kr}$ , $^{161}\text{Gd}$ , $^{163}\text{Dy}$ ; comparison with adopted levels. JOUR PRVCA 78 017303                                       |

KEYNUMBERS AND KEYWORDS

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**A=89 (continued)**

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| $^{89}\text{Y}$  | 2008AG10 | NUCLEAR REACTIONS $^{89}\text{Y}$ , $^{107,109}\text{Ag}(n, n')$ , $E=14.6$ MeV; $^{89}\text{Y}(n, 2n)$ , $E=14.6$ MeV; $^{107,109}\text{Ag}$ , $^{139}\text{La}(n, p)$ , $E=14.6$ MeV; $^{89}\text{Y}(n, \alpha)$ , $E=14.6$ MeV; measured $E\gamma$ , $I\gamma$ , cross sections using the activation technique. Compared results to model calculations. JOUR ANEND 35 1713 |
|                  | 2008HE10 | NUCLEAR REACTIONS $^{79,81}\text{Br}$ , $^{85,87}\text{Rb}(n, \gamma)$ , $E=0-120$ keV; measured $E\gamma$ , $I\gamma$ , $\sigma$ . $^{78,80,82}\text{Se}$ , $^{79,81}\text{Br}$ , $^{80,82,83,84,86}\text{Kr}$ ; $^{85,87}\text{Rb}$ , $^{86,87,88}\text{Sr}$ , $^{89}\text{Y}$ , $^{90}\text{Zr}$ ; deduced total s-process abundances. JOUR PRVCA 78 025802                |
| $^{89}\text{Zr}$ | 2008AV02 | NUCLEAR REACTIONS $^{93}\text{Nb}(p, n)$ , $(p, np)$ , $(p, n\alpha)$ , $E < 17.4$ MeV; measured $E\gamma$ , $I\gamma$ , excitation functions using stacked foil activation technique. Compared results to existing data and model calculations. JOUR NUPBB 266 3353  |

**A=90**

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| $^{90}\text{Kr}$ | 2008HW03 | RADIOACTIVITY $^{252}\text{Cf}(\text{SF})$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. $^{89,91}\text{Kr}$ , $^{159}\text{Sm}$ ; deduced levels, $J$ , $\pi$ , bands, configurations. $^{90,92}\text{Kr}$ , $^{161}\text{Gd}$ , $^{163}\text{Dy}$ ; comparison with adopted levels. JOUR PRVCA 78 017303   |
| $^{90}\text{Y}$  | 2008BRZZ | NUCLEAR REACTIONS $^{89}\text{Y}$ , $^{95}\text{Mo}(n, \gamma)$ , $E$ not given; measured $E\gamma$ , $I\gamma$ ; $^{241}\text{Am}(n, \gamma)$ , $E=0.02$ eV - 100 keV; measured $\sigma$ . Compared results to ENDFB-VII database. CONF Crete(FINUSTAR 2),Proc.P111,Bredeweg   |
|                  | 2008FU08 | NUCLEAR REACTIONS $^{27}\text{Al}$ , $^{28}\text{Si}$ , $^{29}\text{Si}$ , $^{41}\text{K}$ , $^{51}\text{V}$ , $^{61}\text{Ni}$ , $^{65}\text{Cu}$ , $^{64,67}\text{Zn}$ , $^{69}\text{Ga}$ , $^{79}\text{Br}$ , $^{92}\text{Mo}(n, p)$ , $E=3.5-5.9$ MeV; $^{69}\text{Ga}$ , $^{93}\text{Nb}(n, \alpha)$ , $E=3.5-5.9$ MeV; measured $E\gamma$ , $I\gamma$ , cross sections using the activation technique. JOUR ANEND 35 1652                         |
|                  | 2008YA13 | NUCLEAR REACTIONS $^{90}\text{Zr}(n, p)^{90}\text{Y}$ , $E=293$ MeV; measured $E_p$ , $I_p$ , $\sigma$ ; Large acceptance magnetic spectrometer, multi-wire drift chambers, plastic scintillation counters. JOUR NIMAE 592 88   |
| $^{90}\text{Zr}$ | 2008HE10 | NUCLEAR REACTIONS $^{79,81}\text{Br}$ , $^{85,87}\text{Rb}(n, \gamma)$ , $E=0-120$ keV; measured $E\gamma$ , $I\gamma$ , $\sigma$ . $^{78,80,82}\text{Se}$ , $^{79,81}\text{Br}$ , $^{80,82,83,84,86}\text{Kr}$ ; $^{85,87}\text{Rb}$ , $^{86,87,88}\text{Sr}$ , $^{89}\text{Y}$ , $^{90}\text{Zr}$ ; deduced total s-process abundances. JOUR PRVCA 78 025802  |
|                  | 2008PIZY | NUCLEAR REACTIONS Ni, $^{90,92}\text{Zr}$ , $^{118}\text{Sn}$ , $^{208}\text{Pb}(^{20}\text{Ne}, ^{20}\text{Ne}')$ , $E$ not given; measured particle spectra, $\sigma(\theta)$ ; deduced quasielastic barrier distributions; calculated barrier distributions; $^{90,92}\text{Zr}(^{20}\text{Ne}, X)$ , $E$ not given; measured excitation-energy spectra. Compared results to Coupled Channel calculations. CONF Crete(FINUSTAR 2),Proc.P238,Piasecki |
|                  | 2008UTZZ | NUCLEAR REACTIONS $^{91,92,94}\text{Zr}(\gamma, n)$ , $E \approx 8-17$ MeV; measured $\sigma$ ; calculated $\sigma$ ; deduced E1 and M1 strength functions. Compared results to data. CONF Crete(FINUSTAR 2),Proc.P173,Utsunomiya   |



KEYNUMBERS AND KEYWORDS

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**A=91**

- <sup>91</sup>Kr      2008HW03      RADIOACTIVITY <sup>252</sup>Cf(SF); measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin. <sup>89,91</sup>Kr, <sup>159</sup>Sm; deduced levels, J,  $\pi$ , bands, configurations. <sup>90,92</sup>Kr, <sup>161</sup>Gd, <sup>163</sup>Dy; comparison with adopted levels. JOUR PRVCA 78 017303
- <sup>91</sup>Sr      2007KRZY      NUCLEAR REACTIONS <sup>127</sup>I(d, X)<sup>111</sup>In / <sup>119</sup>Te / <sup>121</sup>I / <sup>122</sup>Sb / <sup>123</sup>I / <sup>124</sup>I / <sup>125</sup>Xe / <sup>126</sup>I, E=2.52 GeV; measured yields; <sup>129</sup>I(d, X)<sup>121</sup>Te / <sup>124</sup>I / <sup>126</sup>I / <sup>130</sup>I, E=2.52 GeV; measured yields; <sup>237</sup>Np(d, X)<sup>97</sup>Zr / <sup>99</sup>Mo / <sup>132</sup>Te / <sup>133</sup>I / <sup>238</sup>Np, E=2.52 GeV; measured yields; <sup>238</sup>Pu(d, X)<sup>97</sup>Zr / <sup>135</sup>Xe, E $\approx$ 2.5 GeV; measured yields; <sup>239</sup>Pu(d, X)<sup>103</sup>Ru / <sup>128</sup>Sb / <sup>132</sup>Te / <sup>133</sup>I / <sup>135</sup>I / <sup>135</sup>Xe / <sup>140</sup>Ba / <sup>143</sup>Ce / <sup>91</sup>Sr / <sup>97</sup>Zr, E $\approx$ 2.5 GeV; measured yields; <sup>26</sup>Al(n,  $\alpha$ ), <sup>197</sup>Au(n,  $\gamma$ ), <sup>197</sup>Au(n, 2n), <sup>197</sup>Au(n, 4n), E not given; measured radial distributions of production rates of daughter nuclei; <sup>89</sup>Y(n, 2n), <sup>89</sup>Y(n, 3n), <sup>89</sup>Y(n, 4n), E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; <sup>238</sup>U, Pb(n, f), <sup>238</sup>U, Pb(n,  $\gamma$ ), E not given; measured  $\sigma$ . REPT JINR-E1-2007-7,Krivopustov
- <sup>91</sup>Zr      2008UTZZ      NUCLEAR REACTIONS <sup>91,92,94</sup>Zr( $\gamma$ , n), E  $\approx$  8-17 MeV; measured  $\sigma$ ; calculated  $\sigma$ ; deduced E1 and M1 strength functions. Compared results to data. CONF Crete(FINUSTAR 2),Proc.P173,Utsunomiya

**A=92**

- <sup>92</sup>Br      2006J014      ATOMIC MASSES <sup>96,97,98,99,100,101,102,103,104,105,106</sup>Zr, <sup>98,99,100,101,102,103,104,105,106</sup>Nb, <sup>99,100,101,102,103,104,105,106,107,108,109,110</sup>Mo; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. <sup>117</sup>Pd; measured conversion electrons from isomer decay. <sup>22</sup>Mg, <sup>34</sup>Ar, <sup>46</sup>V, <sup>62</sup>Ga, <sup>74</sup>Rb; reviewed superallowed  $\beta$  decay Ft values. <sup>92</sup>Br; measured time of flight spectrum.<sup>102</sup>Nb; measured  $\gamma$  rays following  $\beta^-$  decay. JOUR IMSPF 251 204
- <sup>92</sup>Kr      2008HW03      RADIOACTIVITY <sup>252</sup>Cf(SF); measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin. <sup>89,91</sup>Kr, <sup>159</sup>Sm; deduced levels, J,  $\pi$ , bands, configurations. <sup>90,92</sup>Kr, <sup>161</sup>Gd, <sup>163</sup>Dy; comparison with adopted levels. JOUR PRVCA 78 017303
- <sup>92</sup>Sr      2008LE19      RADIOACTIVITY <sup>92</sup>Sr; measured E $\gamma$ , I $\gamma$ , T<sub>1/2</sub>. JOUR ARISE 66 1450
- <sup>92</sup>Zr      2008PIZY      NUCLEAR REACTIONS Ni, <sup>90,92</sup>Zr, <sup>118</sup>Sn, <sup>208</sup>Pb(<sup>20</sup>Ne, <sup>20</sup>Ne'), E not given; measured particle spectra,  $\sigma(\theta)$ ; deduced quasielastic barrier distributions; calculated barrier distributions; <sup>90,92</sup>Zr(<sup>20</sup>Ne, X), E not given; measured excitation-energy spectra. Compared results to Coupled Channel calculations. CONF Crete(FINUSTAR 2),Proc.P238,Piasecki
- <sup>92</sup>Nb      2008AV02      NUCLEAR REACTIONS <sup>93</sup>Nb(p, n), (p, np), (p, n $\alpha$ ), E < 17.4 MeV; measured E $\gamma$ , I $\gamma$ , excitation functions using stacked foil activation technique. Compared results to existing data and model calculations. JOUR NUPBB 266 3353

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KEYNUMBERS AND KEYWORDS

**A=92 (continued)**

- 2008FU08 NUCLEAR REACTIONS  $^{27}\text{Al}$ ,  $^{28}\text{Si}$ ,  $^{29}\text{Si}$ ,  $^{41}\text{K}$ ,  $^{51}\text{V}$ ,  $^{61}\text{Ni}$ ,  $^{65}\text{Cu}$ ,  $^{64,67}\text{Zn}$ ,  $^{69}\text{Ga}$ ,  $^{79}\text{Br}$ ,  $^{92}\text{Mo}(\text{n}, \text{p})$ ,  $E=3.5\text{-}5.9\text{ MeV}$ ;  $^{69}\text{Ga}$ ,  $^{93}\text{Nb}(\text{n}, \alpha)$ ,  $E=3.5\text{-}5.9\text{ MeV}$ ; measured  $E\gamma$ ,  $I\gamma$ , cross sections using the activation technique. JOUR ANEND 35 1652
- 2008ZH21 NUCLEAR REACTIONS  $^{93}\text{Nb}$ ,  $^{184,186,192}\text{Os}(\text{n}, 2\text{n})$ ,  $^{189}\text{Os}(\text{n}, \text{p})$ ,  $^{190}\text{Os}(\text{n}, \alpha)$ ,  $E=13.5, 14.7\text{ MeV}$ ; measured  $E\gamma$ ,  $I\gamma$ ,  $\sigma$ . JOUR ARISE 66 1488
- $^{92}\text{Ru}$  2008FA11 ATOMIC MASSES  $^{92}\text{Ru}$ ,  $^{93}\text{Rh}$ ; measured masses; deduced mass excesses, proton separation energies. Penning trap method. JOUR PRVCA 78 022801

**A=93**

- $^{93}\text{Zr}$  2008UTZZ NUCLEAR REACTIONS  $^{91,92,94}\text{Zr}(\gamma, \text{n})$ ,  $E \approx 8\text{-}17\text{ MeV}$ ; measured  $\sigma$ ; calculated  $\sigma$ ; deduced E1 and M1 strength functions. Compared results to data. CONF Crete(FINUSTAR 2),Proc.P173,Utsunomiya
- $^{93}\text{Mo}$  2008AV02 NUCLEAR REACTIONS  $^{93}\text{Nb}(\text{p}, \text{n})$ ,  $(\text{p}, \text{np})$ ,  $(\text{p}, \text{n}\alpha)$ ,  $E < 17.4\text{ MeV}$ ; measured  $E\gamma$ ,  $I\gamma$ , excitation functions using stacked foil activation technique. Compared results to existing data and model calculations. JOUR NUPBB 266 3353
- $^{93}\text{Rh}$  2008FA11 ATOMIC MASSES  $^{92}\text{Ru}$ ,  $^{93}\text{Rh}$ ; measured masses; deduced mass excesses, proton separation energies. Penning trap method. JOUR PRVCA 78 022801

**A=94**

- $^{94}\text{Rb}$  2008TS03 NUCLEAR REACTIONS  $^{235}\text{U}(\text{n}, \text{F})$ ,  $E=\text{thermal}$ ; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma\text{-coin}$ , fragment mass distributions.  $^{94}\text{Rb}$ ; deduced levels,  $J$ ,  $\pi$ , configurations. JOUR PRVCA 78 011301

**A=95**

- $^{95}\text{Ru}$  2008RA19 NUCLEAR REACTIONS  $^{92,94}\text{Mo}(\alpha, \text{n})$ ,  $^{112}\text{Sn}(\alpha, \gamma)$ ,  $E=8.2\text{-}11.1\text{ MeV}$ ; measured  $\sigma$ , astrophysical S-factors. Comparison with Hartree-Fock-Bogoliubov calculations. JOUR PRVCA 78 025804

## A=96

- <sup>96</sup>Zr      2006J014      ATOMIC MASSES <sup>96,97,98,99,100,101,102,103,104,105,106</sup>Zr,  
<sup>98,99,100,101,102,103,104,105,106</sup>Nb,  
<sup>99,100,101,102,103,104,105,106,107,108,109,110</sup>Mo; reviewed cooling and  
trapping techniques, high-precision measurements of the ground state  
properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL  
facility) method and collinear laser spectroscopy. <sup>117</sup>Pd; measured  
conversion electrons from isomer decay. <sup>22</sup>Mg, <sup>34</sup>Ar, <sup>46</sup>V, <sup>62</sup>Ga, <sup>74</sup>Rb;  
reviewed superallowed  $\beta$  decay Ft values. <sup>92</sup>Br; measured time of flight  
spectrum. <sup>102</sup>Nb; measured  $\gamma$  rays following  $\beta^-$  decay. JOUR IMSPF  
251 204
- <sup>96</sup>Mo      2008BRZZ      NUCLEAR REACTIONS <sup>89</sup>Y, <sup>95</sup>Mo(n,  $\gamma$ ), E not given; measured E $\gamma$ ,  
I $\gamma$ ; <sup>241</sup>Am(n,  $\gamma$ ), E=0.02 eV - 100 keV; measured  $\sigma$ . Compared results  
to ENDFB-VII database. CONF Crete(FINUSTAR  
2),Proc.P111,Bredeweg
- 2008SHZY      NUCLEAR REACTIONS <sup>95</sup>Mo(n,  $\gamma$ ), E=1 eV - 100 keV; measured  
E $\gamma$ , I $\gamma$ ,  $\gamma$ -coin; deduced photon strength function. Comparison with  
available data. CONF Yosemite(CNR 2007) Proc.P74,Sheets
- <sup>96</sup>Ag      2006KA74      RADIOACTIVITY <sup>105</sup>Sn(EC), ( $\beta^+$ ), (ECp), ( $\beta^+$ ); measured E $\beta$ , I $\beta$ ,  
 $\beta$ -delayed E $\gamma$ , I $\gamma$ ,  $\beta\gamma$ -,  $\gamma\gamma$ -coin, x-ray spectrum; deduced Q values.  
Total absorption spectrometer (TAS). <sup>70m</sup>Br, <sup>96,97,98</sup>Ag, <sup>100,102,103</sup>In,  
<sup>103</sup>Sn, <sup>113</sup>Xe, <sup>117</sup>Ba; reviewed Q values. JOUR IMSPF 251 138

## A=97

- <sup>97</sup>Zr      2006J014      ATOMIC MASSES <sup>96,97,98,99,100,101,102,103,104,105,106</sup>Zr,  
<sup>98,99,100,101,102,103,104,105,106</sup>Nb,  
<sup>99,100,101,102,103,104,105,106,107,108,109,110</sup>Mo; reviewed cooling and  
trapping techniques, high-precision measurements of the ground state  
properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL  
facility) method and collinear laser spectroscopy. <sup>117</sup>Pd; measured  
conversion electrons from isomer decay. <sup>22</sup>Mg, <sup>34</sup>Ar, <sup>46</sup>V, <sup>62</sup>Ga, <sup>74</sup>Rb;  
reviewed superallowed  $\beta$  decay Ft values. <sup>92</sup>Br; measured time of flight  
spectrum. <sup>102</sup>Nb; measured  $\gamma$  rays following  $\beta^-$  decay. JOUR IMSPF  
251 204
- 2007KRZY      NUCLEAR REACTIONS <sup>127</sup>I(d, X)<sup>111</sup>In / <sup>119</sup>Te / <sup>121</sup>I / <sup>122</sup>Sb / <sup>123</sup>I  
/ <sup>124</sup>I / <sup>125</sup>Xe / <sup>126</sup>I, E=2.52 GeV; measured yields; <sup>129</sup>I(d, X)<sup>121</sup>Te /  
<sup>124</sup>I / <sup>126</sup>I / <sup>130</sup>I, E=2.52 GeV; measured yields; <sup>237</sup>Np(d, X)<sup>97</sup>Zr /  
<sup>99</sup>Mo / <sup>132</sup>Te / <sup>133</sup>I / <sup>238</sup>Np, E=2.52 GeV; measured yields; <sup>238</sup>Pu(d,  
X)<sup>97</sup>Zr / <sup>135</sup>Xe, E $\approx$ 2.5 GeV; measured yields; <sup>239</sup>Pu(d, X)<sup>103</sup>Ru /  
<sup>128</sup>Sb / <sup>132</sup>Te / <sup>133</sup>I / <sup>135</sup>I / <sup>135</sup>Xe / <sup>140</sup>Ba / <sup>143</sup>Ce / <sup>91</sup>Sr / <sup>97</sup>Zr, E $\approx$ 2.5  
GeV; measured yields; <sup>26</sup>Al(n,  $\alpha$ ), <sup>197</sup>Au(n,  $\gamma$ ), <sup>197</sup>Au(n, 2n), <sup>197</sup>Au(n,  
4n), E not given; measured radial distributions of production rates of  
daughter nuclei; <sup>89</sup>Y(n, 2n), <sup>89</sup>Y(n, 3n), <sup>89</sup>Y(n, 4n), E not given;  
measured production rates of daughter nuclei. activation detector for  
transmutation setup; <sup>238</sup>U, Pb(n, f), <sup>238</sup>U, Pb(n,  $\gamma$ ), E not given;  
measured  $\sigma$ . REPT JINR-E1-2007-7,Krivopustov

KEYNUMBERS AND KEYWORDS

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**A=97 (continued)**

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| $^{97}\text{Mo}$ | 2008RA13 | NUCLEAR REACTIONS $^{95}\text{Mo}(t, p)$ , $E=12$ MeV; measured $E_p$ , $I_p$ , $\sigma(\theta)$ using nuclear emulsions. $^{97}\text{Mo}$ ; deduced levels, $J$ , $\pi$ . DWBA analysis. JOUR IMPEE 17 1141   |
| $^{97}\text{Ru}$ | 2008RA19 | NUCLEAR REACTIONS $^{92,94}\text{Mo}(\alpha, n)$ , $^{112}\text{Sn}(\alpha, \gamma)$ , $E=8.2-11.1$ MeV; measured $\sigma$ , astrophysical S-factors. Comparison with Hartree-Fock-Bogoliubov calculations. JOUR PRVCA 78 025804   |
| $^{97}\text{Ag}$ | 2006KA74 | RADIOACTIVITY $^{105}\text{Sn}(\text{EC})$ , $(\beta^+)$ , $(\text{ECp})$ , $(\beta^+)$ ; measured $E\beta$ , $I\beta$ , $\beta$ -delayed $E\gamma$ , $I\gamma$ , $\beta\gamma$ -, $\gamma\gamma$ -coin, x-ray spectrum; deduced Q values. Total absorption spectrometer (TAS). $^{70m}\text{Br}$ , $^{96,97,98}\text{Ag}$ , $^{100,102,103}\text{In}$ , $^{103}\text{Sn}$ , $^{113}\text{Xe}$ , $^{117}\text{Ba}$ ; reviewed Q values. JOUR IMSPF 251 138 |

**A=98**

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|------------------|----------|---|
| $^{98}\text{Zr}$ | 2006J014 | ATOMIC MASSES $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ , $^{98,99,100,101,102,103,104,105,106}\text{Nb}$ , $^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay. $^{22}\text{Mg}$ , $^{34}\text{Ar}$ , $^{46}\text{V}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; reviewed superallowed $\beta$ decay Ft values. $^{92}\text{Br}$ ; measured time of flight spectrum. $^{102}\text{Nb}$ ; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204 |
| $^{98}\text{Nb}$ | 2006J014 | ATOMIC MASSES $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ , $^{98,99,100,101,102,103,104,105,106}\text{Nb}$ , $^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay. $^{22}\text{Mg}$ , $^{34}\text{Ar}$ , $^{46}\text{V}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; reviewed superallowed $\beta$ decay Ft values. $^{92}\text{Br}$ ; measured time of flight spectrum. $^{102}\text{Nb}$ ; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204 |
| $^{98}\text{Mo}$ | 2008RU04 | NUCLEAR REACTIONS $^{98,100}\text{Mo}(\gamma, \gamma')$ , $E<15$ MeV; measured $E\gamma$ , $I\gamma$ , photoabsorption $\sigma$ , giant resonances, angular distributions, distribution of mean branching ratios, dipole strength functions; deduced multipolarities. $^{27}\text{Al}$ , $^{28}\text{Si}$ , $^{56}\text{Fe}$ , $^{63}\text{Cu}$ , $^{70,72,73,74}\text{Ge}(n, \gamma)$ , $E=\text{thermal}$ ; measured $E\gamma$ , $I\gamma$ . $^{99,101}\text{Mo}(\gamma, n)$ ; analyzed cross sections. $^{97}\text{Mo}(n, \gamma)$ , $^{98}\text{Mo}(^3\text{He}, ^3\text{He}'\gamma)$ ; comparisons. JOUR PRVCA 77 064321   |
| $^{98}\text{Ag}$ | 2006KA74 | RADIOACTIVITY $^{105}\text{Sn}(\text{EC})$ , $(\beta^+)$ , $(\text{ECp})$ , $(\beta^+)$ ; measured $E\beta$ , $I\beta$ , $\beta$ -delayed $E\gamma$ , $I\gamma$ , $\beta\gamma$ -, $\gamma\gamma$ -coin, x-ray spectrum; deduced Q values. Total absorption spectrometer (TAS). $^{70m}\text{Br}$ , $^{96,97,98}\text{Ag}$ , $^{100,102,103}\text{In}$ , $^{103}\text{Sn}$ , $^{113}\text{Xe}$ , $^{117}\text{Ba}$ ; reviewed Q values. JOUR IMSPF 251 138  |

## A=99

$^{99}\text{Zr}$	2006J014	<p>ATOMIC MASSES <math>^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}</math>,  <math>^{98,99,100,101,102,103,104,105,106}\text{Nb}</math>,  <math>^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}</math>; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. <math>^{117}\text{Pd}</math>; measured conversion electrons from isomer decay. <math>^{22}\text{Mg}</math>, <math>^{34}\text{Ar}</math>, <math>^{46}\text{V}</math>, <math>^{62}\text{Ga}</math>, <math>^{74}\text{Rb}</math>; reviewed superallowed <math>\beta</math> decay Ft values. <math>^{92}\text{Br}</math>; measured time of flight spectrum. <math>^{102}\text{Nb}</math>; measured <math>\gamma</math> rays following <math>\beta^-</math> decay. JOUR IMSPF 251 204</p>
$^{99}\text{Nb}$	2006J014	<p>ATOMIC MASSES <math>^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}</math>,  <math>^{98,99,100,101,102,103,104,105,106}\text{Nb}</math>,  <math>^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}</math>; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. <math>^{117}\text{Pd}</math>; measured conversion electrons from isomer decay. <math>^{22}\text{Mg}</math>, <math>^{34}\text{Ar}</math>, <math>^{46}\text{V}</math>, <math>^{62}\text{Ga}</math>, <math>^{74}\text{Rb}</math>; reviewed superallowed <math>\beta</math> decay Ft values. <math>^{92}\text{Br}</math>; measured time of flight spectrum. <math>^{102}\text{Nb}</math>; measured <math>\gamma</math> rays following <math>\beta^-</math> decay. JOUR IMSPF 251 204</p>
$^{99}\text{Mo}$	2006J014	<p>ATOMIC MASSES <math>^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}</math>,  <math>^{98,99,100,101,102,103,104,105,106}\text{Nb}</math>,  <math>^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}</math>; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. <math>^{117}\text{Pd}</math>; measured conversion electrons from isomer decay. <math>^{22}\text{Mg}</math>, <math>^{34}\text{Ar}</math>, <math>^{46}\text{V}</math>, <math>^{62}\text{Ga}</math>, <math>^{74}\text{Rb}</math>; reviewed superallowed <math>\beta</math> decay Ft values. <math>^{92}\text{Br}</math>; measured time of flight spectrum. <math>^{102}\text{Nb}</math>; measured <math>\gamma</math> rays following <math>\beta^-</math> decay. JOUR IMSPF 251 204</p>
	2007KRZY	<p>NUCLEAR REACTIONS <math>^{127}\text{I}(\text{d}, \text{X})^{111}\text{In}</math> / <math>^{119}\text{Te}</math> / <math>^{121}\text{I}</math> / <math>^{122}\text{Sb}</math> / <math>^{123}\text{I}</math> / <math>^{124}\text{I}</math> / <math>^{125}\text{Xe}</math> / <math>^{126}\text{I}</math>, E=2.52 GeV; measured yields; <math>^{129}\text{I}(\text{d}, \text{X})^{121}\text{Te}</math> / <math>^{124}\text{I}</math> / <math>^{126}\text{I}</math> / <math>^{130}\text{I}</math>, E=2.52 GeV; measured yields; <math>^{237}\text{Np}(\text{d}, \text{X})^{97}\text{Zr}</math> / <math>^{99}\text{Mo}</math> / <math>^{132}\text{Te}</math> / <math>^{133}\text{I}</math> / <math>^{238}\text{Np}</math>, E=2.52 GeV; measured yields; <math>^{238}\text{Pu}(\text{d}, \text{X})^{97}\text{Zr}</math> / <math>^{135}\text{Xe}</math>, E<math>\approx</math>2.5 GeV; measured yields; <math>^{239}\text{Pu}(\text{d}, \text{X})^{103}\text{Ru}</math> / <math>^{128}\text{Sb}</math> / <math>^{132}\text{Te}</math> / <math>^{133}\text{I}</math> / <math>^{135}\text{I}</math> / <math>^{135}\text{Xe}</math> / <math>^{140}\text{Ba}</math> / <math>^{143}\text{Ce}</math> / <math>^{91}\text{Sr}</math> / <math>^{97}\text{Zr}</math>, E<math>\approx</math>2.5 GeV; measured yields; <math>^{26}\text{Al}(\text{n}, \alpha)</math>, <math>^{197}\text{Au}(\text{n}, \gamma)</math>, <math>^{197}\text{Au}(\text{n}, 2\text{n})</math>, <math>^{197}\text{Au}(\text{n}, 4\text{n})</math>, E not given; measured radial distributions of production rates of daughter nuclei; <math>^{89}\text{Y}(\text{n}, 2\text{n})</math>, <math>^{89}\text{Y}(\text{n}, 3\text{n})</math>, <math>^{89}\text{Y}(\text{n}, 4\text{n})</math>, E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; <math>^{238}\text{U}</math>, <math>\text{Pb}(\text{n}, \text{f})</math>, <math>^{238}\text{U}</math>, <math>\text{Pb}(\text{n}, \gamma)</math>, E not given; measured <math>\sigma</math>. REPT JINR-E1-2007-7, Krivopustov</p>

## A=100

$^{100}\text{Zr}$	2006J014	ATOMIC MASSES $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ , $^{98,99,100,101,102,103,104,105,106}\text{Nb}$ , $^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay. $^{22}\text{Mg}$ , $^{34}\text{Ar}$ , $^{46}\text{V}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; reviewed superallowed $\beta$ decay Ft values. $^{92}\text{Br}$ ; measured time of flight spectrum. $^{102}\text{Nb}$ ; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204
$^{100}\text{Nb}$	2006J014	ATOMIC MASSES $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ , $^{98,99,100,101,102,103,104,105,106}\text{Nb}$ , $^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay. $^{22}\text{Mg}$ , $^{34}\text{Ar}$ , $^{46}\text{V}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; reviewed superallowed $\beta$ decay Ft values. $^{92}\text{Br}$ ; measured time of flight spectrum. $^{102}\text{Nb}$ ; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204
$^{100}\text{Mo}$	2006J014	ATOMIC MASSES $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ , $^{98,99,100,101,102,103,104,105,106}\text{Nb}$ , $^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay. $^{22}\text{Mg}$ , $^{34}\text{Ar}$ , $^{46}\text{V}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; reviewed superallowed $\beta$ decay Ft values. $^{92}\text{Br}$ ; measured time of flight spectrum. $^{102}\text{Nb}$ ; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204
	2008RU04	NUCLEAR REACTIONS $^{98,100}\text{Mo}(\gamma, \gamma')$ , $E < 15$ MeV; measured $E\gamma$ , $I\gamma$ , photoabsorption $\sigma$ , giant resonances, angular distributions, distribution of mean branching ratios, dipole strength functions; deduced multipolarities. $^{27}\text{Al}$ , $^{28}\text{Si}$ , $^{56}\text{Fe}$ , $^{63}\text{Cu}$ , $^{70,72,73,74}\text{Ge}(n, \gamma)$ , $E = \text{thermal}$ ; measured $E\gamma$ , $I\gamma$ . $^{99,101}\text{Mo}(\gamma, n)$ ; analyzed cross sections. $^{97}\text{Mo}(n, \gamma)$ , $^{98}\text{Mo}(^3\text{He}, ^3\text{He}'\gamma)$ ; comparisons. JOUR PRVCA 77 064321
$^{100}\text{In}$	2006KA74	RADIOACTIVITY $^{105}\text{Sn}(\text{EC})$ , $(\beta^+)$ , $(\text{ECp})$ , $(\beta^+)$ ; measured $E\beta$ , $I\beta$ , $\beta$ -delayed $E\gamma$ , $I\gamma$ , $\beta\gamma$ -, $\gamma\gamma$ -coin, x-ray spectrum; deduced Q values. Total absorption spectrometer (TAS). $^{70m}\text{Br}$ , $^{96,97,98}\text{Ag}$ , $^{100,102,103}\text{In}$ , $^{103}\text{Sn}$ , $^{113}\text{Xe}$ , $^{117}\text{Ba}$ ; reviewed Q values. JOUR IMSPF 251 138

## A=101

$^{101}\text{Zr}$	2006J014	ATOMIC MASSES $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ , $^{98,99,100,101,102,103,104,105,106}\text{Nb}$ , $^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay. $^{22}\text{Mg}$ , $^{34}\text{Ar}$ , $^{46}\text{V}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; reviewed superallowed $\beta$ decay Ft values. $^{92}\text{Br}$ ; measured time of flight spectrum. $^{102}\text{Nb}$ ; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204
	2008WA15	RADIOACTIVITY $^{252}\text{Cf}(\text{SF})$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, fission yields of $^{103,104,105}\text{Nb}$ , $^{143,145,147}\text{La}$ . $^{104}\text{Nb}$ ; deduced levels, J, $\pi$ , bands, configurations. $^{101,102,103}\text{Nb}$ , $^{101,103}\text{Zr}$ , $^{103,105}\text{Mo}$ ; level systematics. JOUR PRVCA 78 014313
$^{101}\text{Nb}$	2006J014	ATOMIC MASSES $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ , $^{98,99,100,101,102,103,104,105,106}\text{Nb}$ , $^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay. $^{22}\text{Mg}$ , $^{34}\text{Ar}$ , $^{46}\text{V}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; reviewed superallowed $\beta$ decay Ft values. $^{92}\text{Br}$ ; measured time of flight spectrum. $^{102}\text{Nb}$ ; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204
	2008WA15	RADIOACTIVITY $^{252}\text{Cf}(\text{SF})$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, fission yields of $^{103,104,105}\text{Nb}$ , $^{143,145,147}\text{La}$ . $^{104}\text{Nb}$ ; deduced levels, J, $\pi$ , bands, configurations. $^{101,102,103}\text{Nb}$ , $^{101,103}\text{Zr}$ , $^{103,105}\text{Mo}$ ; level systematics. JOUR PRVCA 78 014313
$^{101}\text{Mo}$	2006J014	ATOMIC MASSES $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ , $^{98,99,100,101,102,103,104,105,106}\text{Nb}$ , $^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay. $^{22}\text{Mg}$ , $^{34}\text{Ar}$ , $^{46}\text{V}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; reviewed superallowed $\beta$ decay Ft values. $^{92}\text{Br}$ ; measured time of flight spectrum. $^{102}\text{Nb}$ ; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204
$^{101}\text{Sn}$	2008SEZZ	NUCLEAR REACTIONS $^{46}\text{Ti}(^{58}\text{Ni}, 3n)$ , $E=192$ MeV; measured $E\gamma$ , $I\gamma$ , particle- $\gamma$ coin. CONF Crete(FINUSTAR 2),Proc.P79,Seweryniak
	2008SEZZ	RADIOACTIVITY $^{101}\text{Sn}(\beta^-)$ ; measured half-life. CONF Crete(FINUSTAR 2),Proc.P79,Seweryniak
$^{101}\text{Sb}$	2008SEZZ	RADIOACTIVITY $^{101}\text{Sn}(\beta^-)$ ; measured half-life. CONF Crete(FINUSTAR 2),Proc.P79,Seweryniak



## A=102

$^{102}\text{Zr}$	2006J014	ATOMIC MASSES $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ , $^{98,99,100,101,102,103,104,105,106}\text{Nb}$ , $^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay. $^{22}\text{Mg}$ , $^{34}\text{Ar}$ , $^{46}\text{V}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; reviewed superallowed $\beta$ decay Ft values. $^{92}\text{Br}$ ; measured time of flight spectrum. $^{102}\text{Nb}$ ; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204
$^{102}\text{Nb}$	2006J014	ATOMIC MASSES $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ , $^{98,99,100,101,102,103,104,105,106}\text{Nb}$ , $^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay. $^{22}\text{Mg}$ , $^{34}\text{Ar}$ , $^{46}\text{V}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; reviewed superallowed $\beta$ decay Ft values. $^{92}\text{Br}$ ; measured time of flight spectrum. $^{102}\text{Nb}$ ; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204
	2008WA15	RADIOACTIVITY $^{252}\text{Cf}(\text{SF})$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, fission yields of $^{103,104,105}\text{Nb}$ , $^{143,145,147}\text{La}$ . $^{104}\text{Nb}$ ; deduced levels, J, $\pi$ , bands, configurations. $^{101,102,103}\text{Nb}$ , $^{101,103}\text{Zr}$ , $^{103,105}\text{Mo}$ ; level systematics. JOUR PRVCA 78 014313
$^{102}\text{Mo}$	2006J014	ATOMIC MASSES $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ , $^{98,99,100,101,102,103,104,105,106}\text{Nb}$ , $^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay. $^{22}\text{Mg}$ , $^{34}\text{Ar}$ , $^{46}\text{V}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; reviewed superallowed $\beta$ decay Ft values. $^{92}\text{Br}$ ; measured time of flight spectrum. $^{102}\text{Nb}$ ; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204
$^{102}\text{In}$	2006KA74	RADIOACTIVITY $^{105}\text{Sn}(\text{EC})$ , $(\beta^+)$ , $(\text{ECp})$ , $(\beta^+)$ ; measured $E\beta$ , $I\beta$ , $\beta$ -delayed $E\gamma$ , $I\gamma$ , $\beta\gamma$ -, $\gamma\gamma$ -coin, x-ray spectrum; deduced Q values. Total absorption spectrometer (TAS). $^{70m}\text{Br}$ , $^{96,97,98}\text{Ag}$ , $^{100,102,103}\text{In}$ , $^{103}\text{Sn}$ , $^{113}\text{Xe}$ , $^{117}\text{Ba}$ ; reviewed Q values. JOUR IMSPF 251 138

## A=103

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|-------------------|----------|---|
| $^{103}\text{Zr}$ | 2006J014 | ATOMIC MASSES $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ ,<br>$^{98,99,100,101,102,103,104,105,106}\text{Nb}$ ,<br>$^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay. $^{22}\text{Mg}$ , $^{34}\text{Ar}$ , $^{46}\text{V}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; reviewed superallowed $\beta$ decay Ft values. $^{92}\text{Br}$ ; measured time of flight spectrum. $^{102}\text{Nb}$ ; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204 |
|                   | 2008WA15 | RADIOACTIVITY $^{252}\text{Cf}(\text{SF})$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, fission yields of $^{103,104,105}\text{Nb}$ , $^{143,145,147}\text{La}$ . $^{104}\text{Nb}$ ; deduced levels, J, $\pi$ , bands, configurations. $^{101,102,103}\text{Nb}$ , $^{101,103}\text{Zr}$ , $^{103,105}\text{Mo}$ ; level systematics. JOUR PRVCA 78 014313   |
| $^{103}\text{Nb}$ | 2006J014 | ATOMIC MASSES $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ ,<br>$^{98,99,100,101,102,103,104,105,106}\text{Nb}$ ,<br>$^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay. $^{22}\text{Mg}$ , $^{34}\text{Ar}$ , $^{46}\text{V}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; reviewed superallowed $\beta$ decay Ft values. $^{92}\text{Br}$ ; measured time of flight spectrum. $^{102}\text{Nb}$ ; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204 |
|                   | 2008WA15 | RADIOACTIVITY $^{252}\text{Cf}(\text{SF})$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, fission yields of $^{103,104,105}\text{Nb}$ , $^{143,145,147}\text{La}$ . $^{104}\text{Nb}$ ; deduced levels, J, $\pi$ , bands, configurations. $^{101,102,103}\text{Nb}$ , $^{101,103}\text{Zr}$ , $^{103,105}\text{Mo}$ ; level systematics. JOUR PRVCA 78 014313   |
| $^{103}\text{Mo}$ | 2006J014 | ATOMIC MASSES $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ ,<br>$^{98,99,100,101,102,103,104,105,106}\text{Nb}$ ,<br>$^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay. $^{22}\text{Mg}$ , $^{34}\text{Ar}$ , $^{46}\text{V}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; reviewed superallowed $\beta$ decay Ft values. $^{92}\text{Br}$ ; measured time of flight spectrum. $^{102}\text{Nb}$ ; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204 |
|                   | 2008WA15 | RADIOACTIVITY $^{252}\text{Cf}(\text{SF})$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, fission yields of $^{103,104,105}\text{Nb}$ , $^{143,145,147}\text{La}$ . $^{104}\text{Nb}$ ; deduced levels, J, $\pi$ , bands, configurations. $^{101,102,103}\text{Nb}$ , $^{101,103}\text{Zr}$ , $^{103,105}\text{Mo}$ ; level systematics. JOUR PRVCA 78 014313   |

KEYNUMBERS AND KEYWORDS

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A=103 (*continued*)

$^{103}\text{Ru}$	2007KRZY	NUCLEAR REACTIONS $^{127}\text{I}(\text{d}, \text{X})^{111}\text{In} / ^{119}\text{Te} / ^{121}\text{I} / ^{122}\text{Sb} / ^{123}\text{I} / ^{124}\text{I} / ^{125}\text{Xe} / ^{126}\text{I}$ , E=2.52 GeV; measured yields; $^{129}\text{I}(\text{d}, \text{X})^{121}\text{Te} / ^{124}\text{I} / ^{126}\text{I} / ^{130}\text{I}$ , E=2.52 GeV; measured yields; $^{237}\text{Np}(\text{d}, \text{X})^{97}\text{Zr} / ^{99}\text{Mo} / ^{132}\text{Te} / ^{133}\text{I} / ^{238}\text{Np}$ , E=2.52 GeV; measured yields; $^{238}\text{Pu}(\text{d}, \text{X})^{97}\text{Zr} / ^{135}\text{Xe}$ , E $\approx$ 2.5 GeV; measured yields; $^{239}\text{Pu}(\text{d}, \text{X})^{103}\text{Ru} / ^{128}\text{Sb} / ^{132}\text{Te} / ^{133}\text{I} / ^{135}\text{I} / ^{135}\text{Xe} / ^{140}\text{Ba} / ^{143}\text{Ce} / ^{91}\text{Sr} / ^{97}\text{Zr}$ , E $\approx$ 2.5 GeV; measured yields; $^{26}\text{Al}(\text{n}, \alpha)$ , $^{197}\text{Au}(\text{n}, \gamma)$ , $^{197}\text{Au}(\text{n}, 2\text{n})$ , $^{197}\text{Au}(\text{n}, 4\text{n})$ , E not given; measured radial distributions of production rates of daughter nuclei; $^{89}\text{Y}(\text{n}, 2\text{n})$ , $^{89}\text{Y}(\text{n}, 3\text{n})$ , $^{89}\text{Y}(\text{n}, 4\text{n})$ , E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; $^{238}\text{U}$ , $\text{Pb}(\text{n}, \text{f})$ , $^{238}\text{U}$ , $\text{Pb}(\text{n}, \gamma)$ , E not given; measured $\sigma$ . REPT JINR-E1-2007-7, Krivopustov
$^{103}\text{Pd}$	2008FIZZ	NUCLEAR REACTIONS $^1_2\text{H}$ , $^6_7\text{Li}$ , $^9\text{Be}$ , $^{10,11}\text{B}$ , $^{12,13}\text{C}$ , $^{14,15}\text{N}$ , $^{16}\text{O}$ , $^{19}\text{F}$ , $^{23,23\text{m}}\text{Na}$ , $^{24,25,26}\text{Mg}$ , $^{27}\text{Al}$ , $^{28,29,30}\text{Si}$ , $^{31}\text{P}$ , $^{32,33,34}\text{S}$ , $^{35,37}\text{Cl}$ , $^{39,40,41}\text{K}$ , $^{102,104,105,106,108,110}\text{Pd}(\text{n}, \gamma)$ , E=thermal; measured cross sections; $^{10}\text{B}(\text{n}, \alpha)$ , E=thermal; measured cross sections; $^{25}\text{Mg}(\text{n}, \gamma)$ , E=thermal; $^{13}\text{C}(\text{n}, \gamma)$ , E=thermal; $^{105}\text{Pd}(\text{n}, \gamma)$ , E=thermal; measured $E\gamma$ , $I\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone
	2008R013	NUCLEAR REACTIONS $^{104}\text{Pd}(\text{d}, \text{t})$ , E=15 MeV; measured triton spectra, and angular distributions using a magnetic spectrograph. $^{103}\text{Pd}$ ; deduced levels, J, $\pi$ , L-transfers, spectroscopic factors. Comparisons with DWBA predictions. JOUR BJPHE 38 245
$^{103}\text{Ag}$	2008GU13	NUCLEAR REACTIONS $^{103}\text{Rh}(\text{O}, \text{X})^{114}\text{Te} / ^{115}\text{Te} / ^{116}\text{Te} / ^{117}\text{Te} / ^{115}\text{Sb} / ^{116}\text{Sb} / ^{117}\text{Sb} / ^{110}\text{Sn} / ^{108}\text{In} / ^{109}\text{In} / ^{110}\text{In} / ^{111}\text{In} / ^{103}\text{Ag} / ^{104}\text{Ag} / ^{106}\text{Ag}$ , E $\approx$ 46-85 MeV; measured $E\gamma$ , $I\gamma$ , $\sigma$ . Discussed fraction of (in)complete fusion. Comparison with PACE4 calculations. HPGe detector, stacked targets, energy degradation technique. JOUR NUPAB 811 77
	2008SP02	NUCLEAR REACTIONS $^{104,105,106}\text{Pd}(\text{p}, \gamma)$ , E=2.6-7.2 MeV; measured $E\gamma$ , $I\gamma$ , $\sigma$ ; deduced excitation energies, astrophysical S-factors, reaction rates. Comparison with theoretical data. $^{102}\text{Pd}(\text{p}, \gamma)$ ; comparison to model calculations. JOUR PRVCA 77 065801
$^{103}\text{In}$	2006KA74	RADIOACTIVITY $^{105}\text{Sn}(\text{EC})$ , $(\beta^+)$ , $(\text{ECp})$ , $(\beta^+)$ ; measured $E\beta$ , $I\beta$ , $\beta$ -delayed $E\gamma$ , $I\gamma$ , $\beta\gamma$ -, $\gamma\gamma$ -coin, x-ray spectrum; deduced Q values. Total absorption spectrometer (TAS). $^{70\text{m}}\text{Br}$ , $^{96,97,98}\text{Ag}$ , $^{100,102,103}\text{In}$ , $^{103}\text{Sn}$ , $^{113}\text{Xe}$ , $^{117}\text{Ba}$ ; reviewed Q values. JOUR IMSPF 251 138
$^{103}\text{Sn}$	2006KA74	RADIOACTIVITY $^{105}\text{Sn}(\text{EC})$ , $(\beta^+)$ , $(\text{ECp})$ , $(\beta^+)$ ; measured $E\beta$ , $I\beta$ , $\beta$ -delayed $E\gamma$ , $I\gamma$ , $\beta\gamma$ -, $\gamma\gamma$ -coin, x-ray spectrum; deduced Q values. Total absorption spectrometer (TAS). $^{70\text{m}}\text{Br}$ , $^{96,97,98}\text{Ag}$ , $^{100,102,103}\text{In}$ , $^{103}\text{Sn}$ , $^{113}\text{Xe}$ , $^{117}\text{Ba}$ ; reviewed Q values. JOUR IMSPF 251 138

## A=104

- $^{104}\text{Zr}$       2006J014      ATOMIC MASSES  $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ ,  
 $^{98,99,100,101,102,103,104,105,106}\text{Nb}$ ,  
 $^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and  
trapping techniques, high-precision measurements of the ground state  
properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL  
facility) method and collinear laser spectroscopy.  $^{117}\text{Pd}$ ; measured  
conversion electrons from isomer decay.  $^{22}\text{Mg}$ ,  $^{34}\text{Ar}$ ,  $^{46}\text{V}$ ,  $^{62}\text{Ga}$ ,  $^{74}\text{Rb}$ ;  
reviewed superallowed  $\beta$  decay Ft values.  $^{92}\text{Br}$ ; measured time of flight  
spectrum.  $^{102}\text{Nb}$ ; measured  $\gamma$  rays following  $\beta^-$  decay. JOUR IMSPF  
251 204
- $^{104}\text{Nb}$       2006J014      ATOMIC MASSES  $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ ,  
 $^{98,99,100,101,102,103,104,105,106}\text{Nb}$ ,  
 $^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and  
trapping techniques, high-precision measurements of the ground state  
properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL  
facility) method and collinear laser spectroscopy.  $^{117}\text{Pd}$ ; measured  
conversion electrons from isomer decay.  $^{22}\text{Mg}$ ,  $^{34}\text{Ar}$ ,  $^{46}\text{V}$ ,  $^{62}\text{Ga}$ ,  $^{74}\text{Rb}$ ;  
reviewed superallowed  $\beta$  decay Ft values.  $^{92}\text{Br}$ ; measured time of flight  
spectrum.  $^{102}\text{Nb}$ ; measured  $\gamma$  rays following  $\beta^-$  decay. JOUR IMSPF  
251 204
- 2008WA15      RADIOACTIVITY  $^{252}\text{Cf}(\text{SF})$ ; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin, fission yields  
of  $^{103,104,105}\text{Nb}$ ,  $^{143,145,147}\text{La}$ .  $^{104}\text{Nb}$ ; deduced levels, J,  $\pi$ , bands,  
configurations.  $^{101,102,103}\text{Nb}$ ,  $^{101,103}\text{Zr}$ ,  $^{103,105}\text{Mo}$ ; level systematics.  
JOUR PRVCA 78 014313
- $^{104}\text{Mo}$       2006J014      ATOMIC MASSES  $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ ,  
 $^{98,99,100,101,102,103,104,105,106}\text{Nb}$ ,  
 $^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and  
trapping techniques, high-precision measurements of the ground state  
properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL  
facility) method and collinear laser spectroscopy.  $^{117}\text{Pd}$ ; measured  
conversion electrons from isomer decay.  $^{22}\text{Mg}$ ,  $^{34}\text{Ar}$ ,  $^{46}\text{V}$ ,  $^{62}\text{Ga}$ ,  $^{74}\text{Rb}$ ;  
reviewed superallowed  $\beta$  decay Ft values.  $^{92}\text{Br}$ ; measured time of flight  
spectrum.  $^{102}\text{Nb}$ ; measured  $\gamma$  rays following  $\beta^-$  decay. JOUR IMSPF  
251 204
- $^{104}\text{Ag}$       2008GU13      NUCLEAR REACTIONS  $^{103}\text{Rh}(^{16}\text{O}, \text{X})^{114}\text{Te} / ^{115}\text{Te} / ^{116}\text{Te} / ^{117}\text{Te} /$   
 $^{115}\text{Sb} / ^{116}\text{Sb} / ^{117}\text{Sb} / ^{110}\text{Sn} / ^{108}\text{In} / ^{109}\text{In} / ^{110}\text{In} / ^{111}\text{In} / ^{103}\text{Ag} /$   
 $^{104}\text{Ag} / ^{106}\text{Ag}$ ,  $E \approx 46\text{-}85$  MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\sigma$ . Discussed fraction  
of (in)complete fusion. Comparison with PACE4 calculations. HPGe  
detector, stacked targets, energy degradation technique. JOUR  
NUPAB 811 77
- $^{104}\text{Cd}$       2006KA74      RADIOACTIVITY  $^{105}\text{Sn}(\text{EC})$ ,  $(\beta^+)$ ,  $(\text{ECp})$ ,  $(\beta^+)$ ; measured  $E\beta$ ,  $I\beta$ ,  
 $\beta$ -delayed  $E\gamma$ ,  $I\gamma$ ,  $\beta\gamma^-$ ,  $\gamma\gamma$ -coin, x-ray spectrum; deduced Q values.  
Total absorption spectrometer (TAS).  $^{70m}\text{Br}$ ,  $^{96,97,98}\text{Ag}$ ,  $^{100,102,103}\text{In}$ ,  
 $^{103}\text{Sn}$ ,  $^{113}\text{Xe}$ ,  $^{117}\text{Ba}$ ; reviewed Q values. JOUR IMSPF 251 138

## A=105

- <sup>105</sup>Zr      2006J014      ATOMIC MASSES <sup>96,97,98,99,100,101,102,103,104,105,106</sup>Zr,  
<sup>98,99,100,101,102,103,104,105,106</sup>Nb,  
<sup>99,100,101,102,103,104,105,106,107,108,109,110</sup>Mo; reviewed cooling and  
trapping techniques, high-precision measurements of the ground state  
properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL  
facility) method and collinear laser spectroscopy. <sup>117</sup>Pd; measured  
conversion electrons from isomer decay. <sup>22</sup>Mg, <sup>34</sup>Ar, <sup>46</sup>V, <sup>62</sup>Ga, <sup>74</sup>Rb;  
reviewed superallowed  $\beta$  decay Ft values. <sup>92</sup>Br; measured time of flight  
spectrum. <sup>102</sup>Nb; measured  $\gamma$  rays following  $\beta^-$  decay. JOUR IMSPF  
251 204
- <sup>105</sup>Nb      2006J014      ATOMIC MASSES <sup>96,97,98,99,100,101,102,103,104,105,106</sup>Zr,  
<sup>98,99,100,101,102,103,104,105,106</sup>Nb,  
<sup>99,100,101,102,103,104,105,106,107,108,109,110</sup>Mo; reviewed cooling and  
trapping techniques, high-precision measurements of the ground state  
properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL  
facility) method and collinear laser spectroscopy. <sup>117</sup>Pd; measured  
conversion electrons from isomer decay. <sup>22</sup>Mg, <sup>34</sup>Ar, <sup>46</sup>V, <sup>62</sup>Ga, <sup>74</sup>Rb;  
reviewed superallowed  $\beta$  decay Ft values. <sup>92</sup>Br; measured time of flight  
spectrum. <sup>102</sup>Nb; measured  $\gamma$  rays following  $\beta^-$  decay. JOUR IMSPF  
251 204
- <sup>105</sup>Mo      2006J014      ATOMIC MASSES <sup>96,97,98,99,100,101,102,103,104,105,106</sup>Zr,  
<sup>98,99,100,101,102,103,104,105,106</sup>Nb,  
<sup>99,100,101,102,103,104,105,106,107,108,109,110</sup>Mo; reviewed cooling and  
trapping techniques, high-precision measurements of the ground state  
properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL  
facility) method and collinear laser spectroscopy. <sup>117</sup>Pd; measured  
conversion electrons from isomer decay. <sup>22</sup>Mg, <sup>34</sup>Ar, <sup>46</sup>V, <sup>62</sup>Ga, <sup>74</sup>Rb;  
reviewed superallowed  $\beta$  decay Ft values. <sup>92</sup>Br; measured time of flight  
spectrum. <sup>102</sup>Nb; measured  $\gamma$  rays following  $\beta^-$  decay. JOUR IMSPF  
251 204
- 2008WA15      RADIOACTIVITY <sup>252</sup>Cf(SF); measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin, fission yields  
of <sup>103,104,105</sup>Nb, <sup>143,145,147</sup>La. <sup>104</sup>Nb; deduced levels, J,  $\pi$ , bands,  
configurations. <sup>101,102,103</sup>Nb, <sup>101,103</sup>Zr, <sup>103,105</sup>Mo; level systematics.  
JOUR PRVCA 78 014313
- <sup>105</sup>Pd      2008FIZZ      NUCLEAR REACTIONS <sup>1,2</sup>H, <sup>6,7</sup>Li, <sup>9</sup>Be, <sup>10,11</sup>B, <sup>12,13</sup>C, <sup>14,15</sup>N, <sup>16</sup>O,  
<sup>19</sup>F, <sup>23,23m</sup>Na, <sup>24,25,26</sup>Mg, <sup>27</sup>Al, <sup>28,29,30</sup>Si, <sup>31</sup>P, <sup>32,33,34</sup>S, <sup>35,37</sup>Cl,  
<sup>39,40,41</sup>K, <sup>102,104,105,106,108,110</sup>Pd(n,  $\gamma$ ), E=thermal; measured cross  
sections; <sup>10</sup>B(n,  $\alpha$ ), E=thermal; measured cross sections; <sup>25</sup>Mg(n,  $\gamma$ ),  
E=thermal; <sup>13</sup>C(n,  $\gamma$ ), E=thermal; <sup>105</sup>Pd(n,  $\gamma$ ), E=thermal; measured  
 $E\gamma$ ,  $I\gamma$ ; deduced cross section balance. compared experimental and  
calculated depopulation. CONF Yosemite(CNR 2007)  
Proc.P26,Firestone
- <sup>105</sup>Ag      2008SP02      NUCLEAR REACTIONS <sup>104,105,106</sup>Pd(p,  $\gamma$ ), E=2.6-7.2 MeV;  
measured  $E\gamma$ ,  $I\gamma$ ,  $\sigma$ ; deduced excitation energies, astrophysical  
S-factors, reaction rates. Comparison with theoretical data. <sup>102</sup>Pd(p,  
 $\gamma$ ); comparison to model calculations. JOUR PRVCA 77 065801

KEYNUMBERS AND KEYWORDS

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**A=105 (continued)**

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|-------------------|----------|--|
|                   | 2008ZI03 | NUCLEAR REACTIONS <sup>76,77,78,80,82</sup> Se, <sup>106,110,111,112,114,116</sup> Cd( $\mu^-$ , $n\nu$ ), E not given; <sup>76</sup> Se( $\mu^-$ , $2n\nu$ ), E not given; measured $E\gamma$ , $I\gamma$ , capture rates, lifetimes, yields. JOUR BRSPE 72 737   |
| <sup>105</sup> In | 2006KA74 | RADIOACTIVITY <sup>105</sup> Sn(EC), ( $\beta^+$ ), (ECp), ( $\beta^+$ ); measured $E\beta$ , $I\beta$ , $\beta$ -delayed $E\gamma$ , $I\gamma$ , $\beta\gamma$ -, $\gamma\gamma$ -coin, x-ray spectrum; deduced Q values. Total absorption spectrometer (TAS). <sup>70m</sup> Br, <sup>96,97,98</sup> Ag, <sup>100,102,103</sup> In, <sup>103</sup> Sn, <sup>113</sup> Xe, <sup>117</sup> Ba; reviewed Q values. JOUR IMSPF 251 138 |
| <sup>105</sup> Sn | 2006KA74 | RADIOACTIVITY <sup>105</sup> Sn(EC), ( $\beta^+$ ), (ECp), ( $\beta^+$ ); measured $E\beta$ , $I\beta$ , $\beta$ -delayed $E\gamma$ , $I\gamma$ , $\beta\gamma$ -, $\gamma\gamma$ -coin, x-ray spectrum; deduced Q values. Total absorption spectrometer (TAS). <sup>70m</sup> Br, <sup>96,97,98</sup> Ag, <sup>100,102,103</sup> In, <sup>103</sup> Sn, <sup>113</sup> Xe, <sup>117</sup> Ba; reviewed Q values. JOUR IMSPF 251 138 |

**A=106**

- |                   |          |  |
|-------------------|----------|--|
| <sup>106</sup> Zr | 2006J014 | ATOMIC MASSES <sup>96,97,98,99,100,101,102,103,104,105,106</sup> Zr, <sup>98,99,100,101,102,103,104,105,106</sup> Nb, <sup>99,100,101,102,103,104,105,106,107,108,109,110</sup> Mo; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. <sup>117</sup> Pd; measured conversion electrons from isomer decay. <sup>22</sup> Mg, <sup>34</sup> Ar, <sup>46</sup> V, <sup>62</sup> Ga, <sup>74</sup> Rb; reviewed superallowed $\beta$ decay Ft values. <sup>92</sup> Br; measured time of flight spectrum. <sup>102</sup> Nb; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204 |
| <sup>106</sup> Nb | 2006J014 | ATOMIC MASSES <sup>96,97,98,99,100,101,102,103,104,105,106</sup> Zr, <sup>98,99,100,101,102,103,104,105,106</sup> Nb, <sup>99,100,101,102,103,104,105,106,107,108,109,110</sup> Mo; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. <sup>117</sup> Pd; measured conversion electrons from isomer decay. <sup>22</sup> Mg, <sup>34</sup> Ar, <sup>46</sup> V, <sup>62</sup> Ga, <sup>74</sup> Rb; reviewed superallowed $\beta$ decay Ft values. <sup>92</sup> Br; measured time of flight spectrum. <sup>102</sup> Nb; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204 |
| <sup>106</sup> Mo | 2006J014 | ATOMIC MASSES <sup>96,97,98,99,100,101,102,103,104,105,106</sup> Zr, <sup>98,99,100,101,102,103,104,105,106</sup> Nb, <sup>99,100,101,102,103,104,105,106,107,108,109,110</sup> Mo; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. <sup>117</sup> Pd; measured conversion electrons from isomer decay. <sup>22</sup> Mg, <sup>34</sup> Ar, <sup>46</sup> V, <sup>62</sup> Ga, <sup>74</sup> Rb; reviewed superallowed $\beta$ decay Ft values. <sup>92</sup> Br; measured time of flight spectrum. <sup>102</sup> Nb; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204 |

KEYNUMBERS AND KEYWORDS

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**A=106 (continued)**

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| $^{106}\text{Pd}$ | 2008FIZZ | NUCLEAR REACTIONS $^1,2\text{H}$ , $^{6,7}\text{Li}$ , $^9\text{Be}$ , $^{10,11}\text{B}$ , $^{12,13}\text{C}$ , $^{14,15}\text{N}$ , $^{16}\text{O}$ , $^{19}\text{F}$ , $^{23,23m}\text{Na}$ , $^{24,25,26}\text{Mg}$ , $^{27}\text{Al}$ , $^{28,29,30}\text{Si}$ , $^{31}\text{P}$ , $^{32,33,34}\text{S}$ , $^{35,37}\text{Cl}$ , $^{39,40,41}\text{K}$ , $^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ , E=thermal; measured cross sections; $^{10}\text{B}(n, \alpha)$ , E=thermal; measured cross sections; $^{25}\text{Mg}(n, \gamma)$ , E=thermal; $^{13}\text{C}(n, \gamma)$ , E=thermal; $^{105}\text{Pd}(n, \gamma)$ , E=thermal; measured $E\gamma$ , $I\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007)<br>Proc.P26,Firestone |
|                   | 2008RU08 | RADIOACTIVITY $^{106}\text{Cd}(2\beta^+)$ , ( $\beta^+\text{EC}$ ), (2EC); measured $T_{1/2}$ , $E\gamma$ , $I\gamma$ using the Telescope Germanium Vertical (TGV-2) spectrometer.<br>JOUR BRSPPE 72 731  |
| $^{106}\text{Ag}$ | 2008GU13 | NUCLEAR REACTIONS $^{103}\text{Rh}(^{16}\text{O}, \text{X})^{114}\text{Te}$ / $^{115}\text{Te}$ / $^{116}\text{Te}$ / $^{117}\text{Te}$ / $^{115}\text{Sb}$ / $^{116}\text{Sb}$ / $^{117}\text{Sb}$ / $^{110}\text{Sn}$ / $^{108}\text{In}$ / $^{109}\text{In}$ / $^{110}\text{In}$ / $^{111}\text{In}$ / $^{103}\text{Ag}$ / $^{104}\text{Ag}$ / $^{106}\text{Ag}$ , $E \approx 46\text{-}85$ MeV; measured $E\gamma$ , $I\gamma$ , $\sigma$ . Discussed fraction of (in)complete fusion. Comparison with PACE4 calculations. HPGe detector, stacked targets, energy degradation technique. JOUR NUPAB 811 77  |
|                   | 2008SP02 | NUCLEAR REACTIONS $^{104,105,106}\text{Pd}(p, \gamma)$ , $E=2.6\text{-}7.2$ MeV; measured $E\gamma$ , $I\gamma$ , $\sigma$ ; deduced excitation energies, astrophysical S-factors, reaction rates. Comparison with theoretical data. $^{102}\text{Pd}(p, \gamma)$ ; comparison to model calculations. JOUR PRVCA 77 065801  |
| $^{106}\text{Cd}$ | 2008RU08 | RADIOACTIVITY $^{106}\text{Cd}(2\beta^+)$ , ( $\beta^+\text{EC}$ ), (2EC); measured $T_{1/2}$ , $E\gamma$ , $I\gamma$ using the Telescope Germanium Vertical (TGV-2) spectrometer.<br>JOUR BRSPPE 72 731  |
| $^{106}\text{Sn}$ | 2008EKZZ | NUCLEAR REACTIONS $^{58}\text{Ni}(^{106}\text{Sn}, ^{106}\text{Sn}')$ , $^{58}\text{Ni}(^{108}\text{Sn}, ^{108}\text{Sn}')$ , $^{58}\text{Ni}(^{110}\text{Sn}, ^{110}\text{Sn}')$ , $E=2.8$ MeV / nucleon; measured $E\gamma$ , $I\gamma$ ; $^{106,108,110}\text{Sn}$ ; deduced B(E2). Compared results with existing data. CONF Crete(FINUSTAR 2),Proc.P296,Ekstrom  |

**A=107**

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| $^{107}\text{Mo}$ | 2006J014 | ATOMIC MASSES $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ , $^{98,99,100,101,102,103,104,105,106}\text{Nb}$ , $^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay. $^{22}\text{Mg}$ , $^{34}\text{Ar}$ , $^{46}\text{V}$ , $^{62}\text{Ga}$ , $^{74}\text{Rb}$ ; reviewed superallowed $\beta$ decay Ft values. $^{92}\text{Br}$ ; measured time of flight spectrum. $^{102}\text{Nb}$ ; measured $\gamma$ rays following $\beta^-$ decay. JOUR IMSPF 251 204 |
| $^{107}\text{Pd}$ | 2008AG10 | NUCLEAR REACTIONS $^{89}\text{Y}$ , $^{107,109}\text{Ag}(n, n')$ , $E=14.6$ MeV; $^{89}\text{Y}(n, 2n)$ , $E=14.6$ MeV; $^{107,109}\text{Ag}$ , $^{139}\text{La}(n, p)$ , $E=14.6$ MeV; $^{89}\text{Y}(n, \alpha)$ , $E=14.6$ MeV; measured $E\gamma$ , $I\gamma$ , cross sections using the activation technique. Compared results to model calculations. JOUR ANEND 35 1713   |



KEYNUMBERS AND KEYWORDS

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**A=107 (continued)**

- 2008FIZZ NUCLEAR REACTIONS  $^1_2\text{H}$ ,  $^6_7\text{Li}$ ,  $^9\text{Be}$ ,  $^{10,11}\text{B}$ ,  $^{12,13}\text{C}$ ,  $^{14,15}\text{N}$ ,  $^{16}\text{O}$ ,  $^{19}\text{F}$ ,  $^{23,23m}\text{Na}$ ,  $^{24,25,26}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{28,29,30}\text{Si}$ ,  $^{31}\text{P}$ ,  $^{32,33,34}\text{S}$ ,  $^{35,37}\text{Cl}$ ,  $^{39,40,41}\text{K}$ ,  $^{102,104,105,106,108,110}\text{Pd}(n, \gamma)$ , E=thermal; measured cross sections;  $^{10}\text{B}(n, \alpha)$ , E=thermal; measured cross sections;  $^{25}\text{Mg}(n, \gamma)$ , E=thermal;  $^{13}\text{C}(n, \gamma)$ , E=thermal;  $^{105}\text{Pd}(n, \gamma)$ , E=thermal; measured  $E\gamma$ ,  $I\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007)  
Proc.P26,Firestone
- $^{107}\text{Ag}$  2008AG10 NUCLEAR REACTIONS  $^{89}\text{Y}$ ,  $^{107,109}\text{Ag}(n, n')$ , E=14.6 MeV;  $^{89}\text{Y}(n, 2n)$ , E=14.6 MeV;  $^{107,109}\text{Ag}$ ,  $^{139}\text{La}(n, p)$ , E=14.6 MeV;  $^{89}\text{Y}(n, \alpha)$ , E=14.6 MeV; measured  $E\gamma$ ,  $I\gamma$ , cross sections using the activation technique. Compared results to model calculations. JOUR ANEND 35 1713
- 2008SP02 NUCLEAR REACTIONS  $^{104,105,106}\text{Pd}(p, \gamma)$ , E=2.6-7.2 MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\sigma$ ; deduced excitation energies, astrophysical S-factors, reaction rates. Comparison with theoretical data.  $^{102}\text{Pd}(p, \gamma)$ ; comparison to model calculations. JOUR PRVCA 77 065801

**A=108**

- $^{108}\text{Mo}$  2006J014 ATOMIC MASSES  $^{96,97,98,99,100,101,102,103,104,105,106}\text{Zr}$ ,  $^{98,99,100,101,102,103,104,105,106}\text{Nb}$ ,  $^{99,100,101,102,103,104,105,106,107,108,109,110}\text{Mo}$ ; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy.  $^{117}\text{Pd}$ ; measured conversion electrons from isomer decay.  $^{22}\text{Mg}$ ,  $^{34}\text{Ar}$ ,  $^{46}\text{V}$ ,  $^{62}\text{Ga}$ ,  $^{74}\text{Rb}$ ; reviewed superallowed  $\beta$  decay Ft values.  $^{92}\text{Br}$ ; measured time of flight spectrum.  $^{102}\text{Nb}$ ; measured  $\gamma$  rays following  $\beta^-$  decay. JOUR IMSPF 251 204
- $^{108}\text{Pd}$  2008BE22 RADIOACTIVITY  $^{108}\text{Cd}(2\text{EC})$ ,  $^{114}\text{Cd}(2\beta^-)$ ; measured  $T_{1/2}$  lower limit. JOUR ZAANE 36 167
- 2008VAZY NUCLEAR REACTIONS  $^{120}\text{Sn}(^{74}\text{Zn}, ^{74}\text{Zn}')$ , E=2.87 MeV / nucleon;  $^{120}\text{Sn}(^{76}\text{Zn}, ^{76}\text{Zn}')$ ,  $^{108}\text{Pd}(^{78}\text{Zn}, ^{78}\text{Zn}')$ , E=2.83 MeV / nucleon;  $^{108}\text{Pd}(^{80}\text{Zn}, ^{80}\text{Zn}')$ , E=2.79 MeV / nucleon; measured  $E\gamma$ ,  $I\gamma$ ;  $^{78,80}\text{Zn}$ ; deduced levels, B(E2); Calculated level energies, B(E2) using the Shell model. CONF Crete(FINUSTAR 2),Proc.P291, Van de Walle
- $^{108}\text{Cd}$  2008BE22 RADIOACTIVITY  $^{108}\text{Cd}(2\text{EC})$ ,  $^{114}\text{Cd}(2\beta^-)$ ; measured  $T_{1/2}$  lower limit. JOUR ZAANE 36 167
- $^{108}\text{In}$  2008GU13 NUCLEAR REACTIONS  $^{103}\text{Rh}(^{16}\text{O}, X)^{114}\text{Te}$  /  $^{115}\text{Te}$  /  $^{116}\text{Te}$  /  $^{117}\text{Te}$  /  $^{115}\text{Sb}$  /  $^{116}\text{Sb}$  /  $^{117}\text{Sb}$  /  $^{110}\text{Sn}$  /  $^{108}\text{In}$  /  $^{109}\text{In}$  /  $^{110}\text{In}$  /  $^{111}\text{In}$  /  $^{103}\text{Ag}$  /  $^{104}\text{Ag}$  /  $^{106}\text{Ag}$ , E $\approx$ 46-85 MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\sigma$ . Discussed fraction of (in)complete fusion. Comparison with PACE4 calculations. HPGe detector, stacked targets, energy degradation technique. JOUR NUPAB 811 77

KEYNUMBERS AND KEYWORDS

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**A=108 (continued)**

<sup>108</sup>Sn      2008EKZZ      NUCLEAR REACTIONS <sup>58</sup>Ni(<sup>106</sup>Sn, <sup>106</sup>Sn'), <sup>58</sup>Ni(<sup>108</sup>Sn, <sup>108</sup>Sn'), <sup>58</sup>Ni(<sup>110</sup>Sn, <sup>110</sup>Sn'), E=2.8 MeV / nucleon; measured E $\gamma$ , I $\gamma$ ; <sup>106,108,110</sup>Sn; deduced B(E2). Compared results with existing data. CONF Crete(FINUSTAR 2),Proc.P296,Ekstrom

**A=109**

<sup>109</sup>Mo      2006J014      ATOMIC MASSES <sup>96,97,98,99,100,101,102,103,104,105,106</sup>Zr, <sup>98,99,100,101,102,103,104,105,106</sup>Nb, <sup>99,100,101,102,103,104,105,106,107,108,109,110</sup>Mo; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. <sup>117</sup>Pd; measured conversion electrons from isomer decay. <sup>22</sup>Mg, <sup>34</sup>Ar, <sup>46</sup>V, <sup>62</sup>Ga, <sup>74</sup>Rb; reviewed superallowed  $\beta$  decay Ft values. <sup>92</sup>Br; measured time of flight spectrum. <sup>102</sup>Nb; measured  $\gamma$  rays following  $\beta^-$  decay. JOUR IMSPF 251 204

<sup>109</sup>Pd      2008AG10      NUCLEAR REACTIONS <sup>89</sup>Y, <sup>107,109</sup>Ag(n, n'), E=14.6 MeV; <sup>89</sup>Y(n, 2n), E=14.6 MeV; <sup>107,109</sup>Ag, <sup>139</sup>La(n, p), E=14.6 MeV; <sup>89</sup>Y(n,  $\alpha$ ), E=14.6 MeV; measured E $\gamma$ , I $\gamma$ , cross sections using the activation technique. Compared results to model calculations. JOUR ANEND 35 1713

                 2008DA10      NUCLEAR REACTIONS <sup>108</sup>Pd(n,  $\gamma$ ), E=thermal; measured E $\gamma$ , I $\gamma$  using chemical separation. Studied possible use of <sup>109</sup>Pd isotope in radiotherapy. JOUR RAACA 96 427

                 2008FIZZ      NUCLEAR REACTIONS <sup>1,2</sup>H, <sup>6,7</sup>Li, <sup>9</sup>Be, <sup>10,11</sup>B, <sup>12,13</sup>C, <sup>14,15</sup>N, <sup>16</sup>O, <sup>19</sup>F, <sup>23,23m</sup>Na, <sup>24,25,26</sup>Mg, <sup>27</sup>Al, <sup>28,29,30</sup>Si, <sup>31</sup>P, <sup>32,33,34</sup>S, <sup>35,37</sup>Cl, <sup>39,40,41</sup>K, <sup>102,104,105,106,108,110</sup>Pd(n,  $\gamma$ ), E=thermal; measured cross sections; <sup>10</sup>B(n,  $\alpha$ ), E=thermal; measured cross sections; <sup>25</sup>Mg(n,  $\gamma$ ), E=thermal; <sup>13</sup>C(n,  $\gamma$ ), E=thermal; <sup>105</sup>Pd(n,  $\gamma$ ), E=thermal; measured E $\gamma$ , I $\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone

                 2008MA25      NUCLEAR REACTIONS <sup>110</sup>Pd, <sup>113</sup>In( $\gamma$ , n), E=9-18 MeV; measured E $\gamma$ , I $\gamma$ , Isomeric ratios, and excitation functions. JOUR PPNLA 5 374

<sup>109</sup>Ag      2008AG10      NUCLEAR REACTIONS <sup>89</sup>Y, <sup>107,109</sup>Ag(n, n'), E=14.6 MeV; <sup>89</sup>Y(n, 2n), E=14.6 MeV; <sup>107,109</sup>Ag, <sup>139</sup>La(n, p), E=14.6 MeV; <sup>89</sup>Y(n,  $\alpha$ ), E=14.6 MeV; measured E $\gamma$ , I $\gamma$ , cross sections using the activation technique. Compared results to model calculations. JOUR ANEND 35 1713

                 2008DA12      NUCLEAR REACTIONS <sup>100</sup>Mo(<sup>13</sup>C, 3np), E=65 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin. <sup>109</sup>Ag; deduced levels, J,  $\pi$ , half-lives by DSAM, B(M1), B(E2). Comparisons with projected shell-model and tilted-axis cranking calculations. JOUR PRVCA 78 021306

                 2008ZI03      NUCLEAR REACTIONS <sup>76,77,78,80,82</sup>Se, <sup>106,110,111,112,114,116</sup>Cd( $\mu^-$ ,  $n\nu$ ), E not given; <sup>76</sup>Se( $\mu^-$ , 2 $n\nu$ ), E not given; measured E $\gamma$ , I $\gamma$ , capture rates, lifetimes, yields. JOUR BRSPE 72 737

**A=109 (continued)**

<sup>109</sup>In      2008GU13      NUCLEAR REACTIONS <sup>103</sup>Rh(<sup>16</sup>O, X)<sup>114</sup>Te / <sup>115</sup>Te / <sup>116</sup>Te / <sup>117</sup>Te / <sup>115</sup>Sb / <sup>116</sup>Sb / <sup>117</sup>Sb / <sup>110</sup>Sn / <sup>108</sup>In / <sup>109</sup>In / <sup>110</sup>In / <sup>111</sup>In / <sup>103</sup>Ag / <sup>104</sup>Ag / <sup>106</sup>Ag, E≈46-85 MeV; measured E $\gamma$ , I $\gamma$ ,  $\sigma$ . Discussed fraction of (in)complete fusion. Comparison with PACE4 calculations. HPGe detector, stacked targets, energy degradation technique. JOUR NUPAB 811 77

**A=110**

<sup>110</sup>Mo      2006J014      ATOMIC MASSES <sup>96,97,98,99,100,101,102,103,104,105,106</sup>Zr, <sup>98,99,100,101,102,103,104,105,106</sup>Nb, <sup>99,100,101,102,103,104,105,106,107,108,109,110</sup>Mo; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. <sup>117</sup>Pd; measured conversion electrons from isomer decay. <sup>22</sup>Mg, <sup>34</sup>Ar, <sup>46</sup>V, <sup>62</sup>Ga, <sup>74</sup>Rb; reviewed superallowed  $\beta$  decay Ft values. <sup>92</sup>Br; measured time of flight spectrum. <sup>102</sup>Nb; measured  $\gamma$  rays following  $\beta^-$  decay. JOUR IMSPF 251 204

<sup>110</sup>Ag      2008ZI03      NUCLEAR REACTIONS <sup>76,77,78,80,82</sup>Se, <sup>106,110,111,112,114,116</sup>Cd( $\mu^-$ ,  $n\nu$ ), E not given; <sup>76</sup>Se( $\mu^-$ ,  $2n\nu$ ), E not given; measured E $\gamma$ , I $\gamma$ , capture rates, lifetimes, yields. JOUR BRSPE 72 737

<sup>110</sup>In      2008AL19      NUCLEAR REACTIONS Cd(p, X)<sup>110</sup>In / <sup>111</sup>In / <sup>113</sup>In / <sup>116</sup>In; E < 14.7 MeV; measured E $\gamma$ , I $\gamma$ , cross sections using stacked foil activation technique. JOUR RAACA 96 461

                 2008GU13      NUCLEAR REACTIONS <sup>103</sup>Rh(<sup>16</sup>O, X)<sup>114</sup>Te / <sup>115</sup>Te / <sup>116</sup>Te / <sup>117</sup>Te / <sup>115</sup>Sb / <sup>116</sup>Sb / <sup>117</sup>Sb / <sup>110</sup>Sn / <sup>108</sup>In / <sup>109</sup>In / <sup>110</sup>In / <sup>111</sup>In / <sup>103</sup>Ag / <sup>104</sup>Ag / <sup>106</sup>Ag, E≈46-85 MeV; measured E $\gamma$ , I $\gamma$ ,  $\sigma$ . Discussed fraction of (in)complete fusion. Comparison with PACE4 calculations. HPGe detector, stacked targets, energy degradation technique. JOUR NUPAB 811 77

<sup>110</sup>Sn      2008EKZZ      NUCLEAR REACTIONS <sup>58</sup>Ni(<sup>106</sup>Sn, <sup>106</sup>Sn'), <sup>58</sup>Ni(<sup>108</sup>Sn, <sup>108</sup>Sn'), <sup>58</sup>Ni(<sup>110</sup>Sn, <sup>110</sup>Sn'), E=2.8 MeV / nucleon; measured E $\gamma$ , I $\gamma$ ; <sup>106,108,110</sup>Sn; deduced B(E2). Compared results with existing data. CONF Crete(FINUSTAR 2),Proc.P296,Ekstrom

                 2008GU13      NUCLEAR REACTIONS <sup>103</sup>Rh(<sup>16</sup>O, X)<sup>114</sup>Te / <sup>115</sup>Te / <sup>116</sup>Te / <sup>117</sup>Te / <sup>115</sup>Sb / <sup>116</sup>Sb / <sup>117</sup>Sb / <sup>110</sup>Sn / <sup>108</sup>In / <sup>109</sup>In / <sup>110</sup>In / <sup>111</sup>In / <sup>103</sup>Ag / <sup>104</sup>Ag / <sup>106</sup>Ag, E≈46-85 MeV; measured E $\gamma$ , I $\gamma$ ,  $\sigma$ . Discussed fraction of (in)complete fusion. Comparison with PACE4 calculations. HPGe detector, stacked targets, energy degradation technique. JOUR NUPAB 811 77

KEYNUMBERS AND KEYWORDS

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**A=111**

<sup>111</sup> Pd	2008FIZZ	NUCLEAR REACTIONS <sup>1,2</sup> H, <sup>6,7</sup> Li, <sup>9</sup> Be, <sup>10,11</sup> B, <sup>12,13</sup> C, <sup>14,15</sup> N, <sup>16</sup> O, <sup>19</sup> F, <sup>23,23m</sup> Na, <sup>24,25,26</sup> Mg, <sup>27</sup> Al, <sup>28,29,30</sup> Si, <sup>31</sup> P, <sup>32,33,34</sup> S, <sup>35,37</sup> Cl, <sup>39,40,41</sup> K, <sup>102,104,105,106,108,110</sup> Pd(n, $\gamma$ ), E=thermal; measured cross sections; <sup>10</sup> B(n, $\alpha$ ), E=thermal; measured cross sections; <sup>25</sup> Mg(n, $\gamma$ ), E=thermal; <sup>13</sup> C(n, $\gamma$ ), E=thermal; <sup>105</sup> Pd(n, $\gamma$ ), E=thermal; measured E $\gamma$ , I $\gamma$ ; deduced cross section balance. compared experimental and calculated depopulation. CONF Yosemite(CNR 2007) Proc.P26,Firestone
<sup>111</sup> Ag	2008ZI03	NUCLEAR REACTIONS <sup>76,77,78,80,82</sup> Se, <sup>106,110,111,112,114,116</sup> Cd( $\mu^-$ , $n\nu$ ), E not given; <sup>76</sup> Se( $\mu^-$ , $2n\nu$ ), E not given; measured E $\gamma$ , I $\gamma$ , capture rates, lifetimes, yields. JOUR BRSPE 72 737
<sup>111</sup> In	2007KRZY	NUCLEAR REACTIONS <sup>127</sup> I(d, X) <sup>111</sup> In / <sup>119</sup> Te / <sup>121</sup> I / <sup>122</sup> Sb / <sup>123</sup> I / <sup>124</sup> I / <sup>125</sup> Xe / <sup>126</sup> I, E=2.52 GeV; measured yields; <sup>129</sup> I(d, X) <sup>121</sup> Te / <sup>124</sup> I / <sup>126</sup> I / <sup>130</sup> I, E=2.52 GeV; measured yields; <sup>237</sup> Np(d, X) <sup>97</sup> Zr / <sup>99</sup> Mo / <sup>132</sup> Te / <sup>133</sup> I / <sup>238</sup> Np, E=2.52 GeV; measured yields; <sup>238</sup> Pu(d, X) <sup>97</sup> Zr / <sup>135</sup> Xe, E $\approx$ 2.5 GeV; measured yields; <sup>239</sup> Pu(d, X) <sup>103</sup> Ru / <sup>128</sup> Sb / <sup>132</sup> Te / <sup>133</sup> I / <sup>135</sup> I / <sup>135</sup> Xe / <sup>140</sup> Ba / <sup>143</sup> Ce / <sup>91</sup> Sr / <sup>97</sup> Zr, E $\approx$ 2.5 GeV; measured yields; <sup>26</sup> Al(n, $\alpha$ ), <sup>197</sup> Au(n, $\gamma$ ), <sup>197</sup> Au(n, 2n), <sup>197</sup> Au(n, 4n), E not given; measured radial distributions of production rates of daughter nuclei; <sup>89</sup> Y(n, 2n), <sup>89</sup> Y(n, 3n), <sup>89</sup> Y(n, 4n), E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; <sup>238</sup> U, Pb(n, f), <sup>238</sup> U, Pb(n, $\gamma$ ), E not given; measured $\sigma$ . REPT JINR-E1-2007-7,Krivopustov
	2008AL19	NUCLEAR REACTIONS Cd(p, X) <sup>110</sup> In / <sup>111</sup> In / <sup>113</sup> In / <sup>116</sup> In;E < 14.7 MeV; measured E $\gamma$ , I $\gamma$ , cross sections using stacked foil activation technique. JOUR RAACA 96 461
	2008GU13	NUCLEAR REACTIONS <sup>103</sup> Rh( <sup>16</sup> O, X) <sup>114</sup> Te / <sup>115</sup> Te / <sup>116</sup> Te / <sup>117</sup> Te / <sup>115</sup> Sb / <sup>116</sup> Sb / <sup>117</sup> Sb / <sup>110</sup> Sn / <sup>108</sup> In / <sup>109</sup> In / <sup>110</sup> In / <sup>111</sup> In / <sup>103</sup> Ag / <sup>104</sup> Ag / <sup>106</sup> Ag, E $\approx$ 46-85 MeV; measured E $\gamma$ , I $\gamma$ , $\sigma$ . Discussed fraction of (in)complete fusion. Comparison with PACE4 calculations. HPGe detector, stacked targets, energy degradation technique. JOUR NUPAB 811 77

**A=112**

<sup>112</sup> Cd	2008BA26	RADIOACTIVITY <sup>112</sup> Sn( $\beta^+$ EC), (2EC); <sup>124</sup> Sn( $2\beta^-$ ); measured E $\gamma$ , I $\gamma$ , T <sub>1/2</sub> for double-beta decay. JOUR NUPAB 807 269
<sup>112</sup> In	2008MA25	NUCLEAR REACTIONS <sup>110</sup> Pd, <sup>113</sup> In( $\gamma$ , n), E=9-18 MeV; measured E $\gamma$ , I $\gamma$ , Isomeric ratios, and excitation functions. JOUR PPNLA 5 374
<sup>112</sup> Sn	2008BA26	RADIOACTIVITY <sup>112</sup> Sn( $\beta^+$ EC), (2EC); <sup>124</sup> Sn( $2\beta^-$ ); measured E $\gamma$ , I $\gamma$ , T <sub>1/2</sub> for double-beta decay. JOUR NUPAB 807 269

**A=113**

<sup>113</sup> Ag	2008ZI03	NUCLEAR REACTIONS <sup>76,77,78,80,82</sup> Se, <sup>106,110,111,112,114,116</sup> Cd( $\mu^-$ , $n\nu$ ), E not given; <sup>76</sup> Se( $\mu^-$ , $2n\nu$ ), E not given; measured E $\gamma$ , I $\gamma$ , capture rates, lifetimes, yields. JOUR BRSPE 72 737
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KEYNUMBERS AND KEYWORDS

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**A=113 (continued)**

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|-------------------|----------|---|
| $^{113}\text{In}$ | 2008AL19 | NUCLEAR REACTIONS Cd(p, X) $^{110}\text{In}$ / $^{111}\text{In}$ / $^{113}\text{In}$ / $^{116}\text{In}$ ; E < 14.7 MeV; measured $E\gamma$ , $I\gamma$ , cross sections using stacked foil activation technique. JOUR RAACA 96 461   |
| $^{113}\text{Sb}$ | 2008KH06 | NUCLEAR REACTIONS Sn(p, pxn) $^{117}\text{Sn}$ / $^{113}\text{Sb}$ , E= 5-40 MeV; measured $E\gamma$ , $I\gamma$ , $\sigma(E)$ , thick target yield of using stacked-foil activation technique. comparison with TALYS and ALICE-PIPE calculations. JOUR KPSJA 53 1181   |
| $^{113}\text{Xe}$ | 2006KA74 | RADIOACTIVITY $^{105}\text{Sn}(EC)$ , ( $\beta^+$ ), (ECp), ( $\beta^+$ ); measured $E\beta$ , $I\beta$ , $\beta$ -delayed $E\gamma$ , $I\gamma$ , $\beta\gamma$ -, $\gamma\gamma$ -coin, x-ray spectrum; deduced Q values. Total absorption spectrometer (TAS). $^{70m}\text{Br}$ , $^{96,97,98}\text{Ag}$ , $^{100,102,103}\text{In}$ , $^{103}\text{Sn}$ , $^{113}\text{Xe}$ , $^{117}\text{Ba}$ ; reviewed Q values. JOUR IMSPF 251 138 |

**A=114**

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|-------------------|----------|--|
| $^{114}\text{Cd}$ | 2008BE22 | RADIOACTIVITY $^{108}\text{Cd}(2EC)$ , $^{114}\text{Cd}(2\beta^-)$ ; measured $T_{1/2}$ lower limit. JOUR ZAANE 36 167   |
| $^{114}\text{Sn}$ | 2008BE22 | RADIOACTIVITY $^{108}\text{Cd}(2EC)$ , $^{114}\text{Cd}(2\beta^-)$ ; measured $T_{1/2}$ lower limit. JOUR ZAANE 36 167   |
| $^{114}\text{Te}$ | 2008GU13 | NUCLEAR REACTIONS $^{103}\text{Rh}(^{16}\text{O}, X)^{114}\text{Te}$ / $^{115}\text{Te}$ / $^{116}\text{Te}$ / $^{117}\text{Te}$ / $^{115}\text{Sb}$ / $^{116}\text{Sb}$ / $^{117}\text{Sb}$ / $^{110}\text{Sn}$ / $^{108}\text{In}$ / $^{109}\text{In}$ / $^{110}\text{In}$ / $^{111}\text{In}$ / $^{103}\text{Ag}$ / $^{104}\text{Ag}$ / $^{106}\text{Ag}$ , E $\approx$ 46-85 MeV; measured $E\gamma$ , $I\gamma$ , $\sigma$ . Discussed fraction of (in)complete fusion. Comparison with PACE4 calculations. HPGe detector, stacked targets, energy degradation technique. JOUR NUPAB 811 77 |

**A=115**

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|-------------------|----------|--|
| $^{115}\text{Ag}$ | 2008ZI03 | NUCLEAR REACTIONS $^{76,77,78,80,82}\text{Se}$ , $^{106,110,111,112,114,116}\text{Cd}(\mu^-, n\nu)$ , E not given; $^{76}\text{Se}(\mu^-, 2n\nu)$ , E not given; measured $E\gamma$ , $I\gamma$ , capture rates, lifetimes, yields. JOUR BRSPE 72 737  |
| $^{115}\text{Sb}$ | 2008GU13 | NUCLEAR REACTIONS $^{103}\text{Rh}(^{16}\text{O}, X)^{114}\text{Te}$ / $^{115}\text{Te}$ / $^{116}\text{Te}$ / $^{117}\text{Te}$ / $^{115}\text{Sb}$ / $^{116}\text{Sb}$ / $^{117}\text{Sb}$ / $^{110}\text{Sn}$ / $^{108}\text{In}$ / $^{109}\text{In}$ / $^{110}\text{In}$ / $^{111}\text{In}$ / $^{103}\text{Ag}$ / $^{104}\text{Ag}$ / $^{106}\text{Ag}$ , E $\approx$ 46-85 MeV; measured $E\gamma$ , $I\gamma$ , $\sigma$ . Discussed fraction of (in)complete fusion. Comparison with PACE4 calculations. HPGe detector, stacked targets, energy degradation technique. JOUR NUPAB 811 77 |
| $^{115}\text{Te}$ | 2008GU13 | NUCLEAR REACTIONS $^{103}\text{Rh}(^{16}\text{O}, X)^{114}\text{Te}$ / $^{115}\text{Te}$ / $^{116}\text{Te}$ / $^{117}\text{Te}$ / $^{115}\text{Sb}$ / $^{116}\text{Sb}$ / $^{117}\text{Sb}$ / $^{110}\text{Sn}$ / $^{108}\text{In}$ / $^{109}\text{In}$ / $^{110}\text{In}$ / $^{111}\text{In}$ / $^{103}\text{Ag}$ / $^{104}\text{Ag}$ / $^{106}\text{Ag}$ , E $\approx$ 46-85 MeV; measured $E\gamma$ , $I\gamma$ , $\sigma$ . Discussed fraction of (in)complete fusion. Comparison with PACE4 calculations. HPGe detector, stacked targets, energy degradation technique. JOUR NUPAB 811 77 |

KEYNUMBERS AND KEYWORDS

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**A=116**

- <sup>116</sup>In    2008AL19    NUCLEAR REACTIONS Cd(p, X)<sup>110</sup>In / <sup>111</sup>In / <sup>113</sup>In / <sup>116</sup>In; E < 14.7 MeV; measured E $\gamma$ , I $\gamma$ , cross sections using stacked foil activation technique. JOUR RAACA 96 461
- <sup>116</sup>Sn    2008EA02    NUCLEAR REACTIONS Sn(<sup>58</sup>Ni, <sup>58</sup>Ni'), E=190 MeV; measured particle spectra, E $\gamma$ , I $\gamma$ , (particle) $\gamma$ -coin. <sup>116,118,120</sup>Sn; deduced g-factors. Transient field technique. JOUR PYLBB 665 147
- <sup>116</sup>Sb    2008GU13    NUCLEAR REACTIONS <sup>103</sup>Rh(<sup>16</sup>O, X)<sup>114</sup>Te / <sup>115</sup>Te / <sup>116</sup>Te / <sup>117</sup>Te / <sup>115</sup>Sb / <sup>116</sup>Sb / <sup>117</sup>Sb / <sup>110</sup>Sn / <sup>108</sup>In / <sup>109</sup>In / <sup>110</sup>In / <sup>111</sup>In / <sup>103</sup>Ag / <sup>104</sup>Ag / <sup>106</sup>Ag, E $\approx$ 46-85 MeV; measured E $\gamma$ , I $\gamma$ ,  $\sigma$ . Discussed fraction of (in)complete fusion. Comparison with PACE4 calculations. HPGe detector, stacked targets, energy degradation technique. JOUR NUPAB 811 77
- <sup>116</sup>Te    2008GU13    NUCLEAR REACTIONS <sup>103</sup>Rh(<sup>16</sup>O, X)<sup>114</sup>Te / <sup>115</sup>Te / <sup>116</sup>Te / <sup>117</sup>Te / <sup>115</sup>Sb / <sup>116</sup>Sb / <sup>117</sup>Sb / <sup>110</sup>Sn / <sup>108</sup>In / <sup>109</sup>In / <sup>110</sup>In / <sup>111</sup>In / <sup>103</sup>Ag / <sup>104</sup>Ag / <sup>106</sup>Ag, E $\approx$ 46-85 MeV; measured E $\gamma$ , I $\gamma$ ,  $\sigma$ . Discussed fraction of (in)complete fusion. Comparison with PACE4 calculations. HPGe detector, stacked targets, energy degradation technique. JOUR NUPAB 811 77
- 2008RA19    NUCLEAR REACTIONS <sup>92,94</sup>Mo( $\alpha$ , n), <sup>112</sup>Sn( $\alpha$ ,  $\gamma$ ), E=8.2-11.1 MeV; measured  $\sigma$ , astrophysical S-factors. Comparison with Hartree-Fock-Bogoliubov calculations. JOUR PRVCA 78 025804

**A=117**

- <sup>117</sup>Pd    2006J014    ATOMIC MASSES <sup>96,97,98,99,100,101,102,103,104,105,106</sup>Zr, <sup>98,99,100,101,102,103,104,105,106</sup>Nb, <sup>99,100,101,102,103,104,105,106,107,108,109,110</sup>Mo; reviewed cooling and trapping techniques, high-precision measurements of the ground state properties of exotic nuclei. Penning trap (JYFLTRAP at IGISOL facility) method and collinear laser spectroscopy. <sup>117</sup>Pd; measured conversion electrons from isomer decay. <sup>22</sup>Mg, <sup>34</sup>Ar, <sup>46</sup>V, <sup>62</sup>Ga, <sup>74</sup>Rb; reviewed superallowed  $\beta$  decay Ft values. <sup>92</sup>Br; measured time of flight spectrum. <sup>102</sup>Nb; measured  $\gamma$  rays following  $\beta^-$  decay. JOUR IMSPF 251 204
- <sup>117</sup>Sn    2008KH06    NUCLEAR REACTIONS Sn(p, pxn)<sup>117</sup>Sn / <sup>113</sup>Sb, E= 5-40 MeV; measured E $\gamma$ , I $\gamma$ ,  $\sigma$ (E), thick target yield of using stacked-foil activation technique. comparison with TALYS and ALICE-PIPE calculations. JOUR KPSJA 53 1181
- <sup>117</sup>Sb    2008GU13    NUCLEAR REACTIONS <sup>103</sup>Rh(<sup>16</sup>O, X)<sup>114</sup>Te / <sup>115</sup>Te / <sup>116</sup>Te / <sup>117</sup>Te / <sup>115</sup>Sb / <sup>116</sup>Sb / <sup>117</sup>Sb / <sup>110</sup>Sn / <sup>108</sup>In / <sup>109</sup>In / <sup>110</sup>In / <sup>111</sup>In / <sup>103</sup>Ag / <sup>104</sup>Ag / <sup>106</sup>Ag, E $\approx$ 46-85 MeV; measured E $\gamma$ , I $\gamma$ ,  $\sigma$ . Discussed fraction of (in)complete fusion. Comparison with PACE4 calculations. HPGe detector, stacked targets, energy degradation technique. JOUR NUPAB 811 77

KEYNUMBERS AND KEYWORDS

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**A=117 (continued)**

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|-------------------|----------|--|
| $^{117}\text{Te}$ | 2008GU13 | NUCLEAR REACTIONS $^{103}\text{Rh}(^{16}\text{O}, \text{X})^{114}\text{Te} / ^{115}\text{Te} / ^{116}\text{Te} / ^{117}\text{Te} / ^{115}\text{Sb} / ^{116}\text{Sb} / ^{117}\text{Sb} / ^{110}\text{Sn} / ^{108}\text{In} / ^{109}\text{In} / ^{110}\text{In} / ^{111}\text{In} / ^{103}\text{Ag} / ^{104}\text{Ag} / ^{106}\text{Ag}$ , $E \approx 46\text{-}85$ MeV; measured $E\gamma$ , $I\gamma$ , $\sigma$ . Discussed fraction of (in)complete fusion. Comparison with PACE4 calculations. HPGe detector, stacked targets, energy degradation technique. JOUR NUPAB 811 77 |
| $^{117}\text{Ba}$ | 2006KA74 | RADIOACTIVITY $^{105}\text{Sn}(\text{EC})$ , $(\beta^+)$ , $(\text{ECp})$ , $(\beta^+)$ ; measured $E\beta$ , $I\beta$ , $\beta$ -delayed $E\gamma$ , $I\gamma$ , $\beta\gamma$ -, $\gamma\gamma$ -coin, x-ray spectrum; deduced Q values. Total absorption spectrometer (TAS). $^{70m}\text{Br}$ , $^{96,97,98}\text{Ag}$ , $^{100,102,103}\text{In}$ , $^{103}\text{Sn}$ , $^{113}\text{Xe}$ , $^{117}\text{Ba}$ ; reviewed Q values. JOUR IMSPF 251 138   |

**A=118**

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|-------------------|----------|--|
| $^{118}\text{Sn}$ | 2008EA02 | NUCLEAR REACTIONS $\text{Sn}(^{58}\text{Ni}, ^{58}\text{Ni}')$ , $E=190$ MeV; measured particle spectra, $E\gamma$ , $I\gamma$ , (particle) $\gamma$ -coin. $^{116,118,120}\text{Sn}$ ; deduced g-factors. Transient field technique. JOUR PYLBB 665 147   |
|                   | 2008PIZY | NUCLEAR REACTIONS $\text{Ni}$ , $^{90,92}\text{Zr}$ , $^{118}\text{Sn}$ , $^{208}\text{Pb}(^{20}\text{Ne}, ^{20}\text{Ne}')$ , E not given; measured particle spectra, $\sigma(\theta)$ ; deduced quasielastic barrier distributions; calculated barrier distributions; $^{90,92}\text{Zr}(^{20}\text{Ne}, \text{X})$ , E not given; measured excitation-energy spectra. Compared results to Coupled Channel calculations. CONF Crete(FINUSTAR 2), Proc.P238, Piasecki |

**A=119**

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|-------------------|----------|---|
| $^{119}\text{Sn}$ | 2008AL24 | NUCLEAR REACTIONS $^{119}\text{Sn}(\gamma, \gamma)$ , $E=23.8$ keV; measured Mossbauer absorption spectrum in the presence of a resonant absorber screen. JOUR BRSPE 72 769   |
| $^{119}\text{Te}$ | 2007KRZY | NUCLEAR REACTIONS $^{127}\text{I}(\text{d}, \text{X})^{111}\text{In} / ^{119}\text{Te} / ^{121}\text{I} / ^{122}\text{Sb} / ^{123}\text{I} / ^{124}\text{I} / ^{125}\text{Xe} / ^{126}\text{I}$ , $E=2.52$ GeV; measured yields; $^{129}\text{I}(\text{d}, \text{X})^{121}\text{Te} / ^{124}\text{I} / ^{126}\text{I} / ^{130}\text{I}$ , $E=2.52$ GeV; measured yields; $^{237}\text{Np}(\text{d}, \text{X})^{97}\text{Zr} / ^{99}\text{Mo} / ^{132}\text{Te} / ^{133}\text{I} / ^{238}\text{Np}$ , $E=2.52$ GeV; measured yields; $^{238}\text{Pu}(\text{d}, \text{X})^{97}\text{Zr} / ^{135}\text{Xe}$ , $E \approx 2.5$ GeV; measured yields; $^{239}\text{Pu}(\text{d}, \text{X})^{103}\text{Ru} / ^{128}\text{Sb} / ^{132}\text{Te} / ^{133}\text{I} / ^{135}\text{I} / ^{135}\text{Xe} / ^{140}\text{Ba} / ^{143}\text{Ce} / ^{91}\text{Sr} / ^{97}\text{Zr}$ , $E \approx 2.5$ GeV; measured yields; $^{26}\text{Al}(\text{n}, \alpha)$ , $^{197}\text{Au}(\text{n}, \gamma)$ , $^{197}\text{Au}(\text{n}, 2\text{n})$ , $^{197}\text{Au}(\text{n}, 4\text{n})$ , E not given; measured radial distributions of production rates of daughter nuclei; $^{89}\text{Y}(\text{n}, 2\text{n})$ , $^{89}\text{Y}(\text{n}, 3\text{n})$ , $^{89}\text{Y}(\text{n}, 4\text{n})$ , E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; $^{238}\text{U}$ , $\text{Pb}(\text{n}, \text{f})$ , $^{238}\text{U}$ , $\text{Pb}(\text{n}, \gamma)$ , E not given; measured $\sigma$ . REPT JINR-E1-2007-7, Krivopustov |



**A=120**

- <sup>120</sup>Sn      2008ACZZ      NUCLEAR REACTIONS <sup>208</sup>Pb(<sup>6</sup>He, <sup>6</sup>He), <sup>208</sup>Pb(<sup>6</sup>He, 2nα), E=14, 16, 18, 22 MeV; <sup>120</sup>Sn(<sup>11</sup>Be, <sup>11</sup>Be'), E=32 MeV; measured particle spectra, σ(θ); Compared results to CDCC and DWBA calculations. CONF Crete(FINUSTAR 2),Proc.P333,Acosta
- 2008EA02      NUCLEAR REACTIONS Sn(<sup>58</sup>Ni, <sup>58</sup>Ni'), E=190 MeV; measured particle spectra, E<sub>γ</sub>, I<sub>γ</sub>, (particle)γ-coin. <sup>116,118,120</sup>Sn; deduced g-factors. Transient field technique. JOUR PYLBB 665 147
- 2008VAZY      NUCLEAR REACTIONS <sup>120</sup>Sn(<sup>74</sup>Zn, <sup>74</sup>Zn'), E=2.87 MeV / nucleon; <sup>120</sup>Sn(<sup>76</sup>Zn, <sup>76</sup>Zn'), <sup>108</sup>Pd(<sup>78</sup>Zn, <sup>78</sup>Zn'), E=2.83 MeV / nucleon; <sup>108</sup>Pd(<sup>80</sup>Zn, <sup>80</sup>Zn'), E=2.79 MeV / nucleon; measured E<sub>γ</sub>, I<sub>γ</sub>; <sup>78,80</sup>Zn; deduced levels, B(E2); Calculated level energies, B(E2) using the Shell model. CONF Crete(FINUSTAR 2),Proc.P291, Van de Walle
- <sup>120</sup>Te      2008SU14      NUCLEAR REACTIONS <sup>132</sup>Ba(p, t), E=25 MeV; measured triton spectra, σ(E, θ). <sup>130</sup>Ba deduced levels, J, π, configurations. DWBA analysis. Comparison with interacting boson model predictions. <sup>122</sup>Te(p, t), E=25 MeV; measured triton spectra; deduced Q-value. JOUR ZAANE 36 243

**A=121**

- <sup>121</sup>Te      2007KRZY      NUCLEAR REACTIONS <sup>127</sup>I(d, X)<sup>111</sup>In / <sup>119</sup>Te / <sup>121</sup>I / <sup>122</sup>Sb / <sup>123</sup>I / <sup>124</sup>I / <sup>125</sup>Xe / <sup>126</sup>I, E=2.52 GeV; measured yields; <sup>129</sup>I(d, X)<sup>121</sup>Te / <sup>124</sup>I / <sup>126</sup>I / <sup>130</sup>I, E=2.52 GeV; measured yields; <sup>237</sup>Np(d, X)<sup>97</sup>Zr / <sup>99</sup>Mo / <sup>132</sup>Te / <sup>133</sup>I / <sup>238</sup>Np, E=2.52 GeV; measured yields; <sup>238</sup>Pu(d, X)<sup>97</sup>Zr / <sup>135</sup>Xe, E≈2.5 GeV; measured yields; <sup>239</sup>Pu(d, X)<sup>103</sup>Ru / <sup>128</sup>Sb / <sup>132</sup>Te / <sup>133</sup>I / <sup>135</sup>I / <sup>135</sup>Xe / <sup>140</sup>Ba / <sup>143</sup>Ce / <sup>91</sup>Sr / <sup>97</sup>Zr, E≈2.5 GeV; measured yields; <sup>26</sup>Al(n, α), <sup>197</sup>Au(n, γ), <sup>197</sup>Au(n, 2n), <sup>197</sup>Au(n, 4n), E not given; measured radial distributions of production rates of daughter nuclei; <sup>89</sup>Y(n, 2n), <sup>89</sup>Y(n, 3n), <sup>89</sup>Y(n, 4n), E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; <sup>238</sup>U, Pb(n, f), <sup>238</sup>U, Pb(n, γ), E not given; measured σ. REPT JINR-E1-2007-7,Krivopustov
- <sup>121</sup>I      2007KRZY      NUCLEAR REACTIONS <sup>127</sup>I(d, X)<sup>111</sup>In / <sup>119</sup>Te / <sup>121</sup>I / <sup>122</sup>Sb / <sup>123</sup>I / <sup>124</sup>I / <sup>125</sup>Xe / <sup>126</sup>I, E=2.52 GeV; measured yields; <sup>129</sup>I(d, X)<sup>121</sup>Te / <sup>124</sup>I / <sup>126</sup>I / <sup>130</sup>I, E=2.52 GeV; measured yields; <sup>237</sup>Np(d, X)<sup>97</sup>Zr / <sup>99</sup>Mo / <sup>132</sup>Te / <sup>133</sup>I / <sup>238</sup>Np, E=2.52 GeV; measured yields; <sup>238</sup>Pu(d, X)<sup>97</sup>Zr / <sup>135</sup>Xe, E≈2.5 GeV; measured yields; <sup>239</sup>Pu(d, X)<sup>103</sup>Ru / <sup>128</sup>Sb / <sup>132</sup>Te / <sup>133</sup>I / <sup>135</sup>I / <sup>135</sup>Xe / <sup>140</sup>Ba / <sup>143</sup>Ce / <sup>91</sup>Sr / <sup>97</sup>Zr, E≈2.5 GeV; measured yields; <sup>26</sup>Al(n, α), <sup>197</sup>Au(n, γ), <sup>197</sup>Au(n, 2n), <sup>197</sup>Au(n, 4n), E not given; measured radial distributions of production rates of daughter nuclei; <sup>89</sup>Y(n, 2n), <sup>89</sup>Y(n, 3n), <sup>89</sup>Y(n, 4n), E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; <sup>238</sup>U, Pb(n, f), <sup>238</sup>U, Pb(n, γ), E not given; measured σ. REPT JINR-E1-2007-7,Krivopustov

**A=122**

- <sup>122</sup>Cd      2008KRZZ      NUCLEAR REACTIONS <sup>58</sup>Ni(<sup>122</sup>Cd, <sup>122</sup>Cd'), (<sup>124</sup>Cd, <sup>124</sup>Cd'), (<sup>126</sup>Cd, <sup>126</sup>Cd'), (<sup>138</sup>Xe, <sup>138</sup>Xe'), (<sup>140</sup>Xe, <sup>140</sup>Xe'), (<sup>142</sup>Xe, <sup>142</sup>Xe'), (<sup>144</sup>Xe, <sup>144</sup>Xe'), (<sup>140</sup>Ba, <sup>140</sup>Ba'), E=2.85 MeV / nucleon; measured E $\gamma$ , I $\gamma$ , g-factor; <sup>122,124,126</sup>Cd, <sup>138,140,142,144</sup>Xe, <sup>140</sup>Ba; deduced B(E2). Compared results to existing data, systematics and model calculations. CONF Crete(FINUSTAR 2),Proc.P84,Kroll
- <sup>122</sup>Sb      2007KRZY      NUCLEAR REACTIONS <sup>127</sup>I(d, X)<sup>111</sup>In / <sup>119</sup>Te / <sup>121</sup>I / <sup>122</sup>Sb / <sup>123</sup>I / <sup>124</sup>I / <sup>125</sup>Xe / <sup>126</sup>I, E=2.52 GeV; measured yields; <sup>129</sup>I(d, X)<sup>121</sup>Te / <sup>124</sup>I / <sup>126</sup>I / <sup>130</sup>I, E=2.52 GeV; measured yields; <sup>237</sup>Np(d, X)<sup>97</sup>Zr / <sup>99</sup>Mo / <sup>132</sup>Te / <sup>133</sup>I / <sup>238</sup>Np, E=2.52 GeV; measured yields; <sup>238</sup>Pu(d, X)<sup>97</sup>Zr / <sup>135</sup>Xe, E $\approx$ 2.5 GeV; measured yields; <sup>239</sup>Pu(d, X)<sup>103</sup>Ru / <sup>128</sup>Sb / <sup>132</sup>Te / <sup>133</sup>I / <sup>135</sup>I / <sup>135</sup>Xe / <sup>140</sup>Ba / <sup>143</sup>Ce / <sup>91</sup>Sr / <sup>97</sup>Zr, E $\approx$ 2.5 GeV; measured yields; <sup>26</sup>Al(n,  $\alpha$ ), <sup>197</sup>Au(n,  $\gamma$ ), <sup>197</sup>Au(n, 2n), <sup>197</sup>Au(n, 4n), E not given; measured radial distributions of production rates of daughter nuclei; <sup>89</sup>Y(n, 2n), <sup>89</sup>Y(n, 3n), <sup>89</sup>Y(n, 4n), E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; <sup>238</sup>U, Pb(n, f), <sup>238</sup>U, Pb(n,  $\gamma$ ), E not given; measured  $\sigma$ . REPT JINR-E1-2007-7,Krivopustov

**A=123**

- <sup>123</sup>I      2007KRZY      NUCLEAR REACTIONS <sup>127</sup>I(d, X)<sup>111</sup>In / <sup>119</sup>Te / <sup>121</sup>I / <sup>122</sup>Sb / <sup>123</sup>I / <sup>124</sup>I / <sup>125</sup>Xe / <sup>126</sup>I, E=2.52 GeV; measured yields; <sup>129</sup>I(d, X)<sup>121</sup>Te / <sup>124</sup>I / <sup>126</sup>I / <sup>130</sup>I, E=2.52 GeV; measured yields; <sup>237</sup>Np(d, X)<sup>97</sup>Zr / <sup>99</sup>Mo / <sup>132</sup>Te / <sup>133</sup>I / <sup>238</sup>Np, E=2.52 GeV; measured yields; <sup>238</sup>Pu(d, X)<sup>97</sup>Zr / <sup>135</sup>Xe, E $\approx$ 2.5 GeV; measured yields; <sup>239</sup>Pu(d, X)<sup>103</sup>Ru / <sup>128</sup>Sb / <sup>132</sup>Te / <sup>133</sup>I / <sup>135</sup>I / <sup>135</sup>Xe / <sup>140</sup>Ba / <sup>143</sup>Ce / <sup>91</sup>Sr / <sup>97</sup>Zr, E $\approx$ 2.5 GeV; measured yields; <sup>26</sup>Al(n,  $\alpha$ ), <sup>197</sup>Au(n,  $\gamma$ ), <sup>197</sup>Au(n, 2n), <sup>197</sup>Au(n, 4n), E not given; measured radial distributions of production rates of daughter nuclei; <sup>89</sup>Y(n, 2n), <sup>89</sup>Y(n, 3n), <sup>89</sup>Y(n, 4n), E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; <sup>238</sup>U, Pb(n, f), <sup>238</sup>U, Pb(n,  $\gamma$ ), E not given; measured  $\sigma$ . REPT JINR-E1-2007-7,Krivopustov

**A=124**

- <sup>124</sup>Cd      2008KRZZ      NUCLEAR REACTIONS <sup>58</sup>Ni(<sup>122</sup>Cd, <sup>122</sup>Cd'), (<sup>124</sup>Cd, <sup>124</sup>Cd'), (<sup>126</sup>Cd, <sup>126</sup>Cd'), (<sup>138</sup>Xe, <sup>138</sup>Xe'), (<sup>140</sup>Xe, <sup>140</sup>Xe'), (<sup>142</sup>Xe, <sup>142</sup>Xe'), (<sup>144</sup>Xe, <sup>144</sup>Xe'), (<sup>140</sup>Ba, <sup>140</sup>Ba'), E=2.85 MeV / nucleon; measured E $\gamma$ , I $\gamma$ , g-factor; <sup>122,124,126</sup>Cd, <sup>138,140,142,144</sup>Xe, <sup>140</sup>Ba; deduced B(E2). Compared results to existing data, systematics and model calculations. CONF Crete(FINUSTAR 2),Proc.P84,Kroll
- <sup>124</sup>Sn      2008BA26      RADIOACTIVITY <sup>112</sup>Sn( $\beta^+$ EC), (2EC); <sup>124</sup>Sn(2 $\beta^-$ ); measured E $\gamma$ , I $\gamma$ , T<sub>1/2</sub> for double-beta decay. JOUR NUPAB 807 269

KEYNUMBERS AND KEYWORDS

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**A=124 (continued)**

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| 2008L007          | NUCLEAR REACTIONS $^9\text{Be}(^{136}\text{Xe}, \text{X})$ , E=600 MeV / nucleon; $^9\text{Be}(^{238}\text{U}, \text{X})$ , E=750 MeV / nucleon; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, multipolarities. $^{125,127,129}\text{Sn}$ ; deduced levels, J, $\pi$ , half-lives of sub- <i>us</i> states, B(E2). $^{124,125,126,127,128,129,130}\text{Sn}$ ; analyzed B(E2). JOUR PRVCA 77 064313  |
| $^{124}\text{Te}$ | 2008BA26 RADIOACTIVITY $^{112}\text{Sn}(\beta^+\text{EC})$ , (2EC); $^{124}\text{Sn}(2\beta^-)$ ; measured $E\gamma$ , $I\gamma$ , $T_{1/2}$ for double-beta decay. JOUR NUPAB 807 269  |
| $^{124}\text{I}$  | 2007KRZY NUCLEAR REACTIONS $^{127}\text{I}(\text{d}, \text{X})^{111}\text{In}$ / $^{119}\text{Te}$ / $^{121}\text{I}$ / $^{122}\text{Sb}$ / $^{123}\text{I}$ / $^{124}\text{I}$ / $^{125}\text{Xe}$ / $^{126}\text{I}$ , E=2.52 GeV; measured yields; $^{129}\text{I}(\text{d}, \text{X})^{121}\text{Te}$ / $^{124}\text{I}$ / $^{126}\text{I}$ / $^{130}\text{I}$ , E=2.52 GeV; measured yields; $^{237}\text{Np}(\text{d}, \text{X})^{97}\text{Zr}$ / $^{99}\text{Mo}$ / $^{132}\text{Te}$ / $^{133}\text{I}$ / $^{238}\text{Np}$ , E=2.52 GeV; measured yields; $^{238}\text{Pu}(\text{d}, \text{X})^{97}\text{Zr}$ / $^{135}\text{Xe}$ , E $\approx$ 2.5 GeV; measured yields; $^{239}\text{Pu}(\text{d}, \text{X})^{103}\text{Ru}$ / $^{128}\text{Sb}$ / $^{132}\text{Te}$ / $^{133}\text{I}$ / $^{135}\text{I}$ / $^{135}\text{Xe}$ / $^{140}\text{Ba}$ / $^{143}\text{Ce}$ / $^{91}\text{Sr}$ / $^{97}\text{Zr}$ , E $\approx$ 2.5 GeV; measured yields; $^{26}\text{Al}(\text{n}, \alpha)$ , $^{197}\text{Au}(\text{n}, \gamma)$ , $^{197}\text{Au}(\text{n}, 2\text{n})$ , $^{197}\text{Au}(\text{n}, 4\text{n})$ , E not given; measured radial distributions of production rates of daughter nuclei; $^{89}\text{Y}(\text{n}, 2\text{n})$ , $^{89}\text{Y}(\text{n}, 3\text{n})$ , $^{89}\text{Y}(\text{n}, 4\text{n})$ , E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; $^{238}\text{U}$ , Pb(n, f), $^{238}\text{U}$ , Pb(n, $\gamma$ ), E not given; measured $\sigma$ . REPT JINR-E1-2007-7,Krivopustov |

**A=125**

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| $^{125}\text{Pd}$ | 2008OH06 NUCLEAR REACTIONS Be( $^{238}\text{U}, \text{X}$ ) $^{125}\text{Pd}$ / $^{126}\text{Pd}$ , E=345 MeV / nucleon; measured fragment energies, ToF, $E\gamma$ , $I\gamma$ , (fragment) $\gamma$ -coin, yields. JOUR JUPSA 77 83201  |
|                   | 2008OHZZ NUCLEAR REACTIONS Be( $^{238}\text{U}, \text{X}$ ), E=345 MeV / nucleon; measured fission fragment spectra, $E\gamma$ , $I\gamma$ , (fragment) $\gamma$ -coin. $^{125,126}\text{Pd}$ ; deduced production cross sections. REPT RIKEN-NC-NP-21,Ohnishi  |
| $^{125}\text{Sn}$ | 2008L007 NUCLEAR REACTIONS $^9\text{Be}(^{136}\text{Xe}, \text{X})$ , E=600 MeV / nucleon; $^9\text{Be}(^{238}\text{U}, \text{X})$ , E=750 MeV / nucleon; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, multipolarities. $^{125,127,129}\text{Sn}$ ; deduced levels, J, $\pi$ , half-lives of sub- <i>us</i> states, B(E2). $^{124,125,126,127,128,129,130}\text{Sn}$ ; analyzed B(E2). JOUR PRVCA 77 064313   |
| $^{125}\text{Xe}$ | 2007KRZY NUCLEAR REACTIONS $^{127}\text{I}(\text{d}, \text{X})^{111}\text{In}$ / $^{119}\text{Te}$ / $^{121}\text{I}$ / $^{122}\text{Sb}$ / $^{123}\text{I}$ / $^{124}\text{I}$ / $^{125}\text{Xe}$ / $^{126}\text{I}$ , E=2.52 GeV; measured yields; $^{129}\text{I}(\text{d}, \text{X})^{121}\text{Te}$ / $^{124}\text{I}$ / $^{126}\text{I}$ / $^{130}\text{I}$ , E=2.52 GeV; measured yields; $^{237}\text{Np}(\text{d}, \text{X})^{97}\text{Zr}$ / $^{99}\text{Mo}$ / $^{132}\text{Te}$ / $^{133}\text{I}$ / $^{238}\text{Np}$ , E=2.52 GeV; measured yields; $^{238}\text{Pu}(\text{d}, \text{X})^{97}\text{Zr}$ / $^{135}\text{Xe}$ , E $\approx$ 2.5 GeV; measured yields; $^{239}\text{Pu}(\text{d}, \text{X})^{103}\text{Ru}$ / $^{128}\text{Sb}$ / $^{132}\text{Te}$ / $^{133}\text{I}$ / $^{135}\text{I}$ / $^{135}\text{Xe}$ / $^{140}\text{Ba}$ / $^{143}\text{Ce}$ / $^{91}\text{Sr}$ / $^{97}\text{Zr}$ , E $\approx$ 2.5 GeV; measured yields; $^{26}\text{Al}(\text{n}, \alpha)$ , $^{197}\text{Au}(\text{n}, \gamma)$ , $^{197}\text{Au}(\text{n}, 2\text{n})$ , $^{197}\text{Au}(\text{n}, 4\text{n})$ , E not given; measured radial distributions of production rates of daughter nuclei; $^{89}\text{Y}(\text{n}, 2\text{n})$ , $^{89}\text{Y}(\text{n}, 3\text{n})$ , $^{89}\text{Y}(\text{n}, 4\text{n})$ , E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; $^{238}\text{U}$ , Pb(n, f), $^{238}\text{U}$ , Pb(n, $\gamma$ ), E not given; measured $\sigma$ . REPT JINR-E1-2007-7,Krivopustov |

KEYNUMBERS AND KEYWORDS

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**A=126**

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| $^{126}\text{Pd}$ | 20080H06 | NUCLEAR REACTIONS $\text{Be}(^{238}\text{U}, \text{X})^{125}\text{Pd} / ^{126}\text{Pd}$ , $E=345$ MeV / nucleon; measured fragment energies, ToF, $E\gamma$ , $I\gamma$ , (fragment) $\gamma$ -coin, yields. JOUR JUPSA 77 83201   |
|                   | 20080HZZ | NUCLEAR REACTIONS $\text{Be}(^{238}\text{U}, \text{X})$ , $E=345$ MeV / nucleon; measured fission fragment spectra, $E\gamma$ , $I\gamma$ , (fragment) $\gamma$ -coin. $^{125,126}\text{Pd}$ ; deduced production cross sections. REPT RIKEN-NC-NP-21, Ohnishi  |
| $^{126}\text{Cd}$ | 2008KRZZ | NUCLEAR REACTIONS $^{58}\text{Ni}(^{122}\text{Cd}, ^{122}\text{Cd}')$ , $(^{124}\text{Cd}, ^{124}\text{Cd}')$ , $(^{126}\text{Cd}, ^{126}\text{Cd}')$ , $(^{138}\text{Xe}, ^{138}\text{Xe}')$ , $(^{140}\text{Xe}, ^{140}\text{Xe}')$ , $(^{142}\text{Xe}, ^{142}\text{Xe}')$ , $(^{144}\text{Xe}, ^{144}\text{Xe}')$ , $(^{140}\text{Ba}, ^{140}\text{Ba}')$ , $E=2.85$ MeV / nucleon; measured $E\gamma$ , $I\gamma$ , g-factor; $^{122,124,126}\text{Cd}$ , $^{138,140,142,144}\text{Xe}$ , $^{140}\text{Ba}$ ; deduced B(E2). Compared results to existing data, systematics and model calculations. CONF Crete(FINUSTAR 2), Proc.P84, Kroll  |
| $^{126}\text{Sn}$ | 2008L007 | NUCLEAR REACTIONS $^9\text{Be}(^{136}\text{Xe}, \text{X})$ , $E=600$ MeV / nucleon; $^9\text{Be}(^{238}\text{U}, \text{X})$ , $E=750$ MeV / nucleon; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, multipolarities. $^{125,127,129}\text{Sn}$ ; deduced levels, J, $\pi$ , half-lives of sub- <i>us</i> states, B(E2). $^{124,125,126,127,128,129,130}\text{Sn}$ ; analyzed B(E2). JOUR PRVCA 77 064313  |
| $^{126}\text{I}$  | 2007KRZY | NUCLEAR REACTIONS $^{127}\text{I}(d, \text{X})^{111}\text{In} / ^{119}\text{Te} / ^{121}\text{I} / ^{122}\text{Sb} / ^{123}\text{I} / ^{124}\text{I} / ^{125}\text{Xe} / ^{126}\text{I}$ , $E=2.52$ GeV; measured yields; $^{129}\text{I}(d, \text{X})^{121}\text{Te} / ^{124}\text{I} / ^{126}\text{I} / ^{130}\text{I}$ , $E=2.52$ GeV; measured yields; $^{237}\text{Np}(d, \text{X})^{97}\text{Zr} / ^{99}\text{Mo} / ^{132}\text{Te} / ^{133}\text{I} / ^{238}\text{Np}$ , $E=2.52$ GeV; measured yields; $^{238}\text{Pu}(d, \text{X})^{97}\text{Zr} / ^{135}\text{Xe}$ , $E\approx 2.5$ GeV; measured yields; $^{239}\text{Pu}(d, \text{X})^{103}\text{Ru} / ^{128}\text{Sb} / ^{132}\text{Te} / ^{133}\text{I} / ^{135}\text{I} / ^{135}\text{Xe} / ^{140}\text{Ba} / ^{143}\text{Ce} / ^{91}\text{Sr} / ^{97}\text{Zr}$ , $E\approx 2.5$ GeV; measured yields; $^{26}\text{Al}(n, \alpha)$ , $^{197}\text{Au}(n, \gamma)$ , $^{197}\text{Au}(n, 2n)$ , $^{197}\text{Au}(n, 4n)$ , $E$ not given; measured radial distributions of production rates of daughter nuclei; $^{89}\text{Y}(n, 2n)$ , $^{89}\text{Y}(n, 3n)$ , $^{89}\text{Y}(n, 4n)$ , $E$ not given; measured production rates of daughter nuclei. activation detector for transmutation setup; $^{238}\text{U}$ , $\text{Pb}(n, f)$ , $^{238}\text{U}$ , $\text{Pb}(n, \gamma)$ , $E$ not given; measured $\sigma$ . REPT JINR-E1-2007-7, Krivopustov |
| $^{126}\text{Xe}$ | 2006HE29 | ATOMIC MASSES $^{126,129,130,131,136}\text{Xe}$ ; measured mass excesses, and relative abundances of different charge states of $^{131}\text{Xe}$ using the ISOLTRAP Penning trap method. JOUR IMSPF 251 131  |

**A=127**

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| $^{127}\text{Sn}$ | 2008L007 | NUCLEAR REACTIONS $^9\text{Be}(^{136}\text{Xe}, \text{X})$ , $E=600$ MeV / nucleon; $^9\text{Be}(^{238}\text{U}, \text{X})$ , $E=750$ MeV / nucleon; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, multipolarities. $^{125,127,129}\text{Sn}$ ; deduced levels, J, $\pi$ , half-lives of sub- <i>us</i> states, B(E2). $^{124,125,126,127,128,129,130}\text{Sn}$ ; analyzed B(E2). JOUR PRVCA 77 064313 |
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KEYNUMBERS AND KEYWORDS

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**A=128**

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| $^{128}\text{Sn}$ | 2008L007 | NUCLEAR REACTIONS $^9\text{Be}(^{136}\text{Xe}, \text{X})$ , $E=600$ MeV / nucleon; $^9\text{Be}(^{238}\text{U}, \text{X})$ , $E=750$ MeV / nucleon; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, multipolarities. $^{125,127,129}\text{Sn}$ ; deduced levels, $J$ , $\pi$ , half-lives of sub- $\nu s$ states, $B(E2)$ . $^{124,125,126,127,128,129,130}\text{Sn}$ ; analyzed $B(E2)$ . JOUR PRVCA 77 064313   |
| $^{128}\text{Sb}$ | 2007KRZY | NUCLEAR REACTIONS $^{127}\text{I}(\text{d}, \text{X})^{111}\text{In}$ / $^{119}\text{Te}$ / $^{121}\text{I}$ / $^{122}\text{Sb}$ / $^{123}\text{I}$ / $^{124}\text{I}$ / $^{125}\text{Xe}$ / $^{126}\text{I}$ , $E=2.52$ GeV; measured yields; $^{129}\text{I}(\text{d}, \text{X})^{121}\text{Te}$ / $^{124}\text{I}$ / $^{126}\text{I}$ / $^{130}\text{I}$ , $E=2.52$ GeV; measured yields; $^{237}\text{Np}(\text{d}, \text{X})^{97}\text{Zr}$ / $^{99}\text{Mo}$ / $^{132}\text{Te}$ / $^{133}\text{I}$ / $^{238}\text{Np}$ , $E=2.52$ GeV; measured yields; $^{238}\text{Pu}(\text{d}, \text{X})^{97}\text{Zr}$ / $^{135}\text{Xe}$ , $E\approx 2.5$ GeV; measured yields; $^{239}\text{Pu}(\text{d}, \text{X})^{103}\text{Ru}$ / $^{128}\text{Sb}$ / $^{132}\text{Te}$ / $^{133}\text{I}$ / $^{135}\text{I}$ / $^{135}\text{Xe}$ / $^{140}\text{Ba}$ / $^{143}\text{Ce}$ / $^{91}\text{Sr}$ / $^{97}\text{Zr}$ , $E\approx 2.5$ GeV; measured yields; $^{26}\text{Al}(\text{n}, \alpha)$ , $^{197}\text{Au}(\text{n}, \gamma)$ , $^{197}\text{Au}(\text{n}, 2\text{n})$ , $^{197}\text{Au}(\text{n}, 4\text{n})$ , $E$ not given; measured radial distributions of production rates of daughter nuclei; $^{89}\text{Y}(\text{n}, 2\text{n})$ , $^{89}\text{Y}(\text{n}, 3\text{n})$ , $^{89}\text{Y}(\text{n}, 4\text{n})$ , $E$ not given; measured production rates of daughter nuclei. activation detector for transmutation setup; $^{238}\text{U}$ , $\text{Pb}(\text{n}, \text{f})$ , $^{238}\text{U}$ , $\text{Pb}(\text{n}, \gamma)$ , $E$ not given; measured $\sigma$ . REPT JINR-E1-2007-7, Krivopustov |
| $^{128}\text{Xe}$ | 2008KOZX | NUCLEAR REACTIONS $\text{Fe}(^{128}\text{Xe}, ^{128}\text{Xe}')$ , $E=525$ MeV; measured $E\gamma$ , $I\gamma$ , (recoil) $\gamma$ -coin. $^{128}\text{Xe}$ ; deduced lifetimes for $2^+$ states. Coulex-Plunger technique. CONF Crete(FINUSTAR 2), Proc.P377, Konstantinopoulos  |

**A=129**

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| $^{129}\text{Sn}$ | 2008L007 | NUCLEAR REACTIONS $^9\text{Be}(^{136}\text{Xe}, \text{X})$ , $E=600$ MeV / nucleon; $^9\text{Be}(^{238}\text{U}, \text{X})$ , $E=750$ MeV / nucleon; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, multipolarities. $^{125,127,129}\text{Sn}$ ; deduced levels, $J$ , $\pi$ , half-lives of sub- $\nu s$ states, $B(E2)$ . $^{124,125,126,127,128,129,130}\text{Sn}$ ; analyzed $B(E2)$ . JOUR PRVCA 77 064313 |
| $^{129}\text{Xe}$ | 2006HE29 | ATOMIC MASSES $^{126,129,130,131,136}\text{Xe}$ ; measured mass excesses, and relative abundances of different charge states of $^{131}\text{Xe}$ using the ISOLTRAP Penning trap method. JOUR IMSPF 251 131  |

**A=130**

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| $^{130}\text{Sn}$ | 2008L007 | NUCLEAR REACTIONS $^9\text{Be}(^{136}\text{Xe}, \text{X})$ , $E=600$ MeV / nucleon; $^9\text{Be}(^{238}\text{U}, \text{X})$ , $E=750$ MeV / nucleon; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, multipolarities. $^{125,127,129}\text{Sn}$ ; deduced levels, $J$ , $\pi$ , half-lives of sub- $\nu s$ states, $B(E2)$ . $^{124,125,126,127,128,129,130}\text{Sn}$ ; analyzed $B(E2)$ . JOUR PRVCA 77 064313 |
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KEYNUMBERS AND KEYWORDS

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**A=130 (continued)**

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| $^{130}\text{I}$  | 2007KRZY | NUCLEAR REACTIONS $^{127}\text{I}(\text{d}, \text{X})^{111}\text{In} / ^{119}\text{Te} / ^{121}\text{I} / ^{122}\text{Sb} / ^{123}\text{I} / ^{124}\text{I} / ^{125}\text{Xe} / ^{126}\text{I}$ , E=2.52 GeV; measured yields; $^{129}\text{I}(\text{d}, \text{X})^{121}\text{Te} / ^{124}\text{I} / ^{126}\text{I} / ^{130}\text{I}$ , E=2.52 GeV; measured yields; $^{237}\text{Np}(\text{d}, \text{X})^{97}\text{Zr} / ^{99}\text{Mo} / ^{132}\text{Te} / ^{133}\text{I} / ^{238}\text{Np}$ , E=2.52 GeV; measured yields; $^{238}\text{Pu}(\text{d}, \text{X})^{97}\text{Zr} / ^{135}\text{Xe}$ , E $\approx$ 2.5 GeV; measured yields; $^{239}\text{Pu}(\text{d}, \text{X})^{103}\text{Ru} / ^{128}\text{Sb} / ^{132}\text{Te} / ^{133}\text{I} / ^{135}\text{I} / ^{135}\text{Xe} / ^{140}\text{Ba} / ^{143}\text{Ce} / ^{91}\text{Sr} / ^{97}\text{Zr}$ , E $\approx$ 2.5 GeV; measured yields; $^{26}\text{Al}(\text{n}, \alpha)$ , $^{197}\text{Au}(\text{n}, \gamma)$ , $^{197}\text{Au}(\text{n}, 2\text{n})$ , $^{197}\text{Au}(\text{n}, 4\text{n})$ , E not given; measured radial distributions of production rates of daughter nuclei; $^{89}\text{Y}(\text{n}, 2\text{n})$ , $^{89}\text{Y}(\text{n}, 3\text{n})$ , $^{89}\text{Y}(\text{n}, 4\text{n})$ , E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; $^{238}\text{U}$ , $\text{Pb}(\text{n}, \text{f})$ , $^{238}\text{U}$ , $\text{Pb}(\text{n}, \gamma)$ , E not given; measured $\sigma$ . REPT JINR-E1-2007-7, Krivopustov |
| $^{130}\text{Xe}$ | 2006HE29 | ATOMIC MASSES $^{126,129,130,131,136}\text{Xe}$ ; measured mass excesses, and relative abundances of different charge states of $^{131}\text{Xe}$ using the ISOLTRAP Penning trap method. JOUR IMSPF 251 131  |
| $^{130}\text{Ba}$ | 2008SU14 | NUCLEAR REACTIONS $^{132}\text{Ba}(\text{p}, \text{t})$ , E=25 MeV; measured triton spectra, $\sigma(\text{E}, \theta)$ . $^{130}\text{Ba}$ deduced levels, J, $\pi$ , configurations. DWBA analysis. Comparison with interacting boson model predictions. $^{122}\text{Te}(\text{p}, \text{t})$ , E=25 MeV; measured triton spectra; deduced Q-value. JOUR ZAANE 36 243  |

**A=131**

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| $^{131}\text{Xe}$ | 2006HE29 | ATOMIC MASSES $^{126,129,130,131,136}\text{Xe}$ ; measured mass excesses, and relative abundances of different charge states of $^{131}\text{Xe}$ using the ISOLTRAP Penning trap method. JOUR IMSPF 251 131 |
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**A=132**

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| $^{132}\text{Te}$ | 2007KRZY | NUCLEAR REACTIONS $^{127}\text{I}(\text{d}, \text{X})^{111}\text{In} / ^{119}\text{Te} / ^{121}\text{I} / ^{122}\text{Sb} / ^{123}\text{I} / ^{124}\text{I} / ^{125}\text{Xe} / ^{126}\text{I}$ , E=2.52 GeV; measured yields; $^{129}\text{I}(\text{d}, \text{X})^{121}\text{Te} / ^{124}\text{I} / ^{126}\text{I} / ^{130}\text{I}$ , E=2.52 GeV; measured yields; $^{237}\text{Np}(\text{d}, \text{X})^{97}\text{Zr} / ^{99}\text{Mo} / ^{132}\text{Te} / ^{133}\text{I} / ^{238}\text{Np}$ , E=2.52 GeV; measured yields; $^{238}\text{Pu}(\text{d}, \text{X})^{97}\text{Zr} / ^{135}\text{Xe}$ , E $\approx$ 2.5 GeV; measured yields; $^{239}\text{Pu}(\text{d}, \text{X})^{103}\text{Ru} / ^{128}\text{Sb} / ^{132}\text{Te} / ^{133}\text{I} / ^{135}\text{I} / ^{135}\text{Xe} / ^{140}\text{Ba} / ^{143}\text{Ce} / ^{91}\text{Sr} / ^{97}\text{Zr}$ , E $\approx$ 2.5 GeV; measured yields; $^{26}\text{Al}(\text{n}, \alpha)$ , $^{197}\text{Au}(\text{n}, \gamma)$ , $^{197}\text{Au}(\text{n}, 2\text{n})$ , $^{197}\text{Au}(\text{n}, 4\text{n})$ , E not given; measured radial distributions of production rates of daughter nuclei; $^{89}\text{Y}(\text{n}, 2\text{n})$ , $^{89}\text{Y}(\text{n}, 3\text{n})$ , $^{89}\text{Y}(\text{n}, 4\text{n})$ , E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; $^{238}\text{U}$ , $\text{Pb}(\text{n}, \text{f})$ , $^{238}\text{U}$ , $\text{Pb}(\text{n}, \gamma)$ , E not given; measured $\sigma$ . REPT JINR-E1-2007-7, Krivopustov |
| $^{132}\text{Xe}$ | 2008RE07 | NUCLEAR REACTIONS $^{20}\text{Ne}$ , $^{27}\text{Al}$ , $^{40}\text{Ar}$ , $^{84}\text{Kr}$ , $^{131,132}\text{Xe}$ , $^{208}\text{Pb}$ , $^{235,238}\text{U}(\text{n}, \gamma)$ , E=low; measured $\text{E}\gamma$ , $\text{I}\gamma$ using cold neutron source and an "invisible container". JOUR JRNCD 276 825   |

**A=133**

- <sup>133</sup>I      2007KRZY      NUCLEAR REACTIONS <sup>127</sup>I(d, X)<sup>111</sup>In / <sup>119</sup>Te / <sup>121</sup>I / <sup>122</sup>Sb / <sup>123</sup>I / <sup>124</sup>I / <sup>125</sup>Xe / <sup>126</sup>I, E=2.52 GeV; measured yields; <sup>129</sup>I(d, X)<sup>121</sup>Te / <sup>124</sup>I / <sup>126</sup>I / <sup>130</sup>I, E=2.52 GeV; measured yields; <sup>237</sup>Np(d, X)<sup>97</sup>Zr / <sup>99</sup>Mo / <sup>132</sup>Te / <sup>133</sup>I / <sup>238</sup>Np, E=2.52 GeV; measured yields; <sup>238</sup>Pu(d, X)<sup>97</sup>Zr / <sup>135</sup>Xe, E≈2.5 GeV; measured yields; <sup>239</sup>Pu(d, X)<sup>103</sup>Ru / <sup>128</sup>Sb / <sup>132</sup>Te / <sup>133</sup>I / <sup>135</sup>I / <sup>135</sup>Xe / <sup>140</sup>Ba / <sup>143</sup>Ce / <sup>91</sup>Sr / <sup>97</sup>Zr, E≈2.5 GeV; measured yields; <sup>26</sup>Al(n, α), <sup>197</sup>Au(n, γ), <sup>197</sup>Au(n, 2n), <sup>197</sup>Au(n, 4n), E not given; measured radial distributions of production rates of daughter nuclei; <sup>89</sup>Y(n, 2n), <sup>89</sup>Y(n, 3n), <sup>89</sup>Y(n, 4n), E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; <sup>238</sup>U, Pb(n, f), <sup>238</sup>U, Pb(n, γ), E not given; measured σ. REPT JINR-E1-2007-7,Krivopustov
- <sup>133</sup>Xe      2008RE07      NUCLEAR REACTIONS <sup>20</sup>Ne, <sup>27</sup>Al, <sup>40</sup>Ar, <sup>84</sup>Kr, <sup>131,132</sup>Xe, <sup>208</sup>Pb, <sup>235,238</sup>U(n, γ), E=low; measured Eγ, Iγ using cold neutron source and an "invisible container". JOUR JRNCD 276 825
- <sup>133</sup>Cs      2008SI19      RADIOACTIVITY <sup>133</sup>Ba(EC); measured Eγ, Iγ, (electron)γ-coin; deduced source activity. JOUR ARISE 66 929
- <sup>133</sup>Ba      2008SI19      RADIOACTIVITY <sup>133</sup>Ba(EC); measured Eγ, Iγ, (electron)γ-coin; deduced source activity. JOUR ARISE 66 929

**A=134**

- <sup>134</sup>Nd      2008LIZX      NUCLEAR REACTIONS <sup>114</sup>Sn(<sup>32</sup>S, 2n2p), E=160 MeV; <sup>114</sup>Cd(<sup>28</sup>Si, 4nα), E=155 MeV; measured Eγ, Iγ, lifetimes using the DSAM. <sup>142</sup>Gd, <sup>134</sup>Nd; deduced levels, J, π, lifetimes, B(E2). CONF Crete(FINUSTAR 2),Proc.P383,Lieder

**A=135**

- <sup>135</sup>I      2007KRZY      NUCLEAR REACTIONS <sup>127</sup>I(d, X)<sup>111</sup>In / <sup>119</sup>Te / <sup>121</sup>I / <sup>122</sup>Sb / <sup>123</sup>I / <sup>124</sup>I / <sup>125</sup>Xe / <sup>126</sup>I, E=2.52 GeV; measured yields; <sup>129</sup>I(d, X)<sup>121</sup>Te / <sup>124</sup>I / <sup>126</sup>I / <sup>130</sup>I, E=2.52 GeV; measured yields; <sup>237</sup>Np(d, X)<sup>97</sup>Zr / <sup>99</sup>Mo / <sup>132</sup>Te / <sup>133</sup>I / <sup>238</sup>Np, E=2.52 GeV; measured yields; <sup>238</sup>Pu(d, X)<sup>97</sup>Zr / <sup>135</sup>Xe, E≈2.5 GeV; measured yields; <sup>239</sup>Pu(d, X)<sup>103</sup>Ru / <sup>128</sup>Sb / <sup>132</sup>Te / <sup>133</sup>I / <sup>135</sup>I / <sup>135</sup>Xe / <sup>140</sup>Ba / <sup>143</sup>Ce / <sup>91</sup>Sr / <sup>97</sup>Zr, E≈2.5 GeV; measured yields; <sup>26</sup>Al(n, α), <sup>197</sup>Au(n, γ), <sup>197</sup>Au(n, 2n), <sup>197</sup>Au(n, 4n), E not given; measured radial distributions of production rates of daughter nuclei; <sup>89</sup>Y(n, 2n), <sup>89</sup>Y(n, 3n), <sup>89</sup>Y(n, 4n), E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; <sup>238</sup>U, Pb(n, f), <sup>238</sup>U, Pb(n, γ), E not given; measured σ. REPT JINR-E1-2007-7,Krivopustov



KEYNUMBERS AND KEYWORDS

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**A=135 (continued)**

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|-------------------|----------|---|
| $^{135}\text{Xe}$ | 2007KRZY | NUCLEAR REACTIONS $^{127}\text{I}(\text{d}, \text{X})^{111}\text{In}$ / $^{119}\text{Te}$ / $^{121}\text{I}$ / $^{122}\text{Sb}$ / $^{123}\text{I}$ / $^{124}\text{I}$ / $^{125}\text{Xe}$ / $^{126}\text{I}$ , E=2.52 GeV; measured yields; $^{129}\text{I}(\text{d}, \text{X})^{121}\text{Te}$ / $^{124}\text{I}$ / $^{126}\text{I}$ / $^{130}\text{I}$ , E=2.52 GeV; measured yields; $^{237}\text{Np}(\text{d}, \text{X})^{97}\text{Zr}$ / $^{99}\text{Mo}$ / $^{132}\text{Te}$ / $^{133}\text{I}$ / $^{238}\text{Np}$ , E=2.52 GeV; measured yields; $^{238}\text{Pu}(\text{d}, \text{X})^{97}\text{Zr}$ / $^{135}\text{Xe}$ , E $\approx$ 2.5 GeV; measured yields; $^{239}\text{Pu}(\text{d}, \text{X})^{103}\text{Ru}$ / $^{128}\text{Sb}$ / $^{132}\text{Te}$ / $^{133}\text{I}$ / $^{135}\text{I}$ / $^{135}\text{Xe}$ / $^{140}\text{Ba}$ / $^{143}\text{Ce}$ / $^{91}\text{Sr}$ / $^{97}\text{Zr}$ , E $\approx$ 2.5 GeV; measured yields; $^{26}\text{Al}(\text{n}, \alpha)$ , $^{197}\text{Au}(\text{n}, \gamma)$ , $^{197}\text{Au}(\text{n}, 2\text{n})$ , $^{197}\text{Au}(\text{n}, 4\text{n})$ , E not given; measured radial distributions of production rates of daughter nuclei; $^{89}\text{Y}(\text{n}, 2\text{n})$ , $^{89}\text{Y}(\text{n}, 3\text{n})$ , $^{89}\text{Y}(\text{n}, 4\text{n})$ , E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; $^{238}\text{U}$ , $\text{Pb}(\text{n}, \text{f})$ , $^{238}\text{U}$ , $\text{Pb}(\text{n}, \gamma)$ , E not given; measured $\sigma$ . REPT JINR-E1-2007-7, Krivopustov |
| $^{135}\text{Ce}$ | 2008BH10 | NUCLEAR REACTIONS $^{130}\text{Te}(^{12}\text{C}, 5\text{n})$ , E=65 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular correlations, linear polarization. $^{137}\text{Ce}$ ; deduced levels, J, $\pi$ , band configurations; calculated potential energy surfaces. $^{135,136,137}\text{Ce}$ ; systematics of kinematic moments of inertia. JOUR PRVCA 78 024304   |

**A=136**

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|-------------------|----------|---|
| $^{136}\text{Xe}$ | 2006HE29 | ATOMIC MASSES $^{126,129,130,131,136}\text{Xe}$ ; measured mass excesses, and relative abundances of different charge states of $^{131}\text{Xe}$ using the ISOLTRAP Penning trap method. JOUR IMSPF 251 131  |
| $^{136}\text{Ce}$ | 2008BH10 | NUCLEAR REACTIONS $^{130}\text{Te}(^{12}\text{C}, 5\text{n})$ , E=65 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular correlations, linear polarization. $^{137}\text{Ce}$ ; deduced levels, J, $\pi$ , band configurations; calculated potential energy surfaces. $^{135,136,137}\text{Ce}$ ; systematics of kinematic moments of inertia. JOUR PRVCA 78 024304 |

**A=137**

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|-------------------|----------|---|
| $^{137}\text{Cs}$ | 2008HI08 | RADIOACTIVITY $^{137}\text{Cs}(\beta^-)$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin from sea water sample to determine concentration. JOUR JRNC D 276 795  |
|                   | 2008P005 | RADIOACTIVITY $^{60}\text{Co}$ , $^{137}\text{Cs}(\beta^-)$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. Effect of shielding, (anti-)coincidence techniques and depth on detector background discussed. JOUR JRNC D 276 771                     |
|                   | 2008SY01 | RADIOACTIVITY $^{60}\text{Co}$ , $^{137}\text{Cs}(\beta^-)$ , $^{40}\text{K}(\beta^+)$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. Effect of shielding and (anti-)coincidence techniques on detector background discussed. JOUR JRNC D 276 779 |
| $^{137}\text{Ba}$ | 2008HI08 | RADIOACTIVITY $^{137}\text{Cs}(\beta^-)$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin from sea water sample to determine concentration. JOUR JRNC D 276 795  |
|                   | 2008P005 | RADIOACTIVITY $^{60}\text{Co}$ , $^{137}\text{Cs}(\beta^-)$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. Effect of shielding, (anti-)coincidence techniques and depth on detector background discussed. JOUR JRNC D 276 771                     |
|                   | 2008SY01 | RADIOACTIVITY $^{60}\text{Co}$ , $^{137}\text{Cs}(\beta^-)$ , $^{40}\text{K}(\beta^+)$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. Effect of shielding and (anti-)coincidence techniques on detector background discussed. JOUR JRNC D 276 779 |

KEYNUMBERS AND KEYWORDS

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**A=137 (continued)**

<sup>137</sup>Ce      2008BH10      NUCLEAR REACTIONS <sup>130</sup>Te(<sup>12</sup>C, 5n), E=65 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, angular correlations, linear polarization. <sup>137</sup>Ce; deduced levels, J,  $\pi$ , band configurations; calculated potential energy surfaces. <sup>135,136,137</sup>Ce; systematics of kinematic moments of inertia. JOUR PRVCA 78 024304

**A=138**

<sup>138</sup>Xe      2008KRZZ      NUCLEAR REACTIONS <sup>58</sup>Ni(<sup>122</sup>Cd, <sup>122</sup>Cd'), (<sup>124</sup>Cd, <sup>124</sup>Cd'), (<sup>126</sup>Cd, <sup>126</sup>Cd'), (<sup>138</sup>Xe, <sup>138</sup>Xe'), (<sup>140</sup>Xe, <sup>140</sup>Xe'), (<sup>142</sup>Xe, <sup>142</sup>Xe'), (<sup>144</sup>Xe, <sup>144</sup>Xe'), (<sup>140</sup>Ba, <sup>140</sup>Ba'), E=2.85 MeV / nucleon; measured E $\gamma$ , I $\gamma$ , g-factor; <sup>122,124,126</sup>Cd, <sup>138,140,142,144</sup>Xe, <sup>140</sup>Ba; deduced B(E2). Compared results to existing data, systematics and model calculations. CONF Crete(FINUSTAR 2),Proc.P84,Kroll

**A=139**

<sup>139</sup>Ba      2008AG10      NUCLEAR REACTIONS <sup>89</sup>Y, <sup>107,109</sup>Ag(n, n'), E=14.6 MeV; <sup>89</sup>Y(n, 2n), E=14.6 MeV; <sup>107,109</sup>Ag, <sup>139</sup>La(n, p), E=14.6 MeV; <sup>89</sup>Y(n,  $\alpha$ ), E=14.6 MeV; measured E $\gamma$ , I $\gamma$ , cross sections using the activation technique. Compared results to model calculations. JOUR ANEND 35 1713

**A=140**

<sup>140</sup>Xe      2008KRZZ      NUCLEAR REACTIONS <sup>58</sup>Ni(<sup>122</sup>Cd, <sup>122</sup>Cd'), (<sup>124</sup>Cd, <sup>124</sup>Cd'), (<sup>126</sup>Cd, <sup>126</sup>Cd'), (<sup>138</sup>Xe, <sup>138</sup>Xe'), (<sup>140</sup>Xe, <sup>140</sup>Xe'), (<sup>142</sup>Xe, <sup>142</sup>Xe'), (<sup>144</sup>Xe, <sup>144</sup>Xe'), (<sup>140</sup>Ba, <sup>140</sup>Ba'), E=2.85 MeV / nucleon; measured E $\gamma$ , I $\gamma$ , g-factor; <sup>122,124,126</sup>Cd, <sup>138,140,142,144</sup>Xe, <sup>140</sup>Ba; deduced B(E2). Compared results to existing data, systematics and model calculations. CONF Crete(FINUSTAR 2),Proc.P84,Kroll

<sup>140</sup>Ba      2007KRZY      NUCLEAR REACTIONS <sup>127</sup>I(d, X)<sup>111</sup>In / <sup>119</sup>Te / <sup>121</sup>I / <sup>122</sup>Sb / <sup>123</sup>I / <sup>124</sup>I / <sup>125</sup>Xe / <sup>126</sup>I, E=2.52 GeV; measured yields; <sup>129</sup>I(d, X)<sup>121</sup>Te / <sup>124</sup>I / <sup>126</sup>I / <sup>130</sup>I, E=2.52 GeV; measured yields; <sup>237</sup>Np(d, X)<sup>97</sup>Zr / <sup>99</sup>Mo / <sup>132</sup>Te / <sup>133</sup>I / <sup>238</sup>Np, E=2.52 GeV; measured yields; <sup>238</sup>Pu(d, X)<sup>97</sup>Zr / <sup>135</sup>Xe, E $\approx$ 2.5 GeV; measured yields; <sup>239</sup>Pu(d, X)<sup>103</sup>Ru / <sup>128</sup>Sb / <sup>132</sup>Te / <sup>133</sup>I / <sup>135</sup>I / <sup>135</sup>Xe / <sup>140</sup>Ba / <sup>143</sup>Ce / <sup>91</sup>Sr / <sup>97</sup>Zr, E $\approx$ 2.5 GeV; measured yields; <sup>26</sup>Al(n,  $\alpha$ ), <sup>197</sup>Au(n,  $\gamma$ ), <sup>197</sup>Au(n, 2n), <sup>197</sup>Au(n, 4n), E not given; measured radial distributions of production rates of daughter nuclei; <sup>89</sup>Y(n, 2n), <sup>89</sup>Y(n, 3n), <sup>89</sup>Y(n, 4n), E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; <sup>238</sup>U, Pb(n, f), <sup>238</sup>U, Pb(n,  $\gamma$ ), E not given; measured  $\sigma$ . REPT JINR-E1-2007-7,Krivopustov

KEYNUMBERS AND KEYWORDS

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**A=140 (continued)**

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|-------------------|----------|--|
|                   | 2008KRZZ | NUCLEAR REACTIONS $^{58}\text{Ni}(^{122}\text{Cd}, ^{122}\text{Cd}')$ , $(^{124}\text{Cd}, ^{124}\text{Cd}')$ , $(^{126}\text{Cd}, ^{126}\text{Cd}')$ , $(^{138}\text{Xe}, ^{138}\text{Xe}')$ , $(^{140}\text{Xe}, ^{140}\text{Xe}')$ , $(^{142}\text{Xe}, ^{142}\text{Xe}')$ , $(^{144}\text{Xe}, ^{144}\text{Xe}')$ , $(^{140}\text{Ba}, ^{140}\text{Ba}')$ , E=2.85 MeV / nucleon; measured $E\gamma$ , $I\gamma$ , g-factor; $^{122,124,126}\text{Cd}$ , $^{138,140,142,144}\text{Xe}$ , $^{140}\text{Ba}$ ; deduced B(E2). Compared results to existing data, systematics and model calculations. CONF Crete(FINUSTAR 2),Proc.P84,Kroll |
| $^{140}\text{Ce}$ | 2006B041 | ATOMIC MASSES $^{140}\text{Pr}$ , $^{140}\text{Ce}$ , $^{147,147m}\text{Dy}$ ; A=144-207; reviewed Shottky and mass spectra. JOUR IMSPF 251 212  |
| $^{140}\text{Pr}$ | 2006B041 | ATOMIC MASSES $^{140}\text{Pr}$ , $^{140}\text{Ce}$ , $^{147,147m}\text{Dy}$ ; A=144-207; reviewed Shottky and mass spectra. JOUR IMSPF 251 212  |
|                   | 2006B041 | RADIOACTIVITY $^{140}\text{Pr}$ , $^{207}\text{Tl}$ , $^{235}\text{Ac}(\beta^-)$ ; measured half-life of bare and few-electron ions. JOUR IMSPF 251 212  |
| $^{140}\text{Nd}$ | 2006B041 | RADIOACTIVITY $^{140}\text{Pr}$ , $^{207}\text{Tl}$ , $^{235}\text{Ac}(\beta^-)$ ; measured half-life of bare and few-electron ions. JOUR IMSPF 251 212  |

**A=141**

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|-------------------|----------|---|
| $^{141}\text{Ba}$ | 2006SA56 | ATOMIC MASSES $^{141,142,143,144,145,146,147}\text{Ba}$ , $^{143,144,145,146,147,148}\text{La}$ , $^{145,146,147,148,149,150,151}\text{Ce}$ , $^{148,149,150,151,152,153}\text{Pr}$ ; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of $^{252}\text{Cf}$ . Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252 |
|-------------------|----------|---|

**A=142**

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|-------------------|----------|--|
| $^{142}\text{Xe}$ | 2008KRZZ | NUCLEAR REACTIONS $^{58}\text{Ni}(^{122}\text{Cd}, ^{122}\text{Cd}')$ , $(^{124}\text{Cd}, ^{124}\text{Cd}')$ , $(^{126}\text{Cd}, ^{126}\text{Cd}')$ , $(^{138}\text{Xe}, ^{138}\text{Xe}')$ , $(^{140}\text{Xe}, ^{140}\text{Xe}')$ , $(^{142}\text{Xe}, ^{142}\text{Xe}')$ , $(^{144}\text{Xe}, ^{144}\text{Xe}')$ , $(^{140}\text{Ba}, ^{140}\text{Ba}')$ , E=2.85 MeV / nucleon; measured $E\gamma$ , $I\gamma$ , g-factor; $^{122,124,126}\text{Cd}$ , $^{138,140,142,144}\text{Xe}$ , $^{140}\text{Ba}$ ; deduced B(E2). Compared results to existing data, systematics and model calculations. CONF Crete(FINUSTAR 2),Proc.P84,Kroll |
| $^{142}\text{Ba}$ | 2006SA56 | ATOMIC MASSES $^{141,142,143,144,145,146,147}\text{Ba}$ , $^{143,144,145,146,147,148}\text{La}$ , $^{145,146,147,148,149,150,151}\text{Ce}$ , $^{148,149,150,151,152,153}\text{Pr}$ ; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of $^{252}\text{Cf}$ . Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252  |
| $^{142}\text{Eu}$ | 2008LIZZ | NUCLEAR REACTIONS $^{97}\text{Mo}(^{51}\text{V}, \text{xny}\rho\alpha)^{142}\text{Eu}$ , E=238 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, $\gamma$ multiplicity distributions. CONF Crete(FINUSTAR 2),Proc.P26,Lieder   |
| $^{142}\text{Gd}$ | 2008LIZX | NUCLEAR REACTIONS $^{114}\text{Sn}(^{32}\text{S}, 2n2p)$ , E=160 MeV; $^{114}\text{Cd}(^{28}\text{Si}, 4n\alpha)$ , E=155 MeV; measured $E\gamma$ , $I\gamma$ , lifetimes using the DSAM. $^{142}\text{Gd}$ , $^{134}\text{Nd}$ ; deduced levels, J, $\pi$ , lifetimes, B(E2). CONF Crete(FINUSTAR 2),Proc.P383,Lieder   |

KEYNUMBERS AND KEYWORDS

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**A=142 (continued)**

<sup>142</sup>Ho      2008CUZZ      NUCLEAR REACTIONS <sup>92</sup>Mo(<sup>54</sup>Fe, 3np); measured E $\gamma$ , I $\gamma$ , time distributions of delayed  $\gamma$  rays. CONF Crete(FINUSTAR 2),Proc.P220,Cullen

**A=143**

<sup>143</sup>Ba      2006SA56      ATOMIC MASSES <sup>141,142,143,144,145,146,147</sup>Ba, <sup>143,144,145,146,147,148</sup>La, <sup>145,146,147,148,149,150,151</sup>Ce, <sup>148,149,150,151,152,153</sup>Pr; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of <sup>252</sup>Cf. Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252

<sup>143</sup>La      2006SA56      ATOMIC MASSES <sup>141,142,143,144,145,146,147</sup>Ba, <sup>143,144,145,146,147,148</sup>La, <sup>145,146,147,148,149,150,151</sup>Ce, <sup>148,149,150,151,152,153</sup>Pr; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of <sup>252</sup>Cf. Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252

<sup>143</sup>Ce      2007KRZY      NUCLEAR REACTIONS <sup>127</sup>I(d, X)<sup>111</sup>In / <sup>119</sup>Te / <sup>121</sup>I / <sup>122</sup>Sb / <sup>123</sup>I / <sup>124</sup>I / <sup>125</sup>Xe / <sup>126</sup>I, E=2.52 GeV; measured yields; <sup>129</sup>I(d, X)<sup>121</sup>Te / <sup>124</sup>I / <sup>126</sup>I / <sup>130</sup>I, E=2.52 GeV; measured yields; <sup>237</sup>Np(d, X)<sup>97</sup>Zr / <sup>99</sup>Mo / <sup>132</sup>Te / <sup>133</sup>I / <sup>238</sup>Np, E=2.52 GeV; measured yields; <sup>238</sup>Pu(d, X)<sup>97</sup>Zr / <sup>135</sup>Xe, E $\approx$ 2.5 GeV; measured yields; <sup>239</sup>Pu(d, X)<sup>103</sup>Ru / <sup>128</sup>Sb / <sup>132</sup>Te / <sup>133</sup>I / <sup>135</sup>I / <sup>135</sup>Xe / <sup>140</sup>Ba / <sup>143</sup>Ce / <sup>91</sup>Sr / <sup>97</sup>Zr, E $\approx$ 2.5 GeV; measured yields; <sup>26</sup>Al(n,  $\alpha$ ), <sup>197</sup>Au(n,  $\gamma$ ), <sup>197</sup>Au(n, 2n), <sup>197</sup>Au(n, 4n), E not given; measured radial distributions of production rates of daughter nuclei; <sup>89</sup>Y(n, 2n), <sup>89</sup>Y(n, 3n), <sup>89</sup>Y(n, 4n), E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; <sup>238</sup>U, Pb(n, f), <sup>238</sup>U, Pb(n,  $\gamma$ ), E not given; measured  $\sigma$ . REPT JINR-E1-2007-7,Krivopustov

**A=144**

<sup>144</sup>Xe      2008KRZZ      NUCLEAR REACTIONS <sup>58</sup>Ni(<sup>122</sup>Cd, <sup>122</sup>Cd'), (<sup>124</sup>Cd, <sup>124</sup>Cd'), (<sup>126</sup>Cd, <sup>126</sup>Cd'), (<sup>138</sup>Xe, <sup>138</sup>Xe'), (<sup>140</sup>Xe, <sup>140</sup>Xe'), (<sup>142</sup>Xe, <sup>142</sup>Xe'), (<sup>144</sup>Xe, <sup>144</sup>Xe'), (<sup>140</sup>Ba, <sup>140</sup>Ba'), E=2.85 MeV / nucleon; measured E $\gamma$ , I $\gamma$ , g-factor; <sup>122,124,126</sup>Cd, <sup>138,140,142,144</sup>Xe, <sup>140</sup>Ba; deduced B(E2). Compared results to existing data, systematics and model calculations. CONF Crete(FINUSTAR 2),Proc.P84,Kroll

<sup>144</sup>Ba      2006SA56      ATOMIC MASSES <sup>141,142,143,144,145,146,147</sup>Ba, <sup>143,144,145,146,147,148</sup>La, <sup>145,146,147,148,149,150,151</sup>Ce, <sup>148,149,150,151,152,153</sup>Pr; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of <sup>252</sup>Cf. Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252

KEYNUMBERS AND KEYWORDS

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**A=144 (continued)**

<sup>144</sup>La      2006SA56      ATOMIC MASSES <sup>141,142,143,144,145,146,147</sup>Ba, <sup>143,144,145,146,147,148</sup>La, <sup>145,146,147,148,149,150,151</sup>Ce, <sup>148,149,150,151,152,153</sup>Pr; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of <sup>252</sup>Cf. Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252

**A=145**

<sup>145</sup>Ba      2006SA56      ATOMIC MASSES <sup>141,142,143,144,145,146,147</sup>Ba, <sup>143,144,145,146,147,148</sup>La, <sup>145,146,147,148,149,150,151</sup>Ce, <sup>148,149,150,151,152,153</sup>Pr; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of <sup>252</sup>Cf. Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252

<sup>145</sup>La      2006SA56      ATOMIC MASSES <sup>141,142,143,144,145,146,147</sup>Ba, <sup>143,144,145,146,147,148</sup>La, <sup>145,146,147,148,149,150,151</sup>Ce, <sup>148,149,150,151,152,153</sup>Pr; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of <sup>252</sup>Cf. Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252

<sup>145</sup>Ce      2006SA56      ATOMIC MASSES <sup>141,142,143,144,145,146,147</sup>Ba, <sup>143,144,145,146,147,148</sup>La, <sup>145,146,147,148,149,150,151</sup>Ce, <sup>148,149,150,151,152,153</sup>Pr; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of <sup>252</sup>Cf. Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252

**A=146**

<sup>146</sup>Ba      2006SA56      ATOMIC MASSES <sup>141,142,143,144,145,146,147</sup>Ba, <sup>143,144,145,146,147,148</sup>La, <sup>145,146,147,148,149,150,151</sup>Ce, <sup>148,149,150,151,152,153</sup>Pr; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of <sup>252</sup>Cf. Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252

<sup>146</sup>La      2006SA56      ATOMIC MASSES <sup>141,142,143,144,145,146,147</sup>Ba, <sup>143,144,145,146,147,148</sup>La, <sup>145,146,147,148,149,150,151</sup>Ce, <sup>148,149,150,151,152,153</sup>Pr; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of <sup>252</sup>Cf. Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252

KEYNUMBERS AND KEYWORDS

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**A=146 (continued)**

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| $^{146}\text{Ce}$ | 2006SA56 | ATOMIC MASSES $^{141,142,143,144,145,146,147}\text{Ba}$ , $^{143,144,145,146,147,148}\text{La}$ , $^{145,146,147,148,149,150,151}\text{Ce}$ , $^{148,149,150,151,152,153}\text{Pr}$ ; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of $^{252}\text{Cf}$ . Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252 |
| $^{146}\text{Sm}$ | 2008SIZX | NUCLEAR REACTIONS $^{147}\text{Sm}(^3\text{He}, \alpha)$ , $(^3\text{He}, ^3\text{He}'\gamma)$ , E=45 MeV; measured particle spectra, E $\gamma$ , I $\gamma$ ; deduced level densities, radiative strength functions. CONF Crete(FINUSTAR 2),Proc.P425,Siem  |
|                   | 2008SIZY | NUCLEAR REACTIONS $^{147}\text{Sm}$ , $^{164}\text{Dy}(^3\text{He}, ^3\text{He}')$ , E=45 MeV; $^{147}\text{Sm}$ , $^{164}\text{Dy}(^3\text{He}, \alpha\gamma)$ , E=45 MeV; measured E $\gamma$ , I $\gamma$ ; deduced level densities $\gamma$ strength functions. CONF Yosemite(CNR 2007) Proc.P65,Siem   |

**A=147**

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|-------------------|----------|---|
| $^{147}\text{Ba}$ | 2006SA56 | ATOMIC MASSES $^{141,142,143,144,145,146,147}\text{Ba}$ , $^{143,144,145,146,147,148}\text{La}$ , $^{145,146,147,148,149,150,151}\text{Ce}$ , $^{148,149,150,151,152,153}\text{Pr}$ ; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of $^{252}\text{Cf}$ . Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252 |
| $^{147}\text{La}$ | 2006SA56 | ATOMIC MASSES $^{141,142,143,144,145,146,147}\text{Ba}$ , $^{143,144,145,146,147,148}\text{La}$ , $^{145,146,147,148,149,150,151}\text{Ce}$ , $^{148,149,150,151,152,153}\text{Pr}$ ; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of $^{252}\text{Cf}$ . Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252 |
| $^{147}\text{Ce}$ | 2006SA56 | ATOMIC MASSES $^{141,142,143,144,145,146,147}\text{Ba}$ , $^{143,144,145,146,147,148}\text{La}$ , $^{145,146,147,148,149,150,151}\text{Ce}$ , $^{148,149,150,151,152,153}\text{Pr}$ ; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of $^{252}\text{Cf}$ . Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252 |
| $^{147}\text{Sm}$ | 2008SIZX | NUCLEAR REACTIONS $^{147}\text{Sm}(^3\text{He}, \alpha)$ , $(^3\text{He}, ^3\text{He}'\gamma)$ , E=45 MeV; measured particle spectra, E $\gamma$ , I $\gamma$ ; deduced level densities, radiative strength functions. CONF Crete(FINUSTAR 2),Proc.P425,Siem  |
|                   | 2008SIZY | NUCLEAR REACTIONS $^{147}\text{Sm}$ , $^{164}\text{Dy}(^3\text{He}, ^3\text{He}')$ , E=45 MeV; $^{147}\text{Sm}$ , $^{164}\text{Dy}(^3\text{He}, \alpha\gamma)$ , E=45 MeV; measured E $\gamma$ , I $\gamma$ ; deduced level densities $\gamma$ strength functions. CONF Yosemite(CNR 2007) Proc.P65,Siem   |
| $^{147}\text{Dy}$ | 2006B041 | ATOMIC MASSES $^{140}\text{Pr}$ , $^{140}\text{Ce}$ , $^{147,147m}\text{Dy}$ ; A=144-207; reviewed Shottky and mass spectra. JOUR IMSPF 251 212   |
| $^{147}\text{Ho}$ | 2006RA38 | ATOMIC MASSES $^{147,148}\text{Er}$ , $^{147}\text{Ho}$ ; measured masses and time of flight using the Penning-trap mass spectrometer SHIPTRAP. Nuclides produced at SHIP facility. JOUR IMSPF 251 146  |
| $^{147}\text{Er}$ | 2006RA38 | ATOMIC MASSES $^{147,148}\text{Er}$ , $^{147}\text{Ho}$ ; measured masses and time of flight using the Penning-trap mass spectrometer SHIPTRAP. Nuclides produced at SHIP facility. JOUR IMSPF 251 146  |

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KEYNUMBERS AND KEYWORDS

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**A=148**

- <sup>148</sup>La 2006SA56 ATOMIC MASSES <sup>141,142,143,144,145,146,147</sup>Ba, <sup>143,144,145,146,147,148</sup>La, <sup>145,146,147,148,149,150,151</sup>Ce, <sup>148,149,150,151,152,153</sup>Pr; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of <sup>252</sup>Cf. Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252
- <sup>148</sup>Ce 2006SA56 ATOMIC MASSES <sup>141,142,143,144,145,146,147</sup>Ba, <sup>143,144,145,146,147,148</sup>La, <sup>145,146,147,148,149,150,151</sup>Ce, <sup>148,149,150,151,152,153</sup>Pr; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of <sup>252</sup>Cf. Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252
- <sup>148</sup>Pr 2006SA56 ATOMIC MASSES <sup>141,142,143,144,145,146,147</sup>Ba, <sup>143,144,145,146,147,148</sup>La, <sup>145,146,147,148,149,150,151</sup>Ce, <sup>148,149,150,151,152,153</sup>Pr; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of <sup>252</sup>Cf. Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252
- <sup>148</sup>Er 2006RA38 ATOMIC MASSES <sup>147,148</sup>Er, <sup>147</sup>Ho; measured masses and time of flight using the Penning-trap mass spectrometer SHIPTRAP. Nuclides produced at SHIP facility. JOUR IMSPF 251 146

**A=149**

- <sup>149</sup>Ce 2006SA56 ATOMIC MASSES <sup>141,142,143,144,145,146,147</sup>Ba, <sup>143,144,145,146,147,148</sup>La, <sup>145,146,147,148,149,150,151</sup>Ce, <sup>148,149,150,151,152,153</sup>Pr; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of <sup>252</sup>Cf. Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252
- <sup>149</sup>Pr 2006SA56 ATOMIC MASSES <sup>141,142,143,144,145,146,147</sup>Ba, <sup>143,144,145,146,147,148</sup>La, <sup>145,146,147,148,149,150,151</sup>Ce, <sup>148,149,150,151,152,153</sup>Pr; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of <sup>252</sup>Cf. Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252

**A=150**

- <sup>150</sup>Ce 2006SA56 ATOMIC MASSES <sup>141,142,143,144,145,146,147</sup>Ba, <sup>143,144,145,146,147,148</sup>La, <sup>145,146,147,148,149,150,151</sup>Ce, <sup>148,149,150,151,152,153</sup>Pr; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of <sup>252</sup>Cf. Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252



KEYNUMBERS AND KEYWORDS

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**A=150 (continued)**

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|-------------------|----------|--|
| $^{150}\text{Pr}$ | 2006SA56 | ATOMIC MASSES $^{141,142,143,144,145,146,147}\text{Ba}$ , $^{143,144,145,146,147,148}\text{La}$ , $^{145,146,147,148,149,150,151}\text{Ce}$ , $^{148,149,150,151,152,153}\text{Pr}$ ; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of $^{252}\text{Cf}$ . Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252  |
| $^{150}\text{Sm}$ | 2008DAZZ | NUCLEAR REACTIONS $^{150}\text{Sm}(n, n'\gamma)$ , E=1-35 MeV; measured $E\gamma$ , $I\gamma$ , $\sigma$ ; deduced spin cut-off and spin distribution in continuum. comparison with model calculations. CONF Yosemite(CNR 2007) Proc.P164,Dashdorj   |
| $^{150}\text{Dy}$ | 2008LI23 | NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , E=102 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, J, $\pi$ , bands; calculated deformation parameters. $^{150,152,154,156,158,160,162,164,166,168,170}\text{Dy}$ , $^{152,154,156,158,160,162,164,166,168,170,172}\text{Er}$ , $^{154,156,158,160,162,164,166,168,170,172,174}\text{Yb}$ , $^{156,158,160,162,164,166,168,170,172,174,176,178,180}\text{Hf}$ ; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323 |

**A=151**

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|-------------------|----------|---|
| $^{151}\text{Ce}$ | 2006SA56 | ATOMIC MASSES $^{141,142,143,144,145,146,147}\text{Ba}$ , $^{143,144,145,146,147,148}\text{La}$ , $^{145,146,147,148,149,150,151}\text{Ce}$ , $^{148,149,150,151,152,153}\text{Pr}$ ; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of $^{252}\text{Cf}$ . Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252 |
| $^{151}\text{Pr}$ | 2006SA56 | ATOMIC MASSES $^{141,142,143,144,145,146,147}\text{Ba}$ , $^{143,144,145,146,147,148}\text{La}$ , $^{145,146,147,148,149,150,151}\text{Ce}$ , $^{148,149,150,151,152,153}\text{Pr}$ ; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of $^{252}\text{Cf}$ . Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252 |
| $^{151}\text{Tb}$ | 2008LEZX | NUCLEAR REACTIONS $^{150}\text{Nd}(^{18}\text{O}, 5n)$ , E=87, 93 MeV; $^{130}\text{Te}(^{27}\text{Al}, 6n)$ , E=155 MeV; $^{170}\text{Er}(^{30}\text{Si}, 4n)$ , E=150 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin; $^{163}\text{Er}$ , $^{151}\text{Tb}$ , $^{196}\text{Pb}$ ; deduced band structure. CONF Crete(FINUSTAR 2),Proc.P11,Leoni   |

**A=152**

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|-------------------|----------|---|
| $^{152}\text{Pr}$ | 2006SA56 | ATOMIC MASSES $^{141,142,143,144,145,146,147}\text{Ba}$ , $^{143,144,145,146,147,148}\text{La}$ , $^{145,146,147,148,149,150,151}\text{Ce}$ , $^{148,149,150,151,152,153}\text{Pr}$ ; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of $^{252}\text{Cf}$ . Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252 |
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KEYNUMBERS AND KEYWORDS

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**A=152 (continued)**

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|-------------------|----------|--|
| $^{152}\text{Sm}$ | 2008KU10 | NUCLEAR REACTIONS $^{152}\text{Sm}(n, n'\gamma)$ , E=1.6-3.0 MeV; $^{208}\text{Pb}(^{152}\text{Sm}, ^{152}\text{Sm}')$ , E=652 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular distributions, excitation functions. $^{152}\text{Sm}$ ; deduced levels, J, $\pi$ , half-lives, B(E2). JOUR PRVCA 77 061301   |
| $^{152}\text{Dy}$ | 2008LI23 | NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , E=102 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, J, $\pi$ , bands; calculated deformation parameters. $^{150,152,154,156,158,160,162,164,166,168,170}\text{Dy}$ , $^{152,154,156,158,160,162,164,166,168,170,172}\text{Er}$ , $^{154,156,158,160,162,164,166,168,170,172,174}\text{Yb}$ , $^{156,158,160,162,164,166,168,170,172,174,176,178,180}\text{Hf}$ ; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323 |
| $^{152}\text{Er}$ | 2008LI23 | NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , E=102 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, J, $\pi$ , bands; calculated deformation parameters. $^{150,152,154,156,158,160,162,164,166,168,170}\text{Dy}$ , $^{152,154,156,158,160,162,164,166,168,170,172}\text{Er}$ , $^{154,156,158,160,162,164,166,168,170,172,174}\text{Yb}$ , $^{156,158,160,162,164,166,168,170,172,174,176,178,180}\text{Hf}$ ; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323 |

**A=153**

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|-------------------|----------|---|
| $^{153}\text{Pr}$ | 2006SA56 | ATOMIC MASSES $^{141,142,143,144,145,146,147}\text{Ba}$ , $^{143,144,145,146,147,148}\text{La}$ , $^{145,146,147,148,149,150,151}\text{Ce}$ , $^{148,149,150,151,152,153}\text{Pr}$ ; measured masses with the Canadian Penning Trap (CPT) mass spectrometer and reviewed the CARIBU Project. Isotopes produced from fission of $^{252}\text{Cf}$ . Comparisons with 1995 and 2003 mass evaluations. JOUR IMSPF 251 252   |
| $^{153}\text{Nd}$ | 2008HW02 | RADIOACTIVITY $^{252}\text{Cf}(\text{SF})$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -, (particle) $\gamma$ -coin. $^{153,155}\text{Nd}$ ; deduced levels, configurations, rotational bands. JOUR PRVCA 78 014309   |
| $^{153}\text{Tm}$ | 2008TE07 | NUCLEAR REACTIONS $^{128}\text{Te}(^{37}\text{Cl}, 5n)$ , $(^{37}\text{Cl}, 4n)$ , E=170 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. $^{160,161}\text{Tm}$ ; deduced levels, J, $\pi$ , triaxial strongly-deformed bands(TSD), moments of inertia. $^{154,157}\text{Er}$ , $^{163}\text{Lu}$ , $^{153,163}\text{Tm}$ ; systematics of bands. Comparison with potential energy surfaces calculated using cranked Nilsson Strutinsky calculations. Superdeformation. JOUR PRVCA 78 017305 |

**A=154**

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|-------------------|----------|---|
| $^{154}\text{Gd}$ | 2008SCZZ | NUCLEAR REACTIONS $^{154,156,158}\text{Gd}(p, p\gamma)$ , E=22 MeV; measured $E\gamma$ , $I\gamma$ , $p\gamma$ -coin; $^{153}\text{Gd}(n, \gamma)$ ; deduced cross sections using the surrogate method. CONF Yosemite(CNR 2007) Proc.P109,Scielzo |
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KEYNUMBERS AND KEYWORDS

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**A=154 (continued)**

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| $^{154}\text{Dy}$ | 2008LI23 | NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , E=102 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, J, $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323 |
| $^{154}\text{Er}$ | 2008LI23 | NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , E=102 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, J, $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323 |
|                   | 2008TE07 | NUCLEAR REACTIONS $^{128}\text{Te}(^{37}\text{Cl}, 5n)$ , ( $^{37}\text{Cl}, 4n)$ , E=170 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. $^{160,161}\text{Tm}$ ; deduced levels, J, $\pi$ , triaxial strongly-deformed bands(TSD), moments of inertia. $^{154,157}\text{Er}$ , $^{163}\text{Lu}$ , $^{153,163}\text{Tm}$ ; systematics of bands. Comparison with potential energy surfaces calculated using cranked Nilsson Strutinsky calculations. Superdeformation. JOUR PRVCA 78 017305   |
| $^{154}\text{Yb}$ | 2008LI23 | NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , E=102 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, J, $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323 |

**A=155**

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|-------------------|----------|---|
| $^{155}\text{Nd}$ | 2008HW02 | RADIOACTIVITY $^{252}\text{Cf}(\text{SF})$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -, (particle) $\gamma$ -coin. $^{153,155}\text{Nd}$ ; deduced levels, configurations, rotational bands. JOUR PRVCA 78 014309 |
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**A=156**

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|-------------------|----------|---|
| $^{156}\text{Gd}$ | 2008SCZZ | NUCLEAR REACTIONS $^{154,156,158}\text{Gd}(p, p\gamma)$ , E=22 MeV; measured $E\gamma$ , $I\gamma$ , $p\gamma$ -coin; $^{153}\text{Gd}(n, \gamma)$ ; deduced cross sections using the surrogate method. CONF Yosemite(CNR 2007) Proc.P109,Scielzo |
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KEYNUMBERS AND KEYWORDS

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**A=156 (continued)**

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|-------------------|----------|---|
| $^{156}\text{Dy}$ | 2008LI23 | <p>NUCLEAR REACTIONS <math>^{144}\text{Sm}(^{16}\text{O}, 4n)</math>, E=102 MeV; measured <math>E\gamma</math>, <math>I\gamma</math>, <math>\gamma\gamma</math>-coin, angular distributions. <math>^{156}\text{Yb}</math>; deduced levels, J, <math>\pi</math>, bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323</p> |
| $^{156}\text{Er}$ | 2008LI23 | <p>NUCLEAR REACTIONS <math>^{144}\text{Sm}(^{16}\text{O}, 4n)</math>, E=102 MeV; measured <math>E\gamma</math>, <math>I\gamma</math>, <math>\gamma\gamma</math>-coin, angular distributions. <math>^{156}\text{Yb}</math>; deduced levels, J, <math>\pi</math>, bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323</p> |
| $^{156}\text{Yb}$ | 2008LI23 | <p>NUCLEAR REACTIONS <math>^{144}\text{Sm}(^{16}\text{O}, 4n)</math>, E=102 MeV; measured <math>E\gamma</math>, <math>I\gamma</math>, <math>\gamma\gamma</math>-coin, angular distributions. <math>^{156}\text{Yb}</math>; deduced levels, J, <math>\pi</math>, bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323</p> |
| $^{156}\text{Hf}$ | 2008LI23 | <p>NUCLEAR REACTIONS <math>^{144}\text{Sm}(^{16}\text{O}, 4n)</math>, E=102 MeV; measured <math>E\gamma</math>, <math>I\gamma</math>, <math>\gamma\gamma</math>-coin, angular distributions. <math>^{156}\text{Yb}</math>; deduced levels, J, <math>\pi</math>, bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323</p> |

**A=157**

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| $^{157}\text{Er}$ | 2008TE07 | <p>NUCLEAR REACTIONS <math>^{128}\text{Te}(^{37}\text{Cl}, 5n)</math>, (<math>^{37}\text{Cl}, 4n</math>), E=170 MeV; measured <math>E\gamma</math>, <math>I\gamma</math>, <math>\gamma\gamma</math>-coin. <math>^{160,161}\text{Tm}</math>; deduced levels, J, <math>\pi</math>, triaxial strongly-deformed bands(TSD), moments of inertia. <math>^{154,157}\text{Er}</math>, <math>^{163}\text{Lu}</math>, <math>^{153,163}\text{Tm}</math>; systematics of bands. Comparison with potential energy surfaces calculated using cranked Nilsson Strutinsky calculations. Superdeformation. JOUR PRVCA 78 017305</p> |
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**A=158**

- <sup>158</sup>Gd    2008SCZZ    NUCLEAR REACTIONS <sup>154,156,158</sup>Gd(p, pγ), E=22 MeV; measured Eγ, Iγ, pγ-coin; <sup>153</sup>Gd(n, γ); deduced cross sections using the surrogate method. CONF Yosemite(CNR 2007) Proc.P109,Scielzo
- <sup>158</sup>Dy    2008LI23    NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured Eγ, Iγ, γγ-coin, angular distributions. <sup>156</sup>Yb; deduced levels, J, π, bands; calculated deformation parameters. <sup>150,152,154,156,158,160,162,164,166,168,170</sup>Dy, <sup>152,154,156,158,160,162,164,166,168,170,172</sup>Er, <sup>154,156,158,160,162,164,166,168,170,172,174</sup>Yb, <sup>156,158,160,162,164,166,168,170,172,174,176,178,180</sup>Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323
- <sup>158</sup>Er    2008LI23    NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured Eγ, Iγ, γγ-coin, angular distributions. <sup>156</sup>Yb; deduced levels, J, π, bands; calculated deformation parameters. <sup>150,152,154,156,158,160,162,164,166,168,170</sup>Dy, <sup>152,154,156,158,160,162,164,166,168,170,172</sup>Er, <sup>154,156,158,160,162,164,166,168,170,172,174</sup>Yb, <sup>156,158,160,162,164,166,168,170,172,174,176,178,180</sup>Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323
- <sup>158</sup>Yb    2008LI23    NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured Eγ, Iγ, γγ-coin, angular distributions. <sup>156</sup>Yb; deduced levels, J, π, bands; calculated deformation parameters. <sup>150,152,154,156,158,160,162,164,166,168,170</sup>Dy, <sup>152,154,156,158,160,162,164,166,168,170,172</sup>Er, <sup>154,156,158,160,162,164,166,168,170,172,174</sup>Yb, <sup>156,158,160,162,164,166,168,170,172,174,176,178,180</sup>Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323
- <sup>158</sup>Hf    2008LI23    NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured Eγ, Iγ, γγ-coin, angular distributions. <sup>156</sup>Yb; deduced levels, J, π, bands; calculated deformation parameters. <sup>150,152,154,156,158,160,162,164,166,168,170</sup>Dy, <sup>152,154,156,158,160,162,164,166,168,170,172</sup>Er, <sup>154,156,158,160,162,164,166,168,170,172,174</sup>Yb, <sup>156,158,160,162,164,166,168,170,172,174,176,178,180</sup>Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323

**A=159**

- <sup>159</sup>Sm    2008HW03    RADIOACTIVITY <sup>252</sup>Cf(SF); measured Eγ, Iγ, γγ-coin. <sup>89,91</sup>Kr, <sup>159</sup>Sm; deduced levels, J, π, bands, configurations. <sup>90,92</sup>Kr, <sup>161</sup>Gd, <sup>163</sup>Dy; comparison with adopted levels. JOUR PRVCA 78 017303

**A=160**

- <sup>160</sup>Dy      2008LI23      NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, angular distributions. <sup>156</sup>Yb; deduced levels, J,  $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323
- <sup>160</sup>Er      2008LI23      NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, angular distributions. <sup>156</sup>Yb; deduced levels, J,  $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323
- <sup>160</sup>Tm      2008TE07      NUCLEAR REACTIONS <sup>128</sup>Te(<sup>37</sup>Cl, 5n), (<sup>37</sup>Cl, 4n), E=170 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin. <sup>160,161</sup>Tm; deduced levels, J,  $\pi$ , triaxial strongly-deformed bands(TSD), moments of inertia. <sup>154,157</sup>Er, <sup>163</sup>Lu, <sup>153,163</sup>Tm; systematics of bands. Comparison with potential energy surfaces calculated using cranked Nilsson Strutinsky calculations. Superdeformation. JOUR PRVCA 78 017305
- <sup>160</sup>Yb      2008LI23      NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, angular distributions. <sup>156</sup>Yb; deduced levels, J,  $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323
- <sup>160</sup>Hf      2008LI23      NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, angular distributions. <sup>156</sup>Yb; deduced levels, J,  $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323

**A=161**

- <sup>161</sup>Gd      2008HW03      RADIOACTIVITY <sup>252</sup>Cf(SF); measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin. <sup>89,91</sup>Kr, <sup>159</sup>Sm; deduced levels, J,  $\pi$ , bands, configurations. <sup>90,92</sup>Kr, <sup>161</sup>Gd, <sup>163</sup>Dy; comparison with adopted levels. JOUR PRVCA 78 017303

KEYNUMBERS AND KEYWORDS

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**A=161 (continued)**

$^{161}\text{Ho}$	2008EG01	RADIOACTIVITY $^{161}\text{Er}(\beta^+)$ ; $^{161}\text{Ho}(\text{IT})$ ; measured $L_2$ and $L_3$ conversion electron spectra using photographic plates and a $\beta$ spectrometer. JOUR BRSPE 72 744
$^{161}\text{Er}$	2008EG01	RADIOACTIVITY $^{161}\text{Er}(\beta^+)$ ; $^{161}\text{Ho}(\text{IT})$ ; measured $L_2$ and $L_3$ conversion electron spectra using photographic plates and a $\beta$ spectrometer. JOUR BRSPE 72 744
$^{161}\text{Tm}$	2008TE07	NUCLEAR REACTIONS $^{128}\text{Te}(^{37}\text{Cl}, 5n)$ , ( $^{37}\text{Cl}, 4n$ ), $E=170$ MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. $^{160,161}\text{Tm}$ ; deduced levels, $J$ , $\pi$ , triaxial strongly-deformed bands(TSD), moments of inertia. $^{154,157}\text{Er}$ , $^{163}\text{Lu}$ , $^{153,163}\text{Tm}$ ; systematics of bands. Comparison with potential energy surfaces calculated using cranked Nilsson Strutinsky calculations. Superdeformation. JOUR PRVCA 78 017305

**A=162**

$^{162}\text{Dy}$	2008LI23	NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , $E=102$ MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, $J$ , $\pi$ , bands; calculated deformation parameters. $^{150,152,154,156,158,160,162,164,166,168,170}\text{Dy}$ , $^{152,154,156,158,160,162,164,166,168,170,172}\text{Er}$ , $^{154,156,158,160,162,164,166,168,170,172,174}\text{Yb}$ , $^{156,158,160,162,164,166,168,170,172,174,176,178,180}\text{Hf}$ ; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323
$^{162}\text{Er}$	2008LI23	NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , $E=102$ MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, $J$ , $\pi$ , bands; calculated deformation parameters. $^{150,152,154,156,158,160,162,164,166,168,170}\text{Dy}$ , $^{152,154,156,158,160,162,164,166,168,170,172}\text{Er}$ , $^{154,156,158,160,162,164,166,168,170,172,174}\text{Yb}$ , $^{156,158,160,162,164,166,168,170,172,174,176,178,180}\text{Hf}$ ; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323
$^{162}\text{Yb}$	2008LI23	NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , $E=102$ MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, $J$ , $\pi$ , bands; calculated deformation parameters. $^{150,152,154,156,158,160,162,164,166,168,170}\text{Dy}$ , $^{152,154,156,158,160,162,164,166,168,170,172}\text{Er}$ , $^{154,156,158,160,162,164,166,168,170,172,174}\text{Yb}$ , $^{156,158,160,162,164,166,168,170,172,174,176,178,180}\text{Hf}$ ; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323



KEYNUMBERS AND KEYWORDS

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**A=162 (continued)**

<sup>162</sup>Hf      2008LI23      NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, angular distributions. <sup>156</sup>Yb; deduced levels, J,  $\pi$ , bands; calculated deformation parameters. <sup>150,152,154,156,158,160,162,164,166,168,170</sup>Dy, <sup>152,154,156,158,160,162,164,166,168,170,172</sup>Er, <sup>154,156,158,160,162,164,166,168,170,172,174</sup>Yb, <sup>156,158,160,162,164,166,168,170,172,174,176,178,180</sup>Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323

**A=163**

<sup>163</sup>Dy      2008HW03      RADIOACTIVITY <sup>252</sup>Cf(SF); measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin. <sup>89,91</sup>Kr, <sup>159</sup>Sm; deduced levels, J,  $\pi$ , bands, configurations. <sup>90,92</sup>Kr, <sup>161</sup>Gd, <sup>163</sup>Dy; comparison with adopted levels. JOUR PRVCA 78 017303

2008SIZY      NUCLEAR REACTIONS <sup>147</sup>Sm, <sup>164</sup>Dy(<sup>3</sup>He, <sup>3</sup>He'), E=45 MeV; <sup>147</sup>Sm, <sup>164</sup>Dy(<sup>3</sup>He,  $\alpha\gamma$ ), E=45 MeV; measured E $\gamma$ , I $\gamma$ ; deduced level densities  $\gamma$  strength functions. CONF Yosemite(CNR 2007) Proc.P65,Siem

<sup>163</sup>Er      2008LEZX      NUCLEAR REACTIONS <sup>150</sup>Nd(<sup>18</sup>O, 5n), E=87, 93 MeV; <sup>130</sup>Te(<sup>27</sup>Al, 6n), E=155 MeV; <sup>170</sup>Er(<sup>30</sup>Si, 4n), E=150 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin; <sup>163</sup>Er, <sup>151</sup>Tb, <sup>196</sup>Pb; deduced band structure. CONF Crete(FINUSTAR 2),Proc.P11,Leoni

<sup>163</sup>Tm      2008TE07      NUCLEAR REACTIONS <sup>128</sup>Te(<sup>37</sup>Cl, 5n), (<sup>37</sup>Cl, 4n), E=170 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin. <sup>160,161</sup>Tm; deduced levels, J,  $\pi$ , triaxial strongly-deformed bands(TSD), moments of inertia. <sup>154,157</sup>Er, <sup>163</sup>Lu, <sup>153,163</sup>Tm; systematics of bands. Comparison with potential energy surfaces calculated using cranked Nilsson Strutinsky calculations. Superdeformation. JOUR PRVCA 78 017305

<sup>163</sup>Lu      2008TE07      NUCLEAR REACTIONS <sup>128</sup>Te(<sup>37</sup>Cl, 5n), (<sup>37</sup>Cl, 4n), E=170 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin. <sup>160,161</sup>Tm; deduced levels, J,  $\pi$ , triaxial strongly-deformed bands(TSD), moments of inertia. <sup>154,157</sup>Er, <sup>163</sup>Lu, <sup>153,163</sup>Tm; systematics of bands. Comparison with potential energy surfaces calculated using cranked Nilsson Strutinsky calculations. Superdeformation. JOUR PRVCA 78 017305

**A=164**

<sup>164</sup>Dy      2008HA21      RADIOACTIVITY <sup>164</sup>Ho( $\beta^+$ ), ( $\beta^-$ ); measured E $\gamma$ , I $\gamma$ . <sup>164</sup>Dy, <sup>164</sup>Er; deduced levels, J,  $\pi$ . JOUR PRVCA 77 068801

A=164 (*continued*)

- 2008LI23 NUCLEAR REACTIONS  $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , E=102 MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin, angular distributions.  $^{156}\text{Yb}$ ; deduced levels, J,  $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323
- 2008SIZY NUCLEAR REACTIONS  $^{147}\text{Sm}$ ,  $^{164}\text{Dy}(^3\text{He}, ^3\text{He}')$ , E=45 MeV;  $^{147}\text{Sm}$ ,  $^{164}\text{Dy}(^3\text{He}, \alpha\gamma)$ , E=45 MeV; measured  $E\gamma$ ,  $I\gamma$ ; deduced level densities  $\gamma$  strength functions. CONF Yosemite(CNR 2007) Proc.P65,Siem
- $^{164}\text{Ho}$  2008HA21 NUCLEAR REACTIONS  $^{165}\text{Ho}(\gamma, n)$ , E=3.3-16.7 MeV; measured  $E\gamma$ ,  $I\gamma$ , half-life; calculated  $\sigma$ .  $^{164}\text{Ho}$ ; deduced levels, J,  $\pi$ . JOUR PRVCA 77 068801
- 2008HA21 RADIOACTIVITY  $^{164}\text{Ho}(\beta^+)$ ,  $(\beta^-)$ ; measured  $E\gamma$ ,  $I\gamma$ .  $^{164}\text{Dy}$ ,  $^{164}\text{Er}$ ; deduced levels, J,  $\pi$ . JOUR PRVCA 77 068801
- $^{164}\text{Er}$  2008HA21 RADIOACTIVITY  $^{164}\text{Ho}(\beta^+)$ ,  $(\beta^-)$ ; measured  $E\gamma$ ,  $I\gamma$ .  $^{164}\text{Dy}$ ,  $^{164}\text{Er}$ ; deduced levels, J,  $\pi$ . JOUR PRVCA 77 068801
- 2008LI23 NUCLEAR REACTIONS  $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , E=102 MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin, angular distributions.  $^{156}\text{Yb}$ ; deduced levels, J,  $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323
- $^{164}\text{Yb}$  2008LI23 NUCLEAR REACTIONS  $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , E=102 MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin, angular distributions.  $^{156}\text{Yb}$ ; deduced levels, J,  $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323
- $^{164}\text{Hf}$  2008LI23 NUCLEAR REACTIONS  $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , E=102 MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin, angular distributions.  $^{156}\text{Yb}$ ; deduced levels, J,  $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323

KEYNUMBERS AND KEYWORDS

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**A=165**

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| $^{165}\text{Dy}$ | 2008BU10 | NUCLEAR REACTIONS $^{71}\text{Ga}$ , $^{75}\text{As}$ , $^{164}\text{Dy}$ , $^{170}\text{Er}(n, \gamma)$ , E=spectrum; measured $E_\gamma$ , $I_\gamma$ ; deduced effective resonance energy using Am-Be neutron source. Comparison with calculations. JOUR ANEND 35 1433  |
| $^{165}\text{Er}$ | 2008TA16 | NUCLEAR REACTIONS $^{165}\text{Ho}(p, n)$ , E=16, 37 MeV; measured X-ray spectra, excitation function using stacked foil activation technique. JOUR NUPBB 266 3346   |
|                   | 2008TA24 | NUCLEAR REACTIONS $^{165}\text{Ho}(d, 2n)^{165}\text{Er}$ , $^{165}\text{Ho}(d, p)^{166g}\text{Ho}$ , E=21 MeV; measured X-ray spectra, $E_\gamma$ , $I_\gamma$ ; deduced $\sigma(E)$ , thick target yield using the stacked-foil activation technique; comparison with nuclear reaction model calculations. JOUR NIMBE 266 3529 |

**A=166**

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| $^{166}\text{Dy}$ | 2008LI23 | NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , E=102 MeV; measured $E_\gamma$ , $I_\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, J, $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323 |
| $^{166}\text{Ho}$ | 2008TA24 | NUCLEAR REACTIONS $^{165}\text{Ho}(d, 2n)^{165}\text{Er}$ , $^{165}\text{Ho}(d, p)^{166g}\text{Ho}$ , E=21 MeV; measured X-ray spectra, $E_\gamma$ , $I_\gamma$ ; deduced $\sigma(E)$ , thick target yield using the stacked-foil activation technique; comparison with nuclear reaction model calculations. JOUR NIMBE 266 3529   |
| $^{166}\text{Er}$ | 2008LI23 | NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , E=102 MeV; measured $E_\gamma$ , $I_\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, J, $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323 |
| $^{166}\text{Yb}$ | 2008LI23 | NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , E=102 MeV; measured $E_\gamma$ , $I_\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, J, $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323 |

KEYNUMBERS AND KEYWORDS

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**A=166 (continued)**

<sup>166</sup>Hf      2008LI23      NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, angular distributions. <sup>156</sup>Yb; deduced levels, J,  $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323

**A=167**

No references found

**A=168**

<sup>168</sup>Dy      2008LI23      NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, angular distributions. <sup>156</sup>Yb; deduced levels, J,  $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323

<sup>168</sup>Er      2008LI23      NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, angular distributions. <sup>156</sup>Yb; deduced levels, J,  $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323

<sup>168</sup>Yb      2008LI23      NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, angular distributions. <sup>156</sup>Yb; deduced levels, J,  $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323

**A=168 (continued)**

- <sup>168</sup>Hf 2008LI23 NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, angular distributions. <sup>156</sup>Yb; deduced levels, J,  $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323

**A=169**

- <sup>169</sup>Yb 2008KI16 NUCLEAR REACTIONS Yb( $\alpha$ , nX)<sup>170</sup>Hf / <sup>171</sup>Hf / <sup>173</sup>Hf / <sup>175</sup>Hf / <sup>177</sup>Hf, Yb( $\alpha$ , X)<sup>169</sup>Yb / <sup>177</sup>Yb / <sup>171</sup>Lu / <sup>172</sup>Lu / <sup>177</sup>Lu / <sup>178</sup>Lu, E < 39 MeV; measured E $\gamma$ , I $\gamma$ , excitation functions using the stacked foil activation technique. JOUR NIMBE 266 3919

**A=170**

- <sup>170</sup>Dy 2008LI23 NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, angular distributions. <sup>156</sup>Yb; deduced levels, J,  $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323
- <sup>170</sup>Er 2008LI23 NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, angular distributions. <sup>156</sup>Yb; deduced levels, J,  $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323
- <sup>170</sup>Yb 2008LI23 NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, angular distributions. <sup>156</sup>Yb; deduced levels, J,  $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323

KEYNUMBERS AND KEYWORDS

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**A=170 (continued)**

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| $^{170}\text{Hf}$ | 2008KI16 | NUCLEAR REACTIONS $\text{Yb}(\alpha, n\text{X})^{170}\text{Hf} / ^{171}\text{Hf} / ^{173}\text{Hf} / ^{175}\text{Hf} / ^{177}\text{Hf}$ , $\text{Yb}(\alpha, \text{X})^{169}\text{Yb} / ^{177}\text{Yb} / ^{171}\text{Lu} / ^{172}\text{Lu} / ^{177}\text{Lu} / ^{178}\text{Lu}$ , $E < 39$ MeV; measured $E\gamma$ , $I\gamma$ , excitation functions using the stacked foil activation technique. JOUR NIMBE 266 3919  |
|                   | 2008LI23 | NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , $E=102$ MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, J, $\pi$ , bands; calculated deformation parameters. $^{150,152,154,156,158,160,162,164,166,168,170}\text{Dy}$ , $^{152,154,156,158,160,162,164,166,168,170,172}\text{Er}$ , $^{154,156,158,160,162,164,166,168,170,172,174}\text{Yb}$ , $^{156,158,160,162,164,166,168,170,172,174,176,178,180}\text{Hf}$ ; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323 |

**A=171**

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| $^{171}\text{Er}$ | 2008BU10 | NUCLEAR REACTIONS $^{71}\text{Ga}$ , $^{75}\text{As}$ , $^{164}\text{Dy}$ , $^{170}\text{Er}(n, \gamma)$ , $E=\text{spectrum}$ ; measured $E\gamma$ , $I\gamma$ ; deduced effective resonance energy using Am-Be neutron source. Comparison with calculations. JOUR ANEND 35 1433   |
| $^{171}\text{Yb}$ | 2008SI20 | NUCLEAR REACTIONS $^{169}\text{Tm}(^{16}\text{O}, 3n)$ , $(^{16}\text{O}, 2n\alpha)$ , $(^{16}\text{O}, n2\alpha)$ , $(^{16}\text{O}, 4np2\alpha)$ , $(^{16}\text{O}, np3\alpha)$ , $E=5.6$ MeV / nucleon; measured (particle) $\gamma$ -coin, spin distributions. $^{177,178,179}\text{Re}$ , $^{180,181,182}\text{Os}$ , $^{180,181,182}\text{Ir}$ ; measured yield ratios. JOUR PRVCA 78 017602                      |
| $^{171}\text{Lu}$ | 2008KI16 | NUCLEAR REACTIONS $\text{Yb}(\alpha, n\text{X})^{170}\text{Hf} / ^{171}\text{Hf} / ^{173}\text{Hf} / ^{175}\text{Hf} / ^{177}\text{Hf}$ , $\text{Yb}(\alpha, \text{X})^{169}\text{Yb} / ^{177}\text{Yb} / ^{171}\text{Lu} / ^{172}\text{Lu} / ^{177}\text{Lu} / ^{178}\text{Lu}$ , $E < 39$ MeV; measured $E\gamma$ , $I\gamma$ , excitation functions using the stacked foil activation technique. JOUR NIMBE 266 3919 |
| $^{171}\text{Hf}$ | 2008KI16 | NUCLEAR REACTIONS $\text{Yb}(\alpha, n\text{X})^{170}\text{Hf} / ^{171}\text{Hf} / ^{173}\text{Hf} / ^{175}\text{Hf} / ^{177}\text{Hf}$ , $\text{Yb}(\alpha, \text{X})^{169}\text{Yb} / ^{177}\text{Yb} / ^{171}\text{Lu} / ^{172}\text{Lu} / ^{177}\text{Lu} / ^{178}\text{Lu}$ , $E < 39$ MeV; measured $E\gamma$ , $I\gamma$ , excitation functions using the stacked foil activation technique. JOUR NIMBE 266 3919 |

**A=172**

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| $^{172}\text{Er}$ | 2008LI23 | NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , $E=102$ MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, J, $\pi$ , bands; calculated deformation parameters. $^{150,152,154,156,158,160,162,164,166,168,170}\text{Dy}$ , $^{152,154,156,158,160,162,164,166,168,170,172}\text{Er}$ , $^{154,156,158,160,162,164,166,168,170,172,174}\text{Yb}$ , $^{156,158,160,162,164,166,168,170,172,174,176,178,180}\text{Hf}$ ; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323 |
| $^{172}\text{Yb}$ | 2008HAZY | NUCLEAR REACTIONS $^{171,173}\text{Yb}(d, p\gamma)$ , $E=18.5$ MeV; measured $E_p$ , $E\gamma$ , $I\gamma$ , $p\gamma$ -coin; $^{171,173}\text{Yb}(n, \gamma)$ ; deduced cross sections using the surrogate method. CONF Yosemite(CNR 2007) Proc.P105,Hatarik  |

KEYNUMBERS AND KEYWORDS

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**A=172 (continued)**

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|                   | 2008LI23 | NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , $E=102$ MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, $J$ , $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323 |
| $^{172}\text{Lu}$ | 2008KI16 | NUCLEAR REACTIONS $\text{Yb}(\alpha, nX)^{170}\text{Hf} / ^{171}\text{Hf} / ^{173}\text{Hf} / ^{175}\text{Hf} / ^{177}\text{Hf}$ , $\text{Yb}(\alpha, X)^{169}\text{Yb} / ^{177}\text{Yb} / ^{171}\text{Lu} / ^{172}\text{Lu} / ^{177}\text{Lu} / ^{178}\text{Lu}$ , $E < 39$ MeV; measured $E\gamma$ , $I\gamma$ , excitation functions using the stacked foil activation technique. JOUR NIMBE 266 3919   |
| $^{172}\text{Hf}$ | 2008LI23 | NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , $E=102$ MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, $J$ , $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323 |
|                   | 2008SI20 | NUCLEAR REACTIONS $^{169}\text{Tm}(^{16}\text{O}, 3n)$ , $(^{16}\text{O}, 2n\alpha)$ , $(^{16}\text{O}, n2\alpha)$ , $(^{16}\text{O}, 4np2\alpha)$ , $(^{16}\text{O}, np3\alpha)$ , $E=5.6$ MeV / nucleon; measured (particle) $\gamma$ -coin, spin distributions. $^{177,178,179}\text{Re}$ , $^{180,181,182}\text{Os}$ , $^{180,181,182}\text{Ir}$ ; measured yield ratios. JOUR PRVCA 78 017602  |
| $^{172}\text{Pt}$ | 2008MC04 | RADIOACTIVITY $^{192}\text{Au}(\beta^+)(\text{EC})$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. $^{192}\text{Pt}$ ; deduced levels, $J$ , $\pi$ , $B(E2)$ . $^{172,174,176,178,180,182,184,186,188,190,192,194}\text{Pt}$ ; systematics. Comparison with model calculations. JOUR PRVCA 78 014320  |

**A=173**

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| $^{173}\text{Hf}$ | 2008KI16 | NUCLEAR REACTIONS $\text{Yb}(\alpha, nX)^{170}\text{Hf} / ^{171}\text{Hf} / ^{173}\text{Hf} / ^{175}\text{Hf} / ^{177}\text{Hf}$ , $\text{Yb}(\alpha, X)^{169}\text{Yb} / ^{177}\text{Yb} / ^{171}\text{Lu} / ^{172}\text{Lu} / ^{177}\text{Lu} / ^{178}\text{Lu}$ , $E < 39$ MeV; measured $E\gamma$ , $I\gamma$ , excitation functions using the stacked foil activation technique. JOUR NIMBE 266 3919 |
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**A=174**

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| $^{174}\text{Yb}$ | 2007KAZN | RADIOACTIVITY $^{178}\text{Hf}(\alpha)$ ; measured partial half-lives to daughter states. REPT JINR-E6-2007-33,Karamian   |
|                   | 2008HAZY | NUCLEAR REACTIONS $^{171,173}\text{Yb}(d, p\gamma)$ , $E=18.5$ MeV; measured $E_p$ , $E\gamma$ , $I\gamma$ , $p\gamma$ -coin; $^{171,173}\text{Yb}(n, \gamma)$ ; deduced cross sections using the surrogate method. CONF Yosemite(CNR 2007) Proc.P105,Hatarik |



KEYNUMBERS AND KEYWORDS

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**A=174 (continued)**

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| 2008LI23          | NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , E=102 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, J, $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323          |
| $^{174}\text{Hf}$ | 2008LI23 NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , E=102 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, J, $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323 |
| $^{174}\text{Pt}$ | 2008MC04 RADIOACTIVITY $^{192}\text{Au}(\beta^+)(\text{EC})$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. $^{192}\text{Pt}$ ; deduced levels, J, $\pi$ , B(E2). $^{172,174,176,178,180,182,184,186,188,190,192,194}\text{Pt}$ ; systematics. Comparison with model calculations. JOUR PRVCA 78 014320   |

**A=175**

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| $^{175}\text{Hf}$ | 2008KI16 NUCLEAR REACTIONS $\text{Yb}(\alpha, n\text{X})^{170}\text{Hf}$ / $^{171}\text{Hf}$ / $^{173}\text{Hf}$ / $^{175}\text{Hf}$ / $^{177}\text{Hf}$ , $\text{Yb}(\alpha, \text{X})^{169}\text{Yb}$ / $^{177}\text{Yb}$ / $^{171}\text{Lu}$ / $^{172}\text{Lu}$ / $^{177}\text{Lu}$ / $^{178}\text{Lu}$ , E < 39 MeV; measured $E\gamma$ , $I\gamma$ , excitation functions using the stacked foil activation technique. JOUR NIMBE 266 3919 |
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**A=176**

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| $^{176}\text{Hf}$ | 2008LI23 NUCLEAR REACTIONS $^{144}\text{Sm}(^{16}\text{O}, 4n)$ , E=102 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin, angular distributions. $^{156}\text{Yb}$ ; deduced levels, J, $\pi$ , bands; calculated deformation parameters. 150,152,154,156,158,160,162,164,166,168,170Dy, 152,154,156,158,160,162,164,166,168,170,172Er, 154,156,158,160,162,164,166,168,170,172,174Yb, 156,158,160,162,164,166,168,170,172,174,176,178,180Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323 |
| $^{176}\text{Ta}$ | 2008SI20 NUCLEAR REACTIONS $^{169}\text{Tm}(^{16}\text{O}, 3n)$ , $(^{16}\text{O}, 2n\alpha)$ , $(^{16}\text{O}, n2\alpha)$ , $(^{16}\text{O}, 4np2\alpha)$ , $(^{16}\text{O}, np3\alpha)$ , E=5.6 MeV / nucleon; measured (particle) $\gamma$ -coin, spin distributions. $^{177,178,179}\text{Re}$ , $^{180,181,182}\text{Os}$ , $^{180,181,182}\text{Ir}$ ; measured yield ratios. JOUR PRVCA 78 017602   |

KEYNUMBERS AND KEYWORDS

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**A=176 (continued)**

<sup>176</sup>Pt      2008MC04      RADIOACTIVITY <sup>192</sup>Au( $\beta^+$ )(EC); measured  $E_\gamma$ ,  $I_\gamma$ ,  $\gamma\gamma$ -coin. <sup>192</sup>Pt; deduced levels, J,  $\pi$ , B(E2). <sup>172,174,176,178,180,182,184,186,188,190,192,194</sup>Pt; systematics. Comparison with model calculations. JOUR PRVCA 78 014320

**A=177**

<sup>177</sup>Yb      2008KI16      NUCLEAR REACTIONS Yb( $\alpha$ , nX)<sup>170</sup>Hf / <sup>171</sup>Hf / <sup>173</sup>Hf / <sup>175</sup>Hf / <sup>177</sup>Hf, Yb( $\alpha$ , X)<sup>169</sup>Yb / <sup>177</sup>Yb / <sup>171</sup>Lu / <sup>172</sup>Lu / <sup>177</sup>Lu / <sup>178</sup>Lu, E < 39 MeV; measured  $E_\gamma$ ,  $I_\gamma$ , excitation functions using the stacked foil activation technique. JOUR NIMBE 266 3919

<sup>177</sup>Lu      2008CA13      RADIOACTIVITY <sup>177</sup>Lu( $\beta^-$ ) [from <sup>176</sup>Lu(n,  $\gamma$ ), E=thermal]; measured  $E_\gamma$ ,  $I_\gamma$ ,  $E\beta$ ,  $I\beta$ ,  $T_{1/2}$  of ground and first metastable state. Comparison with other data. JOUR JRNC D 276 813

2008KI16      NUCLEAR REACTIONS Yb( $\alpha$ , nX)<sup>170</sup>Hf / <sup>171</sup>Hf / <sup>173</sup>Hf / <sup>175</sup>Hf / <sup>177</sup>Hf, Yb( $\alpha$ , X)<sup>169</sup>Yb / <sup>177</sup>Yb / <sup>171</sup>Lu / <sup>172</sup>Lu / <sup>177</sup>Lu / <sup>178</sup>Lu, E < 39 MeV; measured  $E_\gamma$ ,  $I_\gamma$ , excitation functions using the stacked foil activation technique. JOUR NIMBE 266 3919

<sup>177</sup>Hf      2008CA13      RADIOACTIVITY <sup>177</sup>Lu( $\beta^-$ ) [from <sup>176</sup>Lu(n,  $\gamma$ ), E=thermal]; measured  $E_\gamma$ ,  $I_\gamma$ ,  $E\beta$ ,  $I\beta$ ,  $T_{1/2}$  of ground and first metastable state. Comparison with other data. JOUR JRNC D 276 813

2008KI16      NUCLEAR REACTIONS Yb( $\alpha$ , nX)<sup>170</sup>Hf / <sup>171</sup>Hf / <sup>173</sup>Hf / <sup>175</sup>Hf / <sup>177</sup>Hf, Yb( $\alpha$ , X)<sup>169</sup>Yb / <sup>177</sup>Yb / <sup>171</sup>Lu / <sup>172</sup>Lu / <sup>177</sup>Lu / <sup>178</sup>Lu, E < 39 MeV; measured  $E_\gamma$ ,  $I_\gamma$ , excitation functions using the stacked foil activation technique. JOUR NIMBE 266 3919

<sup>177</sup>Re      2008SI20      NUCLEAR REACTIONS <sup>169</sup>Tm(<sup>16</sup>O, 3n), (<sup>16</sup>O, 2n $\alpha$ ), (<sup>16</sup>O, n2 $\alpha$ ), (<sup>16</sup>O, 4np2 $\alpha$ ), (<sup>16</sup>O, np3 $\alpha$ ), E=5.6 MeV / nucleon; measured (particle) $\gamma$ -coin, spin distributions. <sup>177,178,179</sup>Re, <sup>180,181,182</sup>Os, <sup>180,181,182</sup>Ir; measured yield ratios. JOUR PRVCA 78 017602

**A=178**

<sup>178</sup>Lu      2008KI16      NUCLEAR REACTIONS Yb( $\alpha$ , nX)<sup>170</sup>Hf / <sup>171</sup>Hf / <sup>173</sup>Hf / <sup>175</sup>Hf / <sup>177</sup>Hf, Yb( $\alpha$ , X)<sup>169</sup>Yb / <sup>177</sup>Yb / <sup>171</sup>Lu / <sup>172</sup>Lu / <sup>177</sup>Lu / <sup>178</sup>Lu, E < 39 MeV; measured  $E_\gamma$ ,  $I_\gamma$ , excitation functions using the stacked foil activation technique. JOUR NIMBE 266 3919

<sup>178</sup>Hf      2007KAZN      RADIOACTIVITY <sup>178</sup>Hf( $\alpha$ ); measured partial half-lives to daughter states. REPT JINR-E6-2007-33, Karamian

2008LI23      NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured  $E_\gamma$ ,  $I_\gamma$ ,  $\gamma\gamma$ -coin, angular distributions. <sup>156</sup>Yb; deduced levels, J,  $\pi$ , bands; calculated deformation parameters. <sup>150,152,154,156,158,160,162,164,166,168,170</sup>Dy, <sup>152,154,156,158,160,162,164,166,168,170,172</sup>Er, <sup>154,156,158,160,162,164,166,168,170,172,174</sup>Yb, <sup>156,158,160,162,164,166,168,170,172,174,176,178,180</sup>Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323

KEYNUMBERS AND KEYWORDS

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**A=178 (continued)**

- <sup>178</sup>Re    2008SI20    NUCLEAR REACTIONS <sup>169</sup>Tm(<sup>16</sup>O, 3n), (<sup>16</sup>O, 2nα), (<sup>16</sup>O, n2α), (<sup>16</sup>O, 4np2α), (<sup>16</sup>O, np3α), E=5.6 MeV / nucleon; measured (particle)γ-coin, spin distributions. <sup>177,178,179</sup>Re, <sup>180,181,182</sup>Os, <sup>180,181,182</sup>Ir; measured yield ratios. JOUR PRVCA 78 017602
- <sup>178</sup>Pt    2008MC04    RADIOACTIVITY <sup>192</sup>Au(β<sup>+</sup>)(EC); measured E<sub>γ</sub>, I<sub>γ</sub>, γγ-coin. <sup>192</sup>Pt; deduced levels, J, π, B(E2). <sup>172,174,176,178,180,182,184,186,188,190,192,194</sup>Pt; systematics. Comparison with model calculations. JOUR PRVCA 78 014320

**A=179**

- <sup>179</sup>Re    2008SI20    NUCLEAR REACTIONS <sup>169</sup>Tm(<sup>16</sup>O, 3n), (<sup>16</sup>O, 2nα), (<sup>16</sup>O, n2α), (<sup>16</sup>O, 4np2α), (<sup>16</sup>O, np3α), E=5.6 MeV / nucleon; measured (particle)γ-coin, spin distributions. <sup>177,178,179</sup>Re, <sup>180,181,182</sup>Os, <sup>180,181,182</sup>Ir; measured yield ratios. JOUR PRVCA 78 017602

**A=180**

- <sup>180</sup>Hf    2008CHZZ    NUCLEAR REACTIONS <sup>232</sup>Th(<sup>180</sup>Hf, <sup>180</sup>Hf'), E=1300 MeV; measured E<sub>p</sub>, I<sub>p</sub>, E<sub>γ</sub>, I<sub>γ</sub>, (fragment)γ-, γγ-coin; <sup>180</sup>Hf; deduced levels, J, π, vibrational band structure. CONF Crete(FINUSTAR 2),Proc.P265,Chowdhury
- 2008LI23    NUCLEAR REACTIONS <sup>144</sup>Sm(<sup>16</sup>O, 4n), E=102 MeV; measured E<sub>γ</sub>, I<sub>γ</sub>, γγ-coin, angular distributions. <sup>156</sup>Yb; deduced levels, J, π, bands; calculated deformation parameters. <sup>150,152,154,156,158,160,162,164,166,168,170</sup>Dy, <sup>152,154,156,158,160,162,164,166,168,170,172</sup>Er, <sup>154,156,158,160,162,164,166,168,170,172,174</sup>Yb, <sup>156,158,160,162,164,166,168,170,172,174,176,178,180</sup>Hf; discussed level systematics. Comparison with cranked Woods-Saxon-Strutinsky model. JOUR PRVCA 77 064323
- <sup>180</sup>Os    2008SI20    NUCLEAR REACTIONS <sup>169</sup>Tm(<sup>16</sup>O, 3n), (<sup>16</sup>O, 2nα), (<sup>16</sup>O, n2α), (<sup>16</sup>O, 4np2α), (<sup>16</sup>O, np3α), E=5.6 MeV / nucleon; measured (particle)γ-coin, spin distributions. <sup>177,178,179</sup>Re, <sup>180,181,182</sup>Os, <sup>180,181,182</sup>Ir; measured yield ratios. JOUR PRVCA 78 017602
- <sup>180</sup>Ir    2008SI20    NUCLEAR REACTIONS <sup>169</sup>Tm(<sup>16</sup>O, 3n), (<sup>16</sup>O, 2nα), (<sup>16</sup>O, n2α), (<sup>16</sup>O, 4np2α), (<sup>16</sup>O, np3α), E=5.6 MeV / nucleon; measured (particle)γ-coin, spin distributions. <sup>177,178,179</sup>Re, <sup>180,181,182</sup>Os, <sup>180,181,182</sup>Ir; measured yield ratios. JOUR PRVCA 78 017602
- <sup>180</sup>Pt    2008MC04    RADIOACTIVITY <sup>192</sup>Au(β<sup>+</sup>)(EC); measured E<sub>γ</sub>, I<sub>γ</sub>, γγ-coin. <sup>192</sup>Pt; deduced levels, J, π, B(E2). <sup>172,174,176,178,180,182,184,186,188,190,192,194</sup>Pt; systematics. Comparison with model calculations. JOUR PRVCA 78 014320
- <sup>180</sup>Hg    2008GRZV    NUCLEAR REACTIONS <sup>94</sup>Mo(<sup>88</sup>Sr, 2n), E=378 MeV; <sup>113</sup>Cd(<sup>86</sup>Kr, 3n), E=382 MeV; <sup>180</sup>Hg, <sup>196</sup>Po; measured E<sub>γ</sub>, I<sub>γ</sub>, (recoil)γ-coin; deduced B(E2), quadrupole moments. CONF Crete(FINUSTAR 2),Proc.P260,Grahn

KEYNUMBERS AND KEYWORDS

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**A=181**

- <sup>181</sup>Os    2008SI20    NUCLEAR REACTIONS <sup>169</sup>Tm(<sup>16</sup>O, 3n), (<sup>16</sup>O, 2nα), (<sup>16</sup>O, n2α), (<sup>16</sup>O, 4np2α), (<sup>16</sup>O, np3α), E=5.6 MeV / nucleon; measured (particle)γ-coin, spin distributions. <sup>177,178,179</sup>Re, <sup>180,181,182</sup>Os, <sup>180,181,182</sup>Ir; measured yield ratios. JOUR PRVCA 78 017602
- <sup>181</sup>Ir    2008SI20    NUCLEAR REACTIONS <sup>169</sup>Tm(<sup>16</sup>O, 3n), (<sup>16</sup>O, 2nα), (<sup>16</sup>O, n2α), (<sup>16</sup>O, 4np2α), (<sup>16</sup>O, np3α), E=5.6 MeV / nucleon; measured (particle)γ-coin, spin distributions. <sup>177,178,179</sup>Re, <sup>180,181,182</sup>Os, <sup>180,181,182</sup>Ir; measured yield ratios. JOUR PRVCA 78 017602

**A=182**

- <sup>182</sup>Os    2008SI20    NUCLEAR REACTIONS <sup>169</sup>Tm(<sup>16</sup>O, 3n), (<sup>16</sup>O, 2nα), (<sup>16</sup>O, n2α), (<sup>16</sup>O, 4np2α), (<sup>16</sup>O, np3α), E=5.6 MeV / nucleon; measured (particle)γ-coin, spin distributions. <sup>177,178,179</sup>Re, <sup>180,181,182</sup>Os, <sup>180,181,182</sup>Ir; measured yield ratios. JOUR PRVCA 78 017602
- <sup>182</sup>Ir    2008SI20    NUCLEAR REACTIONS <sup>169</sup>Tm(<sup>16</sup>O, 3n), (<sup>16</sup>O, 2nα), (<sup>16</sup>O, n2α), (<sup>16</sup>O, 4np2α), (<sup>16</sup>O, np3α), E=5.6 MeV / nucleon; measured (particle)γ-coin, spin distributions. <sup>177,178,179</sup>Re, <sup>180,181,182</sup>Os, <sup>180,181,182</sup>Ir; measured yield ratios. JOUR PRVCA 78 017602
- <sup>182</sup>Pt    2008MC04    RADIOACTIVITY <sup>192</sup>Au(β<sup>+</sup>)(EC); measured Eγ, Iγ, γγ-coin. <sup>192</sup>Pt; deduced levels, J, π, B(E2). <sup>172,174,176,178,180,182,184,186,188,190,192,194</sup>Pt; systematics. Comparison with model calculations. JOUR PRVCA 78 014320

**A=183**

- <sup>183</sup>Os    2008ZH21    NUCLEAR REACTIONS <sup>93</sup>Nb, <sup>184,186,192</sup>Os(n, 2n), <sup>189</sup>Os(n, p), <sup>190</sup>Os(n, α), E=13.5, 14.7 MeV; measured Eγ, Iγ, σ. JOUR ARISE 66 1488

**A=184**

- <sup>184</sup>Pt    2008MC04    RADIOACTIVITY <sup>192</sup>Au(β<sup>+</sup>)(EC); measured Eγ, Iγ, γγ-coin. <sup>192</sup>Pt; deduced levels, J, π, B(E2). <sup>172,174,176,178,180,182,184,186,188,190,192,194</sup>Pt; systematics. Comparison with model calculations. JOUR PRVCA 78 014320

**A=185**

- <sup>185</sup>Os    2008ZH21    NUCLEAR REACTIONS <sup>93</sup>Nb, <sup>184,186,192</sup>Os(n, 2n), <sup>189</sup>Os(n, p), <sup>190</sup>Os(n, α), E=13.5, 14.7 MeV; measured Eγ, Iγ, σ. JOUR ARISE 66 1488
- <sup>185</sup>Pb    2008PAZX    NUCLEAR REACTIONS <sup>106</sup>Pd(<sup>82</sup>Kr, 3n), E=367 MeV; measured Eγ, Iγ, Eα, Iα, αγγ-coin. <sup>185</sup>Pb, deduced levels, J, π. CONF Crete(FINUSTAR 2),Proc.P413,Pakarinen

KEYNUMBERS AND KEYWORDS

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**A=186**

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| $^{186}\text{Os}$ | 2008GAZW | NUCLEAR REACTIONS $^{185,187}\text{Re}(^3\text{He}, d\gamma)$ , E=30 MeV; measured $E\gamma$ , $I\gamma$ , $\sigma(\theta)$ ; $^{186,188}\text{Os}$ ; deduced B(E2), rotational bands. CONF Crete(FINUSTAR 2),Proc.P188,Garrett  |
| $^{186}\text{Pt}$ | 2008MC04 | RADIOACTIVITY $^{192}\text{Au}(\beta^+)(\text{EC})$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. $^{192}\text{Pt}$ ; deduced levels, J, $\pi$ , B(E2). $^{172,174,176,178,180,182,184,186,188,190,192,194}\text{Pt}$ ; systematics. Comparison with model calculations. JOUR PRVCA 78 014320 |

**A=187**

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| $^{187}\text{W}$ | 2008B026 | NUCLEAR REACTIONS $^{186}\text{W}(n, \gamma)$ , E=thermal; measured prompt and delayed $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin; deduced $\sigma$ . $^{186}\text{W}(d, p)$ , E=18, 22 MeV; $^{186}\text{W}(\text{polarized } d, p)$ , E=18 MeV; measured particle spectra, $\sigma(\theta)$ , asymmetry. $^{187}\text{W}$ deduced levels, J, $\pi$ , branching ratios, neutron binding energy, spectroscopic strengths, band structure. DWBA analysis, quasiparticle-phonon model calculation. Enriched target, Ge detectors, Q3D magnetic spectrograph. JOUR NUPAB 811 28 |
|                  | 2008UD04 | NUCLEAR REACTIONS $^{186}\text{W}(n, \gamma)$ , E=0.0536 eV; measured $E\gamma$ , $I\gamma$ , cross section using activation technique. Compared results to model calculations. JOUR ARISE 66 1235   |
|                  | 2008ZH21 | NUCLEAR REACTIONS $^{93}\text{Nb}$ , $^{184,186,192}\text{Os}(n, 2n)$ , $^{189}\text{Os}(n, p)$ , $^{190}\text{Os}(n, \alpha)$ , E=13.5, 14.7 MeV; measured $E\gamma$ , $I\gamma$ , $\sigma$ . JOUR ARISE 66 1488  |

**A=188**

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| $^{188}\text{Os}$ | 2008GAZW | NUCLEAR REACTIONS $^{185,187}\text{Re}(^3\text{He}, d\gamma)$ , E=30 MeV; measured $E\gamma$ , $I\gamma$ , $\sigma(\theta)$ ; $^{186,188}\text{Os}$ ; deduced B(E2), rotational bands. CONF Crete(FINUSTAR 2),Proc.P188,Garrett  |
| $^{188}\text{Pt}$ | 2008MC04 | RADIOACTIVITY $^{192}\text{Au}(\beta^+)(\text{EC})$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. $^{192}\text{Pt}$ ; deduced levels, J, $\pi$ , B(E2). $^{172,174,176,178,180,182,184,186,188,190,192,194}\text{Pt}$ ; systematics. Comparison with model calculations. JOUR PRVCA 78 014320 |

**A=189**

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| $^{189}\text{Re}$ | 2008ZH21 | NUCLEAR REACTIONS $^{93}\text{Nb}$ , $^{184,186,192}\text{Os}(n, 2n)$ , $^{189}\text{Os}(n, p)$ , $^{190}\text{Os}(n, \alpha)$ , E=13.5, 14.7 MeV; measured $E\gamma$ , $I\gamma$ , $\sigma$ . JOUR ARISE 66 1488 |
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KEYNUMBERS AND KEYWORDS

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**A=190**

<sup>190</sup>Pt      2008MC04      RADIOACTIVITY <sup>192</sup>Au( $\beta^+$ )(EC); measured  $E_\gamma$ ,  $I_\gamma$ ,  $\gamma\gamma$ -coin. <sup>192</sup>Pt; deduced levels, J,  $\pi$ , B(E2). <sup>172,174,176,178,180,182,184,186,188,190,192,194</sup>Pt; systematics. Comparison with model calculations. JOUR PRVCA 78 014320

**A=191**

<sup>191</sup>Os      2008ZH21      NUCLEAR REACTIONS <sup>93</sup>Nb, <sup>184,186,192</sup>Os(n, 2n), <sup>189</sup>Os(n, p), <sup>190</sup>Os(n,  $\alpha$ ), E=13.5, 14.7 MeV; measured  $E_\gamma$ ,  $I_\gamma$ ,  $\sigma$ . JOUR ARISE 66 1488

**A=192**

<sup>192</sup>Pt      2008MC04      RADIOACTIVITY <sup>192</sup>Au( $\beta^+$ )(EC); measured  $E_\gamma$ ,  $I_\gamma$ ,  $\gamma\gamma$ -coin. <sup>192</sup>Pt; deduced levels, J,  $\pi$ , B(E2). <sup>172,174,176,178,180,182,184,186,188,190,192,194</sup>Pt; systematics. Comparison with model calculations. JOUR PRVCA 78 014320

<sup>192</sup>Au      2008MC04      RADIOACTIVITY <sup>192</sup>Au( $\beta^+$ )(EC); measured  $E_\gamma$ ,  $I_\gamma$ ,  $\gamma\gamma$ -coin. <sup>192</sup>Pt; deduced levels, J,  $\pi$ , B(E2). <sup>172,174,176,178,180,182,184,186,188,190,192,194</sup>Pt; systematics. Comparison with model calculations. JOUR PRVCA 78 014320

**A=193**

<sup>193</sup>Pt      2008KOZY      NUCLEAR REACTIONS <sup>192,194,195,196</sup>Pt(n,  $\gamma$ ), E<400 keV; measured  $E_\gamma$ ,  $I_\gamma$ , cross sections; deduced resonance parameters, radiative width distributions. CONF Yosemite(CNR 2007) Proc.P119,Koehler

**A=194**

<sup>194</sup>Ir      2008BA25      NUCLEAR REACTIONS <sup>193</sup>Ir(d, p), E=22 MeV; <sup>196</sup>Pt(polarized d,  $\alpha$ ), E=18 MeV; measured particle spectra,  $\sigma(\theta)$ , spectroscopic strengths, analyzing powers, angular distributions. <sup>193</sup>Ir(n,  $\gamma$ ), (n,  $e^-$ ); analyzed  $E_\gamma$ ,  $I_\gamma$ , electron spectra, conversion coefficients. <sup>194</sup>Ir; deduced levels, J,  $\pi$ , multipolarities, bands. Comparison with theoretical data. JOUR PRVCA 77 064602

<sup>194</sup>Pt      2008BA25      NUCLEAR REACTIONS <sup>193</sup>Ir(d, p), E=22 MeV; <sup>196</sup>Pt(polarized d,  $\alpha$ ), E=18 MeV; measured particle spectra,  $\sigma(\theta)$ , spectroscopic strengths, analyzing powers, angular distributions. <sup>193</sup>Ir(n,  $\gamma$ ), (n,  $e^-$ ); analyzed  $E_\gamma$ ,  $I_\gamma$ , electron spectra, conversion coefficients. <sup>194</sup>Ir; deduced levels, J,  $\pi$ , multipolarities, bands. Comparison with theoretical data. JOUR PRVCA 77 064602

KEYNUMBERS AND KEYWORDS

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**A=194 (continued)**

- 2008MC04 RADIOACTIVITY  $^{192}\text{Au}(\beta^+)(\text{EC})$ ; measured  $E_\gamma$ ,  $I_\gamma$ ,  $\gamma\gamma$ -coin.  $^{192}\text{Pt}$ ; deduced levels, J,  $\pi$ , B(E2).  $^{172,174,176,178,180,182,184,186,188,190,192,194}\text{Pt}$ ; systematics. Comparison with model calculations. JOUR PRVCA 78 014320
- $^{194}\text{Au}$  2007KRZY NUCLEAR REACTIONS  $^{127}\text{I}(\text{d}, \text{X})^{111}\text{In}$  /  $^{119}\text{Te}$  /  $^{121}\text{I}$  /  $^{122}\text{Sb}$  /  $^{123}\text{I}$  /  $^{124}\text{I}$  /  $^{125}\text{Xe}$  /  $^{126}\text{I}$ , E=2.52 GeV; measured yields;  $^{129}\text{I}(\text{d}, \text{X})^{121}\text{Te}$  /  $^{124}\text{I}$  /  $^{126}\text{I}$  /  $^{130}\text{I}$ , E=2.52 GeV; measured yields;  $^{237}\text{Np}(\text{d}, \text{X})^{97}\text{Zr}$  /  $^{99}\text{Mo}$  /  $^{132}\text{Te}$  /  $^{133}\text{I}$  /  $^{238}\text{Np}$ , E=2.52 GeV; measured yields;  $^{238}\text{Pu}(\text{d}, \text{X})^{97}\text{Zr}$  /  $^{135}\text{Xe}$ , E $\approx$ 2.5 GeV; measured yields;  $^{239}\text{Pu}(\text{d}, \text{X})^{103}\text{Ru}$  /  $^{128}\text{Sb}$  /  $^{132}\text{Te}$  /  $^{133}\text{I}$  /  $^{135}\text{I}$  /  $^{135}\text{Xe}$  /  $^{140}\text{Ba}$  /  $^{143}\text{Ce}$  /  $^{91}\text{Sr}$  /  $^{97}\text{Zr}$ , E $\approx$ 2.5 GeV; measured yields;  $^{26}\text{Al}(\text{n}, \alpha)$ ,  $^{197}\text{Au}(\text{n}, \gamma)$ ,  $^{197}\text{Au}(\text{n}, 2\text{n})$ ,  $^{197}\text{Au}(\text{n}, 4\text{n})$ , E not given; measured radial distributions of production rates of daughter nuclei;  $^{89}\text{Y}(\text{n}, 2\text{n})$ ,  $^{89}\text{Y}(\text{n}, 3\text{n})$ ,  $^{89}\text{Y}(\text{n}, 4\text{n})$ , E not given; measured production rates of daughter nuclei. activation detector for transmutation setup;  $^{238}\text{U}$ , Pb(n, f),  $^{238}\text{U}$ , Pb(n,  $\gamma$ ), E not given; measured  $\sigma$ . REPT JINR-E1-2007-7,Krivopustov

**A=195**

- $^{195}\text{Pt}$  2008KOZY NUCLEAR REACTIONS  $^{192,194,195,196}\text{Pt}(\text{n}, \gamma)$ , E<400 keV; measured  $E_\gamma$ ,  $I_\gamma$ , cross sections; deduced resonance parameters, radiative width distributions. CONF Yosemite(CNR 2007) Proc.P119,Koehler

**A=196**

- $^{196}\text{Pt}$  2008KOZY NUCLEAR REACTIONS  $^{192,194,195,196}\text{Pt}(\text{n}, \gamma)$ , E<400 keV; measured  $E_\gamma$ ,  $I_\gamma$ , cross sections; deduced resonance parameters, radiative width distributions. CONF Yosemite(CNR 2007) Proc.P119,Koehler
- 2008RU05 RADIOACTIVITY  $^{22}\text{Na}(\beta^+)$ ,  $^{196}\text{Au}(\text{EC})$ ,  $^{198}\text{Au}(\beta^-)$ ; measured half-life and its dependence on temperature. JOUR PRVCA 77 065502
- $^{196}\text{Au}$  2007KRZY NUCLEAR REACTIONS  $^{127}\text{I}(\text{d}, \text{X})^{111}\text{In}$  /  $^{119}\text{Te}$  /  $^{121}\text{I}$  /  $^{122}\text{Sb}$  /  $^{123}\text{I}$  /  $^{124}\text{I}$  /  $^{125}\text{Xe}$  /  $^{126}\text{I}$ , E=2.52 GeV; measured yields;  $^{129}\text{I}(\text{d}, \text{X})^{121}\text{Te}$  /  $^{124}\text{I}$  /  $^{126}\text{I}$  /  $^{130}\text{I}$ , E=2.52 GeV; measured yields;  $^{237}\text{Np}(\text{d}, \text{X})^{97}\text{Zr}$  /  $^{99}\text{Mo}$  /  $^{132}\text{Te}$  /  $^{133}\text{I}$  /  $^{238}\text{Np}$ , E=2.52 GeV; measured yields;  $^{238}\text{Pu}(\text{d}, \text{X})^{97}\text{Zr}$  /  $^{135}\text{Xe}$ , E $\approx$ 2.5 GeV; measured yields;  $^{239}\text{Pu}(\text{d}, \text{X})^{103}\text{Ru}$  /  $^{128}\text{Sb}$  /  $^{132}\text{Te}$  /  $^{133}\text{I}$  /  $^{135}\text{I}$  /  $^{135}\text{Xe}$  /  $^{140}\text{Ba}$  /  $^{143}\text{Ce}$  /  $^{91}\text{Sr}$  /  $^{97}\text{Zr}$ , E $\approx$ 2.5 GeV; measured yields;  $^{26}\text{Al}(\text{n}, \alpha)$ ,  $^{197}\text{Au}(\text{n}, \gamma)$ ,  $^{197}\text{Au}(\text{n}, 2\text{n})$ ,  $^{197}\text{Au}(\text{n}, 4\text{n})$ , E not given; measured radial distributions of production rates of daughter nuclei;  $^{89}\text{Y}(\text{n}, 2\text{n})$ ,  $^{89}\text{Y}(\text{n}, 3\text{n})$ ,  $^{89}\text{Y}(\text{n}, 4\text{n})$ , E not given; measured production rates of daughter nuclei. activation detector for transmutation setup;  $^{238}\text{U}$ , Pb(n, f),  $^{238}\text{U}$ , Pb(n,  $\gamma$ ), E not given; measured  $\sigma$ . REPT JINR-E1-2007-7,Krivopustov
- 2008RU05 RADIOACTIVITY  $^{22}\text{Na}(\beta^+)$ ,  $^{196}\text{Au}(\text{EC})$ ,  $^{198}\text{Au}(\beta^-)$ ; measured half-life and its dependence on temperature. JOUR PRVCA 77 065502



KEYNUMBERS AND KEYWORDS

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**A=196 (continued)**

- <sup>196</sup>Pb    2008LEZX    NUCLEAR REACTIONS <sup>150</sup>Nd(<sup>18</sup>O, 5n), E=87, 93 MeV; <sup>130</sup>Te(<sup>27</sup>Al, 6n), E=155 MeV; <sup>170</sup>Er(<sup>30</sup>Si, 4n), E=150 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin; <sup>163</sup>Er, <sup>151</sup>Tb, <sup>196</sup>Pb; deduced band structure. CONF Crete(FINUSTAR 2),Proc.P11,Leoni
- <sup>196</sup>Po    2008GRZV    NUCLEAR REACTIONS <sup>94</sup>Mo(<sup>88</sup>Sr, 2n), E=378 MeV; <sup>113</sup>Cd(<sup>86</sup>Kr, 3n), E=382 MeV; <sup>180</sup>Hg, <sup>196</sup>Po; measured E $\gamma$ , I $\gamma$ , (recoil) $\gamma$ -coin; deduced B(E2), quadrupole moments. CONF Crete(FINUSTAR 2),Proc.P260,Grahn

**A=197**

- <sup>197</sup>Pt    2008KOZY    NUCLEAR REACTIONS <sup>192,194,195,196</sup>Pt(n,  $\gamma$ ), E<400 keV; measured E $\gamma$ , I $\gamma$ , cross sections; deduced resonance parameters, radiative width distributions. CONF Yosemite(CNR 2007) Proc.P119,Koehler
- <sup>197</sup>Au    2007ARZT    NUCLEAR REACTIONS <sup>12</sup>C, <sup>197</sup>Au(<sup>11</sup>B, X), E=33 MeV / nucleon; measured light fragment yields; <sup>12</sup>C, <sup>197</sup>Au(<sup>11</sup>B, <sup>11</sup>B), E=33 MeV / nucleon; measured  $\sigma(\theta)$ ; <sup>12</sup>C, <sup>197</sup>Au(<sup>11</sup>B,  $\alpha^7$ Li), E=33 MeV / nucleon; measured light fragment yields; <sup>11</sup>B; analyzed break-up parameters. REPT JINR-P7-2007-8,Artyukh

**A=198**

- <sup>198</sup>Au    2005LI66    RADIOACTIVITY <sup>24</sup>Na( $\beta^-$ ), <sup>42</sup>K( $\beta^-$ ), <sup>198</sup>Au( $\beta^-$ ); measured E $\gamma$ , I $\gamma$ , isotopic T<sub>1/2</sub>. JOUR JRNC D 263 311
- <sup>198</sup>Au    2007KRZY    NUCLEAR REACTIONS <sup>127</sup>I(d, X)<sup>111</sup>In / <sup>119</sup>Te / <sup>121</sup>I / <sup>122</sup>Sb / <sup>123</sup>I / <sup>124</sup>I / <sup>125</sup>Xe / <sup>126</sup>I, E=2.52 GeV; measured yields; <sup>129</sup>I(d, X)<sup>121</sup>Te / <sup>124</sup>I / <sup>126</sup>I / <sup>130</sup>I, E=2.52 GeV; measured yields; <sup>237</sup>Np(d, X)<sup>97</sup>Zr / <sup>99</sup>Mo / <sup>132</sup>Te / <sup>133</sup>I / <sup>238</sup>Np, E=2.52 GeV; measured yields; <sup>238</sup>Pu(d, X)<sup>97</sup>Zr / <sup>135</sup>Xe, E $\approx$ 2.5 GeV; measured yields; <sup>239</sup>Pu(d, X)<sup>103</sup>Ru / <sup>128</sup>Sb / <sup>132</sup>Te / <sup>133</sup>I / <sup>135</sup>I / <sup>135</sup>Xe / <sup>140</sup>Ba / <sup>143</sup>Ce / <sup>91</sup>Sr / <sup>97</sup>Zr, E $\approx$ 2.5 GeV; measured yields; <sup>26</sup>Al(n,  $\alpha$ ), <sup>197</sup>Au(n,  $\gamma$ ), <sup>197</sup>Au(n, 2n), <sup>197</sup>Au(n, 4n), E not given; measured radial distributions of production rates of daughter nuclei; <sup>89</sup>Y(n, 2n), <sup>89</sup>Y(n, 3n), <sup>89</sup>Y(n, 4n), E not given; measured production rates of daughter nuclei. activation detector for transmutation setup; <sup>238</sup>U, Pb(n, f), <sup>238</sup>U, Pb(n,  $\gamma$ ), E not given; measured  $\sigma$ . REPT JINR-E1-2007-7,Krivopustov
- <sup>198</sup>Au    2008BU12    RADIOACTIVITY <sup>22</sup>Na( $\beta^+$ ), <sup>198</sup>Au( $\beta^-$ ); measured T<sub>1/2</sub>, temperature dependence not observed. <sup>16</sup>N( $\beta^-$ ); calculated  $\beta$ -delayed E $\alpha$ , I $\alpha$  using GEANT4 code. JOUR NUPAB 805 462c
- <sup>198</sup>Au    2008HU08    RADIOACTIVITY <sup>22</sup>Na( $\beta^+$ ), <sup>198</sup>Au( $\beta^-$ ), <sup>210</sup>Po( $\alpha$ ); analyzed the effect of host metals on half-lives. JOUR PRVCA 78 015803
- <sup>198</sup>Au    2008J006    NUCLEAR REACTIONS <sup>27</sup>Al, <sup>28</sup>Si, <sup>29</sup>Si, <sup>46,47</sup>Ti, <sup>54</sup>Fe, <sup>58</sup>Ni, <sup>64</sup>Zn(n, p), <sup>27</sup>Al, <sup>30</sup>Si(n,  $\alpha$ ), <sup>197</sup>Au(n,  $\gamma$ ), E= reactor; measured E $\gamma$ , I $\gamma$ , fast neutron spectrum averaged  $\sigma$ ; comparator method. JOUR ARISE 66 1377
- <sup>198</sup>Au    2008RU05    RADIOACTIVITY <sup>22</sup>Na( $\beta^+$ ), <sup>196</sup>Au(EC), <sup>198</sup>Au( $\beta^-$ ); measured half-life and its dependence on temperature. JOUR PRVCA 77 065502

KEYNUMBERS AND KEYWORDS

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**A=198 (continued)**

$^{198}\text{Hg}$	2005LI66	RADIOACTIVITY $^{24}\text{Na}(\beta^-)$ , $^{42}\text{K}(\beta^-)$ , $^{198}\text{Au}(\beta^-)$ ; measured $E_\gamma$ , $I_\gamma$ , isotopic $T_{1/2}$ . JOUR JRNCD 263 311
	2008BU12	RADIOACTIVITY $^{22}\text{Na}(\beta^+)$ , $^{198}\text{Au}(\beta^-)$ ; measured $T_{1/2}$ , temperature dependence not observed. $^{16}\text{N}(\beta^-)$ ; calculated $\beta$ -delayed $E_\alpha$ , $I_\alpha$ using GEANT4 code. JOUR NUPAB 805 462c
	2008HU08	RADIOACTIVITY $^{22}\text{Na}(\beta^+)$ , $^{198}\text{Au}(\beta^-)$ , $^{210}\text{Po}(\alpha)$ ; analyzed the effect of host metals on half-lives. JOUR PRVCA 78 015803
	2008RU05	RADIOACTIVITY $^{22}\text{Na}(\beta^+)$ , $^{196}\text{Au}(\text{EC})$ , $^{198}\text{Au}(\beta^-)$ ; measured half-life and its dependence on temperature. JOUR PRVCA 77 065502
$^{198}\text{Tl}$	2008LA11	NUCLEAR REACTIONS $^{197}\text{Au}(\alpha, 3n)$ , $E=40$ MeV; measured $E_\gamma$ , $I_\gamma$ , $E(\text{CE})$ , $I(\text{CE})$ , $\gamma\gamma$ -, $(\text{ce})\gamma$ -coin. $^{198}\text{Tl}$ ; deduced levels, $J$ , $\pi$ , quasiparticle alignments, band configurations, $B(E2)$ , $B(M1)$ , chiral behaviour. Comparison with 2-quasiparticle plus triaxial rotor model calculations. JOUR PRVCA 78 021305

**A=199**

No references found

**A=200**

No references found

**A=201**

No references found

**A=202**

$^{202}\text{Tl}$	2008DI13	NUCLEAR REACTIONS $^{204,206,207,208}\text{Pb}(\text{d}, \text{X})^{202}\text{Tl} / ^{203}\text{Pb} / ^{203}\text{Bi} / ^{204}\text{Bi} / ^{205}\text{Bi} / ^{206}\text{Bi} / ^{207}\text{Bi}$ , $E=5-40$ MeV; measured production $\sigma$ , yields with activation technique. Comparison with other data and ALICE-IPPE model calculations. JOUR JRNCD 276 835
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**A=203**

$^{203}\text{Pb}$	2008DI13	NUCLEAR REACTIONS $^{204,206,207,208}\text{Pb}(\text{d}, \text{X})^{202}\text{Tl} / ^{203}\text{Pb} / ^{203}\text{Bi} / ^{204}\text{Bi} / ^{205}\text{Bi} / ^{206}\text{Bi} / ^{207}\text{Bi}$ , $E=5-40$ MeV; measured production $\sigma$ , yields with activation technique. Comparison with other data and ALICE-IPPE model calculations. JOUR JRNCD 276 835
$^{203}\text{Bi}$	2008DI13	

KEYNUMBERS AND KEYWORDS

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**A=204**

- $^{204}\text{Hg}$     2006FR27    ATOMIC MASSES  $^{24,26}\text{Mg}$ ,  $^{40,48}\text{Ca}$ ; measured masses of hydrogen-and lithium-like ions of Mg and Ca with SMILETRAP (Penning trap) mass spectrometer; analyzed binding energies. Comparisons with previous results.  $^{204}\text{Hg}$ ; measured time of flight spectrum. JOUR IMSPF 251 281
- $^{204}\text{Bi}$     2008DI13    NUCLEAR REACTIONS  $^{204,206,207,208}\text{Pb}(d, X)^{202}\text{Tl} / ^{203}\text{Pb} / ^{203}\text{Bi} / ^{204}\text{Bi} / ^{205}\text{Bi} / ^{206}\text{Bi} / ^{207}\text{Bi}$ , E=5-40 MeV; measured production  $\sigma$ , yields with activation technique. Comparison with other data and ALICE-IPPE model calculations. JOUR JRNCD 276 835

**A=205**

- $^{205}\text{Pb}$     2008SYZZ    NUCLEAR REACTIONS  $^{206,208}\text{Pb}(^3\text{He}, ^3\text{He}'\gamma)$ ,  $(^3\text{He}, \alpha)$ , E=38 MeV; measured particle spectra,  $E\gamma$ ,  $I\gamma$ ;  $^{205,206,207,208}\text{Pb}$ ; deduced level densities, radiative strength functions. CONF Crete(FINUSTAR 2),Proc.P428,Syed
- $^{205}\text{Bi}$     2008DI13    NUCLEAR REACTIONS  $^{204,206,207,208}\text{Pb}(d, X)^{202}\text{Tl} / ^{203}\text{Pb} / ^{203}\text{Bi} / ^{204}\text{Bi} / ^{205}\text{Bi} / ^{206}\text{Bi} / ^{207}\text{Bi}$ , E=5-40 MeV; measured production  $\sigma$ , yields with activation technique. Comparison with other data and ALICE-IPPE model calculations. JOUR JRNCD 276 835

**A=206**

- $^{206}\text{Pb}$     2008HU08    RADIOACTIVITY  $^{22}\text{Na}(\beta^+)$ ,  $^{198}\text{Au}(\beta^-)$ ,  $^{210}\text{Po}(\alpha)$ ; analyzed the effect of host metals on half-lives. JOUR PRVCA 78 015803
- $^{206}\text{Pb}$     2008MI16    NUCLEAR REACTIONS  $^{208}\text{Pb}(n, n'\gamma)$ ,  $(n, 2n\gamma)$ ,  $(n, 3n\gamma)$ , E=threshold-20 MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\sigma$ ,  $\sigma(\theta)$ .  $^{208}\text{Pb}$  deduced level branching ratios. Comparison with TALYS calculations and other data. JOUR NUPAB 811 1
- $^{206}\text{Pb}$     2008SYZZ    NUCLEAR REACTIONS  $^{206,208}\text{Pb}(^3\text{He}, ^3\text{He}'\gamma)$ ,  $(^3\text{He}, \alpha)$ , E=38 MeV; measured particle spectra,  $E\gamma$ ,  $I\gamma$ ;  $^{205,206,207,208}\text{Pb}$ ; deduced level densities, radiative strength functions. CONF Crete(FINUSTAR 2),Proc.P428,Syed
- $^{206}\text{Bi}$     2008DI13    NUCLEAR REACTIONS  $^{204,206,207,208}\text{Pb}(d, X)^{202}\text{Tl} / ^{203}\text{Pb} / ^{203}\text{Bi} / ^{204}\text{Bi} / ^{205}\text{Bi} / ^{206}\text{Bi} / ^{207}\text{Bi}$ , E=5-40 MeV; measured production  $\sigma$ , yields with activation technique. Comparison with other data and ALICE-IPPE model calculations. JOUR JRNCD 276 835

**A=207**

- $^{207}\text{Tl}$     2006B041    RADIOACTIVITY  $^{140}\text{Pr}$ ,  $^{207}\text{Tl}$ ,  $^{235}\text{Ac}(\beta^-)$ ; measured half-life of bare and few-electron ions. JOUR IMSPF 251 212
- $^{207}\text{Pb}$     2006B041    RADIOACTIVITY  $^{140}\text{Pr}$ ,  $^{207}\text{Tl}$ ,  $^{235}\text{Ac}(\beta^-)$ ; measured half-life of bare and few-electron ions. JOUR IMSPF 251 212

**A=207 (continued)**

- 2008MI16 NUCLEAR REACTIONS  $^{208}\text{Pb}(n, n'\gamma)$ ,  $(n, 2n\gamma)$ ,  $(n, 3n\gamma)$ ,  
E=threshold-20 MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\sigma$ ,  $\sigma(\theta)$ .  $^{208}\text{Pb}$  deduced level  
branching ratios. Comparison with TALYS calculations and other  
data. JOUR NUPAB 811 1
- 2008SYZZ NUCLEAR REACTIONS  $^{206,208}\text{Pb}(^3\text{He}, ^3\text{He}'\gamma)$ ,  $(^3\text{He}, \alpha)$ , E=38 MeV;  
measured particle spectra,  $E\gamma$ ,  $I\gamma$ ;  $^{205,206,207,208}\text{Pb}$ ; deduced level  
densities, radiative strength functions. CONF Crete(FINUSTAR  
2),Proc.P428,Syed
- $^{207}\text{Bi}$  2008DI13 NUCLEAR REACTIONS  $^{204,206,207,208}\text{Pb}(d, X)^{202}\text{Tl} / ^{203}\text{Pb} / ^{203}\text{Bi} /$   
 $^{204}\text{Bi} / ^{205}\text{Bi} / ^{206}\text{Bi} / ^{207}\text{Bi}$ , E=5-40 MeV; measured production  $\sigma$ ,  
yields with activation technique. Comparison with other data and  
ALICE-IPPE model calculations. JOUR JRNCD 276 835

**A=208**

- $^{208}\text{Pb}$  2008ACZZ NUCLEAR REACTIONS  $^{208}\text{Pb}(^6\text{He}, ^6\text{He})$ ,  $^{208}\text{Pb}(^6\text{He}, 2n\alpha)$ , E=14,  
16, 18, 22 MeV;  $^{120}\text{Sn}(^{11}\text{Be}, ^{11}\text{Be}')$ , E=32 MeV; measured particle  
spectra,  $\sigma(\theta)$ ; Compared results to CDCC and DWBA calculations.  
CONF Crete(FINUSTAR 2),Proc.P333,Acosta
- 2008BE18 NUCLEAR REACTIONS  $^{14}\text{N}(n, \gamma)$ , E=low; measured  $E\gamma$ ,  $I\gamma$  using  
cold neutron source.  $^{27}\text{Al}$ ,  $^{207}\text{Pb}(n, \gamma)$ , E=thermal; calculated  $\sigma$ .  
Effect on PGAA results discussed. JOUR JRNCD 276 609
- 2008JI03 NUCLEAR REACTIONS  $^{208}\text{Pb}(^{16}\text{O}, ^{16}\text{O}')$ , E=40.50-80.25 MeV;  
measured quasi=elastic scattering excitation function at backward  
angles. JOUR CPLEE 25 2834
- 2008KU10 NUCLEAR REACTIONS  $^{152}\text{Sm}(n, n'\gamma)$ , E=1.6-3.0 MeV;  
 $^{208}\text{Pb}(^{152}\text{Sm}, ^{152}\text{Sm}')$ , E=652 MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin, angular  
distributions, excitation functions.  $^{152}\text{Sm}$ ; deduced levels, J,  $\pi$ ,  
half-lives, B(E2). JOUR PRVCA 77 061301
- 2008MAZT NUCLEAR REACTIONS  $^{208}\text{Pb}(^{17}\text{F}, ^{17}\text{F})$ , E=85.1, 90.4 MeV;  
 $^{209}\text{Bi}(^{11}\text{B}, ^{11}\text{B})$ , E=40-48 MeV; measured cross sections. CONF  
Crete(FINUSTAR 2),Proc.P401,Mazzocco
- 2008MI14 RADIOACTIVITY  $^{212}\text{Po}(\alpha)$ ; measured half-life in various mettalic  
environments. JOUR PPNLA 5 371
- 2008MI16 NUCLEAR REACTIONS  $^{208}\text{Pb}(n, n'\gamma)$ ,  $(n, 2n\gamma)$ ,  $(n, 3n\gamma)$ ,  
E=threshold-20 MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\sigma$ ,  $\sigma(\theta)$ .  $^{208}\text{Pb}$  deduced level  
branching ratios. Comparison with TALYS calculations and other  
data. JOUR NUPAB 811 1
- 2008PA26 NUCLEAR REACTIONS  $^{208}\text{Pb}(^7\text{Li}, ^7\text{Li})$ , E=18-28 MeV; measured  
reaction product spectra, scattering  $\sigma$ ;  $^7\text{Li}$ ; deduced dipole  
polarizability. Comparison with continuum discretized coupled channel  
calculations. JOUR PRVCA 78 021601
- 2008PIZY NUCLEAR REACTIONS Ni,  $^{90,92}\text{Zr}$ ,  $^{118}\text{Sn}$ ,  $^{208}\text{Pb}(^{20}\text{Ne}, ^{20}\text{Ne}')$ , E not  
given; measured particle spectra,  $\sigma(\theta)$ ; deduced quasilatic barrier  
distributions; calculated barrier distributions;  $^{90,92}\text{Zr}(^{20}\text{Ne}, X)$ , E not  
given; measured excitation-energy spectra. Compared results to  
Coupled Channel calculations. CONF Crete(FINUSTAR  
2),Proc.P238,Piasecki

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KEYNUMBERS AND KEYWORDS

**A=208 (continued)**

2008SYZZ NUCLEAR REACTIONS  $^{206,208}\text{Pb}(^3\text{He}, ^3\text{He}'\gamma)$ ,  $(^3\text{He}, \alpha)$ ,  $E=38$  MeV; measured particle spectra,  $E\gamma$ ,  $I\gamma$ ;  $^{205,206,207,208}\text{Pb}$ ; deduced level densities, radiative strength functions. CONF Crete(FINUSTAR 2),Proc.P428,Syed

**A=209**

$^{209}\text{Pb}$  2008RE07 NUCLEAR REACTIONS  $^{20}\text{Ne}$ ,  $^{27}\text{Al}$ ,  $^{40}\text{Ar}$ ,  $^{84}\text{Kr}$ ,  $^{131,132}\text{Xe}$ ,  $^{208}\text{Pb}$ ,  $^{235,238}\text{U}(n, \gamma)$ ,  $E=\text{low}$ ; measured  $E\gamma$ ,  $I\gamma$  using cold neutron source and an "invisible container". JOUR JRNCD 276 825

$^{209}\text{Bi}$  2006BE65 ATOMIC MASSES  $^{28}\text{Si}$ ,  $^{209}\text{Bi}$ ; measured masses using Penning trap method relative to  $^{12}\text{C}$ . Accurate determination of the Avogadro constant and mass standard. JOUR IMSPF 251 220

2008ET01 NUCLEAR REACTIONS  $^{209}\text{Bi}(^{30}\text{Na}, ^{30}\text{Na}')$ ,  $E=80.1$  MeV / nucleon; measured  $E\gamma$ ,  $I\gamma$ , (particle) $\gamma$ -coin,  $\sigma(\theta)$ .  $^{30}\text{Na}$ ; deduced  $B(E2)$ . Comparison with shell-model calculations. JOUR PRVCA 78 017302

2008MAZT NUCLEAR REACTIONS  $^{208}\text{Pb}(^{17}\text{F}, ^{17}\text{F})$ ,  $E=85.1, 90.4$  MeV;  $^{209}\text{Bi}(^{11}\text{B}, ^{11}\text{B})$ ,  $E=40-48$  MeV; measured cross sections. CONF Crete(FINUSTAR 2),Proc.P401,Mazzocco

**A=210**

$^{210}\text{Po}$  2008HU08 RADIOACTIVITY  $^{22}\text{Na}(\beta^+)$ ,  $^{198}\text{Au}(\beta^-)$ ,  $^{210}\text{Po}(\alpha)$ ; analyzed the effect of host metals on half-lives. JOUR PRVCA 78 015803

$^{210}\text{At}$  2008M008 NUCLEAR REACTIONS  $^{209}\text{Bi}(\alpha, 2n)$ ,  $(\alpha, 3n)$ ,  $E=23.1, 28.8, 32.8$  MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $E\alpha$ ,  $I\alpha$ . Production method for radiotherapy discussed. JOUR JRNCD 276 843

**A=211**

$^{211}\text{At}$  2008M008 NUCLEAR REACTIONS  $^{209}\text{Bi}(\alpha, 2n)$ ,  $(\alpha, 3n)$ ,  $E=23.1, 28.8, 32.8$  MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $E\alpha$ ,  $I\alpha$ . Production method for radiotherapy discussed. JOUR JRNCD 276 843

**A=212**

$^{212}\text{Po}$  2008MI14 RADIOACTIVITY  $^{212}\text{Po}(\alpha)$ ; measured half-life in various mettalic environments. JOUR PPNLA 5 371

**A=213**

<sup>213</sup>Ac      2008DOZZ      RADIOACTIVITY <sup>253</sup>No( $\alpha$ ) [from <sup>207</sup>Pb(<sup>48</sup>Ca, 2n)]; measured E $\gamma$ , I $\gamma$ , E $\alpha$ , I $\alpha$ ,  $\alpha\gamma$ -coin, conversion electrons; <sup>217</sup>Pa( $\alpha$ ) [from <sup>181</sup>Ta(<sup>40</sup>Ar, 4n)]; measured E $\gamma$ , I $\gamma$ ,  $\alpha\gamma$ -coin,  $\alpha$ (conversion electron)-coin; <sup>249</sup>Fm(IT); measured internal conversion coefficients. CONF Crete(FINUSTAR 2),Proc.P64,Dorvaux

**A=214**

No references found

**A=215**

No references found

**A=216**

<sup>216</sup>Ra      2008SI23      NUCLEAR REACTIONS <sup>204</sup>Pb(<sup>12</sup>C, X), E=75-95 MeV; <sup>197</sup>Au(<sup>19</sup>F, X), E=98-118 MeV; measured pre-scission neutron multiplicities, fusion  $\sigma$ , neutron yields. <sup>216</sup>Ra; deduced fission dissipation strength. JOUR PRVCA 78 024609

**A=217**

<sup>217</sup>Pa      2008DOZZ      RADIOACTIVITY <sup>253</sup>No( $\alpha$ ) [from <sup>207</sup>Pb(<sup>48</sup>Ca, 2n)]; measured E $\gamma$ , I $\gamma$ , E $\alpha$ , I $\alpha$ ,  $\alpha\gamma$ -coin, conversion electrons; <sup>217</sup>Pa( $\alpha$ ) [from <sup>181</sup>Ta(<sup>40</sup>Ar, 4n)]; measured E $\gamma$ , I $\gamma$ ,  $\alpha\gamma$ -coin,  $\alpha$ (conversion electron)-coin; <sup>249</sup>Fm(IT); measured internal conversion coefficients. CONF Crete(FINUSTAR 2),Proc.P64,Dorvaux

**A=218**

No references found

**A=219**

No references found

**A=220**

No references found

KEYNUMBERS AND KEYWORDS

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**A=221**

No references found

**A=222**

No references found

**A=223**

No references found

**A=224**

No references found

**A=225**

No references found

**A=226**

No references found

**A=227**

No references found

**A=228**

<sup>228</sup>Ra      2008NA13      RADIOACTIVITY <sup>232</sup>Th( $\alpha$ ); measured E $\gamma$ , I $\gamma$ , full-energy peak efficiency;HPGe detectors, bar sources. JOUR NIMAE 592 80

**A=229**

<sup>229</sup>Th      2008BU14      NUCLEAR REACTIONS <sup>230,232</sup>Th(d, t), E=17 MeV; measured triton-spectra,  $\sigma(E, \theta)$ . <sup>229,231</sup>Th deduced levels, J,  $\pi$ , bands. Enriched target, magnetic spectrograph. Quasi-particle configurations. DWBA analysis. JOUR NUPAB 809 129



KEYNUMBERS AND KEYWORDS

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**A=230**

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| $^{230}\text{Th}$ | 2008P006 | RADIOACTIVITY $^{234,235}\text{U}(\alpha)$ ; measured $E\alpha$ , $I\alpha$ . $^{235,238}\text{U}$ ; deduced half-life ratio. JOUR JRNCD 277 207  |
| $^{230}\text{Pa}$ | 2008M011 | RADIOACTIVITY $^{230}\text{Pa}(\beta^-)$ [from $^{232}\text{Th}(p, 3n)$ , $E=16.4-34.0$ MeV]; measured $E\gamma$ , $I\gamma$ , $E\alpha$ ; deduced $\sigma(E)$ , thick target yield using the stacked-foil activation technique. comparison with EMPIRE II calculations. JOUR ARISE 66 1275 |
| $^{230}\text{U}$  | 2008M011 | RADIOACTIVITY $^{230}\text{Pa}(\beta^-)$ [from $^{232}\text{Th}(p, 3n)$ , $E=16.4-34.0$ MeV]; measured $E\gamma$ , $I\gamma$ , $E\alpha$ ; deduced $\sigma(E)$ , thick target yield using the stacked-foil activation technique. comparison with EMPIRE II calculations. JOUR ARISE 66 1275 |

**A=231**

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|-------------------|----------|--|
| $^{231}\text{Th}$ | 2008AL18 | RADIOACTIVITY $^{235,238}\text{U}(\alpha)$ ; measured $E\gamma$ , $I\gamma$ , $E(\text{K X-ray})$ , $I(\text{K X-ray})$ to determine sample enrichment. Cryogenic spectrometer and HPGe detector compared. JOUR JRNCD 276 749  |
|                   | 2008BU14 | NUCLEAR REACTIONS $^{230,232}\text{Th}(d, t)$ , $E=17$ MeV; measured triton-spectra, $\sigma(E, \theta)$ . $^{229,231}\text{Th}$ deduced levels, $J$ , $\pi$ , bands. Enriched target, magnetic spectrograph. Quasi-particle configurations. DWBA analysis. JOUR NUPAB 809 129 |
|                   | 2008P006 | RADIOACTIVITY $^{234,235}\text{U}(\alpha)$ ; measured $E\alpha$ , $I\alpha$ . $^{235,238}\text{U}$ ; deduced half-life ratio. JOUR JRNCD 277 207   |

**A=232**

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|-------------------|----------|--|
| $^{232}\text{Th}$ | 2008CHZZ | NUCLEAR REACTIONS $^{232}\text{Th}(^{180}\text{Hf}, ^{180}\text{Hf}')$ , $E=1300$ MeV; measured $E_p$ , $I_p$ , $E\gamma$ , $I\gamma$ , (fragment) $\gamma^-$ , $\gamma\gamma$ -coin; $^{180}\text{Hf}$ ; deduced levels, $J$ , $\pi$ , vibrational band structure. CONF Crete(FINUSTAR 2),Proc.P265,Chowdhury |
|                   | 2008NA13 | RADIOACTIVITY $^{232}\text{Th}(\alpha)$ ; measured $E\gamma$ , $I\gamma$ , full-energy peak efficiency;HPGe detectors, bar sources. JOUR NIMAE 592 80  |

**A=233**

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|-------------------|----------|---|
| $^{233}\text{Th}$ | 2008BR08 | NUCLEAR REACTIONS $^{232}\text{Th}$ , $^{233}\text{Pa}$ , $^{234,235}\text{U}(n, \gamma)$ , $E=\text{thermal}$ ; measured $\sigma$ , isotopic ratios. Effect on the thorium cycle discussed. Comparison with other data. JOUR NIMAE 591 510                         |
| $^{233}\text{Pa}$ | 2008GR11 | RADIOACTIVITY $^{237}\text{Np}(\alpha)$ , $^{238,239}\text{Np}(\beta^-)$ [from $^{237}\text{Np}(n, \gamma)$ and $^{238}\text{Np}(n, \gamma)$ ]; measured $E\gamma$ , $I\gamma$ , $E\beta$ , $I\beta$ . $^{239}\text{Np}$ deduced level energies. JOUR JRNCD 276 731 |

KEYNUMBERS AND KEYWORDS

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**A=234**

$^{234}\text{Th}$	2008AL18	RADIOACTIVITY $^{235,238}\text{U}(\alpha)$ ; measured $E\gamma$ , $I\gamma$ , E(K X-ray), I(K X-ray) to determine sample enrichment. Cryogenic spectrometer and HPGe detector compared. JOUR JRNC D 276 749
$^{234}\text{Pa}$	2008BR08	NUCLEAR REACTIONS $^{232}\text{Th}$ , $^{233}\text{Pa}$ , $^{234,235}\text{U}(\text{n}, \gamma)$ , E=thermal; measured $\sigma$ , isotopic ratios. Effect on the thorium cycle discussed. Comparison with other data. JOUR NIMAE 591 510
$^{234}\text{U}$	2008P006	RADIOACTIVITY $^{234,235}\text{U}(\alpha)$ ; measured $E\alpha$ , $I\alpha$ . $^{235,238}\text{U}$ ; deduced half-life ratio. JOUR JRNC D 277 207

**A=235**

$^{235}\text{Ac}$	2006B041	RADIOACTIVITY $^{140}\text{Pr}$ , $^{207}\text{Tl}$ , $^{235}\text{Ac}(\beta^-)$ ; measured half-life of bare and few-electron ions. JOUR IMSPF 251 212
$^{235}\text{Th}$	2006B041	RADIOACTIVITY $^{140}\text{Pr}$ , $^{207}\text{Tl}$ , $^{235}\text{Ac}(\beta^-)$ ; measured half-life of bare and few-electron ions. JOUR IMSPF 251 212
$^{235}\text{U}$	2008AL18	RADIOACTIVITY $^{235,238}\text{U}(\alpha)$ ; measured $E\gamma$ , $I\gamma$ , E(K X-ray), I(K X-ray) to determine sample enrichment. Cryogenic spectrometer and HPGe detector compared. JOUR JRNC D 276 749
	2008BR08	NUCLEAR REACTIONS $^{232}\text{Th}$ , $^{233}\text{Pa}$ , $^{234,235}\text{U}(\text{n}, \gamma)$ , E=thermal; measured $\sigma$ , isotopic ratios. Effect on the thorium cycle discussed. Comparison with other data. JOUR NIMAE 591 510
	2008P006	RADIOACTIVITY $^{234,235}\text{U}(\alpha)$ ; measured $E\alpha$ , $I\alpha$ . $^{235,238}\text{U}$ ; deduced half-life ratio. JOUR JRNC D 277 207
$^{235}\text{Pu}$	2008QI03	RADIOACTIVITY $^{239}\text{Cm}(\alpha)$ [from $^{232}\text{Th}(^{12}\text{C}, 5\text{n})$ , E=70, 74 MeV]; measured $E\gamma$ , $I\gamma$ , $E\alpha$ , $I\alpha$ . JOUR RAACA 96 455

**A=236**

$^{236}\text{U}$	2008BR08	NUCLEAR REACTIONS $^{232}\text{Th}$ , $^{233}\text{Pa}$ , $^{234,235}\text{U}(\text{n}, \gamma)$ , E=thermal; measured $\sigma$ , isotopic ratios. Effect on the thorium cycle discussed. Comparison with other data. JOUR NIMAE 591 510
	2008RE07	NUCLEAR REACTIONS $^{20}\text{Ne}$ , $^{27}\text{Al}$ , $^{40}\text{Ar}$ , $^{84}\text{Kr}$ , $^{131,132}\text{Xe}$ , $^{208}\text{Pb}$ , $^{235,238}\text{U}(\text{n}, \gamma)$ , E=low; measured $E\gamma$ , $I\gamma$ using cold neutron source and an "invisible container". JOUR JRNC D 276 825
	2008SAZY	NUCLEAR REACTIONS $^{238}\text{U}(^{82}\text{Se}, ^{84}\text{Se})$ , $(^{82}\text{Se}, ^{82}\text{Ge})$ , $(^{82}\text{Se}, ^{83}\text{As})$ , $(^{82}\text{Se}, ^{81}\text{Ga})$ , E=505, 515 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma$ asymmetry; $^{81}\text{Ga}$ , $^{82}\text{Ge}$ , $^{83}\text{As}$ , $^{84}\text{Se}$ ; deduced levels, J, $\pi$ . CONF Crete(FINUSTAR 2),Proc.P139,Sahin

**A=237**

$^{237}\text{Np}$	2008GR11	RADIOACTIVITY $^{237}\text{Np}(\alpha)$ , $^{238,239}\text{Np}(\beta^-)$ [from $^{237}\text{Np}(\text{n}, \gamma)$ and $^{238}\text{Np}(\text{n}, \gamma)$ ]; measured $E\gamma$ , $I\gamma$ , $E\beta$ , $I\beta$ . $^{239}\text{Np}$ deduced level energies. JOUR JRNC D 276 731
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**A=237 (continued)**

2008SAZY NUCLEAR REACTIONS  $^{238}\text{U}(^{82}\text{Se}, ^{84}\text{Se}), (^{82}\text{Se}, ^{82}\text{Ge}), (^{82}\text{Se}, ^{83}\text{As}), (^{82}\text{Se}, ^{81}\text{Ga}), E=505, 515 \text{ MeV}$ ; measured  $E\gamma, I\gamma, \gamma$  asymmetry;  $^{81}\text{Ga}, ^{82}\text{Ge}, ^{83}\text{As}, ^{84}\text{Se}$ ; deduced levels,  $J, \pi$ . CONF Crete(FINUSTAR 2),Proc.P139,Sahin

**A=238**

$^{238}\text{U}$  2008AL18 RADIOACTIVITY  $^{235,238}\text{U}(\alpha)$ ; measured  $E\gamma, I\gamma, E(\text{K X-ray}), I(\text{K X-ray})$  to determine sample enrichment. Cryogenic spectrometer and HPGe detector compared. JOUR JRNC D 276 749

2008P006 RADIOACTIVITY  $^{234,235}\text{U}(\alpha)$ ; measured  $E\alpha, I\alpha$ .  $^{235,238}\text{U}$ ; deduced half-life ratio. JOUR JRNC D 277 207

$^{238}\text{Np}$  2007KRZY NUCLEAR REACTIONS  $^{127}\text{I}(\text{d}, \text{X})^{111}\text{In} / ^{119}\text{Te} / ^{121}\text{I} / ^{122}\text{Sb} / ^{123}\text{I} / ^{124}\text{I} / ^{125}\text{Xe} / ^{126}\text{I}, E=2.52 \text{ GeV}$ ; measured yields;  $^{129}\text{I}(\text{d}, \text{X})^{121}\text{Te} / ^{124}\text{I} / ^{126}\text{I} / ^{130}\text{I}, E=2.52 \text{ GeV}$ ; measured yields;  $^{237}\text{Np}(\text{d}, \text{X})^{97}\text{Zr} / ^{99}\text{Mo} / ^{132}\text{Te} / ^{133}\text{I} / ^{238}\text{Np}, E=2.52 \text{ GeV}$ ; measured yields;  $^{238}\text{Pu}(\text{d}, \text{X})^{97}\text{Zr} / ^{135}\text{Xe}, E\approx 2.5 \text{ GeV}$ ; measured yields;  $^{239}\text{Pu}(\text{d}, \text{X})^{103}\text{Ru} / ^{128}\text{Sb} / ^{132}\text{Te} / ^{133}\text{I} / ^{135}\text{I} / ^{135}\text{Xe} / ^{140}\text{Ba} / ^{143}\text{Ce} / ^{91}\text{Sr} / ^{97}\text{Zr}, E\approx 2.5 \text{ GeV}$ ; measured yields;  $^{26}\text{Al}(\text{n}, \alpha), ^{197}\text{Au}(\text{n}, \gamma), ^{197}\text{Au}(\text{n}, 2\text{n}), ^{197}\text{Au}(\text{n}, 4\text{n}), E$  not given; measured radial distributions of production rates of daughter nuclei;  $^{89}\text{Y}(\text{n}, 2\text{n}), ^{89}\text{Y}(\text{n}, 3\text{n}), ^{89}\text{Y}(\text{n}, 4\text{n}), E$  not given; measured production rates of daughter nuclei. activation detector for transmutation setup;  $^{238}\text{U}, \text{Pb}(\text{n}, \text{f}), ^{238}\text{U}, \text{Pb}(\text{n}, \gamma), E$  not given; measured  $\sigma$ . REPT JINR-E1-2007-7,Krivopustov

2008GR11 RADIOACTIVITY  $^{237}\text{Np}(\alpha), ^{238,239}\text{Np}(\beta^-)$  [from  $^{237}\text{Np}(\text{n}, \gamma)$  and  $^{238}\text{Np}(\text{n}, \gamma)$ ]; measured  $E\gamma, I\gamma, E\beta, I\beta$ .  $^{239}\text{Np}$  deduced level energies. JOUR JRNC D 276 731

$^{238}\text{Pu}$  2008GR11 RADIOACTIVITY  $^{237}\text{Np}(\alpha), ^{238,239}\text{Np}(\beta^-)$  [from  $^{237}\text{Np}(\text{n}, \gamma)$  and  $^{238}\text{Np}(\text{n}, \gamma)$ ]; measured  $E\gamma, I\gamma, E\beta, I\beta$ .  $^{239}\text{Np}$  deduced level energies. JOUR JRNC D 276 731

2008SAZY NUCLEAR REACTIONS  $^{238}\text{U}(^{82}\text{Se}, ^{84}\text{Se}), (^{82}\text{Se}, ^{82}\text{Ge}), (^{82}\text{Se}, ^{83}\text{As}), (^{82}\text{Se}, ^{81}\text{Ga}), E=505, 515 \text{ MeV}$ ; measured  $E\gamma, I\gamma, \gamma$  asymmetry;  $^{81}\text{Ga}, ^{82}\text{Ge}, ^{83}\text{As}, ^{84}\text{Se}$ ; deduced levels,  $J, \pi$ . CONF Crete(FINUSTAR 2),Proc.P139,Sahin

$^{238}\text{Cm}$  2008QI03 NUCLEAR REACTIONS  $^{232}\text{Th}(^{12}\text{C}, 6\text{n}), (^{12}\text{C}, 5\text{n}), (^{12}\text{C}, 4\text{n}), E=70, 74 \text{ MeV}$ ; measured cross sections. JOUR RAACA 96 455

**A=239**

$^{239}\text{U}$  2008RE07 NUCLEAR REACTIONS  $^{20}\text{Ne}, ^{27}\text{Al}, ^{40}\text{Ar}, ^{84}\text{Kr}, ^{131,132}\text{Xe}, ^{208}\text{Pb}, ^{235,238}\text{U}(\text{n}, \gamma), E=\text{low}$ ; measured  $E\gamma, I\gamma$  using cold neutron source and an "invisible container". JOUR JRNC D 276 825

$^{239}\text{Np}$  2008GR11 RADIOACTIVITY  $^{237}\text{Np}(\alpha), ^{238,239}\text{Np}(\beta^-)$  [from  $^{237}\text{Np}(\text{n}, \gamma)$  and  $^{238}\text{Np}(\text{n}, \gamma)$ ]; measured  $E\gamma, I\gamma, E\beta, I\beta$ .  $^{239}\text{Np}$  deduced level energies. JOUR JRNC D 276 731

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**A=239 (continued)**

$^{239}\text{Pu}$	2008GR11	RADIOACTIVITY $^{237}\text{Np}(\alpha)$ , $^{238,239}\text{Np}(\beta^-)$ [from $^{237}\text{Np}(n, \gamma)$ and $^{238}\text{Np}(n, \gamma)$ ]; measured $E\gamma$ , $I\gamma$ , $E\beta$ , $I\beta$ . $^{239}\text{Np}$ deduced level energies. JOUR JRNCD 276 731
$^{239}\text{Am}$	2008SAZY	NUCLEAR REACTIONS $^{238}\text{U}(^{82}\text{Se}, ^{84}\text{Se})$ , $(^{82}\text{Se}, ^{82}\text{Ge})$ , $(^{82}\text{Se}, ^{83}\text{As})$ , $(^{82}\text{Se}, ^{81}\text{Ga})$ , $E=505, 515$ MeV; measured $E\gamma$ , $I\gamma$ , $\gamma$ asymmetry; $^{81}\text{Ga}$ , $^{82}\text{Ge}$ , $^{83}\text{As}$ , $^{84}\text{Se}$ ; deduced levels, $J$ , $\pi$ . CONF Crete(FINUSTAR 2),Proc.P139,Sahin
$^{239}\text{Cm}$	2008QI03	RADIOACTIVITY $^{239}\text{Cm}(\alpha)$ [from $^{232}\text{Th}(^{12}\text{C}, 5n)$ , $E=70, 74$ MeV]; measured $E\gamma$ , $I\gamma$ , $E\alpha$ , $I\alpha$ . JOUR RAACA 96 455
	2008QI03	NUCLEAR REACTIONS $^{232}\text{Th}(^{12}\text{C}, 6n)$ , $(^{12}\text{C}, 5n)$ , $(^{12}\text{C}, 4n)$ , $E=70, 74$ MeV; measured cross sections. JOUR RAACA 96 455

**A=240**

$^{240}\text{Cm}$	2008QI03	NUCLEAR REACTIONS $^{232}\text{Th}(^{12}\text{C}, 6n)$ , $(^{12}\text{C}, 5n)$ , $(^{12}\text{C}, 4n)$ , $E=70, 74$ MeV; measured cross sections. JOUR RAACA 96 455
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**A=241**

No references found

**A=242**

$^{242}\text{Am}$	2008BRZZ	NUCLEAR REACTIONS $^{89}\text{Y}$ , $^{95}\text{Mo}(n, \gamma)$ , $E$ not given; measured $E\gamma$ , $I\gamma$ ; $^{241}\text{Am}(n, \gamma)$ , $E=0.02$ eV - 100 keV; measured $\sigma$ . Compared results to ENDFB-VII database. CONF Crete(FINUSTAR 2),Proc.P111,Bredeweg
	2008JAZZ	NUCLEAR REACTIONS $^{241}\text{Am}(n, \gamma)$ , $E=0.02$ eV - 300 keV; measured cross sections; deduced resonance parameters. CONF Yosemite(CNR 2007) Proc.P30,Jandel
	2008JUZZ	NUCLEAR REACTIONS $^{243}\text{Am}(^3\text{He}, p)$ , $(^3\text{He}, d)$ , $(^3\text{He}, t)$ , $(^3\text{He}, \alpha)$ , $E=24, 30$ MeV; measured $E_p$ , $I_p$ , $E_d$ , $I_d$ , $E_t$ , $I_t$ , $E\alpha$ , $I\alpha$ ; deduced pseudo-mass yields; $^{242,243,244}\text{Cm}$ , $^{241}\text{Am}(n, f)$ ; deduced cross sections using surrogate method. CONF Yosemite(CNR 2007) Proc.P90,Jurado

**A=243**

$^{243}\text{Cm}$	2008JUZZ	NUCLEAR REACTIONS $^{243}\text{Am}(^3\text{He}, p)$ , $(^3\text{He}, d)$ , $(^3\text{He}, t)$ , $(^3\text{He}, \alpha)$ , $E=24, 30$ MeV; measured $E_p$ , $I_p$ , $E_d$ , $I_d$ , $E_t$ , $I_t$ , $E\alpha$ , $I\alpha$ ; deduced pseudo-mass yields; $^{242,243,244}\text{Cm}$ , $^{241}\text{Am}(n, f)$ ; deduced cross sections using surrogate method. CONF Yosemite(CNR 2007) Proc.P90,Jurado
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**A=244**

$^{244}\text{Cm}$     2008JUZZ    NUCLEAR REACTIONS  $^{243}\text{Am}(^3\text{He}, \text{p})$ ,  $(^3\text{He}, \text{d})$ ,  $(^3\text{He}, \text{t})$ ,  $(^3\text{He}, \alpha)$ ,  
E=24, 30 MeV; measured  $E_{\text{p}}$ ,  $I_{\text{p}}$ ,  $E_{\text{d}}$ ,  $I_{\text{d}}$ ,  $E_{\text{t}}$ ,  $I_{\text{t}}$ ,  $E_{\alpha}$ ,  $I_{\alpha}$ ; deduced  
pseudo-mass yields;  $^{242,243,244}\text{Cm}$ ,  $^{241}\text{Am}(\text{n}, \text{f})$ ; deduced cross sections  
using surrogate method. CONF Yosemite(CNR 2007) Proc.P90,Jurado  
2008VE05    RADIOACTIVITY  $^{244,246,248}\text{Cm}(\text{SF})$ ; measured ternary fission  $\alpha$  and  
triton emission probabilities and energy distributions. JOUR NUPAB  
806 1

**A=245**

$^{245}\text{Cm}$     2008JUZZ    NUCLEAR REACTIONS  $^{243}\text{Am}(^3\text{He}, \text{p})$ ,  $(^3\text{He}, \text{d})$ ,  $(^3\text{He}, \text{t})$ ,  $(^3\text{He}, \alpha)$ ,  
E=24, 30 MeV; measured  $E_{\text{p}}$ ,  $I_{\text{p}}$ ,  $E_{\text{d}}$ ,  $I_{\text{d}}$ ,  $E_{\text{t}}$ ,  $I_{\text{t}}$ ,  $E_{\alpha}$ ,  $I_{\alpha}$ ; deduced  
pseudo-mass yields;  $^{242,243,244}\text{Cm}$ ,  $^{241}\text{Am}(\text{n}, \text{f})$ ; deduced cross sections  
using surrogate method. CONF Yosemite(CNR 2007) Proc.P90,Jurado

**A=246**

$^{246}\text{Cm}$     2008VE05    RADIOACTIVITY  $^{244,246,248}\text{Cm}(\text{SF})$ ; measured ternary fission  $\alpha$  and  
triton emission probabilities and energy distributions. JOUR NUPAB  
806 1

**A=247**

No references found

**A=248**

$^{248}\text{Cm}$     2008TS03    RADIOACTIVITY  $^{248}\text{Cm}$ ,  $^{252}\text{Cf}(\text{SF})$ ; measured  $E_{\gamma}$ ,  $I_{\gamma}$ ,  $\gamma\gamma$ -coin,  
fragment mass distributions. JOUR PRVCA 78 011301  
2008VE05    RADIOACTIVITY  $^{244,246,248}\text{Cm}(\text{SF})$ ; measured ternary fission  $\alpha$  and  
triton emission probabilities and energy distributions. JOUR NUPAB  
806 1  
 $^{248}\text{Cf}$     2008KA27    NUCLEAR REACTIONS  $^{249}\text{Cf}(\text{d}, \text{p})$ ,  $(\text{d}, \text{t})$ , E=11, 12, 13, 14 MeV;  
measured charged particle energies,  $\sigma(\theta)$ .  $^{248,250}\text{Cf}$ ; deduced levels, J,  
 $\pi$ , bands, configurations. Comparison with model calculations. JOUR  
PRVCA 78 014301  
 $^{248}\text{Fm}$     2008GRZW    NUCLEAR REACTIONS  $^{202}\text{Hg}(^{48}\text{Ca}, 2\text{n})^{248}\text{Fm}$ , E=213 MeV;  
measured  $E_{\gamma}$ ,  $I_{\gamma}$ ;  $^{248}\text{Fm}$ ; deduced bands structure. CONF  
Crete(FINUSTAR 2),Proc.P56,Greenlees

KEYNUMBERS AND KEYWORDS

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**A=249**

<sup>249</sup>Fm      2008DOZZ      RADIOACTIVITY <sup>253</sup>No( $\alpha$ ) [from <sup>207</sup>Pb(<sup>48</sup>Ca, 2n)]; measured E $\gamma$ , I $\gamma$ , E $\alpha$ , I $\alpha$ ,  $\alpha\gamma$ -coin, conversion electrons; <sup>217</sup>Pa( $\alpha$ ) [from <sup>181</sup>Ta(<sup>40</sup>Ar, 4n)]; measured E $\gamma$ , I $\gamma$ ,  $\alpha\gamma$ -coin,  $\alpha$ (conversion electron)-coin; <sup>249</sup>Fm(IT); measured internal conversion coefficients. CONF Crete(FINUSTAR 2),Proc.P64,Dorvaux

**A=250**

<sup>250</sup>Cf      2008KA27      NUCLEAR REACTIONS <sup>249</sup>Cf(d, p), (d, t), E=11, 12, 13, 14 MeV; measured charged particle energies,  $\sigma(\theta)$ . <sup>248,250</sup>Cf; deduced levels, J,  $\pi$ , bands, configurations. Comparison with model calculations. JOUR PRVCA 78 014301

<sup>250</sup>Fm      2008GR17      NUCLEAR REACTIONS <sup>204</sup>Hg(<sup>48</sup>Ca, 2n), E=209 MeV; measured E $\gamma$ , I $\gamma$ , conversion electrons, (ce) $\gamma$ -coin. <sup>250</sup>Fm; deduced levels, J,  $\pi$ , band configurations, B(M1), B(E2). <sup>252,254</sup>No; systematics JOUR PRVCA 78 021303

                 2008GR17      RADIOACTIVITY <sup>250</sup>Fm(IT); measured E $\gamma$ , I $\gamma$ , half-life. Deduced levels, J,  $\pi$ . Comparison with model calculations. JOUR PRVCA 78 021303

<sup>250</sup>No      2008DR05      RADIOACTIVITY <sup>254,255,256,257</sup>Rf( $\alpha$ ); measured E $\alpha$ , I $\alpha$ , half-lives. JOUR PRVCA 78 024605

**A=251**

<sup>251</sup>Fm      2008HA31      RADIOACTIVITY <sup>255</sup>Lr, <sup>255</sup>No( $\alpha$ ) [from <sup>209</sup>Bi(<sup>48</sup>Ca, 2n), E=219 MeV]; measured E $\alpha$ , I $\alpha$ , conversion electrons, E $\gamma$ , I $\gamma$ ,  $\gamma\alpha$ -, (ce) $\alpha$ -coin. <sup>255</sup>Lr; deduced levels, J,  $\pi$ , hindrance factors, half-life of isomeric state. JOUR PRVCA 78 021302

<sup>251</sup>Md      2008HA31      RADIOACTIVITY <sup>255</sup>Lr, <sup>255</sup>No( $\alpha$ ) [from <sup>209</sup>Bi(<sup>48</sup>Ca, 2n), E=219 MeV]; measured E $\alpha$ , I $\alpha$ , conversion electrons, E $\gamma$ , I $\gamma$ ,  $\gamma\alpha$ -, (ce) $\alpha$ -coin. <sup>255</sup>Lr; deduced levels, J,  $\pi$ , hindrance factors, half-life of isomeric state. JOUR PRVCA 78 021302

                 2008KEZY      RADIOACTIVITY <sup>251</sup>Md(IT), <sup>255</sup>Lr(IT); measured E $\gamma$ , I $\gamma$ ; deduced rotational bands, moments of inertia. CONF Crete(FINUSTAR 2),Proc.P368,Ketelhut

<sup>251</sup>No      2008DR05      RADIOACTIVITY <sup>254,255,256,257</sup>Rf( $\alpha$ ); measured E $\alpha$ , I $\alpha$ , half-lives. JOUR PRVCA 78 024605

**A=252**

<sup>252</sup>Cf      2008GA21      RADIOACTIVITY <sup>252</sup>Cf(SF); measured E $\gamma$ , I $\gamma$ , neutron yields and angular correlations. Comparisons with model calculations. JOUR BRSPE 72 773

                 2008HW02      RADIOACTIVITY <sup>252</sup>Cf(SF); measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -, (particle) $\gamma$ -coin. <sup>153,155</sup>Nd; deduced levels, configurations, rotational bands. JOUR PRVCA 78 014309

KEYNUMBERS AND KEYWORDS

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**A=252 (continued)**

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| 2008HW03          | RADIOACTIVITY $^{252}\text{Cf}(\text{SF})$ ; measured $E_\gamma$ , $I_\gamma$ , $\gamma\gamma$ -coin. $^{89,91}\text{Kr}$ , $^{159}\text{Sm}$ ; deduced levels, J, $\pi$ , bands, configurations. $^{90,92}\text{Kr}$ , $^{161}\text{Gd}$ , $^{163}\text{Dy}$ ; comparison with adopted levels. JOUR PRVCA 78 017303  |
| 2008PE20          | RADIOACTIVITY $^{252}\text{Cf}(\text{SF})$ ; measured correlated neutron time-of-flight spectra, $E_n$ , $\sigma(d\theta)$ ; scintillation detectors, n- $\gamma$ pulse shape discrimination. JOUR PANUE 71 1137  |
| 2008TS03          | RADIOACTIVITY $^{248}\text{Cm}$ , $^{252}\text{Cf}(\text{SF})$ ; measured $E_\gamma$ , $I_\gamma$ , $\gamma\gamma$ -coin, fragment mass distributions. JOUR PRVCA 78 011301   |
| 2008WA15          | RADIOACTIVITY $^{252}\text{Cf}(\text{SF})$ ; measured $E_\gamma$ , $I_\gamma$ , $\gamma\gamma$ -coin, fission yields of $^{103,104,105}\text{Nb}$ , $^{143,145,147}\text{La}$ . $^{104}\text{Nb}$ ; deduced levels, J, $\pi$ , bands, configurations. $^{101,102,103}\text{Nb}$ , $^{101,103}\text{Zr}$ , $^{103,105}\text{Mo}$ ; level systematics. JOUR PRVCA 78 014313 |
| $^{252}\text{No}$ | 2008DR05 RADIOACTIVITY $^{254,255,256,257}\text{Rf}(\alpha)$ ; measured $E_\alpha$ , $I_\alpha$ , half-lives. JOUR PRVCA 78 024605  |
|                   | 2008GR17 NUCLEAR REACTIONS $^{204}\text{Hg}(^{48}\text{Ca}, 2n)$ , $E=209$ MeV; measured $E_\gamma$ , $I_\gamma$ , conversion electrons, (ce) $\gamma$ -coin. $^{250}\text{Fm}$ ; deduced levels, J, $\pi$ , band configurations, B(M1), B(E2). $^{252,254}\text{No}$ ; systematics JOUR PRVCA 78 021303  |

**A=253**

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|-------------------|--|
| $^{253}\text{No}$ | 2008DOZZ RADIOACTIVITY $^{253}\text{No}(\alpha)$ [from $^{207}\text{Pb}(^{48}\text{Ca}, 2n)$ ]; measured $E_\gamma$ , $I_\gamma$ , $E_\alpha$ , $I_\alpha$ , $\alpha\gamma$ -coin, conversion electrons; $^{217}\text{Pa}(\alpha)$ [from $^{181}\text{Ta}(^{40}\text{Ar}, 4n)$ ]; measured $E_\gamma$ , $I_\gamma$ , $\alpha\gamma$ -coin, $\alpha$ (conversion electron)-coin; $^{249}\text{Fm}(\text{IT})$ ; measured internal conversion coefficients. CONF Crete(FINUSTAR 2), Proc.P64,Dorvaux |
|                   | 2008DR05 RADIOACTIVITY $^{254,255,256,257}\text{Rf}(\alpha)$ ; measured $E_\alpha$ , $I_\alpha$ , half-lives. JOUR PRVCA 78 024605   |

**A=254**

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|-------------------|--|
| $^{254}\text{No}$ | 2008GR17 NUCLEAR REACTIONS $^{204}\text{Hg}(^{48}\text{Ca}, 2n)$ , $E=209$ MeV; measured $E_\gamma$ , $I_\gamma$ , conversion electrons, (ce) $\gamma$ -coin. $^{250}\text{Fm}$ ; deduced levels, J, $\pi$ , band configurations, B(M1), B(E2). $^{252,254}\text{No}$ ; systematics JOUR PRVCA 78 021303 |
| $^{254}\text{Rf}$ | 2008DR05 NUCLEAR REACTIONS $^{208}\text{Pb}(^{48}\text{Ti}, n)$ , $(^{48}\text{Ti}, 2n)$ , $(^{50}\text{Ti}, n)$ , $(^{50}\text{Ti}, 2n)$ , $E=4.6-4.8$ MeV / nucleon; measured excitation functions, $\sigma$ . JOUR PRVCA 78 024605  |
|                   | 2008DR05 RADIOACTIVITY $^{254,255,256,257}\text{Rf}(\alpha)$ ; measured $E_\alpha$ , $I_\alpha$ , half-lives. JOUR PRVCA 78 024605   |



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**A=255**

- <sup>255</sup>No 2008HA31 RADIOACTIVITY <sup>255</sup>Lr, <sup>255</sup>No( $\alpha$ ) [from <sup>209</sup>Bi(<sup>48</sup>Ca, 2n), E=219 MeV]; measured E $\alpha$ , I $\alpha$ , conversion electrons, E $\gamma$ , I $\gamma$ ,  $\gamma\alpha$ -, (ce) $\alpha$ -coin. <sup>255</sup>Lr; deduced levels, J,  $\pi$ , hindrance factors, half-life of isomeric state. JOUR PRVCA 78 021302
- <sup>255</sup>Lr 2008HA31 RADIOACTIVITY <sup>255</sup>Lr, <sup>255</sup>No( $\alpha$ ) [from <sup>209</sup>Bi(<sup>48</sup>Ca, 2n), E=219 MeV]; measured E $\alpha$ , I $\alpha$ , conversion electrons, E $\gamma$ , I $\gamma$ ,  $\gamma\alpha$ -, (ce) $\alpha$ -coin. <sup>255</sup>Lr; deduced levels, J,  $\pi$ , hindrance factors, half-life of isomeric state. JOUR PRVCA 78 021302
- 2008KEZY RADIOACTIVITY <sup>251</sup>Md(IT), <sup>255</sup>Lr(IT); measured E $\gamma$ , I $\gamma$ ; deduced rotational bands, moments of inertia. CONF Crete(FINUSTAR 2),Proc.P368,Ketelhut
- <sup>255</sup>Rf 2008DR05 NUCLEAR REACTIONS <sup>208</sup>Pb(<sup>48</sup>Ti, n), (<sup>48</sup>Ti, 2n), (<sup>50</sup>Ti, n), (<sup>50</sup>Ti, 2n), E=4.6-4.8 MeV / nucleon; measured excitation functions,  $\sigma$ . JOUR PRVCA 78 024605
- 2008DR05 RADIOACTIVITY <sup>254,255,256,257</sup>Rf( $\alpha$ ); measured E $\alpha$ , I $\alpha$ , half-lives. JOUR PRVCA 78 024605

**A=256**

- <sup>256</sup>Rf 2008DR05 NUCLEAR REACTIONS <sup>208</sup>Pb(<sup>48</sup>Ti, n), (<sup>48</sup>Ti, 2n), (<sup>50</sup>Ti, n), (<sup>50</sup>Ti, 2n), E=4.6-4.8 MeV / nucleon; measured excitation functions,  $\sigma$ . JOUR PRVCA 78 024605
- 2008DR05 RADIOACTIVITY <sup>254,255,256,257</sup>Rf( $\alpha$ ); measured E $\alpha$ , I $\alpha$ , half-lives. JOUR PRVCA 78 024605

**A=257**

- <sup>257</sup>Rf 2008DR05 NUCLEAR REACTIONS <sup>208</sup>Pb(<sup>48</sup>Ti, n), (<sup>48</sup>Ti, 2n), (<sup>50</sup>Ti, n), (<sup>50</sup>Ti, 2n), E=4.6-4.8 MeV / nucleon; measured excitation functions,  $\sigma$ . JOUR PRVCA 78 024605
- 2008DR05 RADIOACTIVITY <sup>254,255,256,257</sup>Rf( $\alpha$ ); measured E $\alpha$ , I $\alpha$ , half-lives. JOUR PRVCA 78 024605

**A=258**

No references found

**A=259**

No references found

**A=260**

No references found

**A=261**

<sup>261</sup>Bh      2008NE08      NUCLEAR REACTIONS <sup>208</sup>Pb(<sup>55</sup>Mn, n), (<sup>55</sup>Mn, 2n), E=273, 278, 283 MeV; <sup>209</sup>Bi(<sup>54</sup>Cr, n), (<sup>54</sup>Cr, 2n), E=253.5-272.3 MeV; measured excitation functions,  $\sigma$ , half-lives. JOUR PRVCA 78 024606

**A=262**

<sup>262</sup>Bh      2008NE08      NUCLEAR REACTIONS <sup>208</sup>Pb(<sup>55</sup>Mn, n), (<sup>55</sup>Mn, 2n), E=273, 278, 283 MeV; <sup>209</sup>Bi(<sup>54</sup>Cr, n), (<sup>54</sup>Cr, 2n), E=253.5-272.3 MeV; measured excitation functions,  $\sigma$ , half-lives. JOUR PRVCA 78 024606

**A=263**

No references found

**A=264**

<sup>264</sup>Hs      2008HI14      NUCLEAR REACTIONS <sup>232</sup>Th(<sup>32</sup>S, X)<sup>264</sup>Hs, E=157.8-195.0 MeV; measured absolute  $\sigma$ , fission fragment  $\sigma$ ,  $\sigma(\theta)$  and anisotropy, mass-angle and mass-ratio distributions, barrier distributions; comparison with transition state model, Coupled channel calculations. JOUR PRLTA 101 092701

**A=265**

No references found

**A=266**

No references found

**A=267**

No references found

**A=268**

No references found

**A=269**

No references found

KEYNUMBERS AND KEYWORDS

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**A=270**

No references found

**A=271**

No references found

**A=272**

No references found

**A=273**

No references found

**A=274**

No references found

**A=275**

No references found

**A=276**

No references found

**A=277**

<sup>277</sup> 112	2008M009	NUCLEAR REACTIONS <sup>208</sup> Pb, <sup>209</sup> Bi( <sup>70</sup> Zn, n), E not given; measured E $\alpha$ , I $\alpha$ , T <sub>1/2</sub> . Confirmed existence of <sup>277</sup> 112 and first observation of <sup>278</sup> 113 via their $\alpha$ -decay daughters. JOUR NUPAB 805 172c
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**A=278**

<sup>278</sup> 113	2008M009	NUCLEAR REACTIONS <sup>208</sup> Pb, <sup>209</sup> Bi( <sup>70</sup> Zn, n), E not given; measured E $\alpha$ , I $\alpha$ , T <sub>1/2</sub> . Confirmed existence of <sup>277</sup> 112 and first observation of <sup>278</sup> 113 via their $\alpha$ -decay daughters. JOUR NUPAB 805 172c
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KEYNUMBERS AND KEYWORDS

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**A=279**

<sup>279</sup>Ds      2008HOZX      RADIOACTIVITY <sup>283</sup>112( $\alpha$ ) [from <sup>238</sup>U(<sup>48</sup>Ca, X)];  
<sup>283</sup>112(spontaneous fission) [from <sup>238</sup>U(<sup>48</sup>Ca, X)]; measured half-lives.  
CONF Crete(FINUSTAR 2),Proc.P69,Hofmann

**A=280**

No references found

**A=281**

No references found

**A=282**

No references found

**A=283**

<sup>283</sup>112      2008HOZX      RADIOACTIVITY <sup>283</sup>112( $\alpha$ ) [from <sup>238</sup>U(<sup>48</sup>Ca, X)];  
<sup>283</sup>112(spontaneous fission) [from <sup>238</sup>U(<sup>48</sup>Ca, X)]; measured half-lives.  
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