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This document lists experimental references added to Nuclear Science References (NSR) during the period July 1, 2007 to September 30, 2007. The first section lists keynumbers and keywords sorted by mass and nuclide. The second section lists all references, ordered by keynumber.

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## Keynumbers and Keywords

### A=1

<sup>1</sup> n	2007BE38	NUCLEAR REACTIONS ${}^3\text{He}(\gamma, 2\text{pn})$ , $(\gamma, 2\text{p})$ , $(\gamma, \text{pd})$ ; ${}^4\text{He}(\gamma, \text{pt})$ , $(\gamma, 2\text{d})$ , $E=0.35\text{-}1.5$ GeV; measured $\sigma(E, \theta)$ . Comparison with model predictions. JOUR NUPAB 790 167c
	2007MA60	NUCLEAR REACTIONS ${}^2\text{H}(\text{polarized p}, 2\text{p})$ , $E=190$ MeV; measured $\sigma(\theta)$ , vector analyzing powers. Comparison with calculations using 3N forces. JOUR NUPAB 790 426c
	2007SA39	NUCLEAR REACTIONS ${}^2\text{H}(\text{p}, \text{p})$ , $(\text{p}, 2\text{p})$ , $E=13$ MeV; measured $E_p$ , $\text{pp-coin}$ , $\sigma(\theta)$ ; calculated $\sigma(\theta)$ . Watson-Migdal-Faddeev model. JOUR NUPAB 790 348c
	2007SE11	NUCLEAR REACTIONS ${}^1\text{H}(\text{polarized d}, 2\text{p})$ , $E=270$ MeV; measured vector and tensor analyzing powers. Comparison with Faddeev calculations. JOUR NUPAB 790 450c
	2007TU04	NUCLEAR REACTIONS ${}^2\text{H}(\text{p}, 2\text{p})$ , $E=5, 6$ MeV; measured $E_p$ , $I_p$ , $\sigma(E, \theta)$ . Plane wave impulse approximation, Trojan horse method. JOUR NUPAB 787 337c
<sup>1</sup> H	2007CA35	NUCLEAR REACTIONS ${}^1\text{H}({}^{36}\text{Si}, {}^{36}\text{Si}')$ , $E < 140$ MeV / nucleon; ${}^1\text{H}({}^{38}\text{Si}, {}^{38}\text{Si}')$ , $E < 140$ MeV / nucleon; ${}^1\text{H}({}^{40}\text{Si}, {}^{40}\text{Si}')$ , $E < 140$ MeV / nucleon; measured $E_\gamma$ , $I_\gamma$ , (particle) $\gamma$ -coinc, inelastic proton scattering cross sections. ${}^{36,38,40}\text{Si}$ deduced quadrupole deformation parameters. JOUR PYLBB 652 169
	2007CH50	NUCLEAR REACTIONS ${}^1\text{H}(e, e')$ , $(e^+, e^+')$ , $E(\text{cm})=318$ MeV; measured $D^*$ production $\sigma(Q^2)$ . Comparison with other data and next-to-leading-order QCD calculations. JOUR PYLBB 649 111
	2007GI08	NUCLEAR REACTIONS ${}^1\text{H}({}^8\text{He}, {}^8\text{He})$ , $({}^8\text{He}, \text{d})$ , $({}^8\text{He}, \text{t})$ , $E=15.7, 61.3$ MeV / nucleon; analyzed $\sigma(\theta)$ . Coupled reaction channel calculations, DWBA analysis. ${}^2\text{H}({}^{26}\text{Ne}, \text{p})$ , $E=9.7$ MeV / nucleon; measured fragment yield, $E_\gamma$ , $I_\gamma$ , (particle) $\gamma$ -coin. ${}^{27}\text{Ne}$ deduced levels, $J, \pi$ . Exogam array, Vamos spectrometer. JOUR NUPAB 787 423c
	2007KA38	NUCLEAR REACTIONS ${}^2\text{H}(\text{polarized p}, \text{p})$ , $E=108, 120, 135, 150, 170, 190$ MeV; measured $\sigma(E, \theta)$ , analyzing powers. ${}^1\text{H}(\text{polarized d}, \text{d})$ , $E=180$ MeV; measured $\sigma(\theta)$ , analyzing powers. ${}^1\text{H}(\text{polarized d}, \text{np})$ , $E=130$ MeV; measured $\sigma(E, \theta)$ . Comparison with calculations. Faddeev model using 2N and 3N potentials. JOUR NUPAB 790 69c
	2007PA26	NUCLEAR REACTIONS ${}^1\text{H}(\text{p}, \text{p}')$ , $E=1.30, 1.36, 1.45$ GeV; measured $E_p$ , $I_p$ , three-pion production $\sigma$ , pp missing mass distributions. Comparison with other data and statistical model calculations. JOUR PYLBB 649 122
	2007SA38	NUCLEAR REACTIONS ${}^1\text{H}(\text{d}, \text{d})$ , $E(\text{cm})=135$ MeV / nucleon; analyzed $\sigma(\theta)$ . ${}^1\text{H}(\text{polarized d}, \gamma)$ , $E(\text{cm})=135$ MeV / nucleon; measured analyzing powers. Comparison with calculations. Faddeev model using 2N and 3N potentials. JOUR NUPAB 790 122c

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KEYNUMBERS AND KEYWORDS

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**A=2**

<sup>2</sup> n	2007SIZY	NUCLEAR REACTIONS ${}^4\text{He}({}^6\text{He}, 2\alpha)$ , E=25 MeV / nucleon; measured $E\alpha$ , $E_n$ , and two neutron momentum distributions. CONF Khanty-Mansiysk (Exotic Nuclei) Proc, P43
<sup>2</sup> H	2007DE31	NUCLEAR REACTIONS ${}^2\text{H}(p, p)$ , E=1.9-3.0 MeV; measured elastic scattering $\sigma$ at backward angles. JOUR NIMBE 261 405
	2007KA38	NUCLEAR REACTIONS ${}^2\text{H}(\text{polarized } p, p)$ , E=108, 120, 135, 150, 170, 190 MeV; measured $\sigma(E, \theta)$ , analyzing powers. ${}^1\text{H}(\text{polarized } d, d)$ , E=180 MeV; measured $\sigma(\theta)$ , analyzing powers. ${}^1\text{H}(\text{polarized } d, np)$ , E=130 MeV; measured $\sigma(E, \theta)$ . Comparison with calculations. Faddeev model using 2N and 3N potentials. JOUR NUPAB 790 69c
	2007MA46	NUCLEAR REACTIONS ${}^2\text{H}(n, n)$ , E=248 MeV; measured $E_n$ , $\sigma$ and vector analyzing power. JOUR PRVCA 76 014004
	2007MA61	NUCLEAR REACTIONS ${}^2\text{H}(\text{polarized } n, n)$ , E=250 MeV; measured $\sigma(\theta)$ , vector analyzing powers. Comparison with Faddeev calculations using 3N forces and other data. JOUR NUPAB 790 430c
	2007MI31	NUCLEAR REACTIONS ${}^2\text{H}(d, pn)$ , E=270 MeV; measured combined proton, neutron energy spectrum at $0^\circ$ ; deduced three and four-body breakup. Plane wave impulse approximation. JOUR NUPAB 790 442c
	2007SA39	NUCLEAR REACTIONS ${}^2\text{H}(p, p)$ , (p, 2p), E=13 MeV; measured $E_p$ , pp-coin, $\sigma(\theta)$ ; calculated $\sigma(\theta)$ . Watson-Migdal-Faddeev model. JOUR NUPAB 790 348c

**A=3**

<sup>3</sup> H	2007MI25	NUCLEAR REACTIONS ${}^4\text{He}({}^{22}\text{O}, {}^{23}\text{F}\gamma)$ , $({}^{23}\text{F}, {}^{23}\text{F}\gamma)$ , $({}^{24}\text{F}, {}^{23}\text{F}\gamma)$ , $({}^{25}\text{Ne}, {}^{23}\text{F}\gamma)$ , E≈35 MeV / nucleon; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin; deduced reaction $\sigma$ . ${}^4\text{He}({}^{22}\text{O}, {}^{23}\text{F}\gamma)$ , E=35 MeV / nucleon; measured $\sigma(\theta)$ . ${}^{23}\text{F}$ deduced levels, J, $\pi$ , configurations. Comparison with DWBA and shell model predictions. JOUR NUPAB 787 569c
	2007NAZW	NUCLEAR REACTIONS ${}^4\text{He}(\gamma, X)$ , E < 50 MeV; ${}^{12}\text{C}(\alpha, \gamma)$ , E(cm)=1.4-1.6 MeV; ${}^2\text{H}$ , ${}^{62}\text{Ni}(n, \gamma)$ , E= low; measured cross sections. CONF Tokai-mura (Nuclear Data) Proc, PIII.01, Nagai
<sup>3</sup> He	2007JAZZ	NUCLEAR REACTIONS ${}^2\text{H}(d, n)$ , E=270 MeV; measured angular dependence of the vector and tensor analyzing powers. Compared results to model calculations. PREPRINT arXiv.0706.3568v1 [nucl-ex]
	2007ME16	NUCLEAR REACTIONS ${}^2\text{H}(p, \gamma)$ , E=190 MeV; measured $\sigma(\theta)$ . ${}^1\text{H}(\text{polarized } d, \gamma)$ , E=55, 66.5, 90 MeV / nucleon; measured $E\gamma$ , (particle) $\gamma$ -coin, vector and tensor analyzing powers. Comparison with model predictions, Faddeev calculations using 3N forces. JOUR NUPAB 790 434c
	2007SA38	NUCLEAR REACTIONS ${}^1\text{H}(d, d)$ , E(cm)=135 MeV / nucleon; analyzed $\sigma(\theta)$ . ${}^1\text{H}(\text{polarized } d, \gamma)$ , E(cm)=135 MeV / nucleon; measured analyzing powers. Comparison with calculations. Faddeev model using 2N and 3N potentials. JOUR NUPAB 790 122c
	2007SC31	NUCLEAR REACTIONS ${}^2\text{H}(p, X){}^3\text{He}$ , E=1360, 1450 MeV; measured missing mass spectra; deduced possible $\omega$ production. JOUR NUPAB 790 319c

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## KEYNUMBERS AND KEYWORDS

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### A=3 (*continued*)

2007TA23 NUCLEAR REACTIONS  $^1\text{H}$ (polarized d,  $\gamma$ ), E=137 MeV; measured tensor analyzing powers. Comparison with meson exchange current calculations and other data. JOUR NUPAB 790 446c

### A=4

$^4\text{n}$  2007FOZY NUCLEAR REACTIONS  $^2\text{H}$ ( $^8\text{He}$ , p), ( $^8\text{He}$ ,  $\alpha$ ), ( $^8\text{He}$ ,  $^6\text{Li}$ ), E=15.3 MeV / nucleon; measured charged particle energies and yields. CONF Khanty-Mansiysk (Exotic Nuclei) Proc, P3

$^4\text{H}$  2007NA18 NUCLEAR REACTIONS  $^4\text{He}$ ( $^7\text{Li}$ ,  $^7\text{Be}$ ), E=455 MeV; measured  $\sigma$  and angular distributions. deduced E1 photodisintegration cross section. JOUR PRVCA 76 021305

$^4\text{He}$  2007MI25 NUCLEAR REACTIONS  $^4\text{He}$ ( $^{22}\text{O}$ ,  $^{23}\text{F}\gamma$ ), ( $^{23}\text{F}$ ,  $^{23}\text{F}\gamma$ ), ( $^{24}\text{F}$ ,  $^{23}\text{F}\gamma$ ), ( $^{25}\text{Ne}$ ,  $^{23}\text{F}\gamma$ ), E≈35 MeV / nucleon; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin; deduced reaction  $\sigma$ .  $^4\text{He}$ ( $^{22}\text{O}$ ,  $^{23}\text{F}\gamma$ ), E=35 MeV / nucleon; measured  $\sigma(\theta)$ .  $^{23}\text{F}$  deduced levels, J,  $\pi$ , configurations. Comparison with DWBA and shell model predictions. JOUR NUPAB 787 569c

2007OS03 NUCLEAR REACTIONS  $^9\text{Be}$ ( $^{13}\text{C}$ ,  $\alpha$ ,  $^{14}\text{C}$ ), E=89.45 MeV; measured particle energies and coincidences.  $^8\text{Be}$  deduced levels. JOUR UKPJA 52 525

### A=5

$^5\text{He}$  2007MI25 NUCLEAR REACTIONS  $^4\text{He}$ ( $^{22}\text{O}$ ,  $^{23}\text{F}\gamma$ ), ( $^{23}\text{F}$ ,  $^{23}\text{F}\gamma$ ), ( $^{24}\text{F}$ ,  $^{23}\text{F}\gamma$ ), ( $^{25}\text{Ne}$ ,  $^{23}\text{F}\gamma$ ), E≈35 MeV / nucleon; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin; deduced reaction  $\sigma$ .  $^4\text{He}$ ( $^{22}\text{O}$ ,  $^{23}\text{F}\gamma$ ), E=35 MeV / nucleon; measured  $\sigma(\theta)$ .  $^{23}\text{F}$  deduced levels, J,  $\pi$ , configurations. Comparison with DWBA and shell model predictions. JOUR NUPAB 787 569c

### A=6

$^6\text{H}$  2007F005 NUCLEAR REACTIONS  $^{6,7}\text{Li}$ ,  $^9\text{Be}$ ,  $^{12}\text{C}$ ( $\pi^+$ ,  $\pi^-$ ), ( $\pi^-$ ,  $\pi^+$ ), E=120-270 MeV; measured double differential inclusive pion double charge exchange cross sections. Compared results to model calculations. JOUR PRVCA 75 064605

2007FOZY NUCLEAR REACTIONS  $^2\text{H}$ ( $^8\text{He}$ , p), ( $^8\text{He}$ ,  $\alpha$ ), ( $^8\text{He}$ ,  $^6\text{Li}$ ), E=15.3 MeV / nucleon; measured charged particle energies and yields. CONF Khanty-Mansiysk (Exotic Nuclei) Proc, P3

$^6\text{He}$  2007GI08 NUCLEAR REACTIONS  $^1\text{H}$ ( $^8\text{He}$ ,  $^8\text{He}$ ), ( $^8\text{He}$ , d), ( $^8\text{He}$ , t), E=15.7, 61.3 MeV / nucleon; analyzed  $\sigma(\theta)$ . Coupled reaction channel calculations, DWBA analysis.  $^2\text{H}$ ( $^{26}\text{Ne}$ , p), E=9.7 MeV / nucleon; measured fragment yield,  $E\gamma$ ,  $I\gamma$ , (particle) $\gamma$ -coin.  $^{27}\text{Ne}$  deduced levels, J,  $\pi$ . Exogam array, Vamos spectrometer. JOUR NUPAB 787 423c

**KEYNUMBERS AND KEYWORDS**

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**A=6 (*continued*)**

<sup>6</sup> Li	2007MI25	NUCLEAR REACTIONS <sup>4</sup> He( <sup>22</sup> O, <sup>23</sup> F $\gamma$ ), ( <sup>23</sup> F, <sup>23</sup> F $\gamma$ ), ( <sup>24</sup> F, <sup>23</sup> F $\gamma$ ), ( <sup>25</sup> Ne, <sup>23</sup> F $\gamma$ ), E $\approx$ 35 MeV / nucleon; measured E $\gamma$ , I $\gamma$ , $\gamma\gamma$ -coin; deduced reaction $\sigma$ . <sup>4</sup> He( <sup>22</sup> O, <sup>23</sup> F $\gamma$ ), E=35 MeV / nucleon; measured $\sigma(\theta)$ . <sup>23</sup> F deduced levels, J, $\pi$ , configurations. Comparison with DWBA and shell model predictions. JOUR NUPAB 787 569c
<sup>6</sup> B	2007F005	NUCLEAR REACTIONS <sup>6,7</sup> Li, <sup>9</sup> Be, <sup>12</sup> C( $\pi^+$ , $\pi^-$ ), ( $\pi^-$ , $\pi^+$ ), E=120-270 MeV; measured double differential inclusive pion double charge exchange cross sections. Compared results to model calculations. JOUR PRVCA 75 064605

**A=7**

<sup>7</sup> H	2007CA28	NUCLEAR REACTIONS <sup>12</sup> C( <sup>8</sup> He, p), E=154 MeV / nucleon; measured particle energies and excitation energy distributions. <sup>7</sup> H deduced resonance energies. JOUR PRLTA 99 062502
	2007F005	NUCLEAR REACTIONS <sup>6,7</sup> Li, <sup>9</sup> Be, <sup>12</sup> C( $\pi^+$ , $\pi^-$ ), ( $\pi^-$ , $\pi^+$ ), E=120-270 MeV; measured double differential inclusive pion double charge exchange cross sections. Compared results to model calculations. JOUR PRVCA 75 064605
	2007GOZY	NUCLEAR REACTIONS <sup>2</sup> H( <sup>8</sup> He, p), ( <sup>8</sup> He, <sup>3</sup> He), E not given; measured cross sections. CONF Khanty-Mansiysk (Exotic Nuclei) Proc, P32
<sup>7</sup> He	2007GI08	NUCLEAR REACTIONS <sup>1</sup> H( <sup>8</sup> He, <sup>8</sup> He), ( <sup>8</sup> He, d), ( <sup>8</sup> He, t), E=15.7, 61.3 MeV / nucleon; analyzed $\sigma(\theta)$ . Coupled reaction channel calculations, DWBA analysis. <sup>2</sup> H( <sup>26</sup> Ne, p), E=9.7 MeV / nucleon; measured fragment yield, E $\gamma$ , I $\gamma$ , (particle) $\gamma$ -coin. <sup>27</sup> Ne deduced levels, J, $\pi$ . Exogam array, Vamos spectrometer. JOUR NUPAB 787 423c
	2007TA25	NUCLEAR REACTIONS <sup>7</sup> Li, <sup>12</sup> C, <sup>28</sup> Si(e, e'K $^+$ ), E not given; measured missing mass spectra. <sup>7</sup> He, <sup>12</sup> B, <sup>28</sup> Al deduced hypernucleus levels. JOUR NUPAB 790 679c
<sup>7</sup> Be	2007AG08	NUCLEAR REACTIONS <sup>7</sup> Li(K $^+$ , K $^0$ ), E at rest; measured $\pi^+$ , $\pi^-$ invariant mass spectra; deduced threshold $\sigma$ upper limit. JOUR PYLBB 649 25
	2007C017	NUCLEAR REACTIONS <sup>3</sup> He( $\alpha$ , $\gamma$ ), E=220, 250, 400 keV; measured E $\gamma$ , I $\gamma$ . Dduced cross section and S-factor. JOUR PRVCA 75 065803
	2007KA33	NUCLEAR REACTIONS N, O, Ar(p, X) <sup>7</sup> Be / <sup>11</sup> C / <sup>13</sup> N / <sup>15</sup> O / <sup>18</sup> F / <sup>22</sup> Na / <sup>24</sup> Na / <sup>27</sup> Mg / <sup>29</sup> Al / <sup>38</sup> S / <sup>38</sup> Cl / <sup>39</sup> Cl, E=12 GeV; measured radionuclide yields. JOUR JRNCD 273 507
	2007LA25	NUCLEAR REACTIONS <sup>2</sup> H( <sup>10</sup> B, n $\alpha$ ), E=27 MeV; measured E $\alpha$ , I $\alpha$ , $\sigma$ ; deduced astrophysical S-factor. Trojan horse method, three-body process. JOUR NUPAB 787 309c
	2007SI19	NUCLEAR REACTIONS C(n, X) <sup>7</sup> Be, Si(n, X) <sup>22,24</sup> Na, <sup>27</sup> Al(n, X), <sup>197</sup> Au(n, X) <sup>194,196</sup> Au, E=70-160 MeV; measured E $\gamma$ , I $\gamma$ following stacked foil activation. Dduced cross sections. JOUR NIMBE 261 993
<sup>7</sup> B	2007F005	NUCLEAR REACTIONS <sup>6,7</sup> Li, <sup>9</sup> Be, <sup>12</sup> C( $\pi^+$ , $\pi^-$ ), ( $\pi^-$ , $\pi^+$ ), E=120-270 MeV; measured double differential inclusive pion double charge exchange cross sections. Compared results to model calculations. JOUR PRVCA 75 064605

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**A=8**

<sup>8</sup> He	2007G024	NUCLEAR REACTIONS ${}^2\text{H}({}^8\text{He}, \text{p})$ , E=25 MeV / nucleon; measured particle energy and missing mass spectra. ${}^8\text{He}$ deduced levels, J, $\pi$ . JOUR PRVCA 76 021605
<sup>8</sup> Li	2007VI11	NUCLEAR REACTIONS ${}^{12}\text{C}({}^{48}\text{Ca}, \text{X}){}^8\text{Li} / {}^9\text{Li} / {}^{25}\text{Na} / {}^{26}\text{Na} / {}^{27}\text{Na} / {}^{29}\text{Al} / {}^{37}\text{K} / {}^{47}\text{K}$ , E=60 MeV / nucleon; measured yield. JOUR NUPAB 787 126c
<sup>8</sup> Be	2007OS03	NUCLEAR REACTIONS ${}^9\text{Be}({}^{13}\text{C}, \alpha{}^{14}\text{C})$ , E=89.45 MeV; measured particle energies and coincidences. ${}^8\text{Be}$ deduced levels. JOUR UKPJA 52 525

**A=9**

<sup>9</sup> He	2007F005	NUCLEAR REACTIONS ${}^{6,7}\text{Li}$ , ${}^9\text{Be}$ , ${}^{12}\text{C}(\pi^+, \pi^-)$ , $(\pi^-, \pi^+)$ , E=120-270 MeV; measured double differential inclusive pion double charge exchange cross sections. Compared results to model calculations. JOUR PRVCA 75 064605
	2007FOZY	NUCLEAR REACTIONS ${}^2\text{H}({}^8\text{He}, \text{p})$ , $({}^8\text{He}, \alpha)$ , $({}^8\text{He}, {}^6\text{Li})$ , E=15.3 MeV / nucleon; measured charged particle energies and yields. CONF Khanty-Mansiysk (Exotic Nuclei) Proc, P3
	2007G024	NUCLEAR REACTIONS ${}^2\text{H}({}^8\text{He}, \text{p})$ , E=25 MeV / nucleon; measured particle energy and missing mass spectra. ${}^8\text{He}$ deduced levels, J, $\pi$ . JOUR PRVCA 76 021605
	2007GOZY	NUCLEAR REACTIONS ${}^2\text{H}({}^8\text{He}, \text{p})$ , $({}^8\text{He}, {}^3\text{He})$ , E not given; measured cross sections. CONF Khanty-Mansiysk (Exotic Nuclei) Proc, P32
<sup>9</sup> Li	2007VI11	NUCLEAR REACTIONS ${}^{12}\text{C}({}^{48}\text{Ca}, \text{X}){}^8\text{Li} / {}^9\text{Li} / {}^{25}\text{Na} / {}^{26}\text{Na} / {}^{27}\text{Na} / {}^{29}\text{Al} / {}^{37}\text{K} / {}^{47}\text{K}$ , E=60 MeV / nucleon; measured yield. JOUR NUPAB 787 126c
<sup>9</sup> B	2007AR21	NUCLEAR REACTIONS ${}^1\text{H}({}^9\text{Be}, \text{n})$ , E=1.2 GeV / nucleon; measured transverse momentum and pair angle distributions for the $\alpha$ particle pair. JOUR PANUE 70 1222
<sup>9</sup> C	2007F005	NUCLEAR REACTIONS ${}^{6,7}\text{Li}$ , ${}^9\text{Be}$ , ${}^{12}\text{C}(\pi^+, \pi^-)$ , $(\pi^-, \pi^+)$ , E=120-270 MeV; measured double differential inclusive pion double charge exchange cross sections. Compared results to model calculations. JOUR PRVCA 75 064605
	2007ST17	NUCLEAR REACTIONS ${}^1\text{H}({}^{10}\text{B}, 2\text{n})$ , E=1.2 GeV / nucleon; measured transverse momentum distribution of protons produced in the fragmentation of ${}^8\text{B}$ . JOUR PANUE 70 1216

**A=10**

<sup>10</sup> Be	2007B027	NUCLEAR REACTIONS ${}^{12}\text{C}({}^{12}\text{C}, {}^{14}\text{O})$ , E=211.4 MeV; measured $\sigma(\theta, \text{E})$ . ${}^{10}\text{Be}$ deduced levels, J, $\pi$ . Coupled channel calculations. JOUR NUPAB 787 451c
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KEYNUMBERS AND KEYWORDS

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**A=11**

<sup>11</sup> B	2007DE28	NUCLEAR REACTIONS <sup>12</sup> C(d, <sup>2</sup> He), (d, n <sup>2</sup> He), E=171 MeV; measured En, Ep, pp-coin, pn-coin, excitation energy spectra, $\sigma(E, \theta)$ , tensor analysing powers. <sup>11</sup> B deduced giant resonance features. JOUR PYLBB 649 35
	2007FU07	NUCLEAR REACTIONS <sup>12</sup> C( $\pi^+$ , K $^+$ ), ( $\pi^+$ , K $^+$ p), E at 1.05 GeV / c; measured E $\gamma$ , I $\gamma$ from <sup>12</sup> C, <sup>11</sup> B decays. Deduced $\Lambda$ -N interaction parameters. JOUR CPLEE 24 2216
	2007ZI03	NUCLEAR REACTIONS <sup>12</sup> C( <sup>17</sup> O, <sup>18</sup> F) <sup>11</sup> B, E=45 MeV / nucleon; measured E $\gamma$ , I $\gamma$ . <sup>18</sup> F deduced B(E1), B(E2). JOUR NIMAE 579 476
<sup>11</sup> C	2007GA34	NUCLEAR REACTIONS <sup>9</sup> Be( <sup>38</sup> Si, <sup>36</sup> Mg), E=83 MeV / nucleon; measured E $\gamma$ , I $\gamma$ . <sup>36</sup> Mg deduced level energy. Compared results to model calculations. JOUR PRLTA 99 072502
	2007KA33	NUCLEAR REACTIONS N, O, Ar(p, X) <sup>7</sup> Be / <sup>11</sup> C / <sup>13</sup> N / <sup>15</sup> O / <sup>18</sup> F / <sup>22</sup> Na / <sup>24</sup> Na / <sup>27</sup> Mg / <sup>29</sup> Al / <sup>38</sup> S / <sup>38</sup> Cl / <sup>39</sup> Cl, E=12 GeV; measured radionuclide yields. JOUR JRNCD 273 507

**A=12**

<sup>12</sup> Be	2007F005	NUCLEAR REACTIONS <sup>6,7</sup> Li, <sup>9</sup> Be, <sup>12</sup> C( $\pi^+$ , $\pi^-$ ), ( $\pi^-$ , $\pi^+$ ), E=120-270 MeV; measured double differential inclusive pion double charge exchange cross sections. Compared results to model calculations. JOUR PRVCA 75 064605
<sup>12</sup> B	2007DE28	NUCLEAR REACTIONS <sup>12</sup> C(d, <sup>2</sup> He), (d, n <sup>2</sup> He), E=171 MeV; measured En, Ep, pp-coin, pn-coin, excitation energy spectra, $\sigma(E, \theta)$ , tensor analysing powers. <sup>11</sup> B deduced giant resonance features. JOUR PYLBB 649 35
	2007I002	NUCLEAR REACTIONS <sup>12</sup> C(e, e'K $^+$ ), E=3.77 GeV; measured cross sections. <sup>12</sup> B deduced level energies. JOUR PRLTA 99 052501
	2007TA25	NUCLEAR REACTIONS <sup>7</sup> Li, <sup>12</sup> C, <sup>28</sup> Si(e, e'K $^+$ ), E not given; measured missing mass spectra. <sup>7</sup> He, <sup>12</sup> B, <sup>28</sup> Al deduced hypernucleus levels. JOUR NUPAB 790 679c
<sup>12</sup> C	2007FU07	NUCLEAR REACTIONS <sup>12</sup> C( $\pi^+$ , K $^+$ ), ( $\pi^+$ , K $^+$ p), E at 1.05 GeV / c; measured E $\gamma$ , I $\gamma$ from <sup>12</sup> C, <sup>11</sup> B decays. Deduced $\Lambda$ -N interaction parameters. JOUR CPLEE 24 2216
	2007MA58	NUCLEAR REACTIONS <sup>27</sup> Al, <sup>127</sup> I, <sup>206,207,208</sup> Pb(n, n' $\gamma$ ), E not give; <sup>10</sup> B( $\alpha$ , p $\gamma$ ), E=2.27 MeV; <sup>9</sup> Be( $\alpha$ , n $\gamma$ ), E=2.27 MeV; measured yields. JOUR PRVCA 76 022801
	2007PA33	NUCLEAR REACTIONS <sup>12</sup> C( <sup>7</sup> Li, <sup>7</sup> Li), E=7.5, 9, 12, 15 MeV; measured elastic $\sigma(\theta)$ ; deduced optical model parameters. <sup>12</sup> C( <sup>7</sup> Li, $\alpha$ X), E=7.5, 9, 12, 15 MeV; measured E $\alpha$ and $\sigma(\theta)$ ; analyzed fusion and direct $\sigma$ . Comparison with previous data and model calculations. JOUR NUPAB 792 187
<sup>12</sup> N	2007WAZY	NUCLEAR REACTIONS <sup>12</sup> C(p, n), E=296 MeV; measured cross section and polarization observables. Compared results to model calculations. PREPRINT ArXiv:0708.2813v1 [nucl-ex]
	2007ZEZZ	NUCLEAR REACTIONS <sup>12,13</sup> C, <sup>18</sup> O, <sup>26</sup> Mg, <sup>58</sup> Ni, <sup>60</sup> Ni, <sup>90</sup> Zr, <sup>118</sup> Sn, <sup>208</sup> Pb( <sup>3</sup> He, t), E=420 MeV; measured triton spectra and cross sections. Deduced B(GT). PREPRINT arXiv:0707.2840v1 [nucl-ex]

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## KEYNUMBERS AND KEYWORDS

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### **A=12 (continued)**

<sup>12</sup>O      2007F005      NUCLEAR REACTIONS <sup>6,7</sup>Li, <sup>9</sup>Be, <sup>12</sup>C( $\pi^+$ ,  $\pi^-$ ), ( $\pi^-$ ,  $\pi^+$ ), E=120-270 MeV; measured double differential inclusive pion double charge exchange cross sections. Compared results to model calculations. JOUR PRVCA 75 064605

### **A=13**

<sup>13</sup>C      2007MA58      NUCLEAR REACTIONS <sup>27</sup>Al, <sup>127</sup>I, <sup>206,207,208</sup>Pb(n, n'γ), E not give; <sup>10</sup>B(α, pγ), E=2.27 MeV; <sup>9</sup>Be(α, nγ), E=2.27 MeV; measured yields. JOUR PRVCA 76 022801

<sup>13</sup>N      2007KA33      NUCLEAR REACTIONS N, O, Ar(p, X)<sup>7</sup>Be / <sup>11</sup>C / <sup>13</sup>N / <sup>15</sup>O / <sup>18</sup>F / <sup>22</sup>Na / <sup>24</sup>Na / <sup>27</sup>Mg / <sup>29</sup>Al / <sup>38</sup>S / <sup>38</sup>Cl / <sup>39</sup>Cl, E=12 GeV; measured radionuclide yields. JOUR JRNCD 273 507

              2007ZEZZ      NUCLEAR REACTIONS <sup>12,13</sup>C, <sup>18</sup>O, <sup>26</sup>Mg, <sup>58</sup>Ni, <sup>60</sup>Ni, <sup>90</sup>Zr, <sup>118</sup>Sn, <sup>208</sup>Pb(<sup>3</sup>He, t), E=420 MeV; measured triton spectra and cross sections. Deduced B(GT). PREPRINT arXiv:0707.2840v1 [nucl-ex]

### **A=14**

<sup>14</sup>N      2007M020      NUCLEAR REACTIONS <sup>1</sup>H(<sup>17</sup>O, α)<sup>14</sup>N, E=3.3 MeV; measured resonance energy and strength. Discussed astrophysical implications. JOUR PRVCA 75 065801

### **A=15**

<sup>15</sup>N      2007R017      NUCLEAR REACTIONS <sup>12</sup>N(<sup>7</sup>Li, α), E=34 MeV; measured Eα, cross sections, angular distributions and analyzing powers. <sup>15</sup>N deduced levels, J, π. JOUR NIMBE 261 1005

<sup>15</sup>O      2007KA33      NUCLEAR REACTIONS N, O, Ar(p, X)<sup>7</sup>Be / <sup>11</sup>C / <sup>13</sup>N / <sup>15</sup>O / <sup>18</sup>F / <sup>22</sup>Na / <sup>24</sup>Na / <sup>27</sup>Mg / <sup>29</sup>Al / <sup>38</sup>S / <sup>38</sup>Cl / <sup>39</sup>Cl, E=12 GeV; measured radionuclide yields. JOUR JRNCD 273 507

              2007LE26      NUCLEAR REACTIONS <sup>1</sup>H(<sup>15</sup>O, p), E=120 MeV; measured excitation function. <sup>16</sup>F deduced level widths. JOUR PRVCA 76 024314

              2007R017      NUCLEAR REACTIONS <sup>12</sup>N(<sup>7</sup>Li, α), E=34 MeV; measured Eα, cross sections, angular distributions and analyzing powers. <sup>15</sup>N deduced levels, J, π. JOUR NIMBE 261 1005

              2007TRZX      NUCLEAR REACTIONS <sup>14</sup>N(p, γ), E=360, 380, 400 keV; measured Eγ, Iγ. Deduced s-factor. PREPRINT ArXiv:0708.3376v1 [nucl-ex]

### **A=16**

<sup>16</sup>N      2007FR11      RADIOACTIVITY <sup>16</sup>N(β<sup>-</sup>); measured delayed α spectrum. Compared results to existing data. JOUR PRVCA 75 065802

## KEYNUMBERS AND KEYWORDS

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### **A=16 (continued)**

	2007RE17	RADIOACTIVITY $^{16}\text{N}(\beta^-)$ [from $^2\text{H}(^{15}\text{N}, ^{16}\text{N})$ , E=82 MeV]; measured $\text{E}\alpha$ , $\text{I}\alpha$ , (particle) $\alpha$ -coin; deduced astrophysical S-factor. JOUR NUPAB 787 289c
$^{16}\text{O}$	2007BE45	NUCLEAR REACTIONS $^{12}\text{C}(^6\text{Li}, \text{d})$ , E=48.2 MeV; measured $\text{Ed}$ , $\sigma(\theta)$ to first eleven states of $^{16}\text{O}$ ; deduced level energies, widths, spectroscopic factors. DWBA analysis. $^{12}\text{C}(\alpha, \gamma)$ , $E(\text{cm}) \approx 0\text{-}3$ MeV; analyzed $\sigma$ ; deduced resonance parameters. R-Matrix calculations. Astrophysical implications discussed. JOUR NUPAB 793 178
	2007FR11	RADIOACTIVITY $^{16}\text{N}(\beta^-)$ ; measured delayed $\alpha$ spectrum. Compared results to existing data. JOUR PRVCA 75 065802
	2007FU09	NUCLEAR REACTIONS $^4\text{He}(^{14}\text{O}, \text{X})^{16}\text{O}$ , E=32.7 MeV; measured yields and excitation function. JOUR PRVCA 76 021603
	2007NAZW	NUCLEAR REACTIONS $^4\text{He}(\gamma, \text{X})$ , $E < 50$ MeV; $^{12}\text{C}(\alpha, \gamma)$ , $E(\text{cm})=1.4\text{-}1.6$ MeV; $^2\text{H}$ , $^{62}\text{Ni}(\text{n}, \gamma)$ , E= low; measured cross sections. CONF Tokai-mura (Nuclear Data) Proc,PIII.01,Nagai
	2007RE17	RADIOACTIVITY $^{16}\text{N}(\beta^-)$ [from $^2\text{H}(^{15}\text{N}, ^{16}\text{N})$ , E=82 MeV]; measured $\text{E}\alpha$ , $\text{I}\alpha$ , (particle) $\alpha$ -coin; deduced astrophysical S-factor. JOUR NUPAB 787 289c
	2007LE26	NUCLEAR REACTIONS $^1\text{H}(^{15}\text{O}, \text{p})$ , E=120 MeV; measured excitation function. $^{16}\text{F}$ deduced level widths. JOUR PRVCA 76 024314

### **A=17**

No references found

### **A=18**

	2007GR18	RADIOACTIVITY $^{18}\text{Ne}(\beta^+)$ ; measured $\beta$ -delayed $\gamma$ -decays, $T_{1/2}$ . JOUR PRVCA 76 025503
	2007KA33	NUCLEAR REACTIONS N, O, Ar(p, X) $^7\text{Be} / ^{11}\text{C} / ^{13}\text{N} / ^{15}\text{O} / ^{18}\text{F} / ^{22}\text{Na} / ^{24}\text{Na} / ^{27}\text{Mg} / ^{29}\text{Al} / ^{38}\text{S} / ^{38}\text{Cl} / ^{39}\text{Cl}$ , E=12 GeV; measured radionuclide yields. JOUR JRNCD 273 507
	2007ZEZZ	NUCLEAR REACTIONS $^{12,13}\text{C}$ , $^{18}\text{O}$ , $^{26}\text{Mg}$ , $^{58}\text{Ni}$ , $^{60}\text{Ni}$ , $^{90}\text{Zr}$ , $^{118}\text{Sn}$ , $^{208}\text{Pb}$ ( $^3\text{He}$ , t), E=420 MeV; measured triton spectra and cross sections. Deduced B(GT). PREPRINT arXiv:0707.2840v1 [nucl-ex]
	2007ZI03	NUCLEAR REACTIONS $^{12}\text{C}(^{17}\text{O}, ^{18}\text{F})^{11}\text{B}$ , E=45 MeV / nucleon; measured $\text{E}\gamma$ , $\text{I}\gamma$ . $^{18}\text{F}$ deduced B(E1), B(E2). JOUR NIMAE 579 476
$^{18}\text{Ne}$	2007GR18	RADIOACTIVITY $^{18}\text{Ne}(\beta^+)$ ; measured $\beta$ -delayed $\gamma$ -decays, $T_{1/2}$ . JOUR PRVCA 76 025503

### **A=19**

	2007CA28	NUCLEAR REACTIONS $^{12}\text{C}(^8\text{He}, \text{p})$ , E=154 MeV / nucleon; measured particle energies and excitation energy distributions. $^7\text{H}$ deduced resonance energies. JOUR PRLTA 99 062502
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### **A=20**

$^{20}\text{F}$	2007WI09	RADIOACTIVITY $^{20}\text{F}(\beta^-)$ ; measured $E\beta$ , $E\gamma$ , $E\alpha$ . Deduced first forbidden decay branching ratios. JOUR PRVCA 76 018501
$^{20}\text{Ne}$	2007WI09	RADIOACTIVITY $^{20}\text{F}(\beta^-)$ ; measured $E\beta$ , $E\gamma$ , $E\alpha$ . Deduced first forbidden decay branching ratios. JOUR PRVCA 76 018501
$^{20}\text{Mg}$	2007GA38	NUCLEAR REACTIONS $^9\text{B}(^{22}\text{Mg}, \text{X})^{20}\text{Mg}$ , $E=150$ MeV / nucleon; measured $E\gamma$ , $I\gamma$ , (particle) $\gamma$ -coinc. $^{20}\text{Mg}$ deduced level energy and mass excess. JOUR PRVCA 76 024317

### **A=21**

No references found

### **A=22**

$^{22}\text{Na}$	2007KA33	NUCLEAR REACTIONS N, O, Ar(p, X) $^7\text{Be}$ / $^{11}\text{C}$ / $^{13}\text{N}$ / $^{15}\text{O}$ / $^{18}\text{F}$ / $^{22}\text{Na}$ / $^{24}\text{Na}$ / $^{27}\text{Mg}$ / $^{29}\text{Al}$ / $^{38}\text{S}$ / $^{38}\text{Cl}$ / $^{39}\text{Cl}$ , $E=12$ GeV; measured radionuclide yields. JOUR JRNCD 273 507
$^{22}\text{Mg}$	2007GR11	NUCLEAR REACTIONS $^1\text{H}(^{21}\text{Na}, \gamma)$ , $E=1.18$ MeV / nucleon; measured $E\gamma$ , $I\gamma$ , yields. $^1\text{H}(^{7}\text{Be}, \text{X})$ , $E=4-27$ MeV; measured elastic and inelastic scattering $\sigma$ . JOUR NIMBE 261 1089
	2007JE03	NUCLEAR REACTIONS $^{12}\text{C}(^{12}\text{C}, 2n)$ , $E=50$ MeV; measured $E\gamma$ , $I\gamma$ . $^{22}\text{Mg}$ deduced level energies. JOUR NIMBE 261 945

### **A=23**

$^{23}\text{N}$	2007JU03	ATOMIC MASSES $^{23}\text{N}$ , $^{23,24}\text{O}$ , $^{25,26,27}\text{F}$ , $^{27,28,29,30,31}\text{Ne}$ , $^{31,32,33}\text{Na}$ , $^{34,35,36}\text{Mg}$ , $^{34,35,36,37,38,39}\text{Al}$ , $^{36,37,38,39,40,41,42}\text{Si}$ , $^{40,41,42,43,44}\text{P}$ , $^{40,43,44,45}\text{S}$ , $^{43,45,46,47}\text{Cl}$ ; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
$^{23}\text{O}$	2007FRZW	NUCLEAR REACTIONS $\text{Be}(^{26}\text{Ne}, \text{n}2\text{p})^{23}\text{O}$ , $E=86$ MeV / nucleon; measured decay energy spectra. PREPRINT ArXiv:0708.2706v1 [nucl-ex]
	2007JU03	ATOMIC MASSES $^{23}\text{N}$ , $^{23,24}\text{O}$ , $^{25,26,27}\text{F}$ , $^{27,28,29,30,31}\text{Ne}$ , $^{31,32,33}\text{Na}$ , $^{34,35,36}\text{Mg}$ , $^{34,35,36,37,38,39}\text{Al}$ , $^{36,37,38,39,40,41,42}\text{Si}$ , $^{40,41,42,43,44}\text{P}$ , $^{40,43,44,45}\text{S}$ , $^{43,45,46,47}\text{Cl}$ ; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
	2007SC32	NUCLEAR REACTIONS $\text{Be}(^{26}\text{Ne}, \text{n}2\text{p})$ , $E=86$ MeV / nucleon; measured neutron decay energy spectrum, fragment-neutron-coinc. $^{23}\text{O}$ deduced level energy, spectroscopic factor. JOUR PRLTA 99 112501
$^{23}\text{F}$	2007MI25	NUCLEAR REACTIONS $^4\text{He}(^{22}\text{O}, ^{23}\text{F}\gamma)$ , $(^{23}\text{F}, ^{23}\text{F}\gamma)$ , $(^{24}\text{F}, ^{23}\text{F}\gamma)$ , $(^{25}\text{Ne}, ^{23}\text{F}\gamma)$ , $E\approx 35$ MeV / nucleon; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin; deduced reaction $\sigma$ . $^4\text{He}(^{22}\text{O}, ^{23}\text{F}\gamma)$ , $E=35$ MeV / nucleon; measured $\sigma(\theta)$ . $^{23}\text{F}$ deduced levels, $J$ , $\pi$ , configurations. Comparison with DWBA and shell model predictions. JOUR NUPAB 787 569c

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KEYNUMBERS AND KEYWORDS

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**A=24**

<sup>24</sup> O	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>24</sup> Na	2007C018	NUCLEAR REACTIONS <sup>25</sup> Mg( $\gamma$ , p), E not given; measured E $\gamma$ , I $\gamma$ from isomeric decay. JOUR NIMBE 261 822
	2007KA33	NUCLEAR REACTIONS N, O, Ar(p, X) <sup>7</sup> Be / <sup>11</sup> C / <sup>13</sup> N / <sup>15</sup> O / <sup>18</sup> F / <sup>22</sup> Na / <sup>24</sup> Na / <sup>27</sup> Mg / <sup>29</sup> Al / <sup>38</sup> S / <sup>38</sup> Cl / <sup>39</sup> Cl, E=12 GeV; measured radionuclide yields. JOUR JRNCD 273 507
<sup>24</sup> Mg	2007VA10	NUCLEAR REACTIONS <sup>28</sup> Si(p, X) <sup>24</sup> Mg, E=1 GeV; measured E $\gamma$ , I $\gamma$ , $\sigma$ . JOUR PANUE 70 1160

**A=25**

<sup>25</sup> F	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>25</sup> Na	2007VI11	NUCLEAR REACTIONS <sup>12</sup> C( <sup>48</sup> Ca, X) <sup>8</sup> Li / <sup>9</sup> Li / <sup>25</sup> Na / <sup>26</sup> Na / <sup>27</sup> Na / <sup>29</sup> Al / <sup>37</sup> K / <sup>47</sup> K, E=60 MeV / nucleon; measured yield. JOUR NUPAB 787 126c

**A=26**

<sup>26</sup> F	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>26</sup> Na	2007VI11	NUCLEAR REACTIONS <sup>12</sup> C( <sup>48</sup> Ca, X) <sup>8</sup> Li / <sup>9</sup> Li / <sup>25</sup> Na / <sup>26</sup> Na / <sup>27</sup> Na / <sup>29</sup> Al / <sup>37</sup> K / <sup>47</sup> K, E=60 MeV / nucleon; measured yield. JOUR NUPAB 787 126c
	2007GRZY	NUCLEAR REACTIONS <sup>24</sup> Mg( <sup>12</sup> C, <sup>10</sup> C), E=53, 95 MeV / nucleon; measured Ep, E $\alpha$ , 2p2 $\alpha$ correlation functions for decay of the excited states. PREPRINT arXiv.0706.4414v1 [nucl-ex]
<sup>26</sup> Al	2007UG01	NUCLEAR REACTIONS <sup>22</sup> Ne( <sup>6</sup> Li, d), E=30 MeV; measured deuteron energy spectra. <sup>26</sup> Mg deduced level energies. JOUR PRVCA 76 025802
	2007ZEZZ	NUCLEAR REACTIONS <sup>12,13</sup> C, <sup>18</sup> O, <sup>26</sup> Mg, <sup>58</sup> Ni, <sup>60</sup> Ni, <sup>90</sup> Zr, <sup>118</sup> Sn, <sup>208</sup> Pb( <sup>3</sup> He, t), E=420 MeV; measured triton spectra and cross sections. Deduced B(GT). PREPRINT arXiv:0707.2840v1 [nucl-ex]
<sup>26</sup> Si	2007SE02	NUCLEAR REACTIONS <sup>12</sup> C( <sup>16</sup> O, 2n), E=58 MeV; measured E $\gamma$ , I $\gamma$ , $\gamma\gamma$ -coinc using the Gammasphere. <sup>26</sup> Si deduced levels, J, $\pi$ . Compared results to model calculations and discussed astrophysical implications. JOUR PRVCA 75 062801

**KEYNUMBERS AND KEYWORDS**

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**A=27**

<sup>27</sup> F	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>27</sup> Ne	2007GI08	NUCLEAR REACTIONS <sup>1</sup> H( <sup>8</sup> He, <sup>8</sup> He), ( <sup>8</sup> He, d), ( <sup>8</sup> He, t), E=15.7, 61.3 MeV / nucleon; analyzed $\sigma(\theta)$ . Coupled reaction channel calculations, DWBA analysis. <sup>2</sup> H( <sup>26</sup> Ne, p), E=9.7 MeV / nucleon; measured fragment yield, E $\gamma$ , I $\gamma$ , (particle) $\gamma$ -coin. <sup>27</sup> Ne deduced levels, J, $\pi$ . Exogam array, Vamos spectrometer. JOUR NUPAB 787 423c
	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>27</sup> Na	2007VI11	NUCLEAR REACTIONS <sup>12</sup> C( <sup>48</sup> Ca, X) <sup>8</sup> Li / <sup>9</sup> Li / <sup>25</sup> Na / <sup>26</sup> Na / <sup>27</sup> Na / <sup>29</sup> Al / <sup>37</sup> K / <sup>47</sup> K, E=60 MeV / nucleon; measured yield. JOUR NUPAB 787 126c
<sup>27</sup> Mg	2007KA33	NUCLEAR REACTIONS N, O, Ar(p, X) <sup>7</sup> Be / <sup>11</sup> C / <sup>13</sup> N / <sup>15</sup> O / <sup>18</sup> F / <sup>22</sup> Na / <sup>24</sup> Na / <sup>27</sup> Mg / <sup>29</sup> Al / <sup>38</sup> S / <sup>38</sup> Cl / <sup>39</sup> Cl, E=12 GeV; measured radionuclide yields. JOUR JRNCD 273 507
<sup>27</sup> Al	2007FE13	NUCLEAR REACTIONS <sup>27</sup> Al( <sup>6</sup> Li, <sup>6</sup> Li), E=7, 8, 10, 12, 18 MeV; <sup>27</sup> Al( <sup>7</sup> Li, <sup>7</sup> Li), E=6, 7, 8, 9, 10, 11, 12, 14, 16, 18 MeV; measured $\sigma(\theta)$ . Optical model analysis, several potentials compared. Breakup threshold anomaly discussed. JOUR NUPAB 787 484c
	2007LE24	NUCLEAR REACTIONS <sup>27</sup> Al( <sup>6</sup> He, <sup>6</sup> He), E=9.5, 11, 12, 13.4 MeV; <sup>51</sup> V( <sup>8</sup> Li, <sup>8</sup> Li), E=26 MeV; measured $\sigma(\theta)$ . Comparison with optical model. <sup>27</sup> Al, <sup>64</sup> Zn( <sup>6</sup> He, <sup>6</sup> He), ( <sup>6</sup> Li, <sup>6</sup> Li), ( <sup>7</sup> Li, <sup>7</sup> Li), ( <sup>9</sup> Be, <sup>9</sup> Be), ( <sup>16</sup> O, <sup>16</sup> O), E $\approx$ 5-25 MeV; analyzed $\sigma$ . Comparison with other data. Secondary radioactive beam. JOUR NUPAB 787 94c
	2007MA58	NUCLEAR REACTIONS <sup>27</sup> Al, <sup>127</sup> I, <sup>206,207,208</sup> Pb(n, n' $\gamma$ ), E not give; <sup>10</sup> B( $\alpha$ , p $\gamma$ ), E=2.27 MeV; <sup>9</sup> Be( $\alpha$ , n $\gamma$ ), E=2.27 MeV; measured yields. JOUR PRVCA 76 022801

**A=28**

<sup>28</sup> Ne	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>28</sup> Al	2007TA25	NUCLEAR REACTIONS <sup>7</sup> Li, <sup>12</sup> C, <sup>28</sup> Si(e, e'K $^+$ ), E not given; measured missing mass spectra. <sup>7</sup> He, <sup>12</sup> B, <sup>28</sup> Al deduced hypernucleus levels. JOUR NUPAB 790 679c
<sup>28</sup> S	2007BU15	NUCLEAR REACTIONS C( <sup>40</sup> Ca, X) <sup>36</sup> Ca / <sup>32</sup> Ar / <sup>28</sup> S, E=95 MeV / nucleon; measured E $\gamma$ , I $\gamma$ . Dduced level energies. JOUR APOBB 38 1353

## KEYNUMBERS AND KEYWORDS

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### **A=29**

<sup>29</sup> Ne	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>29</sup> Al	2007KA33	NUCLEAR REACTIONS N, O, Ar(p, X) <sup>7</sup> Be / <sup>11</sup> C / <sup>13</sup> N / <sup>15</sup> O / <sup>18</sup> F / <sup>22</sup> Na / <sup>24</sup> Na / <sup>27</sup> Mg / <sup>29</sup> Al / <sup>38</sup> S / <sup>38</sup> Cl / <sup>39</sup> Cl, E=12 GeV; measured radionuclide yields. JOUR JRNCD 273 507
	2007VI11	NUCLEAR REACTIONS <sup>12</sup> C( <sup>48</sup> Ca, X) <sup>8</sup> Li / <sup>9</sup> Li / <sup>25</sup> Na / <sup>26</sup> Na / <sup>27</sup> Na / <sup>29</sup> Al / <sup>37</sup> K / <sup>47</sup> K, E=60 MeV / nucleon; measured yield. JOUR NUPAB 787 126c

### **A=30**

<sup>30</sup> Ne	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
	2007TR08	RADIOACTIVITY <sup>30</sup> Ne( $\beta^-$ ) [from Be( <sup>48</sup> Ca, X), E=140 MeV / nucleon]; measured E $\gamma$ , I $\gamma$ , $\beta\gamma$ -coinc, T <sub>1/2</sub> . <sup>30</sup> Na deduced levels, J, $\pi$ . Compared results to model calculations. JOUR PRVCA 76 021301
<sup>30</sup> Na	2007TR08	RADIOACTIVITY <sup>30</sup> Ne( $\beta^-$ ) [from Be( <sup>48</sup> Ca, X), E=140 MeV / nucleon]; measured E $\gamma$ , I $\gamma$ , $\beta\gamma$ -coinc, T <sub>1/2</sub> . <sup>30</sup> Na deduced levels, J, $\pi$ . Compared results to model calculations. JOUR PRVCA 76 021301

### **A=31**

<sup>31</sup> Ne	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>31</sup> Na	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>31</sup> S	2007MA48	NUCLEAR REACTIONS <sup>32</sup> S(p, d), E=32 MeV; measured Ed, $\sigma$ and angular distributions. <sup>31</sup> S deduced level energies and spectroscopic factors. JOUR PRVCA 76 015803

### **A=32**

<sup>32</sup> Na	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
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KEYNUMBERS AND KEYWORDS

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**A=32 (*continued*)**

<sup>32</sup> Al	2007Y0ZZ	NUCLEAR REACTIONS Nb( <sup>40</sup> Ar, X) <sup>32</sup> Al, E=95 MeV / nucleon; measured quadrupole moment using $\beta$ -NMR method. CONF Khanty-Mansiysk (Exotic Nuclei) Proc, P105
<sup>32</sup> Ar	2007BU15	NUCLEAR REACTIONS C( <sup>40</sup> Ca, X) <sup>36</sup> Ca / <sup>32</sup> Ar / <sup>28</sup> S, E=95 MeV / nucleon; measured E $\gamma$ , I $\gamma$ . Deduced level energies. JOUR APOBB 38 1353

**A=33**

<sup>33</sup> Na	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
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**A=34**

<sup>34</sup> Mg	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>34</sup> Al	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43

**A=35**

<sup>35</sup> Mg	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>35</sup> Al	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>35</sup> K	2007YA08	ATOMIC MASSES <sup>35,36,37,38,43,44,45,56</sup> K; measured masses using ISOLTRAP. Discussed implications on IMME. JOUR PRVCA 76 024308
	2007YAZX	ATOMIC MASSES <sup>35,36,37,38,43,44,45,46</sup> K; measured masses using the ISOLTRAP mass spectrometer. PREPRINT arXiv:0707.3201v1 [nucl-ex]

**KEYNUMBERS AND KEYWORDS**

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**A=36**

$^{36}\text{Mg}$	2007GA34	NUCLEAR REACTIONS $^9\text{Be}(^{38}\text{Si}, ^{36}\text{Mg})$ , E=83 MeV / nucleon; measured $\text{E}_\gamma, \text{I}_\gamma$ . $^{36}\text{Mg}$ deduced level energy. Compared results to model calculations. JOUR PRLTA 99 072502
	2007JU03	ATOMIC MASSES $^{23}\text{N}, ^{23,24}\text{O}, ^{25,26,27}\text{F}, ^{27,28,29,30,31}\text{Ne}, ^{31,32,33}\text{Na}, ^{34,35,36}\text{Mg}, ^{34,35,36,37,38,39}\text{Al}, ^{36,37,38,39,40,41,42}\text{Si}, ^{40,41,42,43,44}\text{P}, ^{40,43,44,45}\text{S}, ^{43,45,46,47}\text{Cl}$ ; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
	2007TA15	NUCLEAR REACTIONS $^{184}\text{W}, ^9\text{Be}(^{48}\text{Ca}, \text{X})^{36}\text{Mg} / ^{37}\text{Mg} / ^{38}\text{Mg} / ^{41}\text{Si} / ^{42}\text{Si} / ^{43}\text{Si} / ^{44}\text{Si}$ , E=142 MeV / nucleon; measured production cross sections. Compared results to model calculations. JOUR PRVCA 75 064613
$^{36}\text{Al}$	2007JU03	ATOMIC MASSES $^{23}\text{N}, ^{23,24}\text{O}, ^{25,26,27}\text{F}, ^{27,28,29,30,31}\text{Ne}, ^{31,32,33}\text{Na}, ^{34,35,36}\text{Mg}, ^{34,35,36,37,38,39}\text{Al}, ^{36,37,38,39,40,41,42}\text{Si}, ^{40,41,42,43,44}\text{P}, ^{40,43,44,45}\text{S}, ^{43,45,46,47}\text{Cl}$ ; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
$^{36}\text{Si}$	2007CA35	NUCLEAR REACTIONS $^1\text{H}(^{36}\text{Si}, ^{36}\text{Si}')$ , E < 140 MeV / nucleon; $^1\text{H}(^{38}\text{Si}, ^{38}\text{Si}')$ , E < 140 MeV / nucleon; $^1\text{H}(^{40}\text{Si}, ^{40}\text{Si}')$ , E < 140 MeV / nucleon; measured $\text{E}_\gamma, \text{I}_\gamma$ , (particle) $\gamma$ -coinc, inelastic proton scattering cross sections. $^{36,38,40}\text{Si}$ deduced quadrupole deformation parameters. JOUR PYLBB 652 169
	2007JU03	ATOMIC MASSES $^{23}\text{N}, ^{23,24}\text{O}, ^{25,26,27}\text{F}, ^{27,28,29,30,31}\text{Ne}, ^{31,32,33}\text{Na}, ^{34,35,36}\text{Mg}, ^{34,35,36,37,38,39}\text{Al}, ^{36,37,38,39,40,41,42}\text{Si}, ^{40,41,42,43,44}\text{P}, ^{40,43,44,45}\text{S}, ^{43,45,46,47}\text{Cl}$ ; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
$^{36}\text{K}$	2007YA08	ATOMIC MASSES $^{35,36,37,38,43,44,45,56}\text{K}$ ; measured masses using ISOLTRAP. Discussed implications on IMME. JOUR PRVCA 76 024308
	2007YAZX	ATOMIC MASSES $^{35,36,37,38,43,44,45,46}\text{K}$ ; measured masses using the ISOLTRAP mass spectrometer. PREPRINT arXiv:0707.3201v1 [nucl-ex]
$^{36}\text{Ca}$	2007BU15	NUCLEAR REACTIONS $\text{C}(^{40}\text{Ca}, \text{X})^{36}\text{Ca} / ^{32}\text{Ar} / ^{28}\text{S}$ , E=95 MeV / nucleon; measured $\text{E}_\gamma, \text{I}_\gamma$ . Deduced level energies. JOUR APOBB 38 1353

**A=37**

$^{37}\text{Mg}$	2007TA15	NUCLEAR REACTIONS $^{184}\text{W}, ^9\text{Be}(^{48}\text{Ca}, \text{X})^{36}\text{Mg} / ^{37}\text{Mg} / ^{38}\text{Mg} / ^{41}\text{Si} / ^{42}\text{Si} / ^{43}\text{Si} / ^{44}\text{Si}$ , E=142 MeV / nucleon; measured production cross sections. Compared results to model calculations. JOUR PRVCA 75 064613
$^{37}\text{Al}$	2007JU03	ATOMIC MASSES $^{23}\text{N}, ^{23,24}\text{O}, ^{25,26,27}\text{F}, ^{27,28,29,30,31}\text{Ne}, ^{31,32,33}\text{Na}, ^{34,35,36}\text{Mg}, ^{34,35,36,37,38,39}\text{Al}, ^{36,37,38,39,40,41,42}\text{Si}, ^{40,41,42,43,44}\text{P}, ^{40,43,44,45}\text{S}, ^{43,45,46,47}\text{Cl}$ ; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
$^{37}\text{Si}$	2007JU03	ATOMIC MASSES $^{23}\text{N}, ^{23,24}\text{O}, ^{25,26,27}\text{F}, ^{27,28,29,30,31}\text{Ne}, ^{31,32,33}\text{Na}, ^{34,35,36}\text{Mg}, ^{34,35,36,37,38,39}\text{Al}, ^{36,37,38,39,40,41,42}\text{Si}, ^{40,41,42,43,44}\text{P}, ^{40,43,44,45}\text{S}, ^{43,45,46,47}\text{Cl}$ ; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43

**KEYNUMBERS AND KEYWORDS**

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**A=37 (*continued*)**

<sup>37</sup> K	2007VI11	NUCLEAR REACTIONS <sup>12</sup> C( <sup>48</sup> Ca, X) <sup>8</sup> Li / <sup>9</sup> Li / <sup>25</sup> Na / <sup>26</sup> Na / <sup>27</sup> Na / <sup>29</sup> Al / <sup>37</sup> K / <sup>47</sup> K, E=60 MeV / nucleon; measured yield. JOUR NUPAB 787 126c
	2007YA08	ATOMIC MASSES <sup>35,36,37,38,43,44,45,56</sup> K; measured masses using ISOLTRAP. Discussed implications on IMME. JOUR PRVCA 76 024308
	2007YAZX	ATOMIC MASSES <sup>35,36,37,38,43,44,45,46</sup> K; measured masses using the ISOLTRAP mass spectrometer. PREPRINT arXiv:0707.3201v1 [nucl-ex]

**A=38**

<sup>38</sup> Mg	2007TA15	NUCLEAR REACTIONS <sup>184</sup> W, <sup>9</sup> Be( <sup>48</sup> Ca, X) <sup>36</sup> Mg / <sup>37</sup> Mg / <sup>38</sup> Mg / <sup>41</sup> Si / <sup>42</sup> Si / <sup>43</sup> Si / <sup>44</sup> Si, E=142 MeV / nucleon; measured production cross sections. Compared results to model calculations. JOUR PRVCA 75 064613
<sup>38</sup> Al	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>38</sup> Si	2007CA35	NUCLEAR REACTIONS <sup>1</sup> H( <sup>36</sup> Si, <sup>36</sup> Si'), E < 140 MeV / nucleon; <sup>1</sup> H( <sup>38</sup> Si, <sup>38</sup> Si'), E < 140 MeV / nucleon; <sup>1</sup> H( <sup>40</sup> Si, <sup>40</sup> Si'), E < 140 MeV / nucleon; measured E $\gamma$ , I $\gamma$ , (particle) $\gamma$ -coinc, inelastic proton scattering cross sections. <sup>36,38,40</sup> Si deduced quadrupole deformation parameters. JOUR PYLBB 652 169
	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>38</sup> S	2007KA33	NUCLEAR REACTIONS N, O, Ar(p, X) <sup>7</sup> Be / <sup>11</sup> C / <sup>13</sup> N / <sup>15</sup> O / <sup>18</sup> F / <sup>22</sup> Na / <sup>24</sup> Na / <sup>27</sup> Mg / <sup>29</sup> Al / <sup>38</sup> S / <sup>38</sup> Cl / <sup>39</sup> Cl, E=12 GeV; measured radionuclide yields. JOUR JRNCD 273 507
<sup>38</sup> Cl	2007KA33	NUCLEAR REACTIONS N, O, Ar(p, X) <sup>7</sup> Be / <sup>11</sup> C / <sup>13</sup> N / <sup>15</sup> O / <sup>18</sup> F / <sup>22</sup> Na / <sup>24</sup> Na / <sup>27</sup> Mg / <sup>29</sup> Al / <sup>38</sup> S / <sup>38</sup> Cl / <sup>39</sup> Cl, E=12 GeV; measured radionuclide yields. JOUR JRNCD 273 507
<sup>38</sup> K	2007YA08	ATOMIC MASSES <sup>35,36,37,38,43,44,45,56</sup> K; measured masses using ISOLTRAP. Discussed implications on IMME. JOUR PRVCA 76 024308
	2007YAZX	ATOMIC MASSES <sup>35,36,37,38,43,44,45,46</sup> K; measured masses using the ISOLTRAP mass spectrometer. PREPRINT arXiv:0707.3201v1 [nucl-ex]

**KEYNUMBERS AND KEYWORDS**

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**A=39**

<sup>39</sup> Al	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>39</sup> Si	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>39</sup> Cl	2007KA33	NUCLEAR REACTIONS N, O, Ar(p, X) <sup>7</sup> Be / <sup>11</sup> C / <sup>13</sup> N / <sup>15</sup> O / <sup>18</sup> F / <sup>22</sup> Na / <sup>24</sup> Na / <sup>27</sup> Mg / <sup>29</sup> Al / <sup>38</sup> S / <sup>38</sup> Cl / <sup>39</sup> Cl, E=12 GeV; measured radionuclide yields. JOUR JRNCD 273 507

**A=40**

<sup>40</sup> Si	2007CA35	NUCLEAR REACTIONS <sup>1</sup> H( <sup>36</sup> Si, <sup>36</sup> Si'), E < 140 MeV / nucleon; <sup>1</sup> H( <sup>38</sup> Si, <sup>38</sup> Si'), E < 140 MeV / nucleon; <sup>1</sup> H( <sup>40</sup> Si, <sup>40</sup> Si'), E < 140 MeV / nucleon; measured E $\gamma$ , I $\gamma$ , (particle) $\gamma$ -coinc, inelastic proton scattering cross sections. <sup>36,38,40</sup> Si deduced quadrupole deformation parameters. JOUR PYLBB 652 169
	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>40</sup> P	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>40</sup> S	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43

**A=41**

<sup>41</sup> Si	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
	2007TA15	NUCLEAR REACTIONS <sup>184</sup> W, <sup>9</sup> Be( <sup>48</sup> Ca, X) <sup>36</sup> Mg / <sup>37</sup> Mg / <sup>38</sup> Mg / <sup>41</sup> Si / <sup>42</sup> Si / <sup>43</sup> Si / <sup>44</sup> Si, E=142 MeV / nucleon; measured production cross sections. Compared results to model calculations. JOUR PRVCA 75 064613
<sup>41</sup> P	2007BA47	NUCLEAR REACTIONS <sup>42,44</sup> S( <sup>9</sup> Be, X), E=39 MeV / nucleon; measured E $\gamma$ , I $\gamma$ , $\gamma\gamma$ -coinc. <sup>42</sup> Si, <sup>41,43</sup> P deduced levels. JOUR PRLTA 99 022503

## KEYNUMBERS AND KEYWORDS

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### **A=41 (continued)**

2007JU03 ATOMIC MASSES  $^{23}\text{N}$ ,  $^{23,24}\text{O}$ ,  $^{25,26,27}\text{F}$ ,  $^{27,28,29,30,31}\text{Ne}$ ,  $^{31,32,33}\text{Na}$ ,  $^{34,35,36}\text{Mg}$ ,  $^{34,35,36,37,38,39}\text{Al}$ ,  $^{36,37,38,39,40,41,42}\text{Si}$ ,  $^{40,41,42,43,44}\text{P}$ ,  $^{40,43,44,45}\text{S}$ ,  $^{43,45,46,47}\text{Cl}$ ; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43

### **A=42**

$^{42}\text{Si}$	2007BA47	NUCLEAR REACTIONS $^{42,44}\text{S}(^{9}\text{Be}, \text{X})$ , E=39 MeV / nucleon; measured $\text{E}\gamma$ , $\text{I}\gamma$ , $\gamma\gamma$ -coinc. $^{42}\text{Si}$ , $^{41,43}\text{P}$ deduced levels. JOUR PRLTA 99 022503
	2007JU03	ATOMIC MASSES $^{23}\text{N}$ , $^{23,24}\text{O}$ , $^{25,26,27}\text{F}$ , $^{27,28,29,30,31}\text{Ne}$ , $^{31,32,33}\text{Na}$ , $^{34,35,36}\text{Mg}$ , $^{34,35,36,37,38,39}\text{Al}$ , $^{36,37,38,39,40,41,42}\text{Si}$ , $^{40,41,42,43,44}\text{P}$ , $^{40,43,44,45}\text{S}$ , $^{43,45,46,47}\text{Cl}$ ; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
	2007TA15	NUCLEAR REACTIONS $^{184}\text{W}$ , $^{9}\text{Be}(^{48}\text{Ca}, \text{X})^{36}\text{Mg}$ / $^{37}\text{Mg}$ / $^{38}\text{Mg}$ / $^{41}\text{Si}$ / $^{42}\text{Si}$ / $^{43}\text{Si}$ , E=142 MeV / nucleon; measured production cross sections. Compared results to model calculations. JOUR PRVCA 75 064613
$^{42}\text{P}$	2007JU03	ATOMIC MASSES $^{23}\text{N}$ , $^{23,24}\text{O}$ , $^{25,26,27}\text{F}$ , $^{27,28,29,30,31}\text{Ne}$ , $^{31,32,33}\text{Na}$ , $^{34,35,36}\text{Mg}$ , $^{34,35,36,37,38,39}\text{Al}$ , $^{36,37,38,39,40,41,42}\text{Si}$ , $^{40,41,42,43,44}\text{P}$ , $^{40,43,44,45}\text{S}$ , $^{43,45,46,47}\text{Cl}$ ; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
$^{42}\text{Ca}$	2007C021	NUCLEAR REACTIONS $^{208}\text{Pb}(^{40}\text{Ca}, \text{X})$ , E=235, 249 MeV; analyzed single and paired nucleon transfer $\sigma$ . $^{208}\text{Pb}(^{40}\text{Ca}, \text{X})^{42}\text{Ca}$ , E=225, 236, 250 MeV; analyzed total kinetic energy loss distribution. $^{208}\text{Pb}(^{90}\text{Zr}, \text{X})$ , E=560 MeV; analyzed fragment mass distributions, $\sigma$ ; measured $\text{E}\gamma$ , $\text{I}\gamma$ , (particle) $\gamma$ -coin, DSA. $^{92}\text{Zr}$ deduced levels, J, $\pi$ . $^{238}\text{U}(^{82}\text{Se}, \text{X})$ , E=500 MeV; measured fragment yields, $\sigma$ . Prisma and Clara arrays. Multi-nucleon transfer reaction mechanisms discussed. JOUR NUPAB 787 160c
	2007SZ05	NUCLEAR REACTIONS $^{98}\text{Zr}(^{40}\text{Ca}, \text{X})$ , E=152 MeV; $^{208}\text{Pb}(^{90}\text{Zr}, \text{X})$ , E=560 MeV; measured $\text{E}\Gamma$ , $\text{I}\gamma$ , (particle) $\gamma$ -coinc. $^{95}\text{Zr}$ , $^{42}\text{Ca}$ deduced levels. JOUR PRVCA 76 024604
$^{42}\text{Sc}$	2007SC26	NUCLEAR REACTIONS $^{40}\text{Ca}(^{3}\text{He}, \text{p})^{42}\text{Sc}$ , E=9 MeV; measured $\text{E}\gamma$ , $\text{I}\gamma$ , $\gamma\gamma$ -coinc, and angular correlations. $^{42}\text{Sc}$ deduced levels, J, $\pi$ , B(E2), B(M1), multipole mixing ratios. Compared results to model calculations. JOUR PRVCA 75 064321

### **A=43**

$^{43}\text{Si}$	2007TA15	NUCLEAR REACTIONS $^{184}\text{W}$ , $^{9}\text{Be}(^{48}\text{Ca}, \text{X})^{36}\text{Mg}$ / $^{37}\text{Mg}$ / $^{38}\text{Mg}$ / $^{41}\text{Si}$ / $^{42}\text{Si}$ / $^{43}\text{Si}$ / $^{44}\text{Si}$ , E=142 MeV / nucleon; measured production cross sections. Compared results to model calculations. JOUR PRVCA 75 064613
$^{43}\text{P}$	2007BA47	NUCLEAR REACTIONS $^{42,44}\text{S}(^{9}\text{Be}, \text{X})$ , E=39 MeV / nucleon; measured $\text{E}\gamma$ , $\text{I}\gamma$ , $\gamma\gamma$ -coinc. $^{42}\text{Si}$ , $^{41,43}\text{P}$ deduced levels. JOUR PRLTA 99 022503

## KEYNUMBERS AND KEYWORDS

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### **A=43 (continued)**

	2007JU03	ATOMIC MASSES $^{23}\text{N}$ , $^{23,24}\text{O}$ , $^{25,26,27}\text{F}$ , $^{27,28,29,30,31}\text{Ne}$ , $^{31,32,33}\text{Na}$ , $^{34,35,36}\text{Mg}$ , $^{34,35,36,37,38,39}\text{Al}$ , $^{36,37,38,39,40,41,42}\text{Si}$ , $^{40,41,42,43,44}\text{P}$ , $^{40,43,44,45}\text{S}$ , $^{43,45,46,47}\text{Cl}$ ; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
$^{43}\text{S}$	2007JU03	ATOMIC MASSES $^{23}\text{N}$ , $^{23,24}\text{O}$ , $^{25,26,27}\text{F}$ , $^{27,28,29,30,31}\text{Ne}$ , $^{31,32,33}\text{Na}$ , $^{34,35,36}\text{Mg}$ , $^{34,35,36,37,38,39}\text{Al}$ , $^{36,37,38,39,40,41,42}\text{Si}$ , $^{40,41,42,43,44}\text{P}$ , $^{40,43,44,45}\text{S}$ , $^{43,45,46,47}\text{Cl}$ ; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
$^{43}\text{Cl}$	2007JU03	ATOMIC MASSES $^{23}\text{N}$ , $^{23,24}\text{O}$ , $^{25,26,27}\text{F}$ , $^{27,28,29,30,31}\text{Ne}$ , $^{31,32,33}\text{Na}$ , $^{34,35,36}\text{Mg}$ , $^{34,35,36,37,38,39}\text{Al}$ , $^{36,37,38,39,40,41,42}\text{Si}$ , $^{40,41,42,43,44}\text{P}$ , $^{40,43,44,45}\text{S}$ , $^{43,45,46,47}\text{Cl}$ ; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
$^{43}\text{K}$	2007YA08	ATOMIC MASSES $^{35,36,37,38,43,44,45,56}\text{K}$ ; measured masses using ISOLTRAP. Discussed implications on IMME. JOUR PRVCA 76 024308
	2007YAZX	ATOMIC MASSES $^{35,36,37,38,43,44,45,46}\text{K}$ ; measured masses using the ISOLTRAP mass spectrometer. PREPRINT arXiv:0707.3201v1 [nucl-ex]
$^{43}\text{V}$	2007GI10	RADIOACTIVITY $^{45}\text{Fe}(2\text{p})$ , $^{43}\text{Cr}(\beta^+)$ ; measured direct and $\beta$ -delayed proton energies, $T_{1/2}$ . JOUR PRLTA 99 102501
$^{43}\text{Cr}$	2007GI10	RADIOACTIVITY $^{45}\text{Fe}(2\text{p})$ , $^{43}\text{Cr}(\beta^+)$ ; measured direct and $\beta$ -delayed proton energies, $T_{1/2}$ . JOUR PRLTA 99 102501

### **A=44**

$^{44}\text{Si}$	2007TA15	NUCLEAR REACTIONS $^{184}\text{W}$ , $^9\text{Be}(^{48}\text{Ca}, \text{X})^{36}\text{Mg} / ^{37}\text{Mg} / ^{38}\text{Mg} / ^{41}\text{Si} / ^{42}\text{Si} / ^{43}\text{Si} / ^{44}\text{Si}$ , $E=142$ MeV / nucleon; measured production cross sections. Compared results to model calculations. JOUR PRVCA 75 064613
$^{44}\text{P}$	2007JU03	ATOMIC MASSES $^{23}\text{N}$ , $^{23,24}\text{O}$ , $^{25,26,27}\text{F}$ , $^{27,28,29,30,31}\text{Ne}$ , $^{31,32,33}\text{Na}$ , $^{34,35,36}\text{Mg}$ , $^{34,35,36,37,38,39}\text{Al}$ , $^{36,37,38,39,40,41,42}\text{Si}$ , $^{40,41,42,43,44}\text{P}$ , $^{40,43,44,45}\text{S}$ , $^{43,45,46,47}\text{Cl}$ ; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
$^{44}\text{S}$	2007JU03	ATOMIC MASSES $^{23}\text{N}$ , $^{23,24}\text{O}$ , $^{25,26,27}\text{F}$ , $^{27,28,29,30,31}\text{Ne}$ , $^{31,32,33}\text{Na}$ , $^{34,35,36}\text{Mg}$ , $^{34,35,36,37,38,39}\text{Al}$ , $^{36,37,38,39,40,41,42}\text{Si}$ , $^{40,41,42,43,44}\text{P}$ , $^{40,43,44,45}\text{S}$ , $^{43,45,46,47}\text{Cl}$ ; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
$^{44}\text{K}$	2007YA08	ATOMIC MASSES $^{35,36,37,38,43,44,45,56}\text{K}$ ; measured masses using ISOLTRAP. Discussed implications on IMME. JOUR PRVCA 76 024308
	2007YAZX	ATOMIC MASSES $^{35,36,37,38,43,44,45,46}\text{K}$ ; measured masses using the ISOLTRAP mass spectrometer. PREPRINT arXiv:0707.3201v1 [nucl-ex]
$^{44}\text{Sc}$	2007DR05	RADIOACTIVITY $^{44}\text{Ti}(\text{EC})$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coinc. $^{44}\text{Sc}$ deduced conversion coefficients and penetration parameter. JOUR BRSPE 71 887

## KEYNUMBERS AND KEYWORDS

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### **A=44 (*continued*)**

	2007LA23	NUCLEAR REACTIONS $^{51}\text{V}$ , $^{45}\text{Sc}(\text{He}, \alpha\gamma)$ , $(^3\text{He}, ^3\text{He}'\gamma)$ , E=30, 38 MeV; measured $E\gamma$ , $E\alpha$ , $E(^3\text{He})$ , (particle) $\gamma$ -coinc. $^{50,51}\text{V}$ , $^{44,45}\text{Sc}$ deduced level densities and giant resonance strength functions. JOUR APOBB 38 1495
$^{44}\text{Ti}$	2007DR05	RADIOACTIVITY $^{44}\text{Ti}(\text{EC})$ ; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coinc. $^{44}\text{Sc}$ deduced conversion coefficients and penetration parameter. JOUR BRSPE 71 887

### **A=45**

$^{45}\text{S}$	2007JU03	ATOMIC MASSES $^{23}\text{N}$ , $^{23,24}\text{O}$ , $^{25,26,27}\text{F}$ , $^{27,28,29,30,31}\text{Ne}$ , $^{31,32,33}\text{Na}$ , $^{34,35,36}\text{Mg}$ , $^{34,35,36,37,38,39}\text{Al}$ , $^{36,37,38,39,40,41,42}\text{Si}$ , $^{40,41,42,43,44}\text{P}$ , $^{40,43,44,45}\text{S}$ , $^{43,45,46,47}\text{Cl}$ ; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
$^{45}\text{Cl}$	2007JU03	ATOMIC MASSES $^{23}\text{N}$ , $^{23,24}\text{O}$ , $^{25,26,27}\text{F}$ , $^{27,28,29,30,31}\text{Ne}$ , $^{31,32,33}\text{Na}$ , $^{34,35,36}\text{Mg}$ , $^{34,35,36,37,38,39}\text{Al}$ , $^{36,37,38,39,40,41,42}\text{Si}$ , $^{40,41,42,43,44}\text{P}$ , $^{40,43,44,45}\text{S}$ , $^{43,45,46,47}\text{Cl}$ ; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
$^{45}\text{K}$	2007YA08	ATOMIC MASSES $^{35,36,37,38,43,44,45,56}\text{K}$ ; measured masses using ISOLTRAP. Discussed implications on IMME. JOUR PRVCA 76 024308
	2007YAZX	ATOMIC MASSES $^{35,36,37,38,43,44,45,46}\text{K}$ ; measured masses using the ISOLTRAP mass spectrometer. PREPRINT arXiv:0707.3201v1 [nucl-ex]
$^{45}\text{Sc}$	2007LA23	NUCLEAR REACTIONS $^{51}\text{V}$ , $^{45}\text{Sc}(\text{He}, \alpha\gamma)$ , $(^3\text{He}, ^3\text{He}'\gamma)$ , E=30, 38 MeV; measured $E\gamma$ , $E\alpha$ , $E(^3\text{He})$ , (particle) $\gamma$ -coinc. $^{50,51}\text{V}$ , $^{44,45}\text{Sc}$ deduced level densities and giant resonance strength functions. JOUR APOBB 38 1495
$^{45}\text{Fe}$	2007GI10	RADIOACTIVITY $^{45}\text{Fe}(2\text{p})$ , $^{43}\text{Cr}(\beta^+)$ ; measured direct and $\beta$ -delayed proton energies, $T_{1/2}$ . JOUR PRLTA 99 102501

### **A=46**

$^{46}\text{Cl}$	2007JU03	ATOMIC MASSES $^{23}\text{N}$ , $^{23,24}\text{O}$ , $^{25,26,27}\text{F}$ , $^{27,28,29,30,31}\text{Ne}$ , $^{31,32,33}\text{Na}$ , $^{34,35,36}\text{Mg}$ , $^{34,35,36,37,38,39}\text{Al}$ , $^{36,37,38,39,40,41,42}\text{Si}$ , $^{40,41,42,43,44}\text{P}$ , $^{40,43,44,45}\text{S}$ , $^{43,45,46,47}\text{Cl}$ ; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
$^{46}\text{K}$	2007YAZX	ATOMIC MASSES $^{35,36,37,38,43,44,45,46}\text{K}$ ; measured masses using the ISOLTRAP mass spectrometer. PREPRINT arXiv:0707.3201v1 [nucl-ex]
$^{46}\text{Ti}$	2007KM01	NUCLEAR REACTIONS $^{28}\text{Si}(^{18}\text{O}, \text{F})$ , E=105 MeV; measured $E\gamma$ , $E\text{p}$ , $E\alpha$ , yields, angular distributions, and (particle) $\gamma$ -coinc. $^{46}\text{Ti}$ deduced deformation effects. JOUR APOBB 38 1437

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## KEYNUMBERS AND KEYWORDS

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### A=47

<sup>47</sup> Cl	2007JU03	ATOMIC MASSES <sup>23</sup> N, <sup>23,24</sup> O, <sup>25,26,27</sup> F, <sup>27,28,29,30,31</sup> Ne, <sup>31,32,33</sup> Na, <sup>34,35,36</sup> Mg, <sup>34,35,36,37,38,39</sup> Al, <sup>36,37,38,39,40,41,42</sup> Si, <sup>40,41,42,43,44</sup> P, <sup>40,43,44,45</sup> S, <sup>43,45,46,47</sup> Cl; measured masses; analysed neutron separation energy. Cyclotron-based mass spectrometry. JOUR PYLBB 649 43
<sup>47</sup> K	2007VI11	NUCLEAR REACTIONS <sup>12</sup> C( <sup>48</sup> Ca, X) <sup>8</sup> Li / <sup>9</sup> Li / <sup>25</sup> Na / <sup>26</sup> Na / <sup>27</sup> Na / <sup>29</sup> Al / <sup>37</sup> K / <sup>47</sup> K, E=60 MeV / nucleon; measured yield. JOUR NUPAB 787 126c

### A=48

<sup>48</sup> V	2007TA16	NUCLEAR REACTIONS Ti(d, X) <sup>48</sup> V / <sup>44,46,47,48</sup> Sc, E < 10 MeV; measured E $\gamma$ , Ig. Deduced cross sections using stacked foil technique. JOUR NIMBE 262 7
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### A=49

No references found

### A=50

<sup>50</sup> Ca	2007RE19	NUCLEAR REACTIONS <sup>48</sup> Ca( <sup>238</sup> U, X), E=1.31 GeV / nucleon; measured E $\gamma$ , I $\gamma$ , (particle) $\gamma$ -coinc. <sup>50,51,52</sup> Ca deduced levels, J, $\pi$ . Compared results to model calculations. JOUR PRVCA 76 021304
<sup>50</sup> V	2007LA23	NUCLEAR REACTIONS <sup>51</sup> V, <sup>45</sup> Sc( <sup>3</sup> He, $\alpha\gamma$ ), ( <sup>3</sup> He, <sup>3</sup> He' $\gamma$ ), E=30, 38 MeV; measured E $\gamma$ , E $\alpha$ , E( <sup>3</sup> He), (particle) $\gamma$ -coinc. <sup>50,51</sup> V, <sup>44,45</sup> Sc deduced level densities and giant resonance strength functions. JOUR APOBB 38 1495

### A=51

<sup>51</sup> Ca	2007RE19	NUCLEAR REACTIONS <sup>48</sup> Ca( <sup>238</sup> U, X), E=1.31 GeV / nucleon; measured E $\gamma$ , I $\gamma$ , (particle) $\gamma$ -coinc. <sup>50,51,52</sup> Ca deduced levels, J, $\pi$ . Compared results to model calculations. JOUR PRVCA 76 021304
<sup>51</sup> V	2007LA23	NUCLEAR REACTIONS <sup>51</sup> V, <sup>45</sup> Sc( <sup>3</sup> He, $\alpha\gamma$ ), ( <sup>3</sup> He, <sup>3</sup> He' $\gamma$ ), E=30, 38 MeV; measured E $\gamma$ , E $\alpha$ , E( <sup>3</sup> He), (particle) $\gamma$ -coinc. <sup>50,51</sup> V, <sup>44,45</sup> Sc deduced level densities and giant resonance strength functions. JOUR APOBB 38 1495
	2007LE24	NUCLEAR REACTIONS <sup>27</sup> Al( <sup>6</sup> He, <sup>6</sup> He), E=9.5, 11, 12, 13.4 MeV; <sup>51</sup> V( <sup>8</sup> Li, <sup>8</sup> Li), E=26 MeV; measured $\sigma(\theta)$ . Comparison with optical model. <sup>27</sup> Al, <sup>64</sup> Zn( <sup>6</sup> He, <sup>6</sup> He), ( <sup>6</sup> Li, <sup>6</sup> Li), ( <sup>7</sup> Li, <sup>7</sup> Li), ( <sup>9</sup> Be, <sup>9</sup> Be), ( <sup>16</sup> O, <sup>16</sup> O), E $\approx$ 5-25 MeV; analyzed $\sigma$ . Comparison with other data. Secondary radioactive beam. JOUR NUPAB 787 94c

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## KEYNUMBERS AND KEYWORDS

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### **A=51 (*continued*)**

<sup>51</sup>Cr      2007TA14      NUCLEAR REACTIONS Ni(d, X)<sup>51</sup>Cr / <sup>52</sup>Mn / <sup>54</sup>Mn / <sup>56</sup>Mn / <sup>56</sup>Ni / <sup>57</sup>Ni / <sup>55</sup>Co / <sup>56</sup>Co / <sup>57</sup>Co / <sup>58</sup>Co / <sup>60</sup>Co / <sup>61</sup>Co / <sup>61</sup>Cu / <sup>64</sup>Cu, E < 50 MeV; measured E $\gamma$ , I $\gamma$ , activation cross section and excitation functions using stacked foil technique.Compared results to existing data. JOUR NIMBE 260 495

### **A=52**

<sup>52</sup>Ca      2007RE19      NUCLEAR REACTIONS <sup>48</sup>Ca(<sup>238</sup>U, X), E=1.31 GeV / nucleon; measured E $\gamma$ , I $\gamma$ , (particle) $\gamma$ -coinc. <sup>50,51,52</sup>Ca deduced levels, J,  $\pi$ . Compared results to model calculations. JOUR PRVCA 76 021304

<sup>52</sup>Mn      2007AX01      NUCLEAR REACTIONS <sup>28</sup>Si(<sup>28</sup>Si, n3p), E=110, 115 MeV; <sup>24</sup>Mg(<sup>32</sup>S, n3p), E=130 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coinc, (particle) $\gamma$ -coinc, angular distributions, lifetimes and polarization. <sup>52</sup>Mn deduced levels, J,  $\pi$  for high spin states. JOUR PRVCA 76 014303

2007TA14      NUCLEAR REACTIONS Ni(d, X)<sup>51</sup>Cr / <sup>52</sup>Mn / <sup>54</sup>Mn / <sup>56</sup>Mn / <sup>56</sup>Ni / <sup>57</sup>Ni / <sup>55</sup>Co / <sup>56</sup>Co / <sup>57</sup>Co / <sup>58</sup>Co / <sup>60</sup>Co / <sup>61</sup>Co / <sup>61</sup>Cu / <sup>64</sup>Cu, E < 50 MeV; measured E $\gamma$ , I $\gamma$ , activation cross section and excitation functions using stacked foil technique.Compared results to existing data. JOUR NIMBE 260 495

### **A=53**

No references found

### **A=54**

<sup>54</sup>Mn      2007TA14      NUCLEAR REACTIONS Ni(d, X)<sup>51</sup>Cr / <sup>52</sup>Mn / <sup>54</sup>Mn / <sup>56</sup>Mn / <sup>56</sup>Ni / <sup>57</sup>Ni / <sup>55</sup>Co / <sup>56</sup>Co / <sup>57</sup>Co / <sup>58</sup>Co / <sup>60</sup>Co / <sup>61</sup>Co / <sup>61</sup>Cu / <sup>64</sup>Cu, E < 50 MeV; measured E $\gamma$ , I $\gamma$ , activation cross section and excitation functions using stacked foil technique.Compared results to existing data. JOUR NIMBE 260 495

### **A=55**

<sup>55</sup>Co      2007TA14      NUCLEAR REACTIONS Ni(d, X)<sup>51</sup>Cr / <sup>52</sup>Mn / <sup>54</sup>Mn / <sup>56</sup>Mn / <sup>56</sup>Ni / <sup>57</sup>Ni / <sup>55</sup>Co / <sup>56</sup>Co / <sup>57</sup>Co / <sup>58</sup>Co / <sup>60</sup>Co / <sup>61</sup>Co / <sup>61</sup>Cu / <sup>64</sup>Cu, E < 50 MeV; measured E $\gamma$ , I $\gamma$ , activation cross section and excitation functions using stacked foil technique.Compared results to existing data. JOUR NIMBE 260 495

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KEYNUMBERS AND KEYWORDS

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**A=56**

<sup>56</sup> K	2007YA08	ATOMIC MASSES <sup>35,36,37,38,43,44,45,56</sup> K; measured masses using ISOLTRAP. Discussed implications on IMME. JOUR PRVCA 76 024308
<sup>56</sup> Mn	2007TA14	NUCLEAR REACTIONS Ni(d, X) <sup>51</sup> Cr / <sup>52</sup> Mn / <sup>54</sup> Mn / <sup>56</sup> Mn / <sup>56</sup> Ni / <sup>57</sup> Ni / <sup>55</sup> Co / <sup>56</sup> Co / <sup>57</sup> Co / <sup>58</sup> Co / <sup>60</sup> Co / <sup>61</sup> Co / <sup>61</sup> Cu / <sup>64</sup> Cu, E < 50 MeV; measured E <sub>γ</sub> , I <sub>γ</sub> , activation cross section and excitation functions using stacked foil technique.Compared results to existing data. JOUR NIMBE 260 495
<sup>56</sup> Co	2007TA14	NUCLEAR REACTIONS Ni(d, X) <sup>51</sup> Cr / <sup>52</sup> Mn / <sup>54</sup> Mn / <sup>56</sup> Mn / <sup>56</sup> Ni / <sup>57</sup> Ni / <sup>55</sup> Co / <sup>56</sup> Co / <sup>57</sup> Co / <sup>58</sup> Co / <sup>60</sup> Co / <sup>61</sup> Co / <sup>61</sup> Cu / <sup>64</sup> Cu, E < 50 MeV; measured E <sub>γ</sub> , I <sub>γ</sub> , activation cross section and excitation functions using stacked foil technique.Compared results to existing data. JOUR NIMBE 260 495
<sup>56</sup> Ni	2007TA14	NUCLEAR REACTIONS Ni(d, X) <sup>51</sup> Cr / <sup>52</sup> Mn / <sup>54</sup> Mn / <sup>56</sup> Mn / <sup>56</sup> Ni / <sup>57</sup> Ni / <sup>55</sup> Co / <sup>56</sup> Co / <sup>57</sup> Co / <sup>58</sup> Co / <sup>60</sup> Co / <sup>61</sup> Co / <sup>61</sup> Cu / <sup>64</sup> Cu, E < 50 MeV; measured E <sub>γ</sub> , I <sub>γ</sub> , activation cross section and excitation functions using stacked foil technique.Compared results to existing data. JOUR NIMBE 260 495

**A=57**

<sup>57</sup> Co	2007TA14	NUCLEAR REACTIONS Ni(d, X) <sup>51</sup> Cr / <sup>52</sup> Mn / <sup>54</sup> Mn / <sup>56</sup> Mn / <sup>56</sup> Ni / <sup>57</sup> Ni / <sup>55</sup> Co / <sup>56</sup> Co / <sup>57</sup> Co / <sup>58</sup> Co / <sup>60</sup> Co / <sup>61</sup> Co / <sup>61</sup> Cu / <sup>64</sup> Cu, E < 50 MeV; measured E <sub>γ</sub> , I <sub>γ</sub> , activation cross section and excitation functions using stacked foil technique.Compared results to existing data. JOUR NIMBE 260 495
<sup>57</sup> Ni	2007TA14	NUCLEAR REACTIONS Ni(d, X) <sup>51</sup> Cr / <sup>52</sup> Mn / <sup>54</sup> Mn / <sup>56</sup> Mn / <sup>56</sup> Ni / <sup>57</sup> Ni / <sup>55</sup> Co / <sup>56</sup> Co / <sup>57</sup> Co / <sup>58</sup> Co / <sup>60</sup> Co / <sup>61</sup> Co / <sup>61</sup> Cu / <sup>64</sup> Cu, E < 50 MeV; measured E <sub>γ</sub> , I <sub>γ</sub> , activation cross section and excitation functions using stacked foil technique.Compared results to existing data. JOUR NIMBE 260 495

**A=58**

<sup>58</sup> Co	2007TA14	NUCLEAR REACTIONS Ni(d, X) <sup>51</sup> Cr / <sup>52</sup> Mn / <sup>54</sup> Mn / <sup>56</sup> Mn / <sup>56</sup> Ni / <sup>57</sup> Ni / <sup>55</sup> Co / <sup>56</sup> Co / <sup>57</sup> Co / <sup>58</sup> Co / <sup>60</sup> Co / <sup>61</sup> Co / <sup>61</sup> Cu / <sup>64</sup> Cu, E < 50 MeV; measured E <sub>γ</sub> , I <sub>γ</sub> , activation cross section and excitation functions using stacked foil technique.Compared results to existing data. JOUR NIMBE 260 495
	2007ZE03	NUCLEAR REACTIONS <sup>58</sup> Ni(t, <sup>3</sup> He), E=115 MeV / nucleon; measured particle spectra, $\sigma(\theta)$ . <sup>58</sup> Co deduced Gamow-Teller strength distribution. Comparison with other results, model predictions. JOUR NUPAB 787 329c
<sup>58</sup> Ni	2007AGZV	NUCLEAR REACTIONS <sup>58</sup> Ni( <sup>8</sup> B, <sup>8</sup> B), E=20.7, 23.4, 25.3, 27.2, 29.3 MeV; measured <sup>8</sup> B( $\theta$ ); deduced $\sigma_{el}$ / $\sigma_{Ruth}$ . TWINSOL facility. CONF Voronezh(Nucleus-2007), Contrib,P120,Aguilera

## KEYNUMBERS AND KEYWORDS

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### **A=58 (*continued*)**

	2007HI06	NUCLEAR REACTIONS $^{58}\text{Ni}$ ( $^{58}\text{Ni}$ , $^{58}\text{Ni}$ ), E=260=220 MeV; measured angular distributions. Deduced Mott oscillations. JOUR PRVCA 76 014617
	2007H013	NUCLEAR REACTIONS $^{58}\text{Ni}$ (p, p'), E=172 MeV; measured cross sections, spin flip cross sections and spin-flip probabilities. Compared results to model calculations. JOUR PRVCA 76 014314
$^{58}\text{Cu}$	2007ZEZZ	NUCLEAR REACTIONS $^{12,13}\text{C}$ , $^{18}\text{O}$ , $^{26}\text{Mg}$ , $^{58}\text{Ni}$ , $^{60}\text{Ni}$ , $^{90}\text{Zr}$ , $^{118}\text{Sn}$ , $^{208}\text{Pb}$ ( $^3\text{He}$ , t), E=420 MeV; measured triton spectra and cross sections. Deduced B(GT). PREPRINT arXiv:0707.2840v1 [nucl-ex]

### **A=59**

No references found

### **A=60**

$^{60}\text{Co}$	2007TA14	NUCLEAR REACTIONS Ni(d, X) $^{51}\text{Cr}$ / $^{52}\text{Mn}$ / $^{54}\text{Mn}$ / $^{56}\text{Mn}$ / $^{56}\text{Ni}$ / $^{57}\text{Ni}$ / $^{55}\text{Co}$ / $^{56}\text{Co}$ / $^{57}\text{Co}$ / $^{58}\text{Co}$ / $^{60}\text{Co}$ / $^{61}\text{Co}$ / $^{61}\text{Cu}$ / $^{64}\text{Cu}$ , E < 50 MeV; measured $E_\gamma$ , $I_\gamma$ , activation cross section and excitation functions using stacked foil technique. Compared results to existing data. JOUR NIMBE 260 495
	2007ZH34	NUCLEAR REACTIONS $^{63}\text{Cu}$ (n, n'), (n, 2n), (n, np), (n, d), (n, p), (n, $\alpha$ ), E=14.9 MeV; $^{65}\text{Cu}$ (n, n'), (n, 2n), (n, np), (n, d), (n, p), E=14.9 MeV; measured $E_\gamma$ , $I_\gamma$ , and cross sections. JOUR NSENA 157 354
$^{60}\text{Cu}$	2007ZEZZ	NUCLEAR REACTIONS $^{12,13}\text{C}$ , $^{18}\text{O}$ , $^{26}\text{Mg}$ , $^{58}\text{Ni}$ , $^{60}\text{Ni}$ , $^{90}\text{Zr}$ , $^{118}\text{Sn}$ , $^{208}\text{Pb}$ ( $^3\text{He}$ , t), E=420 MeV; measured triton spectra and cross sections. Deduced B(GT). PREPRINT arXiv:0707.2840v1 [nucl-ex]
$^{60}\text{Zn}$	2007W002	NUCLEAR REACTIONS $^{36}\text{Ar}$ ( $^{24}\text{Mg}$ , F), E=123.1 MeV; $^{36}\text{Ar}$ ( $^{25}\text{Mg}$ , F), E=119.3 MeV; measured $E_\gamma$ , $I_\gamma$ from GDR decay. $^{60,61}\text{Zn}$ deduced GDR parameters, isospin mixing probability. JOUR APOBB 38 1469

### **A=61**

$^{61}\text{Co}$	2007TA14	NUCLEAR REACTIONS Ni(d, X) $^{51}\text{Cr}$ / $^{52}\text{Mn}$ / $^{54}\text{Mn}$ / $^{56}\text{Mn}$ / $^{56}\text{Ni}$ / $^{57}\text{Ni}$ / $^{55}\text{Co}$ / $^{56}\text{Co}$ / $^{57}\text{Co}$ / $^{58}\text{Co}$ / $^{60}\text{Co}$ / $^{61}\text{Co}$ / $^{61}\text{Cu}$ / $^{64}\text{Cu}$ , E < 50 MeV; measured $E_\gamma$ , $I_\gamma$ , activation cross section and excitation functions using stacked foil technique. Compared results to existing data. JOUR NIMBE 260 495
$^{61}\text{Cu}$	2007TA14	NUCLEAR REACTIONS Ni(d, X) $^{51}\text{Cr}$ / $^{52}\text{Mn}$ / $^{54}\text{Mn}$ / $^{56}\text{Mn}$ / $^{56}\text{Ni}$ / $^{57}\text{Ni}$ / $^{55}\text{Co}$ / $^{56}\text{Co}$ / $^{57}\text{Co}$ / $^{58}\text{Co}$ / $^{60}\text{Co}$ / $^{61}\text{Co}$ / $^{61}\text{Cu}$ / $^{64}\text{Cu}$ , E < 50 MeV; measured $E_\gamma$ , $I_\gamma$ , activation cross section and excitation functions using stacked foil technique. Compared results to existing data. JOUR NIMBE 260 495
$^{61}\text{Zn}$	2007W002	NUCLEAR REACTIONS $^{36}\text{Ar}$ ( $^{24}\text{Mg}$ , F), E=123.1 MeV; $^{36}\text{Ar}$ ( $^{25}\text{Mg}$ , F), E=119.3 MeV; measured $E_\gamma$ , $I_\gamma$ from GDR decay. $^{60,61}\text{Zn}$ deduced GDR parameters, isospin mixing probability. JOUR APOBB 38 1469

## KEYNUMBERS AND KEYWORDS

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### **A=62**

<sup>62</sup> Ni	2007ZH34	NUCLEAR REACTIONS <sup>63</sup> Cu(n, n'), (n, 2n), (n, np), (n, d), (n, p), (n, $\alpha$ ), E=14.9 MeV; <sup>65</sup> Cu(n, n'), (n, 2n), (n, np), (n, d), (n, p), E=14.9 MeV; measured E $\gamma$ , I $\gamma$ , and cross sections. JOUR NSENA 157 354
<sup>62</sup> Cu	2007ZH34	NUCLEAR REACTIONS <sup>63</sup> Cu(n, n'), (n, 2n), (n, np), (n, d), (n, p), (n, $\alpha$ ), E=14.9 MeV; <sup>65</sup> Cu(n, n'), (n, 2n), (n, np), (n, d), (n, p), E=14.9 MeV; measured E $\gamma$ , I $\gamma$ , and cross sections. JOUR NSENA 157 354
<sup>62</sup> Zn	2007AL41	NUCLEAR REACTIONS Zn(p, X) <sup>62</sup> Zn / <sup>65</sup> Zn / <sup>66</sup> Ga / <sup>67</sup> Ga / <sup>68</sup> Ga, E < 27.5 MeV; measured yields, cross sections, and excitation functions using stacked foil activation. JOUR ARISE 65 1101

### **A=63**

<sup>63</sup> Ni	2007NAZW	NUCLEAR REACTIONS <sup>4</sup> He( $\gamma$ , X), E < 50 MeV; <sup>12</sup> C( $\alpha$ , $\gamma$ ), E(cm)=1.4-1.6 MeV; <sup>2</sup> H, <sup>62</sup> Ni(n, $\gamma$ ), E= low; measured cross sections. CONF Tokai-mura (Nuclear Data) Proc,PIII.01,Nagai
	2007ZH34	NUCLEAR REACTIONS <sup>63</sup> Cu(n, n'), (n, 2n), (n, np), (n, d), (n, p), (n, $\alpha$ ), E=14.9 MeV; <sup>65</sup> Cu(n, n'), (n, 2n), (n, np), (n, d), (n, p), E=14.9 MeV; measured E $\gamma$ , I $\gamma$ , and cross sections. JOUR NSENA 157 354
<sup>63</sup> Cu	2007ZH34	NUCLEAR REACTIONS <sup>63</sup> Cu(n, n'), (n, 2n), (n, np), (n, d), (n, p), (n, $\alpha$ ), E=14.9 MeV; <sup>65</sup> Cu(n, n'), (n, 2n), (n, np), (n, d), (n, p), E=14.9 MeV; measured E $\gamma$ , I $\gamma$ , and cross sections. JOUR NSENA 157 354

### **A=64**

<sup>64</sup> Ni	2007BL15	RADIOACTIVITY <sup>70</sup> Zn, <sup>116</sup> Cd, <sup>128,130</sup> Te( $\beta^-$ $\beta^-$ ); <sup>64</sup> Zn, <sup>106</sup> Cd, <sup>120</sup> Te( $\beta^+$ $\beta^+$ ); measured summed E $\beta$ . Deduced upper limits for T <sub>1/2</sub> . JOUR PRVCA 76 025501
	2007ZH34	NUCLEAR REACTIONS <sup>63</sup> Cu(n, n'), (n, 2n), (n, np), (n, d), (n, p), (n, $\alpha$ ), E=14.9 MeV; <sup>65</sup> Cu(n, n'), (n, 2n), (n, np), (n, d), (n, p), E=14.9 MeV; measured E $\gamma$ , I $\gamma$ , and cross sections. JOUR NSENA 157 354
<sup>64</sup> Cu	2007KI13	RADIOACTIVITY <sup>64</sup> Zn, <sup>112</sup> Sn( $\beta^+$ ), (EC); <sup>124</sup> Sn(2 $\beta^-$ ); measured E $\gamma$ , I $\gamma$ ; deduced T <sub>1/2</sub> lower limits for $\beta^+$ , EC and 0 $\nu$ -accompanied 2 $\beta$ -decay to ground and excited states. Comparison with theoretical values and previous data. JOUR NUPAB 793 171
	2007TA14	NUCLEAR REACTIONS Ni(d, X) <sup>51</sup> Cr / <sup>52</sup> Mn / <sup>54</sup> Mn / <sup>56</sup> Mn / <sup>56</sup> Ni / <sup>57</sup> Ni / <sup>55</sup> Co / <sup>56</sup> Co / <sup>57</sup> Co / <sup>58</sup> Co / <sup>60</sup> Co / <sup>61</sup> Co / <sup>61</sup> Cu / <sup>64</sup> Cu, E < 50 MeV; measured E $\gamma$ , I $\gamma$ , activation cross section and excitation functions using stacked foil technique.Compared results to existing data. JOUR NIMBE 260 495
	2007ZH34	NUCLEAR REACTIONS <sup>63</sup> Cu(n, n'), (n, 2n), (n, np), (n, d), (n, p), (n, $\alpha$ ), E=14.9 MeV; <sup>65</sup> Cu(n, n'), (n, 2n), (n, np), (n, d), (n, p), E=14.9 MeV; measured E $\gamma$ , I $\gamma$ , and cross sections. JOUR NSENA 157 354
<sup>64</sup> Zn	2007BL15	RADIOACTIVITY <sup>70</sup> Zn, <sup>116</sup> Cd, <sup>128,130</sup> Te( $\beta^-$ $\beta^-$ ); <sup>64</sup> Zn, <sup>106</sup> Cd, <sup>120</sup> Te( $\beta^+$ $\beta^+$ ); measured summed E $\beta$ . Deduced upper limits for T <sub>1/2</sub> . JOUR PRVCA 76 025501

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## KEYNUMBERS AND KEYWORDS

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### **A=64 (*continued*)**

	2007KI13	RADIOACTIVITY $^{64}\text{Zn}$ , $^{112}\text{Sn}(\beta^+)$ , (EC), $^{124}\text{Sn}(2\beta^-)$ ; measured $E\gamma$ , $I\gamma$ ; deduced $T_{1/2}$ lower limits for $\beta^+$ , EC and $0\nu$ -accompanied $2\beta$ -decay to ground and excited states. Comparison with theoretical values and previous data. JOUR NUPAB 793 171
	2007LE24	NUCLEAR REACTIONS $^{27}\text{Al}(\text{He}, \text{He})$ , $E=9.5, 11, 12, 13.4$ MeV; $^{51}\text{V}(\text{Li}, \text{Li})$ , $E=26$ MeV; measured $\sigma(\theta)$ . Comparison with optical model. $^{27}\text{Al}$ , $^{64}\text{Zn}(\text{He}, \text{He})$ , $(\text{Li}, \text{Li})$ , $(\text{Li}, \text{Li})$ , $(\text{Be}, \text{Be})$ , $(\text{O}, \text{O})$ , $E\approx 5-25$ MeV; analyzed $\sigma$ . Comparison with other data.
$^{64}\text{Ge}$	2007ST16	Secondary radioactive beam. JOUR NUPAB 787 94c NUCLEAR REACTIONS $^{93}\text{Nb}(\text{Ge}, \text{n})$ , $E$ not given; measured $E\gamma$ , $I\gamma$ and transition rates using recoil distance method. $^{64}\text{Ge}$ deduced $B(E2)$ and lifetimes. JOUR PRLTA 99 042503

### **A=65**

$^{65}\text{Ni}$	2007ZH34	NUCLEAR REACTIONS $^{63}\text{Cu}(\text{n}, \text{n}')$ , $(\text{n}, 2\text{n})$ , $(\text{n}, \text{np})$ , $(\text{n}, \text{d})$ , $(\text{n}, \text{p})$ , $(\text{n}, \alpha)$ , $E=14.9$ MeV; $^{65}\text{Cu}(\text{n}, \text{n}')$ , $(\text{n}, 2\text{n})$ , $(\text{n}, \text{np})$ , $(\text{n}, \text{d})$ , $(\text{n}, \text{p})$ , $E=14.9$ MeV; measured $E\gamma$ , $I\gamma$ , and cross sections. JOUR NSENA 157 354
$^{65}\text{Cu}$	2007ZH34	NUCLEAR REACTIONS $^{63}\text{Cu}(\text{n}, \text{n}')$ , $(\text{n}, 2\text{n})$ , $(\text{n}, \text{np})$ , $(\text{n}, \text{d})$ , $(\text{n}, \text{p})$ , $(\text{n}, \alpha)$ , $E=14.9$ MeV; $^{65}\text{Cu}(\text{n}, \text{n}')$ , $(\text{n}, 2\text{n})$ , $(\text{n}, \text{np})$ , $(\text{n}, \text{d})$ , $(\text{n}, \text{p})$ , $E=14.9$ MeV; measured $E\gamma$ , $I\gamma$ , and cross sections. JOUR NSENA 157 354
$^{65}\text{Zn}$	2007AL41	NUCLEAR REACTIONS $\text{Zn}(\text{p}, \text{X})^{62}\text{Zn} / ^{65}\text{Zn} / ^{66}\text{Ga} / ^{67}\text{Ga} / ^{68}\text{Ga}$ , $E < 27.5$ MeV; measured yields, cross sections, and excitation functions using stacked foil activation. JOUR ARISE 65 1101

### **A=66**

$^{66}\text{Zn}$	2007SP04	NUCLEAR REACTIONS $^{62}\text{Ni}(\alpha, \gamma)$ , $E=5, 9$ MeV; $^{103}\text{Rh}(\text{p}, \gamma)$ , $E=3, 5$ MeV; measured $E\gamma$ , $I\gamma$ . Deduced total cross sections. Compared results to model calculations. JOUR PRVCA 76 015802
$^{66}\text{Ga}$	2007AL41	NUCLEAR REACTIONS $\text{Zn}(\text{p}, \text{X})^{62}\text{Zn} / ^{65}\text{Zn} / ^{66}\text{Ga} / ^{67}\text{Ga} / ^{68}\text{Ga}$ , $E < 27.5$ MeV; measured yields, cross sections, and excitation functions using stacked foil activation. JOUR ARISE 65 1101

### **A=67**

$^{67}\text{Ga}$	2007AL41	NUCLEAR REACTIONS $\text{Zn}(\text{p}, \text{X})^{62}\text{Zn} / ^{65}\text{Zn} / ^{66}\text{Ga} / ^{67}\text{Ga} / ^{68}\text{Ga}$ , $E < 27.5$ MeV; measured yields, cross sections, and excitation functions using stacked foil activation. JOUR ARISE 65 1101
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### **A=68**

$^{68}\text{Ni}$	2007BR15	NUCLEAR REACTIONS $^{9}\text{Be}(\text{Kr}, \text{X})^{68}\text{Ni}$ , $E=900$ MeV / nucleon; measured $E\gamma$ , $I\gamma$ following projectile coulomb excitation. JOUR APOBB 38 1229
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### **A=68 (*continued*)**

<sup>68</sup>Ga      2007AL41      NUCLEAR REACTIONS Zn(p, X)<sup>62</sup>Zn / <sup>65</sup>Zn / <sup>66</sup>Ga / <sup>67</sup>Ga / <sup>68</sup>Ga, E < 27.5 MeV; measured yields, cross sections, and excitation functions using stacked foil activation. JOUR ARISE 65 1101

### **A=69**

No references found

### **A=70**

<sup>70</sup>Zn      2007BL15      RADIOACTIVITY <sup>70</sup>Zn, <sup>116</sup>Cd, <sup>128,130</sup>Te( $\beta^- \beta^-$ ); <sup>64</sup>Zn, <sup>106</sup>Cd, <sup>120</sup>Te( $\beta^+ \beta^+$ ); measured summed E $\beta$ . Deduced upper limits for T<sub>1/2</sub>. JOUR PRVCA 76 025501

              2007BLZY      RADIOACTIVITY <sup>70</sup>Zn, <sup>116</sup>Cd, <sup>128</sup>Te, <sup>130</sup>Te(2 $\beta^-$ ); measured summed  $\beta$  energies. Deduced T<sub>1/2</sub> limits. PREPRINT arXiv:0707.2756v1 [nucl-ex]

<sup>70</sup>Ge      2007BL15      RADIOACTIVITY <sup>70</sup>Zn, <sup>116</sup>Cd, <sup>128,130</sup>Te( $\beta^- \beta^-$ ); <sup>64</sup>Zn, <sup>106</sup>Cd, <sup>120</sup>Te( $\beta^+ \beta^+$ ); measured summed E $\beta$ . Deduced upper limits for T<sub>1/2</sub>. JOUR PRVCA 76 025501

              2007BLZY      RADIOACTIVITY <sup>70</sup>Zn, <sup>116</sup>Cd, <sup>128</sup>Te, <sup>130</sup>Te(2 $\beta^-$ ); measured summed  $\beta$  energies. Deduced T<sub>1/2</sub> limits. PREPRINT arXiv:0707.2756v1 [nucl-ex]

### **A=71**

No references found

### **A=72**

<sup>72</sup>Ga      2007GA29      NUCLEAR REACTIONS <sup>72,73</sup>Ge(n, p), E=8.8-11.4 MeV; measured cross sections using activation technique. Compared results to model calculations. JOUR NIMBE 261 969

<sup>72</sup>Kr      2007YA06      NUCLEAR REACTIONS <sup>12</sup>C(<sup>72</sup>Kr, X), (<sup>76</sup>Kr, X), (<sup>80</sup>Kr, X), E≤ 1.05 GeV / nucleon; measured  $\sigma$ . <sup>72,76,80</sup>Kr deduced rms matter radii. Secondary beams, Glauber model. Comparison with other data. JOUR NUPAB 787 471c

### **A=73**

<sup>73</sup>Ga      2007GA29      NUCLEAR REACTIONS <sup>72,73</sup>Ge(n, p), E=8.8-11.4 MeV; measured cross sections using activation technique. Compared results to model calculations. JOUR NIMBE 261 969

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**KEYNUMBERS AND KEYWORDS**

**A=74**

<sup>74</sup>Rb      2007NA13      NUCLEAR REACTIONS Ca(<sup>36</sup>Ar, np)<sup>74</sup>Rb, E=103 MeV; Ca(<sup>40</sup>Ca, np)<sup>78</sup>Y, E=118, 121 MeV; measured E $\gamma$ , I $\gamma$ ,  $\beta\gamma$ -coinc using recoil-decay tagging technique. <sup>74</sup>Rb, <sup>78</sup>Y deduced coulomb energy differences between T=1 states. JOUR PRVCA 75 061301

**A=75**

No references found

**A=76**

<sup>76</sup>Kr      2007YA06      NUCLEAR REACTIONS <sup>12</sup>C(<sup>72</sup>Kr, X), (<sup>76</sup>Kr, X), (<sup>80</sup>Kr, X), E  $\leq$  1.05 GeV / nucleon; measured  $\sigma$ . <sup>72,76,80</sup>Kr deduced rms matter radii. Secondary beams, Glauber model. Comparison with other data. JOUR NUPAB 787 471c

**A=77**

No references found

**A=78**

<sup>78</sup>Ni      2007SC29      RADIOACTIVITY <sup>78</sup>Ni( $\beta^-$ ); measured T<sub>1/2</sub>. Silicon strip detector. JOUR NUPAB 787 299c

<sup>78</sup>Cu      2007SC29      RADIOACTIVITY <sup>78</sup>Ni( $\beta^-$ ); measured T<sub>1/2</sub>. Silicon strip detector. JOUR NUPAB 787 299c

<sup>78</sup>Zn      2007IB01      NUCLEAR REACTIONS <sup>238</sup>U( $\gamma$ , F)<sup>78</sup>Zn / <sup>132</sup>Sn, E not given; measured fission fragment yields. ALTO facility. <sup>238</sup>U(n, F)<sup>81</sup>Zn / <sup>83</sup>Ga, E not given; measured E $\gamma$ , I $\gamma$ , E $\beta$ , I $\beta$ ,  $\gamma\gamma$ -coin. <sup>81</sup>Ga, <sup>83</sup>Ge deduced levels, J,  $\pi$ . Online mass separator. JOUR NUPAB 787 110c

<sup>78</sup>Y      2007NA13      NUCLEAR REACTIONS Ca(<sup>36</sup>Ar, np)<sup>74</sup>Rb, E=103 MeV; Ca(<sup>40</sup>Ca, np)<sup>78</sup>Y, E=118, 121 MeV; measured E $\gamma$ , I $\gamma$ ,  $\beta\gamma$ -coinc using recoil-decay tagging technique. <sup>74</sup>Rb, <sup>78</sup>Y deduced coulomb energy differences between T=1 states. JOUR PRVCA 75 061301

**A=79**

No references found

## KEYNUMBERS AND KEYWORDS

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### **A=80**

<sup>80</sup> Zn	2007DE37	NUCLEAR REACTIONS $^{192}\text{Os}$ , $^{238}\text{U}(\text{82Se}, \text{X})\text{80Zn}$ / $^{81}\text{Ga}$ / $^{82}\text{Ge}$ / $^{83}\text{As}$ / $^{84}\text{Se}$ / $^{85}\text{Se}$ / $^{87}\text{Kr}$ , E=460, 505 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. $^{80}\text{Zn}$ , $^{81}\text{Ga}$ , $^{82}\text{Ge}$ , $^{83}\text{As}$ , $^{84,85}\text{Se}$ , $^{87}\text{Kr}$ deduced levels, J, $\pi$ . Comparison with Oxbash shell model. $^{206}\text{Pb}(\text{132Xe}, \text{X})$ , ( $^{144}\text{Xe}$ , X), E=8.26 MeV / nucleon; calculated production $\sigma$ of neutron-rich nuclei. Grazing coupled channels model. JOUR NUPAB 787 74c
<sup>80</sup> Kr	2007YA06	NUCLEAR REACTIONS $^{12}\text{C}(\text{72Kr}, \text{X})$ , ( $^{76}\text{Kr}$ , X), ( $^{80}\text{Kr}$ , X), E≤ 1.05 GeV / nucleon; measured $\sigma$ . $^{72,76,80}\text{Kr}$ deduced rms matter radii. Secondary beams, Glauber model. Comparison with other data. JOUR NUPAB 787 471c

### **A=81**

<sup>81</sup> Zn	2007IB01	NUCLEAR REACTIONS $^{238}\text{U}(\gamma, \text{F})\text{78Zn}$ / $^{132}\text{Sn}$ , E not given; measured fission fragment yields. ALTO facility. $^{238}\text{U}(\text{n}, \text{F})\text{81Zn}$ / $^{83}\text{Ga}$ , E not given; measured $E\gamma$ , $I\gamma$ , $E\beta$ , $I\beta$ , $\gamma\gamma$ -coin. $^{81}\text{Ga}$ , $^{83}\text{Ge}$ deduced levels, J, $\pi$ . Online mass separator. JOUR NUPAB 787 110c
<sup>81</sup> Ga	2007DE37	NUCLEAR REACTIONS $^{192}\text{Os}$ , $^{238}\text{U}(\text{82Se}, \text{X})\text{80Zn}$ / $^{81}\text{Ga}$ / $^{82}\text{Ge}$ / $^{83}\text{As}$ / $^{84}\text{Se}$ / $^{85}\text{Se}$ / $^{87}\text{Kr}$ , E=460, 505 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. $^{80}\text{Zn}$ , $^{81}\text{Ga}$ , $^{82}\text{Ge}$ , $^{83}\text{As}$ , $^{84,85}\text{Se}$ , $^{87}\text{Kr}$ deduced levels, J, $\pi$ . Comparison with Oxbash shell model. $^{206}\text{Pb}(\text{132Xe}, \text{X})$ , ( $^{144}\text{Xe}$ , X), E=8.26 MeV / nucleon; calculated production $\sigma$ of neutron-rich nuclei. Grazing coupled channels model. JOUR NUPAB 787 74c
	2007IB01	NUCLEAR REACTIONS $^{238}\text{U}(\gamma, \text{F})\text{78Zn}$ / $^{132}\text{Sn}$ , E not given; measured fission fragment yields. ALTO facility. $^{238}\text{U}(\text{n}, \text{F})\text{81Zn}$ / $^{83}\text{Ga}$ , E not given; measured $E\gamma$ , $I\gamma$ , $E\beta$ , $I\beta$ , $\gamma\gamma$ -coin. $^{81}\text{Ga}$ , $^{83}\text{Ge}$ deduced levels, J, $\pi$ . Online mass separator. JOUR NUPAB 787 110c
<sup>81</sup> Se	2007CI05	NUCLEAR REACTIONS $^2\text{H}(\text{90Zr}, \text{p}\gamma)$ , ( $^{80}\text{Se}$ , p $\gamma$ ), E=4 MeV / nucleon; measured $E\gamma$ , Ep, p $\gamma$ -coinc. JOUR NIMBE 261 938

### **A=82**

<sup>82</sup> Ge	2007DE37	NUCLEAR REACTIONS $^{192}\text{Os}$ , $^{238}\text{U}(\text{82Se}, \text{X})\text{80Zn}$ / $^{81}\text{Ga}$ / $^{82}\text{Ge}$ / $^{83}\text{As}$ / $^{84}\text{Se}$ / $^{85}\text{Se}$ / $^{87}\text{Kr}$ , E=460, 505 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. $^{80}\text{Zn}$ , $^{81}\text{Ga}$ , $^{82}\text{Ge}$ , $^{83}\text{As}$ , $^{84,85}\text{Se}$ , $^{87}\text{Kr}$ deduced levels, J, $\pi$ . Comparison with Oxbash shell model. $^{206}\text{Pb}(\text{132Xe}, \text{X})$ , ( $^{144}\text{Xe}$ , X), E=8.26 MeV / nucleon; calculated production $\sigma$ of neutron-rich nuclei. Grazing coupled channels model. JOUR NUPAB 787 74c
	2007RZ02	RADIOACTIVITY $^{82}\text{Ge}(\text{IT})$ [from $^{248}\text{Cm}(\text{SF})$ ]; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coinc. $^{82}\text{Ge}$ deduced levels, J, $\pi$ . JOUR PRVCA 76 027302
<sup>82</sup> Nb	2007CA26	NUCLEAR REACTIONS $^9\text{Be}(\text{107Ag}, \text{X})\text{82Nb}$ , E=750 MeV / nucleon; measured $E\gamma$ , $I\gamma$ , lifetime of low lying isomeric state. $^{82}\text{Nb}$ deduced levels, J, $\pi$ . JOUR APOBB 38 1271
	2007RE18	NUCLEAR REACTIONS $\text{Be}(\text{107Ag}, \text{X})\text{82Nb}$ / $^{84}\text{Nb}$ / $^{86}\text{Tc}$ / $^{87}\text{Tc}$ / $^{88}\text{Tc}$ , E=750 MeV / nucleon; measured delayed $E\gamma$ , $I\gamma$ , (particle) $\gamma$ -coin, yield. $^{82}\text{Nb}$ , $^{86}\text{Tc}$ deduced level energy of first excited state. JOUR NUPAB 787 491c

**KEYNUMBERS AND KEYWORDS**

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**A=83**

<sup>83</sup> Ga	2007IB01	NUCLEAR REACTIONS $^{238}\text{U}(\gamma, \text{F})^{78}\text{Zn} / ^{132}\text{Sn}$ , E not given; measured fission fragment yields. ALTO facility. $^{238}\text{U}(\text{n}, \text{F})^{81}\text{Zn} / ^{83}\text{Ga}$ , E not given; measured $E\gamma$ , $I\gamma$ , $E\beta$ , $I\beta$ , $\gamma\gamma$ -coin. $^{81}\text{Ga}$ , $^{83}\text{Ge}$ deduced levels, J, $\pi$ . Online mass separator. JOUR NUPAB 787 110c
<sup>83</sup> Ge	2007IB01	NUCLEAR REACTIONS $^{238}\text{U}(\gamma, \text{F})^{78}\text{Zn} / ^{132}\text{Sn}$ , E not given; measured fission fragment yields. ALTO facility. $^{238}\text{U}(\text{n}, \text{F})^{81}\text{Zn} / ^{83}\text{Ga}$ , E not given; measured $E\gamma$ , $I\gamma$ , $E\beta$ , $I\beta$ , $\gamma\gamma$ -coin. $^{81}\text{Ga}$ , $^{83}\text{Ge}$ deduced levels, J, $\pi$ . Online mass separator. JOUR NUPAB 787 110c
	2007J009	NUCLEAR REACTIONS $^2\text{H}(^{82}\text{Ge}, \text{p})$ , E=4 MeV / nucleon; $^2\text{H}(^{84}\text{Se}, \text{p})$ , E=4.5 MeV / nucleon; $^2\text{H}(^{132}\text{Sn}, \text{p})$ , E=4.77 MeV / nucleon; measured Ep and angular distributions. $^{83}\text{Ge}$ , $^{85}\text{Se}$ , $^{133}\text{Sn}$ deduced levels, J, $\pi$ and spectroscopic factors. Compared results to model calculations. JOUR APOBB 38 1205
<sup>83</sup> As	2007DE37	NUCLEAR REACTIONS $^{192}\text{Os}$ , $^{238}\text{U}(^{82}\text{Se}, \text{X})^{80}\text{Zn} / ^{81}\text{Ga} / ^{82}\text{Ge} / ^{83}\text{As} / ^{84}\text{Se} / ^{85}\text{Se} / ^{87}\text{Kr}$ , E=460, 505 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. $^{80}\text{Zn}$ , $^{81}\text{Ga}$ , $^{82}\text{Ge}$ , $^{83}\text{As}$ , $^{84,85}\text{Se}$ , $^{87}\text{Kr}$ deduced levels, J, $\pi$ . Comparison with Oxbash shell model. $^{206}\text{Pb}(^{132}\text{Xe}, \text{X})$ , ( $^{144}\text{Xe}, \text{X}$ ), E=8.26 MeV / nucleon; calculated production $\sigma$ of neutron-rich nuclei. Grazing coupled channels model. JOUR NUPAB 787 74c
<sup>83</sup> Nb	2007FI07	NUCLEAR REACTIONS $^{28}\text{Si}(^{58}\text{Ni}, 2\text{np})^{83}\text{Nb}$ , E=204, 215 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coinc. $^{83}\text{Nb}$ deduced levels, J, $\pi$ , transition multipolarities, mixing ratios and transition quadrupole moments. JOUR PRVCA 75 064310

**A=84**

<sup>84</sup> Se	2007DE37	NUCLEAR REACTIONS $^{192}\text{Os}$ , $^{238}\text{U}(^{82}\text{Se}, \text{X})^{80}\text{Zn} / ^{81}\text{Ga} / ^{82}\text{Ge} / ^{83}\text{As} / ^{84}\text{Se} / ^{85}\text{Se} / ^{87}\text{Kr}$ , E=460, 505 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. $^{80}\text{Zn}$ , $^{81}\text{Ga}$ , $^{82}\text{Ge}$ , $^{83}\text{As}$ , $^{84,85}\text{Se}$ , $^{87}\text{Kr}$ deduced levels, J, $\pi$ . Comparison with Oxbash shell model. $^{206}\text{Pb}(^{132}\text{Xe}, \text{X})$ , ( $^{144}\text{Xe}, \text{X}$ ), E=8.26 MeV / nucleon; calculated production $\sigma$ of neutron-rich nuclei. Grazing coupled channels model. JOUR NUPAB 787 74c
<sup>84</sup> Nb	2007RE18	NUCLEAR REACTIONS $\text{Be}(^{107}\text{Ag}, \text{X})^{82}\text{Nb} / ^{84}\text{Nb} / ^{86}\text{Tc} / ^{87}\text{Tc} / ^{88}\text{Tc}$ , E=750 MeV / nucleon; measured delayed $E\gamma$ , $I\gamma$ , (particle) $\gamma$ -coin, yield. $^{82}\text{Nb}$ , $^{86}\text{Tc}$ deduced level energy of first excited state. JOUR NUPAB 787 491c

**A=85**

<sup>85</sup> Se	2007DE37	NUCLEAR REACTIONS $^{192}\text{Os}$ , $^{238}\text{U}(^{82}\text{Se}, \text{X})^{80}\text{Zn} / ^{81}\text{Ga} / ^{82}\text{Ge} / ^{83}\text{As} / ^{84}\text{Se} / ^{85}\text{Se} / ^{87}\text{Kr}$ , E=460, 505 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coin. $^{80}\text{Zn}$ , $^{81}\text{Ga}$ , $^{82}\text{Ge}$ , $^{83}\text{As}$ , $^{84,85}\text{Se}$ , $^{87}\text{Kr}$ deduced levels, J, $\pi$ . Comparison with Oxbash shell model. $^{206}\text{Pb}(^{132}\text{Xe}, \text{X})$ , ( $^{144}\text{Xe}, \text{X}$ ), E=8.26 MeV / nucleon; calculated production $\sigma$ of neutron-rich nuclei. Grazing coupled channels model. JOUR NUPAB 787 74c
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## KEYNUMBERS AND KEYWORDS

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### **A=85 (*continued*)**

2007J009      NUCLEAR REACTIONS  ${}^2\text{H}({}^{82}\text{Ge}, \text{p})$ , E=4 MeV / nucleon;  ${}^2\text{H}({}^{84}\text{Se}, \text{p})$ , E=4.5 MeV / nucleon;  ${}^2\text{H}({}^{132}\text{Sn}, \text{p})$ , E=4.77 MeV / nucleon; measured Ep and angular distributions.  ${}^{83}\text{Ge}$ ,  ${}^{85}\text{Se}$ ,  ${}^{133}\text{Sn}$  deduced levels, J,  $\pi$  and spectroscopic factors. Compared results to model calculations. JOUR APOBB 38 1205

### **A=86**

${}^{86}\text{Mo}$     2007AN21    NUCLEAR REACTIONS  ${}^{58}\text{Ni}({}^{36}\text{Ar}, \text{X}){}^{86}$  /  ${}^{88}\text{Mo}$ , E=111 MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coinc.  ${}^{86,88}\text{Mo}$  deduced levels, J,  $\pi$ . JOUR PRVCA 76 014307

${}^{86}\text{Tc}$     2007RE18    NUCLEAR REACTIONS  $\text{Be}({}^{107}\text{Ag}, \text{X}){}^{82}\text{Nb}$  /  ${}^{84}\text{Nb}$  /  ${}^{86}\text{Tc}$  /  ${}^{87}\text{Tc}$  /  ${}^{88}\text{Tc}$ , E=750 MeV / nucleon; measured delayed  $E\gamma$ ,  $I\gamma$ , (particle) $\gamma$ -coin, yield.  ${}^{82}\text{Nb}$ ,  ${}^{86}\text{Tc}$  deduced level energy of first excited state. JOUR NUPAB 787 491c

### **A=87**

${}^{87}\text{Kr}$     2007DE37    NUCLEAR REACTIONS  ${}^{192}\text{Os}$ ,  ${}^{238}\text{U}({}^{82}\text{Se}, \text{X}){}^{80}\text{Zn}$  /  ${}^{81}\text{Ga}$  /  ${}^{82}\text{Ge}$  /  ${}^{83}\text{As}$  /  ${}^{84}\text{Se}$  /  ${}^{85}\text{Se}$  /  ${}^{87}\text{Kr}$ , E=460, 505 MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin.  ${}^{80}\text{Zn}$ ,  ${}^{81}\text{Ga}$ ,  ${}^{82}\text{Ge}$ ,  ${}^{83}\text{As}$ ,  ${}^{84,85}\text{Se}$ ,  ${}^{87}\text{Kr}$  deduced levels, J,  $\pi$ . Comparison with Oxbash shell model.  ${}^{206}\text{Pb}({}^{132}\text{Xe}, \text{X})$ ,  $({}^{144}\text{Xe}, \text{X})$ , E=8.26 MeV / nucleon; calculated production  $\sigma$  of neutron-rich nuclei. Grazing coupled channels model. JOUR NUPAB 787 74c

${}^{87}\text{Tc}$     2007RE18    NUCLEAR REACTIONS  $\text{Be}({}^{107}\text{Ag}, \text{X}){}^{82}\text{Nb}$  /  ${}^{84}\text{Nb}$  /  ${}^{86}\text{Tc}$  /  ${}^{87}\text{Tc}$  /  ${}^{88}\text{Tc}$ , E=750 MeV / nucleon; measured delayed  $E\gamma$ ,  $I\gamma$ , (particle) $\gamma$ -coin, yield.  ${}^{82}\text{Nb}$ ,  ${}^{86}\text{Tc}$  deduced level energy of first excited state. JOUR NUPAB 787 491c

### **A=88**

${}^{88}\text{Sr}$     2007GOZW    NUCLEAR REACTIONS  $\text{Sr}(\text{n}, \text{n}'\gamma){}^{88}\text{Sr}$ , E=fast; measured  $E\gamma$ ,  $I\gamma$ , DSAM;  ${}^{88}\text{Sr}$  deduced levels, J,  $\pi$ ,  $\tau$ . Reactor, fast neutron facilities. CONF Voronezh(Nucleus-2007), Contrib,P102, Govor

${}^{88}\text{Mo}$     2007AN21    NUCLEAR REACTIONS  ${}^{58}\text{Ni}({}^{36}\text{Ar}, \text{X}){}^{86}$  /  ${}^{88}\text{Mo}$ , E=111 MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coinc.  ${}^{86,88}\text{Mo}$  deduced levels, J,  $\pi$ . JOUR PRVCA 76 014307

${}^{88}\text{Tc}$     2007RE18    NUCLEAR REACTIONS  $\text{Be}({}^{107}\text{Ag}, \text{X}){}^{82}\text{Nb}$  /  ${}^{84}\text{Nb}$  /  ${}^{86}\text{Tc}$  /  ${}^{87}\text{Tc}$  /  ${}^{88}\text{Tc}$ , E=750 MeV / nucleon; measured delayed  $E\gamma$ ,  $I\gamma$ , (particle) $\gamma$ -coin, yield.  ${}^{82}\text{Nb}$ ,  ${}^{86}\text{Tc}$  deduced level energy of first excited state. JOUR NUPAB 787 491c

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## KEYNUMBERS AND KEYWORDS

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### **A=89**

<sup>89</sup> Zr	2007HU16	NUCLEAR REACTIONS <sup>90</sup> Zr, <sup>116</sup> Sn, <sup>208</sup> Pb( $\alpha$ , $\alpha'$ n), E=200 MeV; measured measured $\sigma$ , angular distributions. Deduced ISGDR direct-decay branching ratios. JOUR APOBB 38 1479
	2007HU20	NUCLEAR REACTIONS <sup>90</sup> Zr, <sup>116</sup> Sn, <sup>208</sup> Pb( $\alpha$ , $\alpha'$ n), E=200 MeV; measured $\sigma$ and angular distributions. <sup>90</sup> Zr, <sup>116</sup> Sn, <sup>208</sup> Pb deduced branching ratios for direct and statistical neutron decay of isoscalar giant dipole resonance. JOUR PANUE 70 1407

### **A=90**

<sup>90</sup> Sr	2007AL42	RADIOACTIVITY <sup>90</sup> Sr( $\beta^-$ ); measured internal bremsstrahlung spectrum using the beta-stopper method. Compared results to model calculations. JOUR IMPEE 16 1733
<sup>90</sup> Y	2007AL42	RADIOACTIVITY <sup>90</sup> Sr( $\beta^-$ ); measured internal bremsstrahlung spectrum using the beta-stopper method. Compared results to model calculations. JOUR IMPEE 16 1733
<sup>90</sup> Zr	2007HU20	NUCLEAR REACTIONS <sup>90</sup> Zr, <sup>116</sup> Sn, <sup>208</sup> Pb( $\alpha$ , $\alpha'$ n), E=200 MeV; measured $\sigma$ and angular distributions. <sup>90</sup> Zr, <sup>116</sup> Sn, <sup>208</sup> Pb deduced branching ratios for direct and statistical neutron decay of isoscalar giant dipole resonance. JOUR PANUE 70 1407
<sup>90</sup> Nb	2007ZEZZ	NUCLEAR REACTIONS <sup>12,13</sup> C, <sup>18</sup> O, <sup>26</sup> Mg, <sup>58</sup> Ni, <sup>60</sup> Ni, <sup>90</sup> Zr, <sup>118</sup> Sn, <sup>208</sup> Pb( <sup>3</sup> He, t), E=420 MeV; measured triton spectra and cross sections. Deduced B(GT). PREPRINT arXiv:0707.2840v1 [nucl-ex]

### **A=91**

<sup>91</sup> Zr	2007CI05	NUCLEAR REACTIONS <sup>2</sup> H( <sup>90</sup> Zr, p $\gamma$ ), ( <sup>80</sup> Se, p $\gamma$ ), E=4 MeV / nucleon; measured E $\gamma$ , Ep, p $\gamma$ -coinc. JOUR NIMBE 261 938
	2007TH07	NUCLEAR REACTIONS <sup>82</sup> Se( <sup>13</sup> C, 4n) <sup>91</sup> Zr, E=50 MeV; measured E $\gamma$ , I $\gamma$ , $\gamma\gamma$ -coinc. <sup>91</sup> Zr deduced levels, J, $\pi$ . JOUR APOBB 38 1381

### **A=92**

<sup>92</sup> Zr	2007C021	NUCLEAR REACTIONS <sup>208</sup> Pb( <sup>40</sup> Ca, X), E=235, 249 MeV; analyzed single and paired nucleon transfer $\sigma$ . <sup>208</sup> Pb( <sup>40</sup> Ca, X) <sup>42</sup> Ca, E=225, 236, 250 MeV; analyzed total kinetic energy loss distribution. <sup>208</sup> Pb( <sup>90</sup> Zr, X), E=560 MeV; analyzed fragment mass distributions, $\sigma$ ; measured E $\gamma$ , I $\gamma$ , (particle) $\gamma$ -coin, DSA. <sup>92</sup> Zr deduced levels, J, $\pi$ . <sup>238</sup> U( <sup>82</sup> Se, X), E=500 MeV; measured fragment yields, $\sigma$ . Prisma and Clara arrays. Multi-nucleon transfer reaction mechanisms discussed. JOUR NUPAB 787 160c
<sup>92</sup> Rh	2007PE14	NUCLEAR REACTIONS <sup>40</sup> Ca( <sup>58</sup> Ni, np $\alpha$ ), E=240 MeV; measured E $\gamma$ , I $\gamma$ , $\gamma\gamma$ -coinc, (particle) $\gamma$ -coinc. <sup>92</sup> Rh deduced levels, J, $\pi$ . JOUR PRVCA 76 011304

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## KEYNUMBERS AND KEYWORDS

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### **A=93**

No references found

### **A=94**

<sup>94</sup> Mo	2007BU23	NUCLEAR REACTIONS <sup>94</sup> Mo(e, e'), E=70 MeV; <sup>94</sup> Mo(p, p'), E=200 MeV; measured $\sigma$ and excitation strengths. Compared results to model calculations. JOUR PRLTA 99 092503
<sup>94</sup> Ag	2007R016	NUCLEAR REACTIONS <sup>58</sup> Ni( <sup>40</sup> Ca, 3np), E not given; measured Ep, E $\gamma$ , p $\gamma$ -coinc. Deduced spectroscopic factors and deformation parameters. JOUR APOBB 38 1121

### **A=95**

<sup>95</sup> Kr	2007SI16	NUCLEAR REACTIONS <sup>239,241</sup> Pu(n, F), E=thermal; measured E $\gamma$ , I $\gamma$ from isomeric decays. <sup>95</sup> Kr, <sup>96</sup> Rb, <sup>98</sup> Zr deduced levels, J, $\pi$ . JOUR APOBB 38 1321
<sup>95</sup> Y	2007HA32	ATOMIC MASSES <sup>95,96,97,98,99,100,101</sup> Y, <sup>101,102,103,104,105,106,107</sup> Nb; measured masses; analyzed two neutron separation energy. JYFLTRAP double Penning trap. Comparison with model predictions and previous data. JOUR NUPAB 793 20
<sup>95</sup> Zr	2007SZ05	NUCLEAR REACTIONS <sup>98</sup> Zr( <sup>40</sup> Ca, X), E=152 MeV; <sup>208</sup> Pb( <sup>90</sup> Zr, X), E=560 MeV; measured E $\Gamma$ , I $\gamma$ , (particle) $\gamma$ -coinc. <sup>95</sup> Zr, <sup>42</sup> Ca deduced levels. JOUR PRVCA 76 024604

### **A=96**

<sup>96</sup> Rb	2007SI16	NUCLEAR REACTIONS <sup>239,241</sup> Pu(n, F), E=thermal; measured E $\gamma$ , I $\gamma$ from isomeric decays. <sup>95</sup> Kr, <sup>96</sup> Rb, <sup>98</sup> Zr deduced levels, J, $\pi$ . JOUR APOBB 38 1321
<sup>96</sup> Y	2007HA32	ATOMIC MASSES <sup>95,96,97,98,99,100,101</sup> Y, <sup>101,102,103,104,105,106,107</sup> Nb; measured masses; analyzed two neutron separation energy. JYFLTRAP double Penning trap. Comparison with model predictions and previous data. JOUR NUPAB 793 20
<sup>96</sup> Pd	2007MY02	NUCLEAR REACTIONS <sup>9</sup> Be( <sup>107</sup> Ag, X) <sup>96</sup> Pd, E=750 MeV / nucleon; measured E $\gamma$ , I $\gamma$ from the decay of the isomeric states. Deduced isomeric ratios. JOUR APOBB 38 1277

### **A=97**

<sup>97</sup> Y	2007HA32	ATOMIC MASSES <sup>95,96,97,98,99,100,101</sup> Y, <sup>101,102,103,104,105,106,107</sup> Nb; measured masses; analyzed two neutron separation energy. JYFLTRAP double Penning trap. Comparison with model predictions and previous data. JOUR NUPAB 793 20
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## KEYNUMBERS AND KEYWORDS

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### **A=97 (continued)**

<sup>97</sup>Rh      2007SEZW      NUCLEAR REACTIONS <sup>96</sup>Ru(p,  $\gamma$ ), E=4.0-6.5 MeV; measured E $\gamma$ , I $\gamma$ ; <sup>97</sup>Rh deduced levels, J $\pi$ . CONF  
Voronezh(Nucleus-2007),Contrib,P101,Sergeev

### **A=98**

<sup>98</sup>Y      2007HA32      ATOMIC MASSES <sup>95,96,97,98,99,100,101</sup>Y, <sup>101,102,103,104,105,106,107</sup>Nb;  
measured masses; analyzed two neutron separation energy.  
JYFLTRAP double Penning trap. Comparison with model predictions  
and previous data. JOUR NUPAB 793 20

<sup>98</sup>Zr      2007SI16      NUCLEAR REACTIONS <sup>239,241</sup>Pu(n, F), E=thermal; measured E $\gamma$ ,  
I $\gamma$  from isomeric decays. <sup>95</sup>Kr, <sup>96</sup>Rb, <sup>98</sup>Zr deduced levels, J,  $\pi$ . JOUR  
APOBB 38 1321

### **A=99**

<sup>99</sup>Y      2007HA32      ATOMIC MASSES <sup>95,96,97,98,99,100,101</sup>Y, <sup>101,102,103,104,105,106,107</sup>Nb;  
measured masses; analyzed two neutron separation energy.  
JYFLTRAP double Penning trap. Comparison with model predictions  
and previous data. JOUR NUPAB 793 20

### **A=100**

<sup>100</sup>Y      2007HA32      ATOMIC MASSES <sup>95,96,97,98,99,100,101</sup>Y, <sup>101,102,103,104,105,106,107</sup>Nb;  
measured masses; analyzed two neutron separation energy.  
JYFLTRAP double Penning trap. Comparison with model predictions  
and previous data. JOUR NUPAB 793 20

### **A=101**

<sup>101</sup>Y      2007HA32      ATOMIC MASSES <sup>95,96,97,98,99,100,101</sup>Y, <sup>101,102,103,104,105,106,107</sup>Nb;  
measured masses; analyzed two neutron separation energy.  
JYFLTRAP double Penning trap. Comparison with model predictions  
and previous data. JOUR NUPAB 793 20

<sup>101</sup>Nb      2007HA32      ATOMIC MASSES <sup>95,96,97,98,99,100,101</sup>Y, <sup>101,102,103,104,105,106,107</sup>Nb;  
measured masses; analyzed two neutron separation energy.  
JYFLTRAP double Penning trap. Comparison with model predictions  
and previous data. JOUR NUPAB 793 20

<sup>101</sup>Sn      2007SE04      NUCLEAR REACTIONS <sup>46</sup>Ti(<sup>58</sup>Ni, X)<sup>101</sup>Sn, E=192 MeV; measured  
E $\gamma$ , Ep, p $\gamma$ -coinc. <sup>101</sup>Sn deduced levels and relative single particle  
energies. JOUR PRLTA 99 022504

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## KEYNUMBERS AND KEYWORDS

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### A=102

<sup>102</sup>Nb      2007HA32      ATOMIC MASSES <sup>95,96,97,98,99,100,101</sup>Y, <sup>101,102,103,104,105,106,107</sup>Nb;  
measured masses; analyzed two neutron separation energy.  
JYFLTRAP double Penning trap. Comparison with model predictions  
and previous data. JOUR NUPAB 793 20

### A=103

<sup>103</sup>Nb      2007HA32      ATOMIC MASSES <sup>95,96,97,98,99,100,101</sup>Y, <sup>101,102,103,104,105,106,107</sup>Nb;  
measured masses; analyzed two neutron separation energy.  
JYFLTRAP double Penning trap. Comparison with model predictions  
and previous data. JOUR NUPAB 793 20

### A=104

<sup>104</sup>Zr      2007G021      RADIOACTIVITY <sup>252</sup>Cf(SF); measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, fission  
fragment and light charged particle yields. <sup>108,110,112</sup>Ru deduced levels,  
J,  $\pi$ . <sup>104</sup>Zr, <sup>106</sup>Mo, <sup>148</sup>Ce(IT); measured T<sub>1/2</sub>, B(E2). Gammasphere  
array. JOUR NUPAB 787 231c

<sup>104</sup>Nb      2007HA32      ATOMIC MASSES <sup>95,96,97,98,99,100,101</sup>Y, <sup>101,102,103,104,105,106,107</sup>Nb;  
measured masses; analyzed two neutron separation energy.  
JYFLTRAP double Penning trap. Comparison with model predictions  
and previous data. JOUR NUPAB 793 20

<sup>104</sup>Pd      2007SP04      NUCLEAR REACTIONS <sup>62</sup>Ni( $\alpha$ ,  $\gamma$ ), E=5, 9 MeV; <sup>103</sup>Rh(p,  $\gamma$ ), E=3,  
5 MeV; measured E $\gamma$ , I $\gamma$ . Deduced total cross sections. Compared  
results to model calculations. JOUR PRVCA 76 015802

### A=105

<sup>105</sup>Nb      2007HA32      ATOMIC MASSES <sup>95,96,97,98,99,100,101</sup>Y, <sup>101,102,103,104,105,106,107</sup>Nb;  
measured masses; analyzed two neutron separation energy.  
JYFLTRAP double Penning trap. Comparison with model predictions  
and previous data. JOUR NUPAB 793 20

<sup>105</sup>Ag      2007TI07      NUCLEAR REACTIONS <sup>100</sup>Mo(<sup>10</sup>B, 5n), E=58, 64 MeV; measured  
E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coinc. <sup>105</sup>Ag deduced levels, J,  $\pi$ , multipolarities. JOUR  
PRVCA 76 024307

### A=106

<sup>106</sup>Nb      2007HA32      ATOMIC MASSES <sup>95,96,97,98,99,100,101</sup>Y, <sup>101,102,103,104,105,106,107</sup>Nb;  
measured masses; analyzed two neutron separation energy.  
JYFLTRAP double Penning trap. Comparison with model predictions  
and previous data. JOUR NUPAB 793 20

**KEYNUMBERS AND KEYWORDS**

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**A=106 (*continued*)**

<sup>106</sup> Mo	2007G021	RADIOACTIVITY <sup>252</sup> Cf(SF); measured E $\gamma$ , I $\gamma$ , $\gamma\gamma$ -coin, fission fragment and light charged particle yields. <sup>108,110,112</sup> Ru deduced levels, J, $\pi$ . <sup>104</sup> Zr, <sup>106</sup> Mo, <sup>148</sup> Ce(IT); measured T <sub>1/2</sub> , B(E2). Gammasphere array. JOUR NUPAB 787 231c
<sup>106</sup> Tc	2007HA20	ATOMIC MASSES <sup>106,107,108,109,110</sup> Tc, <sup>106,107,108,109,110,111,112,113,114,115</sup> Ru, <sup>108,109,110,111,112,113,114,115,116,117,118</sup> Rh, <sup>112,113,114,115,116,117,118,119,120</sup> Pd; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
<sup>106</sup> Ru	2007HA20	ATOMIC MASSES <sup>106,107,108,109,110</sup> Tc, <sup>106,107,108,109,110,111,112,113,114,115</sup> Ru, <sup>108,109,110,111,112,113,114,115,116,117,118</sup> Rh, <sup>112,113,114,115,116,117,118,119,120</sup> Pd; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
<sup>106</sup> Pd	2007BL15	RADIOACTIVITY <sup>70</sup> Zn, <sup>116</sup> Cd, <sup>128,130</sup> Te( $\beta^-$ / $\beta^-$ ); <sup>64</sup> Zn, <sup>106</sup> Cd, <sup>120</sup> Te( $\beta^+$ / $\beta^+$ ); measured summed E $\beta$ . Deduced upper limits for T <sub>1/2</sub> . JOUR PRVCA 76 025501
	2007RUZY	RADIOACTIVITY <sup>106</sup> Cd( $\beta^+$ EC), (2EC); measured $\gamma\gamma$ , x $\gamma$ -coin; deduced T <sub>1/2</sub> lower limits for 2 $\nu$ EC / EC decay, for 2 $\nu$ $\beta^+$ / EC and 2 $\nu$ EC / EC branches to ground and excited states. Underground laboratory, TGV-2spectrometer. CONF Voronezh(Nucleus-2007),Contrib,P181,Rukhadze
<sup>106</sup> Cd	2007AS05	NUCLEAR REACTIONS <sup>98</sup> Mo( <sup>12</sup> C, 4n) <sup>106</sup> Cd, E=60 MeV; <sup>96</sup> Mo( <sup>13</sup> C, 3n) <sup>106</sup> Cd, E=43 MeV; measured E $\gamma$ , I $\gamma$ , lifetimes for isomeric states. JOUR APOBB 38 1385
	2007BL15	RADIOACTIVITY <sup>70</sup> Zn, <sup>116</sup> Cd, <sup>128,130</sup> Te( $\beta^-$ / $\beta^-$ ); <sup>64</sup> Zn, <sup>106</sup> Cd, <sup>120</sup> Te( $\beta^+$ / $\beta^+$ ); measured summed E $\beta$ . Deduced upper limits for T <sub>1/2</sub> . JOUR PRVCA 76 025501
	2007RUZY	RADIOACTIVITY <sup>106</sup> Cd( $\beta^+$ EC), (2EC); measured $\gamma\gamma$ , x $\gamma$ -coin; deduced T <sub>1/2</sub> lower limits for 2 $\nu$ EC / EC decay, for 2 $\nu$ $\beta^+$ / EC and 2 $\nu$ EC / EC branches to ground and excited states. Underground laboratory, TGV-2spectrometer. CONF Voronezh(Nucleus-2007),Contrib,P181,Rukhadze

**A=107**

<sup>107</sup> Nb	2007HA32	ATOMIC MASSES <sup>95,96,97,98,99,100,101</sup> Y, <sup>101,102,103,104,105,106,107</sup> Nb; measured masses; analyzed two neutron separation energy. JYFLTRAP double Penning trap. Comparison with model predictions and previous data. JOUR NUPAB 793 20
<sup>107</sup> Tc	2007HA20	ATOMIC MASSES <sup>106,107,108,109,110</sup> Tc, <sup>106,107,108,109,110,111,112,113,114,115</sup> Ru, <sup>108,109,110,111,112,113,114,115,116,117,118</sup> Rh, <sup>112,113,114,115,116,117,118,119,120</sup> Pd; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302

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## KEYNUMBERS AND KEYWORDS

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### **A=107 (continued)**

<sup>107</sup>Ru      2007HA20      ATOMIC MASSES <sup>106,107,108,109,110</sup>Tc,  
                  <sup>106,107,108,109,110,111,112,113,114,115</sup>Ru,  
                  <sup>108,109,110,111,112,113,114,115,116,117,118</sup>Rh,  
                  <sup>112,113,114,115,116,117,118,119,120</sup>Pd; measured masses using the  
JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302

### **A=108**

<sup>108</sup>Tc      2007HA20      ATOMIC MASSES <sup>106,107,108,109,110</sup>Tc,  
                  <sup>106,107,108,109,110,111,112,113,114,115</sup>Ru,  
                  <sup>108,109,110,111,112,113,114,115,116,117,118</sup>Rh,  
                  <sup>112,113,114,115,116,117,118,119,120</sup>Pd; measured masses using the  
JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302

<sup>108</sup>Ru      2007G021      RADIOACTIVITY <sup>252</sup>Cf(SF); measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, fission  
fragment and light charged particle yields. <sup>108,110,112</sup>Ru deduced levels,  
J,  $\pi$ . <sup>104</sup>Zr, <sup>106</sup>Mo, <sup>148</sup>Ce(IT); measured T<sub>1/2</sub>, B(E2). Gammasphere  
array. JOUR NUPAB 787 231c

2007HA20      ATOMIC MASSES <sup>106,107,108,109,110</sup>Tc,  
                  <sup>106,107,108,109,110,111,112,113,114,115</sup>Ru,  
                  <sup>108,109,110,111,112,113,114,115,116,117,118</sup>Rh,  
                  <sup>112,113,114,115,116,117,118,119,120</sup>Pd; measured masses using the  
JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302

<sup>108</sup>Rh      2007HA20      ATOMIC MASSES <sup>106,107,108,109,110</sup>Tc,  
                  <sup>106,107,108,109,110,111,112,113,114,115</sup>Ru,  
                  <sup>108,109,110,111,112,113,114,115,116,117,118</sup>Rh,  
                  <sup>112,113,114,115,116,117,118,119,120</sup>Pd; measured masses using the  
JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302

### **A=109**

<sup>109</sup>Tc      2007HA20      ATOMIC MASSES <sup>106,107,108,109,110</sup>Tc,  
                  <sup>106,107,108,109,110,111,112,113,114,115</sup>Ru,  
                  <sup>108,109,110,111,112,113,114,115,116,117,118</sup>Rh,  
                  <sup>112,113,114,115,116,117,118,119,120</sup>Pd; measured masses using the  
JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302

<sup>109</sup>Ru      2007HA20      ATOMIC MASSES <sup>106,107,108,109,110</sup>Tc,  
                  <sup>106,107,108,109,110,111,112,113,114,115</sup>Ru,  
                  <sup>108,109,110,111,112,113,114,115,116,117,118</sup>Rh,  
                  <sup>112,113,114,115,116,117,118,119,120</sup>Pd; measured masses using the  
JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302

<sup>109</sup>Rh      2007HA20      ATOMIC MASSES <sup>106,107,108,109,110</sup>Tc,  
                  <sup>106,107,108,109,110,111,112,113,114,115</sup>Ru,  
                  <sup>108,109,110,111,112,113,114,115,116,117,118</sup>Rh,  
                  <sup>112,113,114,115,116,117,118,119,120</sup>Pd; measured masses using the  
JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302

## KEYNUMBERS AND KEYWORDS

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### **A=109 (*continued*)**

<sup>109</sup> Pd	2007MA66	NUCLEAR REACTIONS <sup>110</sup> Pd, <sup>112</sup> Cd( $\gamma$ , n), E=8-18 MeV; measured cross sections and excitation functions for populating the isomeric states. JOUR UKPJA 52 744
<sup>109</sup> Ag	2007VI10	RADIOACTIVITY <sup>109</sup> Cd(EC); measured E $\gamma$ , I $\gamma$ , E(X-ray). <sup>109</sup> Ag deduced double ionization probability. JOUR BRSPE 71 890
<sup>109</sup> Cd	2007VI10	RADIOACTIVITY <sup>109</sup> Cd(EC); measured E $\gamma$ , I $\gamma$ , E(X-ray). <sup>109</sup> Ag deduced double ionization probability. JOUR BRSPE 71 890

### **A=110**

<sup>110</sup> Tc	2007HA20	ATOMIC MASSES <sup>106,107,108,109,110</sup> Tc, <sup>106,107,108,109,110,111,112,113,114,115</sup> Ru, <sup>108,109,110,111,112,113,114,115,116,117,118</sup> Rh, <sup>112,113,114,115,116,117,118,119,120</sup> Pd; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
<sup>110</sup> Ru	2007G021	RADIOACTIVITY <sup>252</sup> Cf(SF); measured E $\gamma$ , I $\gamma$ , $\gamma\gamma$ -coin, fission fragment and light charged particle yields. <sup>108,110,112</sup> Ru deduced levels, J, $\pi$ . <sup>104</sup> Zr, <sup>106</sup> Mo, <sup>148</sup> Ce(IT); measured T <sub>1/2</sub> , B(E2). Gammasphere array. JOUR NUPAB 787 231c
	2007HA20	ATOMIC MASSES <sup>106,107,108,109,110</sup> Tc, <sup>106,107,108,109,110,111,112,113,114,115</sup> Ru, <sup>108,109,110,111,112,113,114,115,116,117,118</sup> Rh, <sup>112,113,114,115,116,117,118,119,120</sup> Pd; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
<sup>110</sup> Rh	2007HA20	ATOMIC MASSES <sup>106,107,108,109,110</sup> Tc, <sup>106,107,108,109,110,111,112,113,114,115</sup> Ru, <sup>108,109,110,111,112,113,114,115,116,117,118</sup> Rh, <sup>112,113,114,115,116,117,118,119,120</sup> Pd; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
<sup>110</sup> Xe	2007SA36	NUCLEAR REACTIONS <sup>58</sup> Ni( <sup>54</sup> Fe, X) <sup>110</sup> Xe, E=195 MeV; measured E $\gamma$ , I $\gamma$ , $\gamma\gamma$ -coinc. <sup>110</sup> Xe deduced levels and B(E2). JOUR PRLTA 99 022501

### **A=111**

<sup>111</sup> Ru	2007HA20	ATOMIC MASSES <sup>106,107,108,109,110</sup> Tc, <sup>106,107,108,109,110,111,112,113,114,115</sup> Ru, <sup>108,109,110,111,112,113,114,115,116,117,118</sup> Rh, <sup>112,113,114,115,116,117,118,119,120</sup> Pd; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
<sup>111</sup> Rh	2007HA20	ATOMIC MASSES <sup>106,107,108,109,110</sup> Tc, <sup>106,107,108,109,110,111,112,113,114,115</sup> Ru, <sup>108,109,110,111,112,113,114,115,116,117,118</sup> Rh, <sup>112,113,114,115,116,117,118,119,120</sup> Pd; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302

## KEYNUMBERS AND KEYWORDS

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### A=111 (*continued*)

<sup>111</sup> Cd	2007MA66	NUCLEAR REACTIONS <sup>110</sup> Pd, <sup>112</sup> Cd( $\gamma$ , n), E=8-18 MeV; measured cross sections and excitation functions for populating the isomeric states. JOUR UKPJA 52 744
<sup>111</sup> In	2007RE12	NUCLEAR REACTIONS Sn( $\alpha$ , X) <sup>116</sup> Te / <sup>117</sup> Te / <sup>118</sup> Te / <sup>119</sup> Te / <sup>121</sup> Te / <sup>123</sup> Te / <sup>117</sup> Sb / <sup>118</sup> Sb / <sup>120</sup> Sb / <sup>122</sup> Sb / <sup>124</sup> Sb / <sup>126</sup> Sb / <sup>117</sup> Sn / <sup>111</sup> In, E=12-38 MeV; measured E $\gamma$ , I $\gamma$ , cross sections and excitation functions using stacked foil activation technique. JOUR NIMBE 260 672

### A=112

<sup>112</sup> Ru	2007G021	RADIOACTIVITY <sup>252</sup> Cf(SF); measured E $\gamma$ , I $\gamma$ , $\gamma\gamma$ -coin, fission fragment and light charged particle yields. <sup>108,110,112</sup> Ru deduced levels, J, $\pi$ . <sup>104</sup> Zr, <sup>106</sup> Mo, <sup>148</sup> Ce(IT); measured T <sub>1/2</sub> , B(E2). Gammasphere array. JOUR NUPAB 787 231c
	2007HA20	ATOMIC MASSES <sup>106,107,108,109,110</sup> Tc, <sup>106,107,108,109,110,111,112,113,114,115</sup> Ru, <sup>108,109,110,111,112,113,114,115,116,117,118</sup> Rh, <sup>112,113,114,115,116,117,118,119,120</sup> Pd; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
<sup>112</sup> Rh	2007HA20	ATOMIC MASSES <sup>106,107,108,109,110</sup> Tc, <sup>106,107,108,109,110,111,112,113,114,115</sup> Ru, <sup>108,109,110,111,112,113,114,115,116,117,118</sup> Rh, <sup>112,113,114,115,116,117,118,119,120</sup> Pd; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
<sup>112</sup> Pd	2007HA20	ATOMIC MASSES <sup>106,107,108,109,110</sup> Tc, <sup>106,107,108,109,110,111,112,113,114,115</sup> Ru, <sup>108,109,110,111,112,113,114,115,116,117,118</sup> Rh, <sup>112,113,114,115,116,117,118,119,120</sup> Pd; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
<sup>112</sup> In	2007KI13	RADIOACTIVITY <sup>64</sup> Zn, <sup>112</sup> Sn( $\beta^+$ ), (EC); <sup>124</sup> Sn(2 $\beta^-$ ); measured E $\gamma$ , I $\gamma$ ; deduced T <sub>1/2</sub> lower limits for $\beta^+$ , EC and 0 $\nu$ -accompanied 2 $\beta$ -decay to ground and excited states. Comparison with theoretical values and previous data. JOUR NUPAB 793 171
<sup>112</sup> Sn	2007KI13	RADIOACTIVITY <sup>64</sup> Zn, <sup>112</sup> Sn( $\beta^+$ ), (EC); <sup>124</sup> Sn(2 $\beta^-$ ); measured E $\gamma$ , I $\gamma$ ; deduced T <sub>1/2</sub> lower limits for $\beta^+$ , EC and 0 $\nu$ -accompanied 2 $\beta$ -decay to ground and excited states. Comparison with theoretical values and previous data. JOUR NUPAB 793 171
	2007OR04	NUCLEAR REACTIONS <sup>112</sup> Sn(n, n'γ), E=1.7 MeV; measured E $\gamma$ , Ig, angular distributions. Deduced lifetime and B(E2) using DSAM. JOUR PRVCA 76 021302

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## KEYNUMBERS AND KEYWORDS

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### **A=113**

$^{113}\text{Ru}$	2007HA20	ATOMIC MASSES $^{106,107,108,109,110}\text{Tc}$ , $^{106,107,108,109,110,111,112,113,114,115}\text{Ru}$ , $^{108,109,110,111,112,113,114,115,116,117,118}\text{Rh}$ , $^{112,113,114,115,116,117,118,119,120}\text{Pd}$ ; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
$^{113}\text{Rh}$	2007HA20	ATOMIC MASSES $^{106,107,108,109,110}\text{Tc}$ , $^{106,107,108,109,110,111,112,113,114,115}\text{Ru}$ , $^{108,109,110,111,112,113,114,115,116,117,118}\text{Rh}$ , $^{112,113,114,115,116,117,118,119,120}\text{Pd}$ ; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
$^{113}\text{Pd}$	2007HA20	ATOMIC MASSES $^{106,107,108,109,110}\text{Tc}$ , $^{106,107,108,109,110,111,112,113,114,115}\text{Ru}$ , $^{108,109,110,111,112,113,114,115,116,117,118}\text{Rh}$ , $^{112,113,114,115,116,117,118,119,120}\text{Pd}$ ; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
$^{113}\text{In}$	2007VI09	NUCLEAR REACTIONS $^{113,115}\text{In}(\text{e}^+, \text{e}^+')$ , $E=3.9$ MeV; measured $E\gamma$ , $I\gamma$ from isomeric excitations. JOUR BRSPE 71 884

### **A=114**

$^{114}\text{Ru}$	2007HA20	ATOMIC MASSES $^{106,107,108,109,110}\text{Tc}$ , $^{106,107,108,109,110,111,112,113,114,115}\text{Ru}$ , $^{108,109,110,111,112,113,114,115,116,117,118}\text{Rh}$ , $^{112,113,114,115,116,117,118,119,120}\text{Pd}$ ; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
$^{114}\text{Rh}$	2007HA20	ATOMIC MASSES $^{106,107,108,109,110}\text{Tc}$ , $^{106,107,108,109,110,111,112,113,114,115}\text{Ru}$ , $^{108,109,110,111,112,113,114,115,116,117,118}\text{Rh}$ , $^{112,113,114,115,116,117,118,119,120}\text{Pd}$ ; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
$^{114}\text{Pd}$	2007HA20	ATOMIC MASSES $^{106,107,108,109,110}\text{Tc}$ , $^{106,107,108,109,110,111,112,113,114,115}\text{Ru}$ , $^{108,109,110,111,112,113,114,115,116,117,118}\text{Rh}$ , $^{112,113,114,115,116,117,118,119,120}\text{Pd}$ ; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302

### **A=115**

$^{115}\text{Ru}$	2007HA20	ATOMIC MASSES $^{106,107,108,109,110}\text{Tc}$ , $^{106,107,108,109,110,111,112,113,114,115}\text{Ru}$ , $^{108,109,110,111,112,113,114,115,116,117,118}\text{Rh}$ , $^{112,113,114,115,116,117,118,119,120}\text{Pd}$ ; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
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## KEYNUMBERS AND KEYWORDS

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### **A=115 (continued)**

<sup>115</sup> Rh	2007HA20	ATOMIC MASSES <sup>106,107,108,109,110</sup> Tc, <sup>106,107,108,109,110,111,112,113,114,115</sup> Ru, <sup>108,109,110,111,112,113,114,115,116,117,118</sup> Rh, <sup>112,113,114,115,116,117,118,119,120</sup> Pd; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
<sup>115</sup> Pd	2007HA20	ATOMIC MASSES <sup>106,107,108,109,110</sup> Tc, <sup>106,107,108,109,110,111,112,113,114,115</sup> Ru, <sup>108,109,110,111,112,113,114,115,116,117,118</sup> Rh, <sup>112,113,114,115,116,117,118,119,120</sup> Pd; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
<sup>115</sup> In	2007VI09	NUCLEAR REACTIONS <sup>113,115</sup> In(e <sup>+</sup> , e <sup>+</sup> '), E=3.9 MeV; measured E $\gamma$ , I $\gamma$ from isomeric excitations. JOUR BRSPE 71 884
<sup>115</sup> Sn	2007HU16	NUCLEAR REACTIONS <sup>90</sup> Zr, <sup>116</sup> Sn, <sup>208</sup> Pb( $\alpha$ , $\alpha$ 'n), E=200 MeV; measured $\sigma$ , angular distributions. Deduced ISGDR direct-decay branching ratios. JOUR APOBB 38 1479
	2007HU20	NUCLEAR REACTIONS <sup>90</sup> Zr, <sup>116</sup> Sn, <sup>208</sup> Pb( $\alpha$ , $\alpha$ 'n), E=200 MeV; measured $\sigma$ and angular distributions. <sup>90</sup> Zr, <sup>116</sup> Sn, <sup>208</sup> Pb deduced branching ratios for direct and statistical neutron decay of isoscalar giant dipole resonance. JOUR PANUE 70 1407

### **A=116**

<sup>116</sup> Rh	2007HA20	ATOMIC MASSES <sup>106,107,108,109,110</sup> Tc, <sup>106,107,108,109,110,111,112,113,114,115</sup> Ru, <sup>108,109,110,111,112,113,114,115,116,117,118</sup> Rh, <sup>112,113,114,115,116,117,118,119,120</sup> Pd; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
<sup>116</sup> Pd	2007HA20	ATOMIC MASSES <sup>106,107,108,109,110</sup> Tc, <sup>106,107,108,109,110,111,112,113,114,115</sup> Ru, <sup>108,109,110,111,112,113,114,115,116,117,118</sup> Rh, <sup>112,113,114,115,116,117,118,119,120</sup> Pd; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
<sup>116</sup> Cd	2007BL15	RADIOACTIVITY <sup>70</sup> Zn, <sup>116</sup> Cd, <sup>128,130</sup> Te( $\beta^-$ - $\beta^-$ ); <sup>64</sup> Zn, <sup>106</sup> Cd, <sup>120</sup> Te( $\beta^+$ - $\beta^+$ ); measured summed E $\beta$ . Deduced upper limits for T <sub>1/2</sub> . JOUR PRVCA 76 025501
	2007BLZY	RADIOACTIVITY <sup>70</sup> Zn, <sup>116</sup> Cd, <sup>128</sup> Te, <sup>130</sup> Te(2 $\beta^-$ ); measured summed $\beta$ energies. Deduced T <sub>1/2</sub> limits. PREPRINT arXiv:0707.2756v1 [nucl-ex]
<sup>116</sup> In	2007VIZZ	NUCLEAR REACTIONS <sup>118</sup> Sn( $\gamma$ , p), ( $\gamma$ , d), <sup>121</sup> Sb( $\gamma$ , n), ( $\gamma$ , $\alpha$ ), ( $\gamma$ , $\alpha$ n), E(end point)=22 MeV; measured integral cross-sections. Betatron, activation method, NaI(Tl) detector. CONF Voronezh(Nucleus-2007), Contrib,P121,Vishnevsky
<sup>116</sup> Sn	2007BL15	RADIOACTIVITY <sup>70</sup> Zn, <sup>116</sup> Cd, <sup>128,130</sup> Te( $\beta^-$ - $\beta^-$ ); <sup>64</sup> Zn, <sup>106</sup> Cd, <sup>120</sup> Te( $\beta^+$ - $\beta^+$ ); measured summed E $\beta$ . Deduced upper limits for T <sub>1/2</sub> . JOUR PRVCA 76 025501
	2007BLZY	RADIOACTIVITY <sup>70</sup> Zn, <sup>116</sup> Cd, <sup>128</sup> Te, <sup>130</sup> Te(2 $\beta^-$ ); measured summed $\beta$ energies. Deduced T <sub>1/2</sub> limits. PREPRINT arXiv:0707.2756v1 [nucl-ex]

**KEYNUMBERS AND KEYWORDS**

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**A=116 (*continued*)**

<sup>116</sup> Te	2007HU20	NUCLEAR REACTIONS $^{90}\text{Zr}$ , $^{116}\text{Sn}$ , $^{208}\text{Pb}(\alpha, \alpha'n)$ , E=200 MeV; measured $\sigma$ and angular distributions. $^{90}\text{Zr}$ , $^{116}\text{Sn}$ , $^{208}\text{Pb}$ deduced branching ratios for direct and statistical neutron decay of isoscalar giant dipole resonance. JOUR PANUE 70 1407
	2007RE12	NUCLEAR REACTIONS Sn( $\alpha$ , X) $^{116}\text{Te}$ / $^{117}\text{Te}$ / $^{118}\text{Te}$ / $^{119}\text{Te}$ / $^{121}\text{Te}$ / $^{123}\text{Te}$ / $^{117}\text{Sb}$ / $^{118}\text{Sb}$ / $^{120}\text{Sb}$ / $^{122}\text{Sb}$ / $^{124}\text{Sb}$ / $^{126}\text{Sb}$ / $^{117}\text{Sn}$ / $^{111}\text{In}$ , E=12-38 MeV; measured $E\gamma$ , $I\gamma$ , cross sections and excitation functions using stacked foil activation technique. JOUR NIMBE 260 672

**A=117**

<sup>117</sup> Rh	2007HA20	ATOMIC MASSES $^{106,107,108,109,110}\text{Tc}$ , $^{106,107,108,109,110,111,112,113,114,115}\text{Ru}$ , $^{108,109,110,111,112,113,114,115,116,117,118}\text{Rh}$ , $^{112,113,114,115,116,117,118,119,120}\text{Pd}$ ; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
<sup>117</sup> Pd	2007HA20	ATOMIC MASSES $^{106,107,108,109,110}\text{Tc}$ , $^{106,107,108,109,110,111,112,113,114,115}\text{Ru}$ , $^{108,109,110,111,112,113,114,115,116,117,118}\text{Rh}$ , $^{112,113,114,115,116,117,118,119,120}\text{Pd}$ ; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
	2007ST19	NUCLEAR REACTIONS $^{238}\text{U}(\alpha, F)$ , E=30 MeV; measured fission fragment yield, $E\gamma$ , $I\gamma$ , (fragment) $\gamma$ -coin. $^{117,118,120}\text{Pd}$ , $^{122,124}\text{Cd}$ deduced levels, $J$ , $\pi$ . JOUR NUPAB 787 455c
<sup>117</sup> In	2007VIZZ	NUCLEAR REACTIONS $^{118}\text{Sn}(\gamma, p)$ , $(\gamma, d)$ , $^{121}\text{Sb}(\gamma, n)$ , $(\gamma, \alpha)$ , $(\gamma, \alpha n)$ , E(end point)=22 MeV; measured integral cross-sections. Betatron, activation method, NaI(Tl) detector. CONF Voronezh(Nucleus-2007), Contrib,P121,Vishnevsky
<sup>117</sup> Sn	2007RE12	NUCLEAR REACTIONS Sn( $\alpha$ , X) $^{116}\text{Te}$ / $^{117}\text{Te}$ / $^{118}\text{Te}$ / $^{119}\text{Te}$ / $^{121}\text{Te}$ / $^{123}\text{Te}$ / $^{117}\text{Sb}$ / $^{118}\text{Sb}$ / $^{120}\text{Sb}$ / $^{122}\text{Sb}$ / $^{124}\text{Sb}$ / $^{126}\text{Sb}$ / $^{117}\text{Sn}$ / $^{111}\text{In}$ , E=12-38 MeV; measured $E\gamma$ , $I\gamma$ , cross sections and excitation functions using stacked foil activation technique. JOUR NIMBE 260 672
<sup>117</sup> Sb	2007RE12	NUCLEAR REACTIONS Sn( $\alpha$ , X) $^{116}\text{Te}$ / $^{117}\text{Te}$ / $^{118}\text{Te}$ / $^{119}\text{Te}$ / $^{121}\text{Te}$ / $^{123}\text{Te}$ / $^{117}\text{Sb}$ / $^{118}\text{Sb}$ / $^{120}\text{Sb}$ / $^{122}\text{Sb}$ / $^{124}\text{Sb}$ / $^{126}\text{Sb}$ / $^{117}\text{Sn}$ / $^{111}\text{In}$ , E=12-38 MeV; measured $E\gamma$ , $I\gamma$ , cross sections and excitation functions using stacked foil activation technique. JOUR NIMBE 260 672
<sup>117</sup> Te	2007RE12	NUCLEAR REACTIONS Sn( $\alpha$ , X) $^{116}\text{Te}$ / $^{117}\text{Te}$ / $^{118}\text{Te}$ / $^{119}\text{Te}$ / $^{121}\text{Te}$ / $^{123}\text{Te}$ / $^{117}\text{Sb}$ / $^{118}\text{Sb}$ / $^{120}\text{Sb}$ / $^{122}\text{Sb}$ / $^{124}\text{Sb}$ / $^{126}\text{Sb}$ / $^{117}\text{Sn}$ / $^{111}\text{In}$ , E=12-38 MeV; measured $E\gamma$ , $I\gamma$ , cross sections and excitation functions using stacked foil activation technique. JOUR NIMBE 260 672

**KEYNUMBERS AND KEYWORDS**

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**A=118**

<sup>118</sup> Rh	2007HA20	ATOMIC MASSES <sup>106,107,108,109,110</sup> Tc, <sup>106,107,108,109,110,111,112,113,114,115</sup> Ru, <sup>108,109,110,111,112,113,114,115,116,117,118</sup> Rh, <sup>112,113,114,115,116,117,118,119,120</sup> Pd; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
<sup>118</sup> Pd	2007HA20	ATOMIC MASSES <sup>106,107,108,109,110</sup> Tc, <sup>106,107,108,109,110,111,112,113,114,115</sup> Ru, <sup>108,109,110,111,112,113,114,115,116,117,118</sup> Rh, <sup>112,113,114,115,116,117,118,119,120</sup> Pd; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
	2007ST19	NUCLEAR REACTIONS <sup>238</sup> U( $\alpha$ , F), E=30 MeV; measured fission fragment yield, E $\gamma$ , I $\gamma$ , (fragment) $\gamma$ -coin. <sup>117,118,120</sup> Pd, <sup>122,124</sup> Cd deduced levels, J, $\pi$ . JOUR NUPAB 787 455c
<sup>118</sup> Sb	2007RE12	NUCLEAR REACTIONS Sn( $\alpha$ , X) <sup>116</sup> Te / <sup>117</sup> Te / <sup>118</sup> Te / <sup>119</sup> Te / <sup>121</sup> Te / <sup>123</sup> Te / <sup>117</sup> Sb / <sup>118</sup> Sb / <sup>120</sup> Sb / <sup>122</sup> Sb / <sup>124</sup> Sb / <sup>126</sup> Sb / <sup>117</sup> Sn / <sup>111</sup> In, E=12-38 MeV; measured E $\gamma$ , I $\gamma$ , cross sections and excitation functions using stacked foil activation technique. JOUR NIMBE 260 672
	2007ZEZZ	NUCLEAR REACTIONS <sup>12,13</sup> C, <sup>18</sup> O, <sup>26</sup> Mg, <sup>58</sup> Ni, <sup>60</sup> Ni, <sup>90</sup> Zr, <sup>118</sup> Sn, <sup>208</sup> Pb( <sup>3</sup> He, t), E=420 MeV; measured triton spectra and cross sections. Deduced B(GT). PREPRINT arXiv:0707.2840v1 [nucl-ex]
<sup>118</sup> Te	2007HE20	NUCLEAR REACTIONS <sup>64</sup> Ni( <sup>64</sup> Ni, F), E=255, 261 MeV; measured E $\gamma$ , I $\gamma$ , (particle) $\gamma$ -coinc, charged particle angular distributions. <sup>118</sup> Te, <sup>124</sup> Xe, <sup>124,125</sup> Cs deduced levels, J. JOUR APOBB 38 1421
	2007RE12	NUCLEAR REACTIONS Sn( $\alpha$ , X) <sup>116</sup> Te / <sup>117</sup> Te / <sup>118</sup> Te / <sup>119</sup> Te / <sup>121</sup> Te / <sup>123</sup> Te / <sup>117</sup> Sb / <sup>118</sup> Sb / <sup>120</sup> Sb / <sup>122</sup> Sb / <sup>124</sup> Sb / <sup>126</sup> Sb / <sup>117</sup> Sn / <sup>111</sup> In, E=12-38 MeV; measured E $\gamma$ , I $\gamma$ , cross sections and excitation functions using stacked foil activation technique. JOUR NIMBE 260 672

**A=119**

<sup>119</sup> Pd	2007HA20	ATOMIC MASSES <sup>106,107,108,109,110</sup> Tc, <sup>106,107,108,109,110,111,112,113,114,115</sup> Ru, <sup>108,109,110,111,112,113,114,115,116,117,118</sup> Rh, <sup>112,113,114,115,116,117,118,119,120</sup> Pd; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
<sup>119</sup> Te	2007PAZK	NUCLEAR REACTIONS <sup>120,130</sup> Te( $\gamma$ , n), E(end point)=25-30 MeV; measured E $\gamma$ , I $\gamma$ ; <sup>119m,119g,129m,129g</sup> Te deduced yield ratio Y <sub>m</sub> / Y <sub>g</sub> . Betatron, activation method, Ge(Li) detector. CONF Voronezh(Nucleus-2007),Contrib,P146,Palvanov
	2007RE12	NUCLEAR REACTIONS Sn( $\alpha$ , X) <sup>116</sup> Te / <sup>117</sup> Te / <sup>118</sup> Te / <sup>119</sup> Te / <sup>121</sup> Te / <sup>123</sup> Te / <sup>117</sup> Sb / <sup>118</sup> Sb / <sup>120</sup> Sb / <sup>122</sup> Sb / <sup>124</sup> Sb / <sup>126</sup> Sb / <sup>117</sup> Sn / <sup>111</sup> In, E=12-38 MeV; measured E $\gamma$ , I $\gamma$ , cross sections and excitation functions using stacked foil activation technique. JOUR NIMBE 260 672

## KEYNUMBERS AND KEYWORDS

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### **A=120**

$^{120}\text{Pd}$	2007HA20	ATOMIC MASSES $^{106,107,108,109,110}\text{Tc}$ , $^{106,107,108,109,110,111,112,113,114,115}\text{Ru}$ , $^{108,109,110,111,112,113,114,115,116,117,118}\text{Rh}$ , $^{112,113,114,115,116,117,118,119,120}\text{Pd}$ ; measured masses using the JYFLTRAP double penning trap setup. JOUR PRVCA 75 064302
	2007ST19	NUCLEAR REACTIONS $^{238}\text{U}(\alpha, \text{F})$ , E=30 MeV; measured fission fragment yield, $E\gamma$ , $I\gamma$ , (fragment) $\gamma$ -coin. $^{117,118,120}\text{Pd}$ , $^{122,124}\text{Cd}$ deduced levels, J, $\pi$ . JOUR NUPAB 787 455c
$^{120}\text{Sn}$	2007BL15	RADIOACTIVITY $^{70}\text{Zn}$ , $^{116}\text{Cd}$ , $^{128,130}\text{Te}(\beta^-\beta^-)$ ; $^{64}\text{Zn}$ , $^{106}\text{Cd}$ , $^{120}\text{Te}(\beta^+\beta^+)$ ; measured summed $E\beta$ . Deduced upper limits for $T_{1/2}$ . JOUR PRVCA 76 025501
$^{120}\text{Sb}$	2007RE12	NUCLEAR REACTIONS $\text{Sn}(\alpha, X)^{116}\text{Te}$ / $^{117}\text{Te}$ / $^{118}\text{Te}$ / $^{119}\text{Te}$ / $^{121}\text{Te}$ / $^{123}\text{Te}$ / $^{117}\text{Sb}$ / $^{118}\text{Sb}$ / $^{120}\text{Sb}$ / $^{122}\text{Sb}$ / $^{124}\text{Sb}$ / $^{126}\text{Sb}$ / $^{117}\text{Sn}$ / $^{111}\text{In}$ , E=12-38 MeV; measured $E\gamma$ , $I\gamma$ , cross sections and excitation functions using stacked foil activation technique. JOUR NIMBE 260 672
	2007VIZY	NUCLEAR REACTIONS $^{121}\text{Sb}(\gamma, n)$ , $^{153}\text{Eu}(\gamma, n)$ , E(end point)=12.5, 22 MeV; $^{151}\text{Eu}(n, \gamma)$ , E=thermal, slow; measured $E\gamma$ , $I\gamma$ ; $^{120m,120g}\text{Sb}$ , $^{152m,152g}\text{Eu}$ deduced yield ratio $Y_m / Y_g$ ; $^{152m,152g}\text{Eu}$ deduced $\sigma(8^-) / \sigma(0^-)$ . Microtron, betatron, reactor, activation method, NaI(Tl), Ge detectors. CONF Voronezh(Nucleus-2007),Contrib,P135,Vishnevsky
	2007VIZZ	NUCLEAR REACTIONS $^{118}\text{Sn}(\gamma, p)$ , $(\gamma, d)$ , $^{121}\text{Sb}(\gamma, n)$ , $(\gamma, \alpha)$ , $(\gamma, \alpha n)$ , E(end point)=22 MeV; measured integral cross-sections. Betatron, activation method, NaI(Tl) detector. CONF Voronezh(Nucleus-2007),Contrib,P121,Vishnevsky
$^{120}\text{Te}$	2007BL15	RADIOACTIVITY $^{70}\text{Zn}$ , $^{116}\text{Cd}$ , $^{128,130}\text{Te}(\beta^-\beta^-)$ ; $^{64}\text{Zn}$ , $^{106}\text{Cd}$ , $^{120}\text{Te}(\beta^+\beta^+)$ ; measured summed $E\beta$ . Deduced upper limits for $T_{1/2}$ . JOUR PRVCA 76 025501

### **A=121**

$^{121}\text{Te}$	2007RE12	NUCLEAR REACTIONS $\text{Sn}(\alpha, X)^{116}\text{Te}$ / $^{117}\text{Te}$ / $^{118}\text{Te}$ / $^{119}\text{Te}$ / $^{121}\text{Te}$ / $^{123}\text{Te}$ / $^{117}\text{Sb}$ / $^{118}\text{Sb}$ / $^{120}\text{Sb}$ / $^{122}\text{Sb}$ / $^{124}\text{Sb}$ / $^{126}\text{Sb}$ / $^{117}\text{Sn}$ / $^{111}\text{In}$ , E=12-38 MeV; measured $E\gamma$ , $I\gamma$ , cross sections and excitation functions using stacked foil activation technique. JOUR NIMBE 260 672
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### **A=122**

$^{122}\text{Cd}$	2007ST19	NUCLEAR REACTIONS $^{238}\text{U}(\alpha, \text{F})$ , E=30 MeV; measured fission fragment yield, $E\gamma$ , $I\gamma$ , (fragment) $\gamma$ -coin. $^{117,118,120}\text{Pd}$ , $^{122,124}\text{Cd}$ deduced levels, J, $\pi$ . JOUR NUPAB 787 455c
$^{122}\text{Sb}$	2007RE12	NUCLEAR REACTIONS $\text{Sn}(\alpha, X)^{116}\text{Te}$ / $^{117}\text{Te}$ / $^{118}\text{Te}$ / $^{119}\text{Te}$ / $^{121}\text{Te}$ / $^{123}\text{Te}$ / $^{117}\text{Sb}$ / $^{118}\text{Sb}$ / $^{120}\text{Sb}$ / $^{122}\text{Sb}$ / $^{124}\text{Sb}$ / $^{126}\text{Sb}$ / $^{117}\text{Sn}$ / $^{111}\text{In}$ , E=12-38 MeV; measured $E\gamma$ , $I\gamma$ , cross sections and excitation functions using stacked foil activation technique. JOUR NIMBE 260 672

## KEYNUMBERS AND KEYWORDS

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### **A=123**

$^{123}\text{Te}$	2007RE12	NUCLEAR REACTIONS $\text{Sn}(\alpha, X)^{116}\text{Te} / ^{117}\text{Te} / ^{118}\text{Te} / ^{119}\text{Te} / ^{121}\text{Te} / ^{123}\text{Te} / ^{117}\text{Sb} / ^{118}\text{Sb} / ^{120}\text{Sb} / ^{122}\text{Sb} / ^{124}\text{Sb} / ^{126}\text{Sb} / ^{117}\text{Sn} / ^{111}\text{In}$ , E=12-38 MeV; measured $E\gamma$ , $I\gamma$ , cross sections and excitation functions using stacked foil activation technique. JOUR NIMBE 260 672
$^{123}\text{I}$	2007BEZT	NUCLEAR REACTIONS $^{127}\text{I}(\gamma, n)$ , $(\gamma, 3n)$ , $(\gamma, 4n)$ , E(end point)=50 MeV; measured $E\gamma$ ; deduced yields of reactions. Microtron, activation method, HPGe detector. CONF Voronezh(Nucleus-2007),Contrib,P132,Belyshev

### **A=124**

$^{124}\text{Cd}$	2007ST19	NUCLEAR REACTIONS $^{238}\text{U}(\alpha, F)$ , E=30 MeV; measured fission fragment yield, $E\gamma$ , $I\gamma$ , (fragment) $\gamma$ -coin. $^{117,118,120}\text{Pd}$ , $^{122,124}\text{Cd}$ deduced levels, $J, \pi$ . JOUR NUPAB 787 455c
$^{124}\text{Sn}$	2007KI13	RADIOACTIVITY $^{64}\text{Zn}$ , $^{112}\text{Sn}(\beta^+)$ , (EC); $^{124}\text{Sn}(2\beta^-)$ ; measured $E\gamma$ , $I\gamma$ ; deduced $T_{1/2}$ lower limits for $\beta+$ , EC and $0\nu$ -accompanying 2 $\beta$ -decay to ground and excited states. Comparison with theoretical values and previous data. JOUR NUPAB 793 171
$^{124}\text{Sb}$	2007RE12	NUCLEAR REACTIONS $\text{Sn}(\alpha, X)^{116}\text{Te} / ^{117}\text{Te} / ^{118}\text{Te} / ^{119}\text{Te} / ^{121}\text{Te} / ^{123}\text{Te} / ^{117}\text{Sb} / ^{118}\text{Sb} / ^{120}\text{Sb} / ^{122}\text{Sb} / ^{124}\text{Sb} / ^{126}\text{Sb} / ^{117}\text{Sn} / ^{111}\text{In}$ , E=12-38 MeV; measured $E\gamma$ , $I\gamma$ , cross sections and excitation functions using stacked foil activation technique. JOUR NIMBE 260 672
$^{124}\text{Te}$	2007KI13	RADIOACTIVITY $^{64}\text{Zn}$ , $^{112}\text{Sn}(\beta^+)$ , (EC); $^{124}\text{Sn}(2\beta^-)$ ; measured $E\gamma$ , $I\gamma$ ; deduced $T_{1/2}$ lower limits for $\beta+$ , EC and $0\nu$ -accompanying 2 $\beta$ -decay to ground and excited states. Comparison with theoretical values and previous data. JOUR NUPAB 793 171
$^{124}\text{I}$	2007BEZT	NUCLEAR REACTIONS $^{127}\text{I}(\gamma, n)$ , $(\gamma, 3n)$ , $(\gamma, 4n)$ , E(end point)=50 MeV; measured $E\gamma$ ; deduced yields of reactions. Microtron, activation method, HPGe detector. CONF Voronezh(Nucleus-2007),Contrib,P132,Belyshev
$^{124}\text{Xe}$	2007AL37	NUCLEAR REACTIONS $^{82}\text{Se}(^{48}\text{Ca}, X)$ , E=205 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coinc using Gammasphere. $^{124,125,126}\text{Xe}$ deduced levels, $J, \pi$ . JOUR APOBB 38 1431
	2007HE20	NUCLEAR REACTIONS $^{64}\text{Ni}(^{64}\text{Ni}, F)$ , E=255, 261 MeV; measured $E\gamma$ , $I\gamma$ , (particle) $\gamma$ -coinc, charged particle angular distributions. $^{118}\text{Te}$ , $^{124}\text{Xe}$ , $^{124,125}\text{Cs}$ deduced levels, $J$ . JOUR APOBB 38 1421
$^{124}\text{Cs}$	2007HE20	NUCLEAR REACTIONS $^{64}\text{Ni}(^{64}\text{Ni}, F)$ , E=255, 261 MeV; measured $E\gamma$ , $I\gamma$ , (particle) $\gamma$ -coinc, charged particle angular distributions. $^{118}\text{Te}$ , $^{124}\text{Xe}$ , $^{124,125}\text{Cs}$ deduced levels, $J$ . JOUR APOBB 38 1421

### **A=125**

$^{125}\text{Xe}$	2007AL37	NUCLEAR REACTIONS $^{82}\text{Se}(^{48}\text{Ca}, X)$ , E=205 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coinc using Gammasphere. $^{124,125,126}\text{Xe}$ deduced levels, $J, \pi$ . JOUR APOBB 38 1431
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## KEYNUMBERS AND KEYWORDS

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### **A=125 (continued)**

<sup>125</sup>Cs      2007HE20      NUCLEAR REACTIONS <sup>64</sup>Ni(<sup>64</sup>Ni, F), E=255, 261 MeV; measured E $\gamma$ , I $\gamma$ , (particle) $\gamma$ -coinc, charged particle angular distributions. <sup>118</sup>Te, <sup>124</sup>Xe, <sup>124,125</sup>Cs deduced levels, J. JOUR APOBB 38 1421

### **A=126**

<sup>126</sup>Sb      2007RE12      NUCLEAR REACTIONS Sn( $\alpha$ , X)<sup>116</sup>Te / <sup>117</sup>Te / <sup>118</sup>Te / <sup>119</sup>Te / <sup>121</sup>Te / <sup>123</sup>Te / <sup>117</sup>Sb / <sup>118</sup>Sb / <sup>120</sup>Sb / <sup>122</sup>Sb / <sup>124</sup>Sb / <sup>126</sup>Sb / <sup>117</sup>Sn / <sup>111</sup>In, E=12-38 MeV; measured E $\gamma$ , I $\gamma$ , cross sections and excitation functions using stacked foil activation technique. JOUR NIMBE 260 672

<sup>126</sup>I      2007BEZT      NUCLEAR REACTIONS <sup>127</sup>I( $\gamma$ , n), ( $\gamma$ , 3n), ( $\gamma$ , 4n), E(end point)=50 MeV; measured E $\gamma$ ; deduced yields of reactions. Microtron, activation method, HPGe detector. CONF Voronezh(Nucleus-2007), Contrib,P132,Belyshev

<sup>126</sup>Xe      2007AL37      NUCLEAR REACTIONS <sup>82</sup>Se(<sup>48</sup>Ca, X), E=205 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coinc using Gammasphere. <sup>124,125,126</sup>Xe deduced levels, J,  $\pi$ . JOUR APOBB 38 1431

### **A=127**

<sup>127</sup>Sn      2007NE10      NUCLEAR REACTIONS <sup>9</sup>Be(<sup>238</sup>U, F)<sup>127</sup>Sn, E=750 MeV / nucleon; <sup>9</sup>Be(<sup>136</sup>Xe, X)<sup>127</sup>Sn, E=650 MeV / nucleon; measured E $\gamma$ , I $\gamma(\theta, H, t)$ , (particle) $\gamma$ -coinc. <sup>127</sup>Sn deduced g-factor using TDPAD method. JOUR APOBB 38 1237

<sup>127</sup>I      2007MA58      NUCLEAR REACTIONS <sup>27</sup>Al, <sup>127</sup>I, <sup>206,207,208</sup>Pb(n, n' $\gamma$ ), E not give; <sup>10</sup>B( $\alpha$ , p $\gamma$ ), E=2.27 MeV; <sup>9</sup>Be( $\alpha$ , n $\gamma$ ), E=2.27 MeV; measured yields. JOUR PRVCA 76 022801

### **A=128**

<sup>128</sup>Te      2007BL15      RADIOACTIVITY <sup>70</sup>Zn, <sup>116</sup>Cd, <sup>128,130</sup>Te( $\beta^-$  $\beta^-$ ); <sup>64</sup>Zn, <sup>106</sup>Cd, <sup>120</sup>Te( $\beta^+$  $\beta^+$ ); measured summed E $\beta$ . Deduced upper limits for T<sub>1/2</sub>. JOUR PRVCA 76 025501

                2007BLZY      RADIOACTIVITY <sup>70</sup>Zn, <sup>116</sup>Cd, <sup>128</sup>Te, <sup>130</sup>Te(2 $\beta^-$ ); measured summed  $\beta$  energies. Deduced T<sub>1/2</sub> limits. PREPRINT arXiv:0707.2756v1 [nucl-ex]

<sup>128</sup>Xe      2007BL15      RADIOACTIVITY <sup>70</sup>Zn, <sup>116</sup>Cd, <sup>128,130</sup>Te( $\beta^-$  $\beta^-$ ); <sup>64</sup>Zn, <sup>106</sup>Cd, <sup>120</sup>Te( $\beta^+$  $\beta^+$ ); measured summed E $\beta$ . Deduced upper limits for T<sub>1/2</sub>. JOUR PRVCA 76 025501

                2007BLZY      RADIOACTIVITY <sup>70</sup>Zn, <sup>116</sup>Cd, <sup>128</sup>Te, <sup>130</sup>Te(2 $\beta^-$ ); measured summed  $\beta$  energies. Deduced T<sub>1/2</sub> limits. PREPRINT arXiv:0707.2756v1 [nucl-ex]

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## KEYNUMBERS AND KEYWORDS

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### **A=129**

<sup>129</sup>Te      2007PAZX      NUCLEAR REACTIONS <sup>120,130</sup>Te( $\gamma$ , n), E(end point)=25-30 MeV; measured E $\gamma$ , I $\gamma$ ; <sup>119m,119g,129m,129g</sup>Te deduced yield ratio Y<sub>m</sub> / Y<sub>g</sub>. Betatron, activation method, Ge(Li) detector. CONF Voronezh(Nucleus-2007),Contrib,P146,Palvanov

### **A=130**

<sup>130</sup>Te      2007BL15      RADIOACTIVITY <sup>70</sup>Zn, <sup>116</sup>Cd, <sup>128,130</sup>Te( $\beta^- \beta^-$ ); <sup>64</sup>Zn, <sup>106</sup>Cd, <sup>120</sup>Te( $\beta^+ \beta^+$ ); measured summed E $\beta$ . Deduced upper limits for T<sub>1/2</sub>. JOUR PRVCA 76 025501

2007BLZY      RADIOACTIVITY <sup>70</sup>Zn, <sup>116</sup>Cd, <sup>128</sup>Te, <sup>130</sup>Te(2 $\beta^-$ ); measured summed  $\beta$  energies. Deduced T<sub>1/2</sub> limits. PREPRINT arXiv:0707.2756v1 [nucl-ex]

<sup>130</sup>Xe      2007BL15      RADIOACTIVITY <sup>70</sup>Zn, <sup>116</sup>Cd, <sup>128,130</sup>Te( $\beta^- \beta^-$ ); <sup>64</sup>Zn, <sup>106</sup>Cd, <sup>120</sup>Te( $\beta^+ \beta^+$ ); measured summed E $\beta$ . Deduced upper limits for T<sub>1/2</sub>. JOUR PRVCA 76 025501

2007BLZY      RADIOACTIVITY <sup>70</sup>Zn, <sup>116</sup>Cd, <sup>128</sup>Te, <sup>130</sup>Te(2 $\beta^-$ ); measured summed  $\beta$  energies. Deduced T<sub>1/2</sub> limits. PREPRINT arXiv:0707.2756v1 [nucl-ex]

### **A=131**

No references found

### **A=132**

<sup>132</sup>Sn      2007IB01      NUCLEAR REACTIONS <sup>238</sup>U( $\gamma$ , F)<sup>78</sup>Zn / <sup>132</sup>Sn, E not given; measured fission fragment yields. ALTO facility. <sup>238</sup>U(n, F)<sup>81</sup>Zn / <sup>83</sup>Ga, E not given; measured E $\gamma$ , I $\gamma$ , E $\beta$ , I $\beta$ ,  $\gamma\gamma$ -coin. <sup>81</sup>Ga, <sup>83</sup>Ge deduced levels, J,  $\pi$ . Online mass separator. JOUR NUPAB 787 110c

<sup>132</sup>Ce      2007WI08      NUCLEAR REACTIONS <sup>68</sup>Zn(<sup>64</sup>Ni, F), E=300, 400, 500 MeV; <sup>116</sup>Sn(<sup>16</sup>O, F), E=130, 250 MeV; measured E $\gamma$ , I $\gamma$  from GDR decay. <sup>132</sup>Ce deduced GDR parameters. JOUR APOBB 38 1447

### **A=133**

<sup>133</sup>Sn      2007J009      NUCLEAR REACTIONS <sup>2</sup>H(<sup>82</sup>Ge, p), E=4 MeV / nucleon; <sup>2</sup>H(<sup>84</sup>Se, p), E=4.5 MeV / nucleon; <sup>2</sup>H(<sup>132</sup>Sn, p), E=4.77 MeV / nucleon; measured Ep and angular distributions. <sup>83</sup>Ge, <sup>85</sup>Se, <sup>133</sup>Sn deduced levels, J,  $\pi$  and spectroscopic factors. Compared results to model calculations. JOUR APOBB 38 1205

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## KEYNUMBERS AND KEYWORDS

### A=134

$^{134}\text{La}$  2007KU13 NUCLEAR REACTIONS  $^{124}\text{Sn}(^{14}\text{N}, 4\text{n})$ , E=67 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coinc, lifetimes.  $^{134}\text{La}$  deduced levels, J,  $\pi$ . JOUR PRVCA 76 014309

### A=135

$^{135}\text{Sb}$  2007MA40 RADIOACTIVITY  $^{136}\text{Sn}(\beta^-)$ ; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coinc.  $^{135}\text{Sb}$  deduced levels, B(E2). JOUR APOBB 38 1213

### A=136

$^{136}\text{Sn}$  2007MA40 RADIOACTIVITY  $^{136}\text{Sn}(\beta^-)$ ; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coinc.  $^{135}\text{Sb}$  deduced levels, B(E2). JOUR APOBB 38 1213

$^{136}\text{Sb}$  2007MA40 RADIOACTIVITY  $^{136}\text{Sn}(\beta^-)$ ; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coinc.  $^{135}\text{Sb}$  deduced levels, B(E2). JOUR APOBB 38 1213

### A=137

$^{137}\text{Cs}$  2007SE05 RADIOACTIVITY  $^{137}\text{Cs}(\beta^-)$ ; measured E $\gamma$ , I $\gamma$ . Deduced branching ratio and ft value. JOUR BRSPE 71 827

$^{137}\text{Ba}$  2007SE05 RADIOACTIVITY  $^{137}\text{Cs}(\beta^-)$ ; measured E $\gamma$ , I $\gamma$ . Deduced branching ratio and ft value. JOUR BRSPE 71 827

$^{137}\text{Pr}$  2007AG13 NUCLEAR REACTIONS  $^{122}\text{Sn}(^{19}\text{F}, 4\text{n})$ , E=80 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coinc.  $^{137}\text{Pr}$  deduced levels, J,  $\pi$ , multipolarity. JOUR PRVCA 76 024321

### A=138

No references found

### A=139

$^{139}\text{Nd}$  2007KU12 NUCLEAR REACTIONS  $^{128}\text{Te}(^{16}\text{O}, 5\text{n})$ , E=85 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coinc, polarization assymetry.  $^{139}\text{Nd}$  deduced levels, J,  $\pi$ . JOUR PRVCA 76 014306

$^{139}\text{Sm}$  2007LIZY NUCLEAR REACTIONS  $^{114}\text{Sn}(^{32}\text{S}, \text{n}2\text{p}\alpha)$ ,  $(^{32}\text{S}, \text{n}2\text{p})$ , E=160 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, DSAM.  $^{139}\text{Sm}$ ,  $^{142}\text{Gd}$  deduced high-spin levels, J,  $\pi$ ,  $\tau$ . EUROBALL IV array. CONF Voronezh(Nucleus-2007), Contrib,P94,Lieder

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**KEYNUMBERS AND KEYWORDS**

**A=140**

<sup>140</sup>La      2007TAZW      NUCLEAR REACTIONS <sup>139</sup>La, <sup>152</sup>Sm, <sup>192,193</sup>Ir(n,  $\gamma$ ), E=55, 144 keV; measured cross sections relative to <sup>197</sup>Au. CONF Tokai-mura (Nuclear Data) Proc,PV.02,Tan

**A=141**

No references found

**A=142**

<sup>142</sup>Gd      2007LIZY      NUCLEAR REACTIONS <sup>114</sup>Sn(<sup>32</sup>S, n2p $\alpha$ ), (<sup>32</sup>S, n2p), E=160 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, DSAM. <sup>139</sup>Sm, <sup>142</sup>Gd deduced high-spin levels, J,  $\pi$ ,  $\tau$ . EUROBALL IV array. CONF Voronezh(Nucleus-2007),Contrib,P94,Lieder

**A=143**

<sup>143</sup>La      2007WA20      RADIOACTIVITY <sup>143</sup>La[from <sup>252</sup>Cf(SF)]; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coinc. <sup>143</sup>La deduced levels, J,  $\pi$  for high spin levels. JOUR PRVCA 75 064301

<sup>143</sup>Sm      2007PAZY      NUCLEAR REACTIONS <sup>144</sup>Sm( $\gamma$ , n), E(end point)=20-30 MeV; measured E $\gamma$ , I $\gamma$ ; <sup>143m,143g</sup>Sm deduced yield ratio Y<sub>m</sub> / Y<sub>g</sub>. Betatron, activation method, Ge(Li) detector. CONF Voronezh(Nucleus-2007),Contrib,P145,Palvanov

<sup>143</sup>Gd      2007LIZY      NUCLEAR REACTIONS <sup>114</sup>Sn(<sup>32</sup>S, n2p $\alpha$ ), (<sup>32</sup>S, n2p), E=160 MeV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, DSAM. <sup>139</sup>Sm, <sup>142</sup>Gd deduced high-spin levels, J,  $\pi$ ,  $\tau$ . EUROBALL IV array. CONF Voronezh(Nucleus-2007),Contrib,P94,Lieder

**A=144**

No references found

**A=145**

<sup>145</sup>Tm      2007SE06      NUCLEAR REACTIONS <sup>58</sup>Ni(<sup>92</sup>Mo, 4np), E=417 MeV; measured E $\gamma$ , I $\gamma$ , Ep, p $\gamma$ -coinc. <sup>145</sup>Tm deduced levels, J,  $\pi$ . JOUR PRLTA 99 082502

**A=146**

No references found

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## KEYNUMBERS AND KEYWORDS

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### **A=147**

<sup>147</sup>Sm      2007K054      NUCLEAR REACTIONS <sup>147</sup>Sm(n,  $\gamma$ ), E=spectrum; measured E $\gamma$ , I $\gamma$ , multiplicities. <sup>147</sup>Sm deduced resonance energies and spins. JOUR PRVCA 76 025804

### **A=148**

<sup>148</sup>Ce      2007G021      RADIOACTIVITY <sup>252</sup>Cf(SF); measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin, fission fragment and light charged particle yields. <sup>108,110,112</sup>Ru deduced levels, J,  $\pi$ . <sup>104</sup>Zr, <sup>106</sup>Mo, <sup>148</sup>Ce(IT); measured T<sub>1/2</sub>, B(E2). Gammasphere array. JOUR NUPAB 787 231c

<sup>148</sup>Sm      2007K054      NUCLEAR REACTIONS <sup>147</sup>Sm(n,  $\gamma$ ), E=spectrum; measured E $\gamma$ , I $\gamma$ , multiplicities. <sup>147</sup>Sm deduced resonance energies and spins. JOUR PRVCA 76 025804

2007KOZY      NUCLEAR REACTIONS <sup>147</sup>Sm(n,  $\gamma$ ), E=spectrum; measured E $\gamma$ , yields. Deduced resonance parameters. PREPRINT ArXiv:0708.0218v1 [nucl-ex]

### **A=149**

No references found

### **A=150**

No references found

### **A=151**

<sup>151</sup>Sm      2007DA23      NUCLEAR REACTIONS <sup>150</sup>Sm(n,  $\gamma$ ), E=1-35 MeV; measured E $\gamma$ , I $\gamma$ , excitation functions and partial  $\gamma$ -ray production cross sections. Compared results to model calculations. JOUR NIMBE 261 948

2007HA24      NUCLEAR REACTIONS <sup>152</sup>Sm, <sup>197</sup>Au( $\gamma$ , n), E=8.3-12.4 MeV; measured cross sections. JOUR JNSTA 44 938

### **A=152**

<sup>152</sup>Sm      2007LI43      NUCLEAR REACTIONS <sup>152</sup>Sm(<sup>16</sup>O, <sup>16</sup>O), (<sup>16</sup>O, <sup>16</sup>O'), (<sup>16</sup>O, X), E(cm)=45-70 MeV; measured  $\sigma$ ( $\theta$ =156,  $\theta$ =160,  $\theta$ =164), evaporation residue  $\sigma$  for boron, carbon, nitrogen and oxygen isotopes; deduced reaction mechanism features. <sup>208</sup>Pb(<sup>6</sup>Li, <sup>6</sup>Li), (<sup>6</sup>Li, <sup>6</sup>Li'), (<sup>6</sup>Li, X), (<sup>7</sup>Li, <sup>7</sup>Li), (<sup>7</sup>Li, <sup>7</sup>Li'), (<sup>7</sup>Li, X), E(cm)=18-42 MeV; <sup>90,96</sup>Zr(<sup>32</sup>S, X), E(cm)=60-95 MeV; measured  $\sigma$ ; deduced reaction mechanism features. <sup>208</sup>Pb(<sup>6</sup>Li, <sup>6</sup>Li), E(cm)=26-40 MeV; measured fusion  $\sigma$ ; deduced reaction mechanism features. Comparison with coupled-channels model. JOUR NUPAB 787 281c

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## KEYNUMBERS AND KEYWORDS

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### **A=152 (*continued*)**

$^{152}\text{Eu}$	2007AG09	NUCLEAR REACTIONS $^{151,153}\text{Eu}(\text{n}, \gamma)$ , E=0.1-100 keV; measured $E\gamma$ , $I\gamma$ , and multiplicity distributions. JOUR NIMBE 261 934
	2007VIZY	NUCLEAR REACTIONS $^{121}\text{Sb}(\gamma, \text{n})$ , $^{153}\text{Eu}(\gamma, \text{n})$ , E(end point)=12.5, 22 MeV; $^{151}\text{Eu}(\text{n}, \gamma)$ , E=thermal, slow; measured $E\gamma$ , $I\gamma$ ; $^{120m,120g}\text{Sb}$ , $^{152m,152g}\text{Eu}$ deduced yield ratio $Y_m / Y_g$ ; $^{152m,152g}\text{Eu}$ deduced $\sigma(8^-) / \sigma(0^-)$ . Microtron, betatron, reactor, activation method, NaI(Tl), Ge detectors. CONF Voronezh(Nucleus-2007), Contrib,P135,Vishnevsky
$^{152}\text{Gd}$	2007CA25	NUCLEAR REACTIONS $^{124}\text{Sn}({}^{36}\text{S}, 4\text{n}\alpha)$ , $^{152}\text{Gd}$ , e=175 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coinc using the Gammasphere. $^{152}\text{Gd}$ deduced levels, J, $\pi$ . Compared results to model calculations. JOUR PRVCA 75 064314
$^{152}\text{Dy}$	2007LA20	NUCLEAR REACTIONS $^{108}\text{Pd}({}^{48}\text{Ca}, 4\text{n})$ , $^{152}\text{Dy}$ , E=191 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coinc. Analyzed quasicontinuum and ridge spectra and feeding intensity of the superdeformed bands. JOUR PRVCA 75 064309

### **A=153**

$^{153}\text{Sm}$	2007TAZW	NUCLEAR REACTIONS $^{139}\text{La}$ , $^{152}\text{Sm}$ , $^{192,193}\text{Ir}(\text{n}, \gamma)$ , E=55, 144 keV; measured cross sections relative to $^{197}\text{Au}$ . CONF Tokai-mura (Nuclear Data) Proc,PV.02,Tan
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### **A=154**

$^{154}\text{Eu}$	2007AG09	NUCLEAR REACTIONS $^{151,153}\text{Eu}(\text{n}, \gamma)$ , E=0.1-100 keV; measured $E\gamma$ , $I\gamma$ , and multiplicity distributions. JOUR NIMBE 261 934
$^{154}\text{Hf}$	2007PA27	RADIOACTIVITY $^{159}\text{Re}(\alpha)$ [from $^{106}\text{Cd}({}^{58}\text{Ni}, \text{X})$ ]; $^{155}\text{Ta}(\text{p})$ ; measured $E\alpha$ , $I\alpha$ , Ep, Ip. deduced separation energies. JOUR PRVCA 75 061302

### **A=155**

$^{155}\text{Ta}$	2007PA27	RADIOACTIVITY $^{159}\text{Re}(\alpha)$ [from $^{106}\text{Cd}({}^{58}\text{Ni}, \text{X})$ ]; $^{155}\text{Ta}(\text{p})$ ; measured $E\alpha$ , $I\alpha$ , Ep, Ip. deduced separation energies. JOUR PRVCA 75 061302
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### **A=156**

No references found

### **A=157**

$^{157}\text{Ta}$	2007ST16	NUCLEAR REACTIONS $^{93}\text{Nb}({}^{65}\text{Ge}, \text{n})$ , E not given; measured $E\gamma$ , $I\gamma$ and transition rates using recoil distance method. $^{64}\text{Ge}$ deduced B(E2) and lifetimes. JOUR PRLTA 99 042503
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## KEYNUMBERS AND KEYWORDS

### A=158

No references found

### A=159

$^{159}\text{Ho}$	2007VAZX	RADIOACTIVITY $^{159,161}\text{Er}(\text{EC})$ ; measured ce; $^{159,161}\text{Ho}$ deduced multipolarities. Mass-separator, Si(Li) detector with mini-orange magnetic filter. CONF Voronezh(Nucleus-2007),Contrib,P76,Vaganov
$^{159}\text{Er}$	2007VAZX	RADIOACTIVITY $^{159,161}\text{Er}(\text{EC})$ ; measured ce; $^{159,161}\text{Ho}$ deduced multipolarities. Mass-separator, Si(Li) detector with mini-orange magnetic filter. CONF Voronezh(Nucleus-2007),Contrib,P76,Vaganov
$^{159}\text{Re}$	2007PA27	RADIOACTIVITY $^{159}\text{Re}(\alpha)$ [from $^{106}\text{Cd}(^{58}\text{Ni}, \text{X})$ ]; $^{155}\text{Ta}(\text{p})$ ; measured $E\alpha$ , $I\alpha$ , $Ep$ , $Ip$ . deduced separation energies. JOUR PRVCA 75 061302

### A=160

$^{160}\text{Dy}$	2007ADZY	RADIOACTIVITY $^{160}\text{Ho}(\text{EC})$ ; measured $E(\text{ce})$ ; $^{160}\text{Dy}$ deduced levels, $J \pi$ , $J\pi=0^+$ level. CONF Voronezh(Nucleus-2007),Contrib,P106,Adam
$^{160}\text{Ho}$	2007ADZY	RADIOACTIVITY $^{160}\text{Ho}(\text{EC})$ ; measured $E(\text{ce})$ ; $^{160}\text{Dy}$ deduced levels, $J \pi$ , $J\pi=0^+$ level. CONF Voronezh(Nucleus-2007),Contrib,P106,Adam
$^{160}\text{Er}$	2007GA26	RADIOACTIVITY $^{160}\text{Er}(\text{IT})$ ; measured $E\gamma$ , $I\gamma$ , $e\gamma$ -coinc. Deduced levels, $J, \pi$ . JOUR APOBB 38 1169

### A=161

$^{161}\text{Ho}$	2007VAZX	RADIOACTIVITY $^{159,161}\text{Er}(\text{EC})$ ; measured ce; $^{159,161}\text{Ho}$ deduced multipolarities. Mass-separator, Si(Li) detector with mini-orange magnetic filter. CONF Voronezh(Nucleus-2007),Contrib,P76,Vaganov
$^{161}\text{Er}$	2007VAZX	RADIOACTIVITY $^{159,161}\text{Er}(\text{EC})$ ; measured ce; $^{159,161}\text{Ho}$ deduced multipolarities. Mass-separator, Si(Li) detector with mini-orange magnetic filter. CONF Voronezh(Nucleus-2007),Contrib,P76,Vaganov

### A=162

No references found

### A=163

$^{163}\text{Tm}$	2007WA21	NUCLEAR REACTIONS $^{130}\text{Te}(^{37}\text{Cl}, 4n)^{163}\text{Tm}$ , $E=165$ MeV; measured $E$ , $I\gamma$ , $\gamma\gamma$ -coinc, mean lifetimes using DSAM and the Gammasphere array. $^{163}\text{Tm}$ deduced quadrupole transition moments for proposed triaxial strongly deformed bands. JOUR PRVCA 75 064315
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*KEYNUMBERS AND KEYWORDS*

**A=164**

No references found

**A=165**

No references found

**A=166**

No references found

**A=167**

$^{167}\text{Lu}$       2007BE33      NUCLEAR REACTIONS  $^{123}\text{Sb}(^{48}\text{Ca}, \text{X})^{167}\text{Lu}$ , E=203 MeV; measured  $E\gamma$ ,  $I\gamma$ , conversion electron energies,  $\gamma\gamma$ -coinc, (conversion-electron) $\gamma$ -coinc.  $^{167}\text{Lu}$  deduced conversion coefficients.  
JOUR APOBB 38 1535

**A=168**

$^{168}\text{Er}$       2007BU25      NUCLEAR REACTIONS  $^{170}\text{Er}(\text{p}, \text{t})$ , E=25 MeV; measured reaction product energies energies and angular distributions.  $^{168}\text{Er}$  deduced  $0^+$  and  $2^+$  level energies and reaction transfer strength distributions.  
JOUR PANUE 70 1336

**A=169**

No references found

**A=170**

$^{170}\text{Er}$       2007I001      NUCLEAR REACTIONS  $^{168}\text{Er}(^{28}\text{Si}, 4\text{n})^{192}\text{Pb}$ ,  $^{170}\text{Er}(^{29}\text{Si}, 5\text{n})^{170}\text{Er}$ , E not given; measured  $E\gamma$ ,  $I\gamma(\theta, E, t)$ .  $^{192,194}\text{Pb}$  deduced quadrupole moments of isomeric states using the TDPAD method. JOUR APOBB 38 1249

**A=171**

No references found

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*KEYNUMBERS AND KEYWORDS*

**A=172**

No references found

**A=173**

No references found

**A=174**

No references found

**A=175**

No references found

**A=176**

No references found

**A=177**

No references found

**A=178**

$^{178}\text{Hf}$	2007K043	NUCLEAR REACTIONS $^{160}\text{Gd}(^{18}\text{O}, \text{X})^{178}\text{Hf}$ , E=79-156 MeV; measured $\text{E}\alpha$ , $\text{E}\gamma$ , particle $\gamma$ -coinc. Deduced total cross sections for xn channels. Compared results to model calculations. JOUR PRVCA 75 064611
	2007LAZW	RADIOACTIVITY $^{178}\text{Ta}(\text{EC})$ [from $^{175}\text{Lu}(\alpha, \text{n})$ , E=18 MeV]; measured $\text{E}\gamma$ , $\text{I}\gamma$ ; $^{178}\text{Hf}$ deduced levels, calculated log ft. CONF Voronezh(Nucleus-2007),Contrib,P109,Lashko
$^{178}\text{Ta}$	2007LAZW	RADIOACTIVITY $^{178}\text{Ta}(\text{EC})$ [from $^{175}\text{Lu}(\alpha, \text{n})$ , E=18 MeV]; measured $\text{E}\gamma$ , $\text{I}\gamma$ ; $^{178}\text{Hf}$ deduced levels, calculated log ft. CONF Voronezh(Nucleus-2007),Contrib,P109,Lashko

**A=179**

No references found

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**KEYNUMBERS AND KEYWORDS**

**A=180**

$^{180}\text{Hf}$	2007ST20	RADIOACTIVITY $^{180}\text{Hf}(\text{IT})$ ; measured $E\gamma$ , $I\gamma$ , angular distributions and mixing ratio. Deduced presence of irregular E2 admixture in the isomeric transition. JOUR PRVCA 76 025502
	2007STZY	RADIOACTIVITY $^{180}\text{Hf}(\text{IT})$ ; measured $E\gamma$ , $I\gamma$ , angular distribution and multipole mixing ratio. PREPRINT arXiv:0707.1061v1 [nucl-ex]
	2007ZAZX	RADIOACTIVITY $^{180}\text{Hf}(\text{IT})$ ; measured $E\gamma$ , $I\gamma$ , angular distribution. Deduced multipole mixing ratio. CONF Bormio (XLV Winter Meeting) Proc, P348

**A=181**

No references found

**A=182**

No references found

**A=183**

No references found

**A=184**

$^{184}\text{Pb}$	2007KNZZ	NUCLEAR REACTIONS $^{144,154}\text{Sm}(^{48}\text{Ca}, \gamma)$ , $(^{40}\text{Ca}, \gamma)$ , $E=163-252$ MeV; measured fission fragment mass, energy distributions and $\sigma$ . CONF Khanty-Mansiysk (Exotic Nuclei) Proc, P185
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**A=185**

No references found

**A=186**

No references found

**A=187**

$^{187}\text{Os}$	2007HU17	NUCLEAR REACTIONS $^{186,188,189,190}\text{Os}(n, \gamma)$ , $E=\text{spectrum}$ ; measured correlated isotopic anomalies. Deduced neutron capture cross section ratios relevant to the astrophysical S-process. JOUR ASJOA 664 L59
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## KEYNUMBERS AND KEYWORDS

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### **A=187 (continued)**

<sup>187</sup> Po	2007SE07	NUCLEAR REACTIONS <sup>186,187,189</sup> Os(n, $\gamma$ ), E=5-90 keV; measured E $\gamma$ , I $\gamma$ , neutron capture cross sections. JOUR PRVCA 76 022802
	2007AN19	NUCLEAR REACTIONS <sup>144</sup> Sm( <sup>46</sup> Ti, 3n) <sup>187</sup> Po, E=224 MeV; <sup>144</sup> Sm( <sup>52</sup> Cr, X) <sup>193,194</sup> Rn, E=232, 252 meV; measured E $\alpha$ . <sup>187</sup> Po, <sup>193,194</sup> Rn deduced levels. JOUR APOBB 38 1557

### **A=188**

<sup>188</sup> Os	2007MA43	NUCLEAR REACTIONS <sup>176</sup> Yb( <sup>12</sup> C, F), E=65, 84 MeV; measured E $\gamma$ , I $\gamma$ , angular anisotropy from GDR decay. <sup>188</sup> Os deduced shape parameters. JOUR APOBB 38 1463
	2007SE07	NUCLEAR REACTIONS <sup>186,187,189</sup> Os(n, $\gamma$ ), E=5-90 keV; measured E $\gamma$ , I $\gamma$ , neutron capture cross sections. JOUR PRVCA 76 022802

### **A=189**

<sup>189</sup> Os	2007HU17	NUCLEAR REACTIONS <sup>186,188,189,190</sup> Os(n, $\gamma$ ), E=spectrum; measured correlated isotopic anomalies. Deduced neutron capture cross section ratios relevant to the astrophysical S-process. JOUR ASJOA 664 L59
	2007ZHZZ	NUCLEAR REACTIONS <sup>190</sup> Ir( $\gamma$ , n), <sup>196</sup> Au( $\gamma$ , n), E(end point)=12.0, 12.5, 14.5, 22 MeV; <sup>197</sup> Au(n, $\gamma$ ) E=thermal, slow; measured E $\gamma$ , I $\gamma$ ; <sup>190m,190g</sup> Ir, <sup>196m,196g</sup> Au deduced $\sigma_m / \sigma_g$ ; <sup>197m,197g</sup> Au deduced $\sigma_m / \sigma_m + \sigma_g$ . Microtron, betatron, reactor, activation method, NaI(Tl), Ge detectors. CONF Voronezh(Nucleus-2007),Contrib,P136,Zheltonozhsky

### **A=190**

<sup>190</sup> Os	2007HU17	NUCLEAR REACTIONS <sup>186,188,189,190</sup> Os(n, $\gamma$ ), E=spectrum; measured correlated isotopic anomalies. Deduced neutron capture cross section ratios relevant to the astrophysical S-process. JOUR ASJOA 664 L59
	2007SE07	NUCLEAR REACTIONS <sup>186,187,189</sup> Os(n, $\gamma$ ), E=5-90 keV; measured E $\gamma$ , I $\gamma$ , neutron capture cross sections. JOUR PRVCA 76 022802

### **A=191**

<sup>191</sup> Os	2007HU17	NUCLEAR REACTIONS <sup>186,188,189,190</sup> Os(n, $\gamma$ ), E=spectrum; measured correlated isotopic anomalies. Deduced neutron capture cross section ratios relevant to the astrophysical S-process. JOUR ASJOA 664 L59
	2007LAZX	RADIOACTIVITY <sup>191</sup> Pt(EC); measured E $\gamma$ ; <sup>191</sup> Ir deduced levels. CONF Voronezh(Nucleus-2007),Contrib,P108,Lashko
<sup>191</sup> Pt	2007LAZX	RADIOACTIVITY <sup>191</sup> Pt(EC); measured E $\gamma$ ; <sup>191</sup> Ir deduced levels. CONF Voronezh(Nucleus-2007),Contrib,P108,Lashko

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## KEYNUMBERS AND KEYWORDS

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### **A=192**

$^{192}\text{Pb}$	2007I001	NUCLEAR REACTIONS $^{168}\text{Er}(^{28}\text{Si}, 4\text{n})^{192}\text{Pb}$ , $^{170}\text{Er}(^{29}\text{Si}, 5\text{n})^{170}\text{Er}$ , E not given; measured $E\gamma$ , $I\gamma(\theta, E, t)$ . $^{192,194}\text{Pb}$ deduced quadrupole moments of isomeric states using the TDPAD method. JOUR APOBB 38 1249
	2007KNZZ	NUCLEAR REACTIONS $^{144,154}\text{Sm}(^{48}\text{Ca}, \gamma)$ , $(^{40}\text{Ca}, \gamma)$ , E=163-252 MeV; measured fission fragment mass, energy distributions and $\sigma$ . CONF Khanty-Mansiysk (Exotic Nuclei) Proc, P185

### **A=193**

$^{193}\text{Ir}$	2007TAZW	NUCLEAR REACTIONS $^{139}\text{La}$ , $^{152}\text{Sm}$ , $^{192,193}\text{Ir}(n, \gamma)$ , E=55, 144 keV; measured cross sections relative to $^{197}\text{Au}$ . CONF Tokai-mura (Nuclear Data) Proc,PV.02,Tan
$^{193}\text{Rn}$	2007AN19	NUCLEAR REACTIONS $^{144}\text{Sm}(^{46}\text{Ti}, 3\text{n})^{187}\text{Po}$ , E=224 MeV; $^{144}\text{Sm}(^{52}\text{Cr}, X)^{193,194}\text{Rn}$ , E=232, 252 meV; measured $E\alpha$ . $^{187}\text{Po}$ , $^{193,194}\text{Rn}$ deduced levels. JOUR APOBB 38 1557

### **A=194**

$^{194}\text{Ir}$	2007TAZW	NUCLEAR REACTIONS $^{139}\text{La}$ , $^{152}\text{Sm}$ , $^{192,193}\text{Ir}(n, \gamma)$ , E=55, 144 keV; measured cross sections relative to $^{197}\text{Au}$ . CONF Tokai-mura (Nuclear Data) Proc,PV.02,Tan
$^{194}\text{Pb}$	2007I001	NUCLEAR REACTIONS $^{168}\text{Er}(^{28}\text{Si}, 4\text{n})^{192}\text{Pb}$ , $^{170}\text{Er}(^{29}\text{Si}, 5\text{n})^{170}\text{Er}$ , E not given; measured $E\gamma$ , $I\gamma(\theta, E, t)$ . $^{192,194}\text{Pb}$ deduced quadrupole moments of isomeric states using the TDPAD method. JOUR APOBB 38 1249
	2007KNZZ	NUCLEAR REACTIONS $^{144,154}\text{Sm}(^{48}\text{Ca}, \gamma)$ , $(^{40}\text{Ca}, \gamma)$ , E=163-252 MeV; measured fission fragment mass, energy distributions and $\sigma$ . CONF Khanty-Mansiysk (Exotic Nuclei) Proc, P185

### **A=195**

$^{195}\text{Au}$	2007ZHZZ	NUCLEAR REACTIONS $^{190}\text{Ir}(\gamma, n)$ , $^{196}\text{Au}(\gamma, n)$ , E(end point)=12.0, 12.5, 14.5, 22 MeV; $^{197}\text{Au}(n, \gamma)$ E=thermal, slow; measured $E\gamma$ , $I\gamma$ ; $^{190m,190g}\text{Ir}$ , $^{196m,196g}\text{Au}$ deduced $\sigma_m / \sigma_g$ ; $^{197m,197g}\text{Au}$ deduced $\sigma_m / \sigma_m + \sigma_g$ . Microtron, betatron, reactor, activation method, NaI(Tl), Ge detectors. CONF Voronezh(Nucleus-2007),Contrib,P136,Zheltonozhsky
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### **A=196**

$^{196}\text{Au}$	2007HA24	NUCLEAR REACTIONS $^{152}\text{Sm}$ , $^{197}\text{Au}(\gamma, n)$ , E=8.3-12.4 MeV; measured cross sections. JOUR JNSTA 44 938
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## KEYNUMBERS AND KEYWORDS

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### **A=196 (continued)**

2007KUZX NUCLEAR REACTIONS  $^{197}\text{Au}(\alpha, \text{xn})$ ,  $(\alpha, \text{n}\alpha)$ ,  $(\alpha, 2\text{np})$ , E=14-36 MeV; measured excitation functions using stacked foil activation.  
CONF Khanty-Mansiysk (Exotic Nuclei) Proc, P196

### **A=197**

No references found

### **A=198**

$^{198}\text{Au}$  2007ZHZZ NUCLEAR REACTIONS  $^{190}\text{Ir}(\gamma, \text{n})$ ,  $^{196}\text{Au}(\gamma, \text{n})$ , E(end point)=12.0, 12.5, 14.5, 22 MeV;  $^{197}\text{Au}(\text{n}, \gamma)$  E=thermal, slow; measured  $E\gamma$ ,  $I\gamma$ ;  $^{190m,190g}\text{Ir}$ ,  $^{196m,196g}\text{Au}$  deduced  $\sigma_m / \sigma_g$ ;  $^{197m,197g}\text{Au}$  deduced  $\sigma_m / \sigma_m + \sigma_g$ . Microtron, betatron, reactor, activation method, NaI(Tl), Ge detectors. CONF Voronezh(Nucleus-2007), Contrib, P136, Zheltonozhsky  
 $^{198}\text{Hg}$  2007KUZX NUCLEAR REACTIONS  $^{197}\text{Au}(\alpha, \text{xn})$ ,  $(\alpha, \text{n}\alpha)$ ,  $(\alpha, 2\text{np})$ , E=14-36 MeV; measured excitation functions using stacked foil activation.  
CONF Khanty-Mansiysk (Exotic Nuclei) Proc, P196  
 $^{198}\text{Tl}$  2007LA22 NUCLEAR REACTIONS  $^{197}\text{Au}(\alpha, 3\text{n})^{198}\text{Tl}$ , E=40 MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coinc.  $^{198}\text{Tl}$  deduced levels, J,  $\pi$ . JOUR APOBB 38 1417

### **A=199**

No references found

### **A=200**

No references found

### **A=201**

$^{201}\text{Hg}$  2007ME12 RADIOACTIVITY  $^{201}\text{Hg}$ [from  $^{201}\text{Tl}(\text{EC})$ ]; measured  $E\gamma$ ,  $I\gamma$ ,  $e\gamma$ -coinc,  $T_{1/2}$  of the first excited state.  $^{201}\text{Hg}$  deduced B(M1) and B(E2).  
JOUR PRVCA 75 064306

### **A=202**

$^{202}\text{Tl}$  2007F006 NUCLEAR REACTIONS  $^{203}\text{Tl}(\text{n}, 2\text{n}\gamma)$ , E=0.6-250 MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coinc, and excitation functions.  $^{202}\text{Tl}$  deduced levels, J,  $\pi$ .  
JOUR PRVCA 76 014302  
 $^{202}\text{Pb}$  2007KNZZ NUCLEAR REACTIONS  $^{144,154}\text{Sm}(^{48}\text{Ca}, \gamma)$ ,  $(^{40}\text{Ca}, \gamma)$ , E=163-252 MeV; measured fission fragment mass, energy distributions and  $\sigma$ .  
CONF Khanty-Mansiysk (Exotic Nuclei) Proc, P185

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## KEYNUMBERS AND KEYWORDS

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### **A=203**

No references found

### **A=204**

No references found

### **A=205**

No references found

### **A=206**

$^{206}\text{Pb}$	2007B022	RADIOACTIVITY $^{210}\text{Po}(\alpha)$ ; measured $E\alpha$ , $E\gamma$ , $\alpha\gamma$ -coinc. Deduced differential bremsstrahlung emission probability. JOUR PRLTA 99 022505
	2007B024	NUCLEAR REACTIONS $^{206}\text{Pb}(n, n')$ , $(n, \gamma)$ , $E=1-620$ keV; measured $E_n$ , $E\gamma$ , and yields. Deduced resonance parameters. JOUR PRVCA 76 014605
	2007MA58	NUCLEAR REACTIONS $^{27}\text{Al}$ , $^{127}\text{I}$ , $^{206,207,208}\text{Pb}(n, n'\gamma)$ , $E$ not give; $^{10}\text{B}(\alpha, p\gamma)$ , $E=2.27$ MeV; $^9\text{Be}(\alpha, n\gamma)$ , $E=2.27$ MeV; measured yields. JOUR PRVCA 76 022801
$^{206}\text{Fr}$	2007HA29	NUCLEAR REACTIONS $^{169}\text{Tm}(^{40}\text{Ar}, 3n)$ , $E=170$ MeV; $^{208}\text{Pb}(^{40}\text{Ar}, 3n)$ , $E=199$ MeV; $^{238}\text{U}(^{22}\text{Ne}, 5n)$ , $E=105.9-120.9$ MeV; $^{248}\text{Cm}(^{18}\text{O}, 5n)$ , $E=94.4$ MeV; measured $E\alpha$ , $I\alpha$ , superheavy element production yields using a gas filled recoil separator. JOUR ZDDNE 45 81

### **A=207**

$^{207}\text{Pb}$	2007B024	NUCLEAR REACTIONS $^{206}\text{Pb}(n, n')$ , $(n, \gamma)$ , $E=1-620$ keV; measured $E_n$ , $E\gamma$ , and yields. Deduced resonance parameters. JOUR PRVCA 76 014605
	2007DOZY	NUCLEAR REACTIONS $^{206}\text{Pb}(n, \gamma)$ , $E=0.001-600$ keV; measured $E\gamma$ , $I\gamma$ , yields. Deduced resonance parameters and maxwellian averaged cross sections. PREPRINT arXiv:0707.3679v1 [nucl-ex]
	2007HU16	NUCLEAR REACTIONS $^{90}\text{Zr}$ , $^{116}\text{Sn}$ , $^{208}\text{Pb}(\alpha, \alpha'n)$ , $E=200$ MeV; measured $\sigma$ , angular distributions. Deduced ISGDR direct-decay branching ratios. JOUR APOBB 38 1479
	2007HU20	NUCLEAR REACTIONS $^{90}\text{Zr}$ , $^{116}\text{Sn}$ , $^{208}\text{Pb}(\alpha, \alpha'n)$ , $E=200$ MeV; measured $\sigma$ and angular distributions. $^{90}\text{Zr}$ , $^{116}\text{Sn}$ , $^{208}\text{Pb}$ deduced branching ratios for direct and statistical neutron decay of isoscalar giant dipole resonance. JOUR PANUE 70 1407
	2007MA58	NUCLEAR REACTIONS $^{27}\text{Al}$ , $^{127}\text{I}$ , $^{206,207,208}\text{Pb}(n, n'\gamma)$ , $E$ not give; $^{10}\text{B}(\alpha, p\gamma)$ , $E=2.27$ MeV; $^9\text{Be}(\alpha, n\gamma)$ , $E=2.27$ MeV; measured yields. JOUR PRVCA 76 022801

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## KEYNUMBERS AND KEYWORDS

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### **A=208**

$^{208}\text{Pb}$	2007HU20	NUCLEAR REACTIONS $^{90}\text{Zr}$ , $^{116}\text{Sn}$ , $^{208}\text{Pb}(\alpha, \alpha'n)$ , E=200 MeV; measured $\sigma$ and angular distributions. $^{90}\text{Zr}$ , $^{116}\text{Sn}$ , $^{208}\text{Pb}$ deduced branching ratios for direct and statistical neutron decay of isoscalar giant dipole resonance. JOUR PANUE 70 1407
	2007KUZY	NUCLEAR REACTIONS $^{208}\text{Pb}(^{152}\text{Sm}, ^{152}\text{Sm}')$ , E=652 MeV; measured $E\gamma$ , $I\gamma$ , $\gamma\gamma$ -coinc. $^{152}\text{Sm}$ , deduced level energies, $J$ , $\pi$ , $B(E2)$ . PREPRINT arXiv.0706.4129v2 [nucl-ex]
	2007LI43	NUCLEAR REACTIONS $^{152}\text{Sm}(^{16}\text{O}, ^{16}\text{O})$ , $(^{16}\text{O}, ^{16}\text{O}')$ , $(^{16}\text{O}, X)$ , $E(cm)=45-70$ MeV; measured $\sigma(\theta=156, \theta=160, \theta=164)$ , evaporation residue $\sigma$ for boron, carbon, nitrogen and oxygen isotopes; deduced reaction mechanism features. $^{208}\text{Pb}(^6\text{Li}, ^6\text{Li})$ , $(^6\text{Li}, ^6\text{Li}')$ , $(^6\text{Li}, X)$ , $(^7\text{Li}, ^7\text{Li})$ , $(^7\text{Li}, ^7\text{Li}')$ , $(^7\text{Li}, X)$ , $E(cm)=18-42$ MeV; $^{90,96}\text{Zr}(^{32}\text{S}, X)$ , $E(cm)=60-95$ MeV; measured $\sigma$ ; deduced reaction mechanism features. $^{208}\text{Pb}(^6\text{Li}, ^6\text{Li})$ , $E(cm)=26-40$ MeV; measured fusion $\sigma$ ; deduced reaction mechanism features. Comparison with coupled-channels model. JOUR NUPAB 787 281c
	2007MA58	NUCLEAR REACTIONS $^{27}\text{Al}$ , $^{127}\text{I}$ , $^{206,207,208}\text{Pb}(n, n'\gamma)$ , E not give; $^{10}\text{B}(\alpha, p\gamma)$ , E=2.27 MeV; $^9\text{Be}(\alpha, n\gamma)$ , E=2.27 MeV; measured yields. JOUR PRVCA 76 022801
$^{208}\text{Bi}$	2007ZEZZ	NUCLEAR REACTIONS $^{12,13}\text{C}$ , $^{18}\text{O}$ , $^{26}\text{Mg}$ , $^{58}\text{Ni}$ , $^{60}\text{Ni}$ , $^{90}\text{Zr}$ , $^{118}\text{Sn}$ , $^{208}\text{Pb}(^3\text{He}, t)$ , E=420 MeV; measured triton spectra and cross sections. Deduced B(GT). PREPRINT arXiv:0707.2840v1 [nucl-ex]

### **A=209**

$^{209}\text{At}$	2007TA17	RADIOACTIVITY $^{209}\text{Rn}(\text{EC})$ ; measured $E\gamma$ , $I\gamma$ , polarization and relaxation. JOUR NIMAE 579 472
$^{209}\text{Rn}$	2007TA17	RADIOACTIVITY $^{209}\text{Rn}(\text{EC})$ ; measured $E\gamma$ , $I\gamma$ , polarization and relaxation. JOUR NIMAE 579 472

### **A=210**

$^{210}\text{Po}$	2007B022	RADIOACTIVITY $^{210}\text{Po}(\alpha)$ ; measured $E\alpha$ , $E\gamma$ , $\alpha\gamma$ -coinc. Deduced differential bremsstrahlung emission probability. JOUR PRLTA 99 022505
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### **A=211**

$^{211}\text{Th}$	2007MA57	ATOMIC MASSES $^{211,213,217,218}\text{Th}$ ; measured masses and relative abundances using inductively coupled plasma sector field mass spectrometry. JOUR PRVCA 76 021303
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### **A=212**

No references found

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*KEYNUMBERS AND KEYWORDS*

**A=213**

$^{213}\text{Th}$       2007MA57      ATOMIC MASSES  $^{211,213,217,218}\text{Th}$ ; measured masses and relative abundances using inductively coupled plasma sector field mass spectrometry. JOUR PRVCA 76 021303

**A=214**

No references found

**A=215**

No references found

**A=216**

No references found

**A=217**

$^{217}\text{Th}$       2007MA57      ATOMIC MASSES  $^{211,213,217,218}\text{Th}$ ; measured masses and relative abundances using inductively coupled plasma sector field mass spectrometry. JOUR PRVCA 76 021303

**A=218**

$^{218}\text{Th}$       2007MA57      ATOMIC MASSES  $^{211,213,217,218}\text{Th}$ ; measured masses and relative abundances using inductively coupled plasma sector field mass spectrometry. JOUR PRVCA 76 021303

**A=219**

$^{219}\text{Th}$       2007RE14      NUCLEAR REACTIONS  $^{198}\text{Pt}(^{26}\text{Mg}, \text{X})^{224}\text{Th}$ , E=128 MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coinc, (particle) $\gamma$ -coinc.  $^{219,220}\text{Th}$  deduced levels,  $J, \pi$ . JOUR APOBB 38 1547

**A=220**

$^{220}\text{Th}$       2007RE14      NUCLEAR REACTIONS  $^{198}\text{Pt}(^{26}\text{Mg}, \text{X})^{224}\text{Th}$ , E=128 MeV; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coinc, (particle) $\gamma$ -coinc.  $^{219,220}\text{Th}$  deduced levels,  $J, \pi$ . JOUR APOBB 38 1547

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*KEYNUMBERS AND KEYWORDS*

**A=221**

No references found

**A=222**

No references found

**A=223**

No references found

**A=224**

$^{224}\text{Th}$       2007RE14      NUCLEAR REACTIONS  $^{198}\text{Pt}(^{26}\text{Mg}, \text{X})^{224}\text{Th}$ , E=128 MeV;  
measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coinc, (particle) $\gamma$ -coinc.  $^{219,220}\text{Th}$  deduced levels,  
 $J, \pi$ . JOUR APOBB 38 1547

**A=225**

No references found

**A=226**

No references found

**A=227**

No references found

**A=228**

No references found

**A=229**

No references found

**A=230**

No references found

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*KEYNUMBERS AND KEYWORDS*

**A=231**

No references found

**A=232**

No references found

**A=233**

No references found

**A=234**

No references found

**A=235**

$^{235}\text{U}$       2007OB02      NUCLEAR REACTIONS  $^{234}\text{U}(\text{n}, \gamma)^{235}\text{U}$ , E=0.95, 1.27 MeV; measured delayed fission fragment spectra from the decay of the shape isomer, isomeric fission  $T_{1/2}$  and cross section. JOUR PRLTA 99 042502

**A=236**

$^{236}\text{Th}$       2007IS09      NUCLEAR REACTIONS  $^{238}\text{U}(^{18}\text{O}, ^{20}\text{Ne})$ , E=200 MeV;  $^{244}\text{Pu}(^{16}\text{O}, ^{20}\text{Ne})$ , E=162 MeV; measured  $E\gamma$ ,  $I\gamma$ , (particle) $\gamma$ -coinc.  $^{236}\text{Th}$ ,  $^{242}\text{U}$  deduced levels, J,  $\pi$ . JOUR PRVCA 76 011303  
 $^{236}\text{U}$       2007AH05      RADIOACTIVITY  $^{244}\text{Cm}$ ,  $^{240}\text{Pu}(\alpha)$ ; measured  $E\alpha$ ,  $I\alpha$  and  $T_{1/2}$ . JOUR NIMAE 579 458  
                2007BR16      NUCLEAR REACTIONS  $^{235}\text{U}$ ,  $^{252}\text{Cf}(\text{n}, \gamma)$ , ( $\text{n}$ , X), E < 18 eV; measured  $E\gamma$ ,  $I\gamma$ , fission fragments. Deduced cross sections. JOUR NIMBE 261 986

**A=237**

No references found

**A=238**

No references found

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**KEYNUMBERS AND KEYWORDS**

**A=239**

No references found

**A=240**

$^{240}\text{U}$	2007IS09	NUCLEAR REACTIONS $^{238}\text{U}(^{18}\text{O}, ^{20}\text{Ne})$ , E=200 MeV; $^{244}\text{Pu}(^{16}\text{O}, ^{20}\text{Ne})$ , E=162 MeV; measured $E\gamma$ , $I\gamma$ , (particle) $\gamma$ -coinc. $^{236}\text{Th}$ , $^{242}\text{U}$ deduced levels, J, $\pi$ . JOUR PRVCA 76 011303
	2007IS11	NUCLEAR REACTIONS $^{238}\text{U}(^{18}\text{O}, ^{16}\text{O})^{240}\text{U}$ , E=200 MeV; $^{244}\text{Pu}(^{18}\text{O}, ^{16}\text{O})^{246}\text{Pu}$ , E=200 MeV; $^{248}\text{Cm}(^{18}\text{O}, ^{16}\text{O})$ , e=200 meV; measured $E\gamma$ , $I\gamma$ , (particle) $\gamma$ -coinc. $^{240}\text{U}$ , $^{246}\text{Pu}$ , $^{250}\text{Cm}$ deduced levels, J, $\pi$ , moments of inertia. JOUR PANUE 70 1457
$^{240}\text{Pu}$	2007AH05	RADIOACTIVITY $^{244}\text{Cm}$ , $^{240}\text{Pu}(\alpha)$ ; measured $E\alpha$ , $I\alpha$ and $T_{1/2}$ . JOUR NIMAE 579 458
	2007BU19	RADIOACTIVITY $^{240}\text{Pu}(\text{SF})$ ; measured $E\gamma$ , $I\gamma$ from fission products. Deduced fission product yields. JOUR AENGA 102 232

**A=241**

No references found

**A=242**

$^{242}\text{U}$	2007IS09	NUCLEAR REACTIONS $^{238}\text{U}(^{18}\text{O}, ^{20}\text{Ne})$ , E=200 MeV; $^{244}\text{Pu}(^{16}\text{O}, ^{20}\text{Ne})$ , E=162 MeV; measured $E\gamma$ , $I\gamma$ , (particle) $\gamma$ -coinc. $^{236}\text{Th}$ , $^{242}\text{U}$ deduced levels, J, $\pi$ . JOUR PRVCA 76 011303
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**A=243**

No references found

**A=244**

$^{244}\text{Cm}$	2007AH05	RADIOACTIVITY $^{244}\text{Cm}$ , $^{240}\text{Pu}(\alpha)$ ; measured $E\alpha$ , $I\alpha$ and $T_{1/2}$ . JOUR NIMAE 579 458
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**A=245**

$^{245}\text{Fm}$	2007HA29	NUCLEAR REACTIONS $^{169}\text{Tm}(^{40}\text{Ar}, 3n)$ , E=170 MeV; $^{208}\text{Pb}(^{40}\text{Ar}, 3n)$ , E=199 MeV; $^{238}\text{U}(^{22}\text{Ne}, 5n)$ , E=105.9-120.9 MeV; $^{248}\text{Cm}(^{18}\text{O}, 5n)$ , E=94.4 MeV; measured $E\alpha$ , $I\alpha$ , superheavy element production yields using a gas filled recoil separator. JOUR ZDDNE 45 81
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## KEYNUMBERS AND KEYWORDS

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### **A=246**

$^{246}\text{Pu}$       2007IS11      NUCLEAR REACTIONS  $\text{U}({}^{18}\text{O}, {}^{16}\text{O}){}^{240}\text{U}$ ,  $E=200$  MeV;  $^{244}\text{Pu}({}^{18}\text{O}, {}^{16}\text{O}){}^{246}\text{Pu}$ ,  $E=200$  MeV;  $^{248}\text{Cm}({}^{18}\text{O}, {}^{16}\text{O})$ ,  $e=200$  meV; measured  $E\gamma$ ,  $I\gamma$ , (particle) $\gamma$ -coin.  ${}^{240}\text{U}$ ,  ${}^{246}\text{Pu}$ ,  ${}^{250}\text{Cm}$  deduced levels,  $J$ ,  $\pi$ , moments of inertia. JOUR PANUE 70 1457

### **A=247**

No references found

### **A=248**

No references found

### **A=249**

$^{249}\text{Bk}$       2007SE08      RADIOACTIVITY  ${}^{253}\text{Es}(\alpha)$ ; measured  $T_{1/2}$  at low temperatures. JOUR PRVCA 76 024304

### **A=250**

$^{250}\text{Cm}$       2007IS11      NUCLEAR REACTIONS  $\text{U}({}^{18}\text{O}, {}^{16}\text{O}){}^{240}\text{U}$ ,  $E=200$  MeV;  $^{244}\text{Pu}({}^{18}\text{O}, {}^{16}\text{O}){}^{246}\text{Pu}$ ,  $E=200$  MeV;  $^{248}\text{Cm}({}^{18}\text{O}, {}^{16}\text{O})$ ,  $e=200$  meV; measured  $E\gamma$ ,  $I\gamma$ , (particle) $\gamma$ -coin.  ${}^{240}\text{U}$ ,  ${}^{246}\text{Pu}$ ,  ${}^{250}\text{Cm}$  deduced levels,  $J$ ,  $\pi$ , moments of inertia. JOUR PANUE 70 1457

### **A=251**

$^{251}\text{No}$       2007G05      NUCLEAR REACTIONS  ${}^{208}\text{Pb}$ ,  ${}^{209}\text{Bi}({}^{48}\text{Ca}, n)$ ,  $({}^{50}\text{Ti}, n)$ ,  $({}^{54}\text{Cr}, n)$ ,  $({}^{58}\text{Fe}, n)$ ,  $({}^{62}\text{Ni}, n)$ ,  $({}^{64}\text{Ni}, n)$ ,  $({}^{70}\text{Zn}, n)$ ,  $E$  not given; analyzed  $\sigma$ .  ${}^{233}\text{U}$ ,  ${}^{237}\text{Np}$ ,  ${}^{244}\text{Pu}$ ,  ${}^{248}\text{Cm}$ ,  ${}^{249}\text{Cf}({}^{22}\text{Ne}, 4n)$ ,  $({}^{26}\text{Mg}, 4n)$ ,  $({}^{36}\text{S}, 5n)$ ,  $({}^{48}\text{Ca}, 4n)$ ,  $E$  not given; measured  $E\alpha$ ,  $\alpha\alpha$ -coin following residual nucleus decay; analyzed  $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

### **A=252**

$^{252}\text{Cf}$       2007G021      RADIOACTIVITY  ${}^{252}\text{Cf}(\text{SF})$ ; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin, fission fragment and light charged particle yields.  ${}^{108,110,112}\text{Ru}$  deduced levels,  $J$ ,  $\pi$ .  ${}^{104}\text{Zr}$ ,  ${}^{106}\text{Mo}$ ,  ${}^{148}\text{Ce}(\text{IT})$ ; measured  $T_{1/2}$ ,  $B(\text{E}2)$ . Gammasphere array. JOUR NUPAB 787 231c

2007PRZZ      RADIOACTIVITY  ${}^{252}\text{Cf}(\text{SF})$ ; measured neutron energies and correlations. CONF Khanty-Mansiysk (Exotic Nuclei) Proc, P179

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## KEYNUMBERS AND KEYWORDS

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### **A=253**

$^{253}\text{Cf}$	2007BR16	NUCLEAR REACTIONS $^{235}\text{U}$ , $^{252}\text{Cf}(\text{n}, \gamma)$ , ( $\text{n}$ , X), $E < 18$ eV; measured $E\gamma$ , $I\gamma$ , fission fragments. Deduced cross sections. JOUR NIMBE 261 986
$^{253}\text{Es}$	2007SE08	RADIOACTIVITY $^{253}\text{Es}(\alpha)$ ; measured $T_{1/2}$ at low temperatures. JOUR PRVCA 76 024304

### **A=254**

No references found

### **A=255**

$^{255}\text{No}$	2007HA29	NUCLEAR REACTIONS $^{169}\text{Tm}(^{40}\text{Ar}, 3\text{n})$ , $E=170$ MeV; $^{208}\text{Pb}(^{40}\text{Ar}, 3\text{n})$ , $E=199$ MeV; $^{238}\text{U}(^{22}\text{Ne}, 5\text{n})$ , $E=105.9\text{-}120.9$ MeV; $^{248}\text{Cm}(^{18}\text{O}, 5\text{n})$ , $E=94.4$ MeV; measured $E\alpha$ , $I\alpha$ , superheavy element production yields using a gas filled recoil separator. JOUR ZDDNE 45 81
	2007TG05	NUCLEAR REACTIONS $^{208}\text{Pb}$ , $^{209}\text{Bi}(^{48}\text{Ca}, \text{n})$ , ( $^{50}\text{Ti}, \text{n}$ ), ( $^{54}\text{Cr}, \text{n}$ ), ( $^{58}\text{Fe}, \text{n}$ ), ( $^{62}\text{Ni}, \text{n}$ ), ( $^{64}\text{Ni}, \text{n}$ ), ( $^{70}\text{Zn}, \text{n}$ ), $E$ not given; analyzed $\sigma$ . $^{233}\text{U}$ , $^{237}\text{Np}$ , $^{244}\text{Pu}$ , $^{248}\text{Cm}$ , $^{249}\text{Cf}(^{22}\text{Ne}, 4\text{n})$ , ( $^{26}\text{Mg}, 4\text{n}$ ), ( $^{36}\text{S}, 5\text{n}$ ), ( $^{48}\text{Ca}, 4\text{n}$ ), $E$ not given; measured $E\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c
$^{255}\text{Lr}$	2007TG05	NUCLEAR REACTIONS $^{208}\text{Pb}$ , $^{209}\text{Bi}(^{48}\text{Ca}, \text{n})$ , ( $^{50}\text{Ti}, \text{n}$ ), ( $^{54}\text{Cr}, \text{n}$ ), ( $^{58}\text{Fe}, \text{n}$ ), ( $^{62}\text{Ni}, \text{n}$ ), ( $^{64}\text{Ni}, \text{n}$ ), ( $^{70}\text{Zn}, \text{n}$ ), $E$ not given; analyzed $\sigma$ . $^{233}\text{U}$ , $^{237}\text{Np}$ , $^{244}\text{Pu}$ , $^{248}\text{Cm}$ , $^{249}\text{Cf}(^{22}\text{Ne}, 4\text{n})$ , ( $^{26}\text{Mg}, 4\text{n}$ ), ( $^{36}\text{S}, 5\text{n}$ ), ( $^{48}\text{Ca}, 4\text{n}$ ), $E$ not given; measured $E\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c
$^{255}\text{Rf}$	2007TG05	NUCLEAR REACTIONS $^{208}\text{Pb}$ , $^{209}\text{Bi}(^{48}\text{Ca}, \text{n})$ , ( $^{50}\text{Ti}, \text{n}$ ), ( $^{54}\text{Cr}, \text{n}$ ), ( $^{58}\text{Fe}, \text{n}$ ), ( $^{62}\text{Ni}, \text{n}$ ), ( $^{64}\text{Ni}, \text{n}$ ), ( $^{70}\text{Zn}, \text{n}$ ), $E$ not given; analyzed $\sigma$ . $^{233}\text{U}$ , $^{237}\text{Np}$ , $^{244}\text{Pu}$ , $^{248}\text{Cm}$ , $^{249}\text{Cf}(^{22}\text{Ne}, 4\text{n})$ , ( $^{26}\text{Mg}, 4\text{n}$ ), ( $^{36}\text{S}, 5\text{n}$ ), ( $^{48}\text{Ca}, 4\text{n}$ ), $E$ not given; measured $E\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

### **A=256**

$^{256}\text{Lr}$	2007TG05	NUCLEAR REACTIONS $^{208}\text{Pb}$ , $^{209}\text{Bi}(^{48}\text{Ca}, \text{n})$ , ( $^{50}\text{Ti}, \text{n}$ ), ( $^{54}\text{Cr}, \text{n}$ ), ( $^{58}\text{Fe}, \text{n}$ ), ( $^{62}\text{Ni}, \text{n}$ ), ( $^{64}\text{Ni}, \text{n}$ ), ( $^{70}\text{Zn}, \text{n}$ ), $E$ not given; analyzed $\sigma$ . $^{233}\text{U}$ , $^{237}\text{Np}$ , $^{244}\text{Pu}$ , $^{248}\text{Cm}$ , $^{249}\text{Cf}(^{22}\text{Ne}, 4\text{n})$ , ( $^{26}\text{Mg}, 4\text{n}$ ), ( $^{36}\text{S}, 5\text{n}$ ), ( $^{48}\text{Ca}, 4\text{n}$ ), $E$ not given; measured $E\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c
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## KEYNUMBERS AND KEYWORDS

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### **A=257**

<sup>257</sup>Rf      20070G05      NUCLEAR REACTIONS  $^{208}\text{Pb}$ ,  $^{209}\text{Bi}$ ( $^{48}\text{Ca}$ , n), ( $^{50}\text{Ti}$ , n), ( $^{54}\text{Cr}$ , n), ( $^{58}\text{Fe}$ , n), ( $^{62}\text{Ni}$ , n), ( $^{64}\text{Ni}$ , n), ( $^{70}\text{Zn}$ , n), E not given; analyzed  $\sigma$ .  $^{233}\text{U}$ ,  $^{237}\text{Np}$ ,  $^{244}\text{Pu}$ ,  $^{248}\text{Cm}$ ,  $^{249}\text{Cf}$ ( $^{22}\text{Ne}$ , 4n), ( $^{26}\text{Mg}$ , 4n), ( $^{36}\text{S}$ , 5n), ( $^{48}\text{Ca}$ , 4n), E not given; measured  $E\alpha$ ,  $\alpha\alpha$ -coin following residual nucleus decay; analyzed  $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

### **A=258**

<sup>258</sup>Db      20070G05      NUCLEAR REACTIONS  $^{208}\text{Pb}$ ,  $^{209}\text{Bi}$ ( $^{48}\text{Ca}$ , n), ( $^{50}\text{Ti}$ , n), ( $^{54}\text{Cr}$ , n), ( $^{58}\text{Fe}$ , n), ( $^{62}\text{Ni}$ , n), ( $^{64}\text{Ni}$ , n), ( $^{70}\text{Zn}$ , n), E not given; analyzed  $\sigma$ .  $^{233}\text{U}$ ,  $^{237}\text{Np}$ ,  $^{244}\text{Pu}$ ,  $^{248}\text{Cm}$ ,  $^{249}\text{Cf}$ ( $^{22}\text{Ne}$ , 4n), ( $^{26}\text{Mg}$ , 4n), ( $^{36}\text{S}$ , 5n), ( $^{48}\text{Ca}$ , 4n), E not given; measured  $E\alpha$ ,  $\alpha\alpha$ -coin following residual nucleus decay; analyzed  $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

### **A=259**

<sup>259</sup>Db      20070G05      NUCLEAR REACTIONS  $^{208}\text{Pb}$ ,  $^{209}\text{Bi}$ ( $^{48}\text{Ca}$ , n), ( $^{50}\text{Ti}$ , n), ( $^{54}\text{Cr}$ , n), ( $^{58}\text{Fe}$ , n), ( $^{62}\text{Ni}$ , n), ( $^{64}\text{Ni}$ , n), ( $^{70}\text{Zn}$ , n), E not given; analyzed  $\sigma$ .  $^{233}\text{U}$ ,  $^{237}\text{Np}$ ,  $^{244}\text{Pu}$ ,  $^{248}\text{Cm}$ ,  $^{249}\text{Cf}$ ( $^{22}\text{Ne}$ , 4n), ( $^{26}\text{Mg}$ , 4n), ( $^{36}\text{S}$ , 5n), ( $^{48}\text{Ca}$ , 4n), E not given; measured  $E\alpha$ ,  $\alpha\alpha$ -coin following residual nucleus decay; analyzed  $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

### **A=260**

No references found

### **A=261**

<sup>261</sup>Rf      2007HA29      NUCLEAR REACTIONS  $^{169}\text{Tm}$ ( $^{40}\text{Ar}$ , 3n), E=170 MeV;  $^{208}\text{Pb}$ ( $^{40}\text{Ar}$ , 3n), E=199 MeV;  $^{238}\text{U}$ ( $^{22}\text{Ne}$ , 5n), E=105.9-120.9 MeV;  $^{248}\text{Cm}$ ( $^{18}\text{O}$ , 5n), E=94.4 MeV; measured  $E\alpha$ ,  $I\alpha$ , superheavy element production yields using a gas filled recoil separator. JOUR ZDDNE 45 81

<sup>261</sup>Sg      20070G05      NUCLEAR REACTIONS  $^{208}\text{Pb}$ ,  $^{209}\text{Bi}$ ( $^{48}\text{Ca}$ , n), ( $^{50}\text{Ti}$ , n), ( $^{54}\text{Cr}$ , n), ( $^{58}\text{Fe}$ , n), ( $^{62}\text{Ni}$ , n), ( $^{64}\text{Ni}$ , n), ( $^{70}\text{Zn}$ , n), E not given; analyzed  $\sigma$ .  $^{233}\text{U}$ ,  $^{237}\text{Np}$ ,  $^{244}\text{Pu}$ ,  $^{248}\text{Cm}$ ,  $^{249}\text{Cf}$ ( $^{22}\text{Ne}$ , 4n), ( $^{26}\text{Mg}$ , 4n), ( $^{36}\text{S}$ , 5n), ( $^{48}\text{Ca}$ , 4n), E not given; measured  $E\alpha$ ,  $\alpha\alpha$ -coin following residual nucleus decay; analyzed  $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

2007ST12      NUCLEAR REACTIONS  $^{208}\text{Pb}$ ( $^{54}\text{Cr}$ , X) $^{261}\text{Sg}$ , e=4.70-5.17 MeV / nucleon; measured  $E\gamma$ , EX,  $E\alpha$ ,  $\alpha\gamma$ -coinc.  $^{261}\text{Sg}$  deduced levels, J,  $\pi$ . JOUR APOBB 38 1561

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## KEYNUMBERS AND KEYWORDS

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### **A=262**

$^{262}\text{Lr}$	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}112$ , $^{280,281,282,283,284}113$ , $^{286,287,288,289}114$ , $^{287,288}115$ , $^{290,291,292,293}116$ , $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}112$ , $^{286,288}114(\text{SF})$ ; measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
$^{262}\text{Rf}$	20070G05	NUCLEAR REACTIONS $^{208}\text{Pb}$ , $^{209}\text{Bi}(^{48}\text{Ca}, \text{n})$ , $(^{50}\text{Ti}, \text{n})$ , $(^{54}\text{Cr}, \text{n})$ , $(^{58}\text{Fe}, \text{n})$ , $(^{62}\text{Ni}, \text{n})$ , $(^{64}\text{Ni}, \text{n})$ , $(^{70}\text{Zn}, \text{n})$ , $\text{E}$ not given; analyzed $\sigma$ . $^{233}\text{U}$ , $^{237}\text{Np}$ , $^{244}\text{Pu}$ , $^{248}\text{Cm}$ , $^{249}\text{Cf}(^{22}\text{Ne}, 4\text{n})$ , $(^{26}\text{Mg}, 4\text{n})$ , $(^{36}\text{S}, 5\text{n})$ , $(^{48}\text{Ca},$ $4\text{n})$ , $\text{E}$ not given; measured $\text{E}\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c
$^{262}\text{Bh}$	20070G05	NUCLEAR REACTIONS $^{208}\text{Pb}$ , $^{209}\text{Bi}(^{48}\text{Ca}, \text{n})$ , $(^{50}\text{Ti}, \text{n})$ , $(^{54}\text{Cr}, \text{n})$ , $(^{58}\text{Fe}, \text{n})$ , $(^{62}\text{Ni}, \text{n})$ , $(^{64}\text{Ni}, \text{n})$ , $(^{70}\text{Zn}, \text{n})$ , $\text{E}$ not given; analyzed $\sigma$ . $^{233}\text{U}$ , $^{237}\text{Np}$ , $^{244}\text{Pu}$ , $^{248}\text{Cm}$ , $^{249}\text{Cf}(^{22}\text{Ne}, 4\text{n})$ , $(^{26}\text{Mg}, 4\text{n})$ , $(^{36}\text{S}, 5\text{n})$ , $(^{48}\text{Ca},$ $4\text{n})$ , $\text{E}$ not given; measured $\text{E}\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

### **A=263**

$^{263}\text{Lr}$	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}112$ , $^{280,281,282,283,284}113$ , $^{286,287,288,289}114$ , $^{287,288}115$ , $^{290,291,292,293}116$ , $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}112$ , $^{286,288}114(\text{SF})$ ; measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
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### **A=264**

$^{264}\text{Lr}$	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}112$ , $^{280,281,282,283,284}113$ , $^{286,287,288,289}114$ , $^{287,288}115$ , $^{290,291,292,293}116$ , $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}112$ , $^{286,288}114(\text{SF})$ ; measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
$^{264}\text{Hs}$	20070G05	NUCLEAR REACTIONS $^{208}\text{Pb}$ , $^{209}\text{Bi}(^{48}\text{Ca}, \text{n})$ , $(^{50}\text{Ti}, \text{n})$ , $(^{54}\text{Cr}, \text{n})$ , $(^{58}\text{Fe}, \text{n})$ , $(^{62}\text{Ni}, \text{n})$ , $(^{64}\text{Ni}, \text{n})$ , $(^{70}\text{Zn}, \text{n})$ , $\text{E}$ not given; analyzed $\sigma$ . $^{233}\text{U}$ , $^{237}\text{Np}$ , $^{244}\text{Pu}$ , $^{248}\text{Cm}$ , $^{249}\text{Cf}(^{22}\text{Ne}, 4\text{n})$ , $(^{26}\text{Mg}, 4\text{n})$ , $(^{36}\text{S}, 5\text{n})$ , $(^{48}\text{Ca},$ $4\text{n})$ , $\text{E}$ not given; measured $\text{E}\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

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## KEYNUMBERS AND KEYWORDS

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### **A=265**

$^{265}\text{Rf}$	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}112$ , $^{280,281,282,283,284}113$ , $^{286,287,288,289}114$ , $^{287,288}115$ , $^{290,291,292,293}116$ , $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}112$ , $^{286,288}114(\text{SF})$ ; measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
$^{265}\text{Hs}$	20070G05	NUCLEAR REACTIONS $^{208}\text{Pb}$ , $^{209}\text{Bi}(^{48}\text{Ca}, \text{n})$ , $(^{50}\text{Ti}, \text{n})$ , $(^{54}\text{Cr}, \text{n})$ , $(^{58}\text{Fe}, \text{n})$ , $(^{62}\text{Ni}, \text{n})$ , $(^{64}\text{Ni}, \text{n})$ , $(^{70}\text{Zn}, \text{n})$ , $\text{E}$ not given; analyzed $\sigma$ . $^{233}\text{U}$ , $^{237}\text{Np}$ , $^{244}\text{Pu}$ , $^{248}\text{Cm}$ , $^{249}\text{Cf}$ ( $^{22}\text{Ne}$ , 4n), $(^{26}\text{Mg}, 4\text{n})$ , $(^{36}\text{S}, 5\text{n})$ , $(^{48}\text{Ca}, 4\text{n})$ , $\text{E}$ not given; measured $\text{E}\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

### **A=266**

$^{266}\text{Db}$	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}112$ , $^{280,281,282,283,284}113$ , $^{286,287,288,289}114$ , $^{287,288}115$ , $^{290,291,292,293}116$ , $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}112$ , $^{286,288}114(\text{SF})$ ; measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
$^{266}\text{Sg}$	20070G05	NUCLEAR REACTIONS $^{208}\text{Pb}$ , $^{209}\text{Bi}(^{48}\text{Ca}, \text{n})$ , $(^{50}\text{Ti}, \text{n})$ , $(^{54}\text{Cr}, \text{n})$ , $(^{58}\text{Fe}, \text{n})$ , $(^{62}\text{Ni}, \text{n})$ , $(^{64}\text{Ni}, \text{n})$ , $(^{70}\text{Zn}, \text{n})$ , $\text{E}$ not given; analyzed $\sigma$ . $^{233}\text{U}$ , $^{237}\text{Np}$ , $^{244}\text{Pu}$ , $^{248}\text{Cm}$ , $^{249}\text{Cf}$ ( $^{22}\text{Ne}$ , 4n), $(^{26}\text{Mg}, 4\text{n})$ , $(^{36}\text{S}, 5\text{n})$ , $(^{48}\text{Ca}, 4\text{n})$ , $\text{E}$ not given; measured $\text{E}\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c
$^{266}\text{Mt}$	20070G05	NUCLEAR REACTIONS $^{208}\text{Pb}$ , $^{209}\text{Bi}(^{48}\text{Ca}, \text{n})$ , $(^{50}\text{Ti}, \text{n})$ , $(^{54}\text{Cr}, \text{n})$ , $(^{58}\text{Fe}, \text{n})$ , $(^{62}\text{Ni}, \text{n})$ , $(^{64}\text{Ni}, \text{n})$ , $(^{70}\text{Zn}, \text{n})$ , $\text{E}$ not given; analyzed $\sigma$ . $^{233}\text{U}$ , $^{237}\text{Np}$ , $^{244}\text{Pu}$ , $^{248}\text{Cm}$ , $^{249}\text{Cf}$ ( $^{22}\text{Ne}$ , 4n), $(^{26}\text{Mg}, 4\text{n})$ , $(^{36}\text{S}, 5\text{n})$ , $(^{48}\text{Ca}, 4\text{n})$ , $\text{E}$ not given; measured $\text{E}\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

### **A=267**

$^{267}\text{Rf}$	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}112$ , $^{280,281,282,283,284}113$ , $^{286,287,288,289}114$ , $^{287,288}115$ , $^{290,291,292,293}116$ , $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}112$ , $^{286,288}114(\text{SF})$ ; measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
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### **A=267 (*continued*)**

<sup>267</sup> Db	20070G05	RADIOACTIVITY <sup>266,267,268</sup> Db, <sup>269,271</sup> Sg, <sup>270,272</sup> Bh, <sup>275</sup> Hs, <sup>274,275,276</sup> Mt, <sup>279,281</sup> Ds, <sup>278,279,280</sup> Rg, <sup>283,284,285</sup> 112, <sup>280,281,282,283,284</sup> 113, <sup>286,287,288,289</sup> 114, <sup>287,288</sup> 115, <sup>290,291,292,293</sup> 116, <sup>294</sup> 118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . <sup>267</sup> Rf, <sup>271</sup> Sg, <sup>279,281</sup> Ds, <sup>282,283,284,285</sup> 112, <sup>286,288</sup> 114(SF); measured T <sub>1/2</sub> . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
<sup>267</sup> Hs	20070G05	NUCLEAR REACTIONS <sup>208</sup> Pb, <sup>209</sup> Bi( <sup>48</sup> Ca, n), ( <sup>50</sup> Ti, n), ( <sup>54</sup> Cr, n), ( <sup>58</sup> Fe, n), ( <sup>62</sup> Ni, n), ( <sup>64</sup> Ni, n), ( <sup>70</sup> Zn, n), E not given; analyzed $\sigma$ . <sup>233</sup> U, <sup>237</sup> Np, <sup>244</sup> Pu, <sup>248</sup> Cm, <sup>249</sup> Cf( <sup>22</sup> Ne, 4n), ( <sup>26</sup> Mg, 4n), ( <sup>36</sup> S, 5n), ( <sup>48</sup> Ca, 4n), E not given; measured E $\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

### **A=268**

<sup>268</sup> Db	20070G05	RADIOACTIVITY <sup>266,267,268</sup> Db, <sup>269,271</sup> Sg, <sup>270,272</sup> Bh, <sup>275</sup> Hs, <sup>274,275,276</sup> Mt, <sup>279,281</sup> Ds, <sup>278,279,280</sup> Rg, <sup>283,284,285</sup> 112, <sup>280,281,282,283,284</sup> 113, <sup>286,287,288,289</sup> 114, <sup>287,288</sup> 115, <sup>290,291,292,293</sup> 116, <sup>294</sup> 118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . <sup>267</sup> Rf, <sup>271</sup> Sg, <sup>279,281</sup> Ds, <sup>282,283,284,285</sup> 112, <sup>286,288</sup> 114(SF); measured T <sub>1/2</sub> . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
	2007ST18	RADIOACTIVITY <sup>268</sup> Db(SF); <sup>272</sup> Bh, <sup>276</sup> Mt, <sup>280</sup> Rg, <sup>284</sup> 113, <sup>288</sup> 115( $\alpha$ ); measured E $\alpha$ , E(fragment), T <sub>1/2</sub> . JOUR NUPAB 787 388c
<sup>268</sup> Mt	20070G05	NUCLEAR REACTIONS <sup>208</sup> Pb, <sup>209</sup> Bi( <sup>48</sup> Ca, n), ( <sup>50</sup> Ti, n), ( <sup>54</sup> Cr, n), ( <sup>58</sup> Fe, n), ( <sup>62</sup> Ni, n), ( <sup>64</sup> Ni, n), ( <sup>70</sup> Zn, n), E not given; analyzed $\sigma$ . <sup>233</sup> U, <sup>237</sup> Np, <sup>244</sup> Pu, <sup>248</sup> Cm, <sup>249</sup> Cf( <sup>22</sup> Ne, 4n), ( <sup>26</sup> Mg, 4n), ( <sup>36</sup> S, 5n), ( <sup>48</sup> Ca, 4n), E not given; measured E $\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

### **A=269**

<sup>269</sup> Sg	20070G05	RADIOACTIVITY <sup>266,267,268</sup> Db, <sup>269,271</sup> Sg, <sup>270,272</sup> Bh, <sup>275</sup> Hs, <sup>274,275,276</sup> Mt, <sup>279,281</sup> Ds, <sup>278,279,280</sup> Rg, <sup>283,284,285</sup> 112, <sup>280,281,282,283,284</sup> 113, <sup>286,287,288,289</sup> 114, <sup>287,288</sup> 115, <sup>290,291,292,293</sup> 116, <sup>294</sup> 118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . <sup>267</sup> Rf, <sup>271</sup> Sg, <sup>279,281</sup> Ds, <sup>282,283,284,285</sup> 112, <sup>286,288</sup> 114(SF); measured T <sub>1/2</sub> . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
<sup>269</sup> Ds	20070G05	NUCLEAR REACTIONS <sup>208</sup> Pb, <sup>209</sup> Bi( <sup>48</sup> Ca, n), ( <sup>50</sup> Ti, n), ( <sup>54</sup> Cr, n), ( <sup>58</sup> Fe, n), ( <sup>62</sup> Ni, n), ( <sup>64</sup> Ni, n), ( <sup>70</sup> Zn, n), E not given; analyzed $\sigma$ . <sup>233</sup> U, <sup>237</sup> Np, <sup>244</sup> Pu, <sup>248</sup> Cm, <sup>249</sup> Cf( <sup>22</sup> Ne, 4n), ( <sup>26</sup> Mg, 4n), ( <sup>36</sup> S, 5n), ( <sup>48</sup> Ca, 4n), E not given; measured E $\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

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## KEYNUMBERS AND KEYWORDS

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### **A=270**

$^{270}\text{Bh}$	20070G05	RADIOACTIVITY 266,267,268Db, 269,271Sg, 270,272Bh, 275Hs, 274,275,276Mt, 279,281Ds, 278,279,280Rg, 283,284,285112, 280,281,282,283,284113, 286,287,288,289114, 287,288115, 290,291,292,293116, 294118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . 267Rf, 271Sg, 279,281Ds, 282,283,284,285112, 286,288114(SF); measured T <sub>1/2</sub> . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
$^{270}\text{Hs}$	20070G05	NUCLEAR REACTIONS 208Pb, 209Bi( $^{48}\text{Ca}$ , n), ( $^{50}\text{Ti}$ , n), ( $^{54}\text{Cr}$ , n), ( $^{58}\text{Fe}$ , n), ( $^{62}\text{Ni}$ , n), ( $^{64}\text{Ni}$ , n), ( $^{70}\text{Zn}$ , n), E not given; analyzed $\sigma$ . 233U, 237Np, 244Pu, 248Cm, 249Cf( $^{22}\text{Ne}$ , 4n), ( $^{26}\text{Mg}$ , 4n), ( $^{36}\text{S}$ , 5n), ( $^{48}\text{Ca}$ , 4n), E not given; measured E $\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c
$^{270}\text{Rg}$	20070G05	NUCLEAR REACTIONS 208Pb, 209Bi( $^{48}\text{Ca}$ , n), ( $^{50}\text{Ti}$ , n), ( $^{54}\text{Cr}$ , n), ( $^{58}\text{Fe}$ , n), ( $^{62}\text{Ni}$ , n), ( $^{64}\text{Ni}$ , n), ( $^{70}\text{Zn}$ , n), E not given; analyzed $\sigma$ . 233U, 237Np, 244Pu, 248Cm, 249Cf( $^{22}\text{Ne}$ , 4n), ( $^{26}\text{Mg}$ , 4n), ( $^{36}\text{S}$ , 5n), ( $^{48}\text{Ca}$ , 4n), E not given; measured E $\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

### **A=271**

$^{271}\text{Sg}$	20070G05	RADIOACTIVITY 266,267,268Db, 269,271Sg, 270,272Bh, 275Hs, 274,275,276Mt, 279,281Ds, 278,279,280Rg, 283,284,285112, 280,281,282,283,284113, 286,287,288,289114, 287,288115, 290,291,292,293116, 294118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . 267Rf, 271Sg, 279,281Ds, 282,283,284,285112, 286,288114(SF); measured T <sub>1/2</sub> . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
$^{271}\text{Bh}$	20070G05	RADIOACTIVITY 266,267,268Db, 269,271Sg, 270,272Bh, 275Hs, 274,275,276Mt, 279,281Ds, 278,279,280Rg, 283,284,285112, 280,281,282,283,284113, 286,287,288,289114, 287,288115, 290,291,292,293116, 294118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . 267Rf, 271Sg, 279,281Ds, 282,283,284,285112, 286,288114(SF); measured T <sub>1/2</sub> . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
$^{271}\text{Ds}$	20070G05	NUCLEAR REACTIONS 208Pb, 209Bi( $^{48}\text{Ca}$ , n), ( $^{50}\text{Ti}$ , n), ( $^{54}\text{Cr}$ , n), ( $^{58}\text{Fe}$ , n), ( $^{62}\text{Ni}$ , n), ( $^{64}\text{Ni}$ , n), ( $^{70}\text{Zn}$ , n), E not given; analyzed $\sigma$ . 233U, 237Np, 244Pu, 248Cm, 249Cf( $^{22}\text{Ne}$ , 4n), ( $^{26}\text{Mg}$ , 4n), ( $^{36}\text{S}$ , 5n), ( $^{48}\text{Ca}$ , 4n), E not given; measured E $\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

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## KEYNUMBERS AND KEYWORDS

### A=272

$^{272}\text{Bh}$	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}112$ , $^{280,281,282,283,284}113$ , $^{286,287,288,289}114$ , $^{287,288}115$ , $^{290,291,292,293}116$ , $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}112$ , $^{286,288}114(\text{SF})$ ; measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
	2007ST18	RADIOACTIVITY $^{268}\text{Db}(\text{SF})$ ; $^{272}\text{Bh}$ , $^{276}\text{Mt}$ , $^{280}\text{Rg}$ , $^{284}113$ , $^{288}115(\alpha)$ ; measured $\text{E}\alpha$ , $\text{E}(\text{fragment})$ , $T_{1/2}$ . JOUR NUPAB 787 388c
$^{272}\text{Rg}$	20070G05	NUCLEAR REACTIONS $^{208}\text{Pb}$ , $^{209}\text{Bi}(\text{^{48}\text{Ca}, n})$ , $(^{50}\text{Ti}, \text{n})$ , $(^{54}\text{Cr}, \text{n})$ , $(^{58}\text{Fe}, \text{n})$ , $(^{62}\text{Ni}, \text{n})$ , $(^{64}\text{Ni}, \text{n})$ , $(^{70}\text{Zn}, \text{n})$ , $\text{E}$ not given; analyzed $\sigma$ . $^{233}\text{U}$ , $^{237}\text{Np}$ , $^{244}\text{Pu}$ , $^{248}\text{Cm}$ , $^{249}\text{Cf}(\text{^{22}\text{Ne}, 4n})$ , $(^{26}\text{Mg}, 4\text{n})$ , $(^{36}\text{S}, 5\text{n})$ , $(^{48}\text{Ca}, 4\text{n})$ , $\text{E}$ not given; measured $\text{E}\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

### A=273

No references found

### A=274

$^{274}\text{Mt}$	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}112$ , $^{280,281,282,283,284}113$ , $^{286,287,288,289}114$ , $^{287,288}115$ , $^{290,291,292,293}116$ , $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}112$ , $^{286,288}114(\text{SF})$ ; measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
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### A=275

$^{275}\text{Hs}$	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}112$ , $^{280,281,282,283,284}113$ , $^{286,287,288,289}114$ , $^{287,288}115$ , $^{290,291,292,293}116$ , $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}112$ , $^{286,288}114(\text{SF})$ ; measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
$^{275}\text{Mt}$	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}112$ , $^{280,281,282,283,284}113$ , $^{286,287,288,289}114$ , $^{287,288}115$ , $^{290,291,292,293}116$ , $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}112$ , $^{286,288}114(\text{SF})$ ; measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c

## KEYNUMBERS AND KEYWORDS

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### **A=275 (*continued*)**

<sup>275</sup>Ds      20070G05      NUCLEAR REACTIONS <sup>208</sup>Pb, <sup>209</sup>Bi(<sup>48</sup>Ca, n), (<sup>50</sup>Ti, n), (<sup>54</sup>Cr, n), (<sup>58</sup>Fe, n), (<sup>62</sup>Ni, n), (<sup>64</sup>Ni, n), (<sup>70</sup>Zn, n), E not given; analyzed  $\sigma$ . <sup>233</sup>U, <sup>237</sup>Np, <sup>244</sup>Pu, <sup>248</sup>Cm, <sup>249</sup>Cf(<sup>22</sup>Ne, 4n), (<sup>26</sup>Mg, 4n), (<sup>36</sup>S, 5n), (<sup>48</sup>Ca, 4n), E not given; measured E $\alpha$ ,  $\alpha\alpha$ -coin following residual nucleus decay; analyzed  $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

### **A=276**

<sup>276</sup>Mt      20070G05      RADIOACTIVITY <sup>266,267,268</sup>Db, <sup>269,271</sup>Sg, <sup>270,272</sup>Bh, <sup>275</sup>Hs, <sup>274,275,276</sup>Mt, <sup>279,281</sup>Ds, <sup>278,279,280</sup>Rg, <sup>283,284,285</sup>112, <sup>280,281,282,283,284</sup>113, <sup>286,287,288,289</sup>114, <sup>287,288</sup>115, <sup>290,291,292,293</sup>116, <sup>294</sup>118( $\alpha$ ); measured E $\alpha$ , T<sub>1/2</sub>. <sup>267</sup>Rf, <sup>271</sup>Sg, <sup>279,281</sup>Ds, <sup>282,283,284,285</sup>112, <sup>286,288</sup>114(SF); measured T<sub>1/2</sub>. Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c

2007ST18           RADIOACTIVITY <sup>268</sup>Db(SF); <sup>272</sup>Bh, <sup>276</sup>Mt, <sup>280</sup>Rg, <sup>284</sup>113, <sup>288</sup>115( $\alpha$ ); measured E $\alpha$ , E(fragment), T<sub>1/2</sub>. JOUR NUPAB 787 388c

<sup>276</sup>Rg      20070G05      RADIOACTIVITY <sup>266,267,268</sup>Db, <sup>269,271</sup>Sg, <sup>270,272</sup>Bh, <sup>275</sup>Hs, <sup>274,275,276</sup>Mt, <sup>279,281</sup>Ds, <sup>278,279,280</sup>Rg, <sup>283,284,285</sup>112, <sup>280,281,282,283,284</sup>113, <sup>286,287,288,289</sup>114, <sup>287,288</sup>115, <sup>290,291,292,293</sup>116, <sup>294</sup>118( $\alpha$ ); measured E $\alpha$ , T<sub>1/2</sub>. <sup>267</sup>Rf, <sup>271</sup>Sg, <sup>279,281</sup>Ds, <sup>282,283,284,285</sup>112, <sup>286,288</sup>114(SF); measured T<sub>1/2</sub>. Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c

### **A=277**

<sup>277</sup>Hs      20070G05      RADIOACTIVITY <sup>266,267,268</sup>Db, <sup>269,271</sup>Sg, <sup>270,272</sup>Bh, <sup>275</sup>Hs, <sup>274,275,276</sup>Mt, <sup>279,281</sup>Ds, <sup>278,279,280</sup>Rg, <sup>283,284,285</sup>112, <sup>280,281,282,283,284</sup>113, <sup>286,287,288,289</sup>114, <sup>287,288</sup>115, <sup>290,291,292,293</sup>116, <sup>294</sup>118( $\alpha$ ); measured E $\alpha$ , T<sub>1/2</sub>. <sup>267</sup>Rf, <sup>271</sup>Sg, <sup>279,281</sup>Ds, <sup>282,283,284,285</sup>112, <sup>286,288</sup>114(SF); measured T<sub>1/2</sub>. Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c

<sup>277</sup>Rg      20070G05      RADIOACTIVITY <sup>266,267,268</sup>Db, <sup>269,271</sup>Sg, <sup>270,272</sup>Bh, <sup>275</sup>Hs, <sup>274,275,276</sup>Mt, <sup>279,281</sup>Ds, <sup>278,279,280</sup>Rg, <sup>283,284,285</sup>112, <sup>280,281,282,283,284</sup>113, <sup>286,287,288,289</sup>114, <sup>287,288</sup>115, <sup>290,291,292,293</sup>116, <sup>294</sup>118( $\alpha$ ); measured E $\alpha$ , T<sub>1/2</sub>. <sup>267</sup>Rf, <sup>271</sup>Sg, <sup>279,281</sup>Ds, <sup>282,283,284,285</sup>112, <sup>286,288</sup>114(SF); measured T<sub>1/2</sub>. Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c

<sup>277</sup>112      20070G05      NUCLEAR REACTIONS <sup>208</sup>Pb, <sup>209</sup>Bi(<sup>48</sup>Ca, n), (<sup>50</sup>Ti, n), (<sup>54</sup>Cr, n), (<sup>58</sup>Fe, n), (<sup>62</sup>Ni, n), (<sup>64</sup>Ni, n), (<sup>70</sup>Zn, n), E not given; analyzed  $\sigma$ . <sup>233</sup>U, <sup>237</sup>Np, <sup>244</sup>Pu, <sup>248</sup>Cm, <sup>249</sup>Cf(<sup>22</sup>Ne, 4n), (<sup>26</sup>Mg, 4n), (<sup>36</sup>S, 5n), (<sup>48</sup>Ca, 4n), E not given; measured E $\alpha$ ,  $\alpha\alpha$ -coin following residual nucleus decay; analyzed  $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

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## KEYNUMBERS AND KEYWORDS

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### **A=278**

$^{278}\text{Rg}$	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}112$ , $^{280,281,282,283,284}113$ , $^{286,287,288,289}114$ , $^{287,288}115$ , $^{290,291,292,293}116$ , $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}112$ , $^{286,288}114(\text{SF})$ ; measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
$^{278}113$	20070G05	NUCLEAR REACTIONS $^{208}\text{Pb}$ , $^{209}\text{Bi}(^{48}\text{Ca}, \text{n})$ , $(^{50}\text{Ti}, \text{n})$ , $(^{54}\text{Cr}, \text{n})$ , $(^{58}\text{Fe}, \text{n})$ , $(^{62}\text{Ni}, \text{n})$ , $(^{64}\text{Ni}, \text{n})$ , $(^{70}\text{Zn}, \text{n})$ , E not given; analyzed $\sigma$ . $^{233}\text{U}$ , $^{237}\text{Np}$ , $^{244}\text{Pu}$ , $^{248}\text{Cm}$ , $^{249}\text{Cf}(^{22}\text{Ne}, 4\text{n})$ , $(^{26}\text{Mg}, 4\text{n})$ , $(^{36}\text{S}, 5\text{n})$ , $(^{48}\text{Ca}, 4\text{n})$ , E not given; measured $\text{E}\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

### **A=279**

$^{279}\text{Ds}$	2007EI02	RADIOACTIVITY $^{283}112(\alpha)$ ; $^{287}114(\alpha)$ , (SF); measured $\text{E}\alpha$ , E(fragment), $T_{1/2}$ . JOUR NUPAB 787 373c
	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}112$ , $^{280,281,282,283,284}113$ , $^{286,287,288,289}114$ , $^{287,288}115$ , $^{290,291,292,293}116$ , $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}112$ , $^{286,288}114(\text{SF})$ ; measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
$^{279}\text{Rg}$	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}112$ , $^{280,281,282,283,284}113$ , $^{286,287,288,289}114$ , $^{287,288}115$ , $^{290,291,292,293}116$ , $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}112$ , $^{286,288}114(\text{SF})$ ; measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
$^{279}112$	20070G05	NUCLEAR REACTIONS $^{208}\text{Pb}$ , $^{209}\text{Bi}(^{48}\text{Ca}, \text{n})$ , $(^{50}\text{Ti}, \text{n})$ , $(^{54}\text{Cr}, \text{n})$ , $(^{58}\text{Fe}, \text{n})$ , $(^{62}\text{Ni}, \text{n})$ , $(^{64}\text{Ni}, \text{n})$ , $(^{70}\text{Zn}, \text{n})$ , E not given; analyzed $\sigma$ . $^{233}\text{U}$ , $^{237}\text{Np}$ , $^{244}\text{Pu}$ , $^{248}\text{Cm}$ , $^{249}\text{Cf}(^{22}\text{Ne}, 4\text{n})$ , $(^{26}\text{Mg}, 4\text{n})$ , $(^{36}\text{S}, 5\text{n})$ , $(^{48}\text{Ca}, 4\text{n})$ , E not given; measured $\text{E}\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

### **A=280**

$^{280}\text{Ds}$	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}112$ , $^{280,281,282,283,284}113$ , $^{286,287,288,289}114$ , $^{287,288}115$ , $^{290,291,292,293}116$ , $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}112$ , $^{286,288}114(\text{SF})$ ; measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
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**KEYNUMBERS AND KEYWORDS**

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**A=280 (*continued*)**

<sup>280</sup> Rg	20070G05	RADIOACTIVITY <sup>266,267,268</sup> Db, <sup>269,271</sup> Sg, <sup>270,272</sup> Bh, <sup>275</sup> Hs, <sup>274,275,276</sup> Mt, <sup>279,281</sup> Ds, <sup>278,279,280</sup> Rg, <sup>283,284,285</sup> 112, <sup>280,281,282,283,284</sup> 113, <sup>286,287,288,289</sup> 114, <sup>287,288</sup> 115, <sup>290,291,292,293</sup> 116, <sup>294</sup> 118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . <sup>267</sup> Rf, <sup>271</sup> Sg, <sup>279,281</sup> Ds, <sup>282,283,284,285</sup> 112, <sup>286,288</sup> 114(SF); measured T <sub>1/2</sub> . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
	2007ST18	RADIOACTIVITY <sup>268</sup> Db(SF); <sup>272</sup> Bh, <sup>276</sup> Mt, <sup>280</sup> Rg, <sup>284</sup> 113, <sup>288</sup> 115( $\alpha$ ); measured E $\alpha$ , E(fragment), T <sub>1/2</sub> . JOUR NUPAB 787 388c
<sup>280</sup> 113	20070G05	RADIOACTIVITY <sup>266,267,268</sup> Db, <sup>269,271</sup> Sg, <sup>270,272</sup> Bh, <sup>275</sup> Hs, <sup>274,275,276</sup> Mt, <sup>279,281</sup> Ds, <sup>278,279,280</sup> Rg, <sup>283,284,285</sup> 112, <sup>280,281,282,283,284</sup> 113, <sup>286,287,288,289</sup> 114, <sup>287,288</sup> 115, <sup>290,291,292,293</sup> 116, <sup>294</sup> 118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . <sup>267</sup> Rf, <sup>271</sup> Sg, <sup>279,281</sup> Ds, <sup>282,283,284,285</sup> 112, <sup>286,288</sup> 114(SF); measured T <sub>1/2</sub> . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
<sup>280</sup> 114	20070G05	NUCLEAR REACTIONS <sup>208</sup> Pb, <sup>209</sup> Bi( <sup>48</sup> Ca, n), ( <sup>50</sup> Ti, n), ( <sup>54</sup> Cr, n), ( <sup>58</sup> Fe, n), ( <sup>62</sup> Ni, n), ( <sup>64</sup> Ni, n), ( <sup>70</sup> Zn, n), E not given; analyzed $\sigma$ . <sup>233</sup> U, <sup>237</sup> Np, <sup>244</sup> Pu, <sup>248</sup> Cm, <sup>249</sup> Cf( <sup>22</sup> Ne, 4n), ( <sup>26</sup> Mg, 4n), ( <sup>36</sup> S, 5n), ( <sup>48</sup> Ca, 4n), E not given; measured E $\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

**A=281**

<sup>281</sup> Ds	20070G05	RADIOACTIVITY <sup>266,267,268</sup> Db, <sup>269,271</sup> Sg, <sup>270,272</sup> Bh, <sup>275</sup> Hs, <sup>274,275,276</sup> Mt, <sup>279,281</sup> Ds, <sup>278,279,280</sup> Rg, <sup>283,284,285</sup> 112, <sup>280,281,282,283,284</sup> 113, <sup>286,287,288,289</sup> 114, <sup>287,288</sup> 115, <sup>290,291,292,293</sup> 116, <sup>294</sup> 118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . <sup>267</sup> Rf, <sup>271</sup> Sg, <sup>279,281</sup> Ds, <sup>282,283,284,285</sup> 112, <sup>286,288</sup> 114(SF); measured T <sub>1/2</sub> . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
<sup>281</sup> 113	20070G05	NUCLEAR REACTIONS <sup>208</sup> Pb, <sup>209</sup> Bi( <sup>48</sup> Ca, n), ( <sup>50</sup> Ti, n), ( <sup>54</sup> Cr, n), ( <sup>58</sup> Fe, n), ( <sup>62</sup> Ni, n), ( <sup>64</sup> Ni, n), ( <sup>70</sup> Zn, n), E not given; analyzed $\sigma$ . <sup>233</sup> U, <sup>237</sup> Np, <sup>244</sup> Pu, <sup>248</sup> Cm, <sup>249</sup> Cf( <sup>22</sup> Ne, 4n), ( <sup>26</sup> Mg, 4n), ( <sup>36</sup> S, 5n), ( <sup>48</sup> Ca, 4n), E not given; measured E $\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c
	20070G05	RADIOACTIVITY <sup>266,267,268</sup> Db, <sup>269,271</sup> Sg, <sup>270,272</sup> Bh, <sup>275</sup> Hs, <sup>274,275,276</sup> Mt, <sup>279,281</sup> Ds, <sup>278,279,280</sup> Rg, <sup>283,284,285</sup> 112, <sup>280,281,282,283,284</sup> 113, <sup>286,287,288,289</sup> 114, <sup>287,288</sup> 115, <sup>290,291,292,293</sup> 116, <sup>294</sup> 118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . <sup>267</sup> Rf, <sup>271</sup> Sg, <sup>279,281</sup> Ds, <sup>282,283,284,285</sup> 112, <sup>286,288</sup> 114(SF); measured T <sub>1/2</sub> . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c

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## KEYNUMBERS AND KEYWORDS

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### **A=282**

<sup>282</sup> 112	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}$ 112, 280,281,282,283,284113, 286,287,288,289114, 287,288115, 290,291,292,293116, $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}$ 112, 286,288114(SF); measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
<sup>282</sup> 113	20070G02	NUCLEAR REACTIONS $^{237}\text{Np}(^{48}\text{Ca}, 3\text{n})^{282}113$ , $E=244$ MeV; measured $\text{E}\alpha$ , production cross section and $T_{1/2}$ . JOUR PRVCA 76 011601
	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}$ 112, 280,281,282,283,284113, 286,287,288,289114, 287,288115, 290,291,292,293116, $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}$ 112, 286,288114(SF); measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c

### **A=283**

<sup>283</sup> 112	2007EI02	NUCLEAR REACTIONS $^{238}\text{U}(^{48}\text{Ca}, 3\text{n})$ , $^{242}\text{Pu}(^{48}\text{Ca}, 3\text{n})$ , $E=237$ MeV; measured super heavy element yield, $\text{E}\alpha$ , $I\alpha$ ; analyzed production $\sigma$ . JOUR NUPAB 787 373c
	2007EI02	RADIOACTIVITY $^{283}112(\alpha)$ ; $^{287}114(\alpha)$ , (SF); measured $\text{E}\alpha$ , $E(\text{fragment})$ , $T_{1/2}$ . JOUR NUPAB 787 373c
	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}$ 112, 280,281,282,283,284113, 286,287,288,289114, 287,288115, 290,291,292,293116, $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}$ 112, 286,288114(SF); measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
	2007ST18	NUCLEAR REACTIONS $^{238}\text{U}(^{48}\text{Ca}, 3\text{n})$ , $E=247$ MeV; measured super heavy element yield, $\text{E}\alpha$ , $I\alpha$ ; analyzed production $\sigma$ . Detailed chemical analysis procedure given. JOUR NUPAB 787 388c
<sup>283</sup> 113	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}$ 112, 280,281,282,283,284113, 286,287,288,289114, 287,288115, 290,291,292,293116, $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}$ 112, 286,288114(SF); measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c

### **A=284**

<sup>284</sup> 112	20070G05	RADIOACTIVITY $^{266,267,268}\text{Db}$ , $^{269,271}\text{Sg}$ , $^{270,272}\text{Bh}$ , $^{275}\text{Hs}$ , $^{274,275,276}\text{Mt}$ , $^{279,281}\text{Ds}$ , $^{278,279,280}\text{Rg}$ , $^{283,284,285}$ 112, 280,281,282,283,284113, 286,287,288,289114, 287,288115, 290,291,292,293116, $^{294}118(\alpha)$ ; measured $\text{E}\alpha$ , $T_{1/2}$ . $^{267}\text{Rf}$ , $^{271}\text{Sg}$ , $^{279,281}\text{Ds}$ , $^{282,283,284,285}$ 112, 286,288114(SF); measured $T_{1/2}$ . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
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### **A=284 (*continued*)**

<sup>284</sup> 113	20070G05	RADIOACTIVITY 266,267,268Db, 269,271Sg, 270,272Bh, 275Hs, 274,275,276Mt, 279,281Ds, 278,279,280Rg, 283,284,285112, 280,281,282,283,284113, 286,287,288,289114, 287,288115, 290,291,292,293116, 294118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . 267Rf, 271Sg, 279,281Ds, 282,283,284,285112, 286,288114(SF); measured T <sub>1/2</sub> . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
	2007ST18	RADIOACTIVITY 268Db(SF); 272Bh, 276Mt, 280Rg, 284113, 288115( $\alpha$ ); measured E $\alpha$ , E(fragment), T <sub>1/2</sub> . JOUR NUPAB 787 388c

### **A=285**

<sup>285</sup> 112	20070G05	RADIOACTIVITY 266,267,268Db, 269,271Sg, 270,272Bh, 275Hs, 274,275,276Mt, 279,281Ds, 278,279,280Rg, 283,284,285112, 280,281,282,283,284113, 286,287,288,289114, 287,288115, 290,291,292,293116, 294118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . 267Rf, 271Sg, 279,281Ds, 282,283,284,285112, 286,288114(SF); measured T <sub>1/2</sub> . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
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### **A=286**

<sup>286</sup> 114	20070G05	RADIOACTIVITY 266,267,268Db, 269,271Sg, 270,272Bh, 275Hs, 274,275,276Mt, 279,281Ds, 278,279,280Rg, 283,284,285112, 280,281,282,283,284113, 286,287,288,289114, 287,288115, 290,291,292,293116, 294118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . 267Rf, 271Sg, 279,281Ds, 282,283,284,285112, 286,288114(SF); measured T <sub>1/2</sub> . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
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### **A=287**

<sup>287</sup> 114	2007EI02	NUCLEAR REACTIONS $^{238}\text{U}(^{48}\text{Ca}, 3\text{n})$ , $^{242}\text{Pu}(^{48}\text{Ca}, 3\text{n})$ , E=237 MeV; measured super heavy element yield, E $\alpha$ , I $\alpha$ ; analyzed production $\sigma$ . JOUR NUPAB 787 373c
	2007EI02	RADIOACTIVITY $^{283}112(\alpha)$ ; $^{287}114(\alpha)$ , (SF); measured E $\alpha$ , E(fragment), T <sub>1/2</sub> . JOUR NUPAB 787 373c
	20070G05	RADIOACTIVITY 266,267,268Db, 269,271Sg, 270,272Bh, 275Hs, 274,275,276Mt, 279,281Ds, 278,279,280Rg, 283,284,285112, 280,281,282,283,284113, 286,287,288,289114, 287,288115, 290,291,292,293116, 294118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . 267Rf, 271Sg, 279,281Ds, 282,283,284,285112, 286,288114(SF); measured T <sub>1/2</sub> . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c
<sup>287</sup> 115	20070G05	RADIOACTIVITY 266,267,268Db, 269,271Sg, 270,272Bh, 275Hs, 274,275,276Mt, 279,281Ds, 278,279,280Rg, 283,284,285112, 280,281,282,283,284113, 286,287,288,289114, 287,288115, 290,291,292,293116, 294118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . 267Rf, 271Sg, 279,281Ds, 282,283,284,285112, 286,288114(SF); measured T <sub>1/2</sub> . Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c

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## KEYNUMBERS AND KEYWORDS

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### **A=288**

<sup>288</sup> 114	20070G05	NUCLEAR REACTIONS <sup>208</sup> Pb, <sup>209</sup> Bi( <sup>48</sup> Ca, n), ( <sup>50</sup> Ti, n), ( <sup>54</sup> Cr, n), ( <sup>58</sup> Fe, n), ( <sup>62</sup> Ni, n), ( <sup>64</sup> Ni, n), ( <sup>70</sup> Zn, n), E not given; analyzed $\sigma$ . <sup>233</sup> U, <sup>237</sup> Np, <sup>244</sup> Pu, <sup>248</sup> Cm, <sup>249</sup> Cf( <sup>22</sup> Ne, 4n), ( <sup>26</sup> Mg, 4n), ( <sup>36</sup> S, 5n), ( <sup>48</sup> Ca, 4n), E not given; measured E $\alpha$ , $\alpha\alpha$ -coin following residual nucleus decay; analyzed $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c
	20070G05	RADIOACTIVITY <sup>266,267,268</sup> Db, <sup>269,271</sup> Sg, <sup>270,272</sup> Bh, <sup>275</sup> Hs, <sup>274,275,276</sup> Mt, <sup>279,281</sup> Ds, <sup>278,279,280</sup> Rg, <sup>283,284,285</sup> 112, <sup>280,281,282,283,284</sup> 113, <sup>286,287,288,289</sup> 114, <sup>287,288</sup> 115, <sup>290,291,292,293</sup> 116, <sup>294</sup> 118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . <sup>267</sup> Rf, <sup>271</sup> Sg, <sup>279,281</sup> Ds, <sup>282,283,284,285</sup> 112, <sup>286,288</sup> 114(SF); measured T <sub>1/2</sub> . Comparison with model predictions.
<sup>288</sup> 115	20070G05	Comparison with other data. JOUR NUPAB 787 343c RADIOACTIVITY <sup>266,267,268</sup> Db, <sup>269,271</sup> Sg, <sup>270,272</sup> Bh, <sup>275</sup> Hs, <sup>274,275,276</sup> Mt, <sup>279,281</sup> Ds, <sup>278,279,280</sup> Rg, <sup>283,284,285</sup> 112, <sup>280,281,282,283,284</sup> 113, <sup>286,287,288,289</sup> 114, <sup>287,288</sup> 115, <sup>290,291,292,293</sup> 116, <sup>294</sup> 118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . <sup>267</sup> Rf, <sup>271</sup> Sg, <sup>279,281</sup> Ds, <sup>282,283,284,285</sup> 112, <sup>286,288</sup> 114(SF); measured T <sub>1/2</sub> . Comparison with model predictions.
	2007ST18	Comparison with other data. JOUR NUPAB 787 343c RADIOACTIVITY <sup>268</sup> Db(SF); <sup>272</sup> Bh, <sup>276</sup> Mt, <sup>280</sup> Rg, <sup>284</sup> 113, <sup>288</sup> 115( $\alpha$ ); measured E $\alpha$ , E(fragment), T <sub>1/2</sub> . JOUR NUPAB 787 388c

### **A=289**

<sup>289</sup> 114	20070G05	RADIOACTIVITY <sup>266,267,268</sup> Db, <sup>269,271</sup> Sg, <sup>270,272</sup> Bh, <sup>275</sup> Hs, <sup>274,275,276</sup> Mt, <sup>279,281</sup> Ds, <sup>278,279,280</sup> Rg, <sup>283,284,285</sup> 112, <sup>280,281,282,283,284</sup> 113, <sup>286,287,288,289</sup> 114, <sup>287,288</sup> 115, <sup>290,291,292,293</sup> 116, <sup>294</sup> 118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . <sup>267</sup> Rf, <sup>271</sup> Sg, <sup>279,281</sup> Ds, <sup>282,283,284,285</sup> 112, <sup>286,288</sup> 114(SF); measured T <sub>1/2</sub> . Comparison with model predictions.
		Comparison with other data. JOUR NUPAB 787 343c

### **A=290**

<sup>290</sup> 116	20070G05	RADIOACTIVITY <sup>266,267,268</sup> Db, <sup>269,271</sup> Sg, <sup>270,272</sup> Bh, <sup>275</sup> Hs, <sup>274,275,276</sup> Mt, <sup>279,281</sup> Ds, <sup>278,279,280</sup> Rg, <sup>283,284,285</sup> 112, <sup>280,281,282,283,284</sup> 113, <sup>286,287,288,289</sup> 114, <sup>287,288</sup> 115, <sup>290,291,292,293</sup> 116, <sup>294</sup> 118( $\alpha$ ); measured E $\alpha$ , T <sub>1/2</sub> . <sup>267</sup> Rf, <sup>271</sup> Sg, <sup>279,281</sup> Ds, <sup>282,283,284,285</sup> 112, <sup>286,288</sup> 114(SF); measured T <sub>1/2</sub> . Comparison with model predictions.
		Comparison with other data. JOUR NUPAB 787 343c

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## KEYNUMBERS AND KEYWORDS

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### **A=291**

<sup>291</sup>116      20070G05      RADIOACTIVITY <sup>266,267,268</sup>Db, <sup>269,271</sup>Sg, <sup>270,272</sup>Bh, <sup>275</sup>Hs, <sup>274,275,276</sup>Mt, <sup>279,281</sup>Ds, <sup>278,279,280</sup>Rg, <sup>283,284,285</sup>112, <sup>280,281,282,283,284</sup>113, <sup>286,287,288,289</sup>114, <sup>287,288</sup>115, <sup>290,291,292,293</sup>116, <sup>294</sup>118( $\alpha$ ); measured E $\alpha$ , T<sub>1/2</sub>. <sup>267</sup>Rf, <sup>271</sup>Sg, <sup>279,281</sup>Ds, <sup>282,283,284,285</sup>112, <sup>286,288</sup>114(SF); measured T<sub>1/2</sub>. Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c

### **A=292**

<sup>292</sup>116      20070G05      NUCLEAR REACTIONS <sup>208</sup>Pb, <sup>209</sup>Bi(<sup>48</sup>Ca, n), (<sup>50</sup>Ti, n), (<sup>54</sup>Cr, n), (<sup>58</sup>Fe, n), (<sup>62</sup>Ni, n), (<sup>64</sup>Ni, n), (<sup>70</sup>Zn, n), E not given; analyzed  $\sigma$ . <sup>233</sup>U, <sup>237</sup>Np, <sup>244</sup>Pu, <sup>248</sup>Cm, <sup>249</sup>Cf(<sup>22</sup>Ne, 4n), (<sup>26</sup>Mg, 4n), (<sup>36</sup>S, 5n), (<sup>48</sup>Ca, 4n), E not given; measured E $\alpha$ ,  $\alpha\alpha$ -coin following residual nucleus decay; analyzed  $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c  
20070G05      RADIOACTIVITY <sup>266,267,268</sup>Db, <sup>269,271</sup>Sg, <sup>270,272</sup>Bh, <sup>275</sup>Hs, <sup>274,275,276</sup>Mt, <sup>279,281</sup>Ds, <sup>278,279,280</sup>Rg, <sup>283,284,285</sup>112, <sup>280,281,282,283,284</sup>113, <sup>286,287,288,289</sup>114, <sup>287,288</sup>115, <sup>290,291,292,293</sup>116, <sup>294</sup>118( $\alpha$ ); measured E $\alpha$ , T<sub>1/2</sub>. <sup>267</sup>Rf, <sup>271</sup>Sg, <sup>279,281</sup>Ds, <sup>282,283,284,285</sup>112, <sup>286,288</sup>114(SF); measured T<sub>1/2</sub>. Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c

### **A=293**

<sup>293</sup>116      20070G05      RADIOACTIVITY <sup>266,267,268</sup>Db, <sup>269,271</sup>Sg, <sup>270,272</sup>Bh, <sup>275</sup>Hs, <sup>274,275,276</sup>Mt, <sup>279,281</sup>Ds, <sup>278,279,280</sup>Rg, <sup>283,284,285</sup>112, <sup>280,281,282,283,284</sup>113, <sup>286,287,288,289</sup>114, <sup>287,288</sup>115, <sup>290,291,292,293</sup>116, <sup>294</sup>118( $\alpha$ ); measured E $\alpha$ , T<sub>1/2</sub>. <sup>267</sup>Rf, <sup>271</sup>Sg, <sup>279,281</sup>Ds, <sup>282,283,284,285</sup>112, <sup>286,288</sup>114(SF); measured T<sub>1/2</sub>. Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c  
<sup>293</sup>118      20070G05      NUCLEAR REACTIONS <sup>208</sup>Pb, <sup>209</sup>Bi(<sup>48</sup>Ca, n), (<sup>50</sup>Ti, n), (<sup>54</sup>Cr, n), (<sup>58</sup>Fe, n), (<sup>62</sup>Ni, n), (<sup>64</sup>Ni, n), (<sup>70</sup>Zn, n), E not given; analyzed  $\sigma$ . <sup>233</sup>U, <sup>237</sup>Np, <sup>244</sup>Pu, <sup>248</sup>Cm, <sup>249</sup>Cf(<sup>22</sup>Ne, 4n), (<sup>26</sup>Mg, 4n), (<sup>36</sup>S, 5n), (<sup>48</sup>Ca, 4n), E not given; measured E $\alpha$ ,  $\alpha\alpha$ -coin following residual nucleus decay; analyzed  $\sigma$ ; deduced reaction mechanism features, hindrance and survivability. Comparison with other data. JOUR NUPAB 787 343c

### **A=294**

<sup>294</sup>118      20070G05      RADIOACTIVITY <sup>266,267,268</sup>Db, <sup>269,271</sup>Sg, <sup>270,272</sup>Bh, <sup>275</sup>Hs, <sup>274,275,276</sup>Mt, <sup>279,281</sup>Ds, <sup>278,279,280</sup>Rg, <sup>283,284,285</sup>112, <sup>280,281,282,283,284</sup>113, <sup>286,287,288,289</sup>114, <sup>287,288</sup>115, <sup>290,291,292,293</sup>116, <sup>294</sup>118( $\alpha$ ); measured E $\alpha$ , T<sub>1/2</sub>. <sup>267</sup>Rf, <sup>271</sup>Sg, <sup>279,281</sup>Ds, <sup>282,283,284,285</sup>112, <sup>286,288</sup>114(SF); measured T<sub>1/2</sub>. Comparison with model predictions. Comparison with other data. JOUR NUPAB 787 343c

## References

- 2007ADZY J.Adam, D.Bogachenko, V.P.Garistov, O.K.Egorov, T.A.Islamov, V.V.Kolesnikov, V.I.Silaev, A.A.Solnyshkin - Contrib. 57th International Conf. "Nucleus-2007" on Problems on Fundamental Problems of Nuclear Physics, Atomic Power Engineering and Nuclear Technologies, Voronezh, p.106 (2007)  
0<sup>+</sup>-Excited State with the Energy of 681.3 keV in <sup>160</sup>Dy Nucleus
- 2007AG08 M.Agnello, and the FINUDA Collaboration - Phys.Lett. B 649, 25 (2007)  
Experimental study of the (K<sup>+</sup>, K<sup>0</sup>) interactions on <sup>7</sup>Li close to threshold
- 2007AG09 U.Agvaanluvsan, J.A.Becker, R.A.Macri, W.Parker, P.Wilk, C.Y.Wu, T.A.Bredeweg, E.Esch, R.C.Haight, J.M.O'Donnell, R.Reifarth, R.S.Rundberg, J.M.Schwantes, J.L.Ullmann, D.J.Vieira, J.B.Wilhelmy, J.M.Wouters, G.E.Mitchell, S.Sheets, F.Becvar, M.Krticka - Nucl.Instrum.Methods Phys.Res. B261, 934 (2007)  
Progress on the europium neutron capture study using DANCE
- 2007AG13 P.Agarwal, S.Kumar, S.Singh, R.K.Sinha, A.Dhal, S.Muralithar, R.P.Singh, N.Madhavan, R.Kumar, R.K.Bhowmik, S.S.Malik, S.C.Pancholi, L.Chaturvedi, H.C.Jain, A.K.Jain - Phys.Rev. C 76, 024321 (2007)  
Bandcrossing of magnetic rotation bands in <sup>137</sup>Pr
- 2007AGZV E.F.Aguilera, E.Martinez-Quiroz, T.L.Belyaeva, J.J.Kolata - Contrib. 57th International Conf. "Nucleus-2007" on Problems on Fundamental Problems of Nuclear Physics, Atomic Power Engineering and Nuclear Technologies, Voronezh, p.120 (2007)  
Elastic Scattering of <sup>8</sup>B + <sup>58</sup>Ni Near the Coulomb Barrier
- 2007AH05 I.Ahmad, F.G.Kondev, J.P.Greene, M.A.Kellett, A.L.Nichols - Nucl.Instrum.Methods Phys.Res. A579, 458 (2007)  
Measurement of the <sup>240</sup>Pu half-life
- 2007AL37 A.Al-Khatib, H.Hubel, P.Bringel, C.Engelhardt, A.Neusser-Neffgen, G.B.Hagemann, C.R.Hansen, B.Herskind, G.Sletten, A.Bracco, F.Camera, G.Benzoni, P.Fallon, R.M.Clark, M.P.Carpenter, R.V.F.Janssens, T.L.Khoo, P.Chowdhury, H.Amro - Acta Phys.Pol. B38, 1431 (2007)  
High-Spin Spectroscopy of <sup>124,125,126</sup>Xe
- 2007AL41 F.S.Al-Saleh, K.S.Al Mugren, A.Azzam - Appl.Radiat.Isot. 65, 1101 (2007)  
Excitation function measurements and integral yields estimation for <sup>nat</sup>Zn(p, x) reactions at low energies
- 2007AL42 E.Almaz, A.Cengiz, A.Tartar - Int.J.Mod.Phys. E16, 1733 (2007)  
Unfolding continuous photon spectrum emitted from <sup>90</sup>Sr-<sup>90</sup>Y in equilibrium

## REFERENCES

---

- 2007AN19 S.Antalic, A.N.Andreyev, D.Ackermann, L.Bianco, D.Cullen, I.Darby, S.Franchoo, S.Heinz, F.P.Hessberger, S.Hofmann, M.Huyse, B.Kindler, I.Kojouharov, A.-P.Leppanen, S.R.Lesher, B.Lommel, R.Mann, G.Munzenberg, K.Nishio, R.D.Page, J.Pakarinen, J.J.Ressler, S.Saro, B.Streicher, B.Sulignano, J.Thomson, P.Van Duppen, M.Venhart, D.Wiseman, R.Wyss - *Acta Phys.Pol.* B38, 1557 (2007) The New Isotopes in Po-Rn Region
- 2007AN21 K.Andgren, E.Ganioglu, B.Cederwall, R.Wyss, S.Bhattacharyya, J.R.Brown, G.de Angelis, G.de France, Zs.Dombradi, J.Gal, B.Hadinia, A.Johnson, F.Johnston-Theasby, A.Jungclaus, A.Khaplanov, J.Kownacki, K.Lagergren, G.La Rana, J.Molnar, R.Moro, B.S.Nara Singh, J.Nyberg, M.Sandzelius, J.-N.Scheurer, G.Sletten, D.Sohler, J.Timar, M.Trotta, J.J.Valiente-Dobon, E.Vardaci, R.Wadsworth, S.Williams - *Phys.Rev. C* 76, 014307 (2007)  
Low-spin collective behavior in the transitional nuclei  $^{86,88}\text{Mo}$
- 2007AR21 D.A.Artemenkov, V.Bradnova, P.I.Zarubin, I.G.Zarubina, N.A.Kachalova, A.D.Kovalenko, A.I.Malakhov, G.I.Orlova, P.A.Rukoyatkin, V.V.Rusakova, E.Stan, R.Stanoeva, M.Haiduc, S.P.Kharlamov, I.Tsakov, M.M.Chernyavsky, T.V.Shchedrina - *Phys.Atomic Nuclei* 70, 1222 (2007); *Yad.Fiz.* 70, 1261 (2007)  
Features of the  $^9\text{Be} \rightarrow 2\text{He}$  fragmentation in an emulsion for an energy of 1.2 GeV per nucleon
- 2007AS05 S.F.Ashley, A.Linnemann, J.Jolie, P.H.Regan, K.Andgren, A.Dewald, E.A.McCutchan, B.Melon, O.Moller, N.V.Zamfir, L.Amon, N.Boelaert, R.B.Cakirli, R.F.Casten, R.M.Clark, C.Fransen, W.Gelletly, G.Gurdal, M.Heidemann, K.L.Keyes, M.N.-Erduran, D.A.Meyer, A.Papenberg, C.Plettner, G.Rainovski, R.V.Ribas, N.J.Thomas, J.Vinson, D.D.Warner, V.Werner, E.Williams, K.O.Zell - *Acta Phys.Pol.* B38, 1385 (2007)  
Lifetime Determination of Excited States in  $^{106}\text{Cd}$
- 2007AX01 M.Axiotis, S.M.Lenzi, N.Marginean, D.R.Napoli, C.A.Ur, F.Brandolini, E.Farnea, A.Gadea, A.Algora, G.de Angelis, D.Bazzacco, P.G.Bizzeti, A.Bizzeti-Sona, P.von Brentano, J.A.Cameron, A.Dewald, H.Grawe, C.A.Kalfas, S.Lunardi, T.Martinez, C.T.Papadopoulos, Zs.Podolyak, C.Rossi Alvarez, J.Sanchez-Solano, D.Tonev, R.Vlastou - *Phys.Rev. C* 76, 014303 (2007)  
High-spin  $\gamma$ -ray spectroscopy in  $^{52}\text{Mn}$
- 2007BA47 B.Bastin, S.Grevy, D.Sohler, O.Sorlin, Zs.Dombradi, N.L.Achouri, J.C.Angelique, F.Azaiez, D.Baiborodin, R.Borcea, C.Bourgeois, A.Butia, A.Burger, R.Chapman, J.C.Dalouzy, Z.Dlouhy, A.Drouard, Z.Elekes, S.Franchoo, S.Iacob, B.Laurent, M.Lazar, X.Liang, E.Lienard, J.Mrazek, L.Nalpas, F.Negoita, N.A.Orr, Y.Penionzhkevich, Zs.Podolyak, F.Pougheon, P.Roussel-Chomaz, M.G.Saint-Laurent, M.Stanoi, I.Stefan, F.Nowacki, A.Poves - *Phys.Rev.Lett.* 99, 022503 (2007)  
Collapse of the N = 28 Shell Closure in  $^{42}\text{Si}$

## REFERENCES

---

- 2007BE33 C.W.Beausang, S.R.Lesher, J.T.Burke, L.A.Bernstein, L.Phair, H.Ai, G.Gurdal, L.Ahle, D.S.Brenner, M.Carpenter, R.M.Clark, B.Crider, J.Escher, P.Fallon, J.P.Greene, D.J.Hartley, A.A.Hecht, R.V.F.Janssens, T.Lauritsen, I.Y.Lee, C.J.Lister, A.O.Macchiavelli, M.A.McMahan, C.Plettner, J.Rohrer, D.Seweryniak, E.Williams, S.Zhu - *Acta Phys.Pol.* B38, 1535 (2007)  
New Results on Fission Cross Sections in Actinide Nuclei Using the Surrogate Ratio Method and on Conversion Coefficients in Triaxial Strongly Deformed Bands in  $^{167}\text{Lu}$  from ICE Ball and Gammasphere
- 2007BE38 B.L.Berman, for the CLAS Collaboration - *Nucl.Phys.* A790, 167c (2007)  
Two-body photodisintegration of  $^3\text{He}$ ,  $^4\text{He}$ , and  $^2\text{He}$  up to 1.5 GeV
- 2007BE45 A.Belhout, S.Ouichaoui, H.Beaumevieille, A.Boughrara, S.Fortier, J.Kiener, J.M.Maison, S.K.Mehdi, L.Rosier, J.P.Thibaud, A.Trabelsi, J.Vernotte - *Nucl.Phys.* A793, 178 (2007)  
Measurement and DWBA analysis of the  $^{12}\text{C}(^6\text{Li}, \text{d})^{16}\text{O}$   $\alpha$ -transfer reaction cross sections at 48.2 MeV. R-matrix analysis of  $^{12}\text{C}(\alpha, \gamma)^{16}\text{O}$  direct capture reaction data
- 2007BEZT S.S.Belyshev, A.N.Ermakov, A.A.Kuznetsov, I.V.Makarenko, V.V.Khankin - Contrib. 57th International Conf. "Nucleus-2007" on Problems on Fundamental Problems of Nuclear Physics, Atomic Power Engineering and Nuclear Technologies, Voronezh, p.132 (2007)  
Photonuclear Reactions with the Emission of Several Neutrons in  $^{127}\text{I}$  Nucleus
- 2007BL15 T.Bloxham, A.Boston, J.Dawson, D.Dobos, S.P.Fox, M.Freer, B.R.Fulton, C.Gossling, P.F.Harrison, M.Junker, H.Kiel, J.McGrath, B.Morgan, D.Munstermann, P.Nolan, S.Oehl, Y.Ramachers, C.Reeve, D.Stewart, R.Wadsworth, J.R.Wilson, K.Zuber - *Phys.Rev.* C 76, 025501 (2007)  
First results on double  $\beta$ -decay modes of Cd, Te, and Zn Isotopes
- 2007BLZY T.Bloxham, A.Boston, J.Dawson, D.Dobos, S.P.Fox, M.Freer, B.R.Fulton, C.Gossling, P.F.Harrison, M.Junker, H.Kiel, J.McGrath, B.Morgan, D.Munstermann, P.Nolan, S.Oehl, Y.Ramachers, C.Reeve, D.Stewart, R.Wadsworth, J.R.Wilson, K.Zuber, and the COBRA Collaboration - arXiv:0707.2756v1 [nucl-ex] (2007)  
First results on double beta decay modes of Cd, Te and Zn isotopes with the COBRA experiment
- 2007B022 H.Boie, H.Scheit, U.D.Jentschura, F.Kock, M.Lauer, A.I.Milstein, I.S.Terekhov, D.Schwalm - *Phys.Rev.Lett.* 99, 022505 (2007)  
Bremsstrahlung in  $\alpha$  Decay Reexamined
- 2007B024 A.Borella, F.Gunsing, M.Moxon, P.Schillebeeckx, P.Siegler - *Phys.Rev.* C 76, 014605 (2007); Erratum *Phys.Rev.* C 76, 019904 (2007)  
High-resolution neutron transmission and capture measurements of the nucleus  $^{206}\text{Pb}$
- 2007B027 H.G.Bohlen, T.Dorsch, Tz.Kokalova, W.von Oertzen, Ch.Schulz, C.Wheldon - *Nucl.Phys.* A787, 451c (2007)  
New assignments for  $^{10}\text{Be}$  states from the  $^{12}\text{C}(^{12}\text{C}, ^{14}\text{O})^{10}\text{Be}$  reaction

**REFERENCES**

---

- 2007BR15 A.Bracco, and the FRS Collaboration - Acta Phys.Pol. B38, 1229 (2007)  
Coulomb Excitation of  $^{68}\text{Ni}$  at 600 AMeV
- 2007BR16 T.A.Bredeweg, M.M.Fowler, J.A.Becker, E.M.Bond, M.B.Chadwick,  
R.R.C.Clement, E.-I.Esch, T.Ethyvignot, T.Granier, M.Jandel, R.A.Macri,  
J.M.O'Donnell, R.Reifarth, R.S.Rundberg, J.L.Ullmann, D.J.Vieira, J.B.Wilhelmy,  
J.M.Wouters, C.Y.Wu - Nucl.Instrum.Methods Phys.Res. B261, 986 (2007)  
Simultaneous measurement of ( $n, \gamma$ ) and ( $n, \text{fission}$ ) cross sections with the DANCE  
 $4\pi \text{ BaF}_2$  array
- 2007BU15 A.Buerger, F.Azaiez, M.Stanoiu, Zs.Dombradi, A.Al-Khatib, B.Bastin,  
G.Benzoni, R.Borcea, Ch.Bourgeois, P.Bringel, E.Clement, J.-C.Dalouzy, Z.Dlouhy,  
A.Drouart, C.Engelhardt, S.Franchoo, Zs.Fulop, A.Gorgen, S.Grevy, H.Hubel,  
F.Ibrahim, W.Korten, J.Mrazek , A.Navin, F.Rotaru, P.Roussel-Chomaz,  
M.-G.Saint-Laurent, G.Sletten, D.Sohler, O.Sorlin, Ch.Theisen, C.Timis, D.Verney,  
S.Williams - Acta Phys.Pol. B38, 1353 (2007)  
Spectroscopy Around  $^{36}\text{Ca}$
- 2007BU19 A.V.Bushuev, V.N.Zubarev, A.F.Kozhin, E.V.Petrova, T.K.Ragimov, A.M.Petrov,  
G.N.Vlaskin, V.I.Timonin, A.A.Samoilov - At.Energ. 102, 232 (2007)  
Yield determination of  $^{240}\text{Pu}$  spontaneous fission products
- 2007BU23 O.Burda, N.Botha, J.Carter, R.W.Fearick, S.V.Fortsch, C.Fransen, H.Fujita,  
J.D.Holt, M.Kuhar, A.Lenhardt, P.von Neumann-Cosel, R.Neveling, N.Pietralla,  
V.Yu.Ponomarev, A.Richter, O.Scholten, E.Sideras-Haddad, F.D.Smit, J.Wambach -  
Phys.Rev.Lett. 99, 092503 (2007)  
High-Energy-Resolution Inelastic Electron and Proton Scattering and the  
multiphonon Nature of Mixed-Symmetry  $2^+$  States in  $^{94}\text{Mo}$
- 2007BU25 D.Bucurescu, R.F.Casten, G.Graw, J.Jolie, N.Braun, P.von Brentano,  
T.Faestermann, S.Heinze, R.Hertenberger, N.Lo Iudice, R.Krucken, M.Mahgoub,  
D.A.Meyer, O.Moller, D.Mucher, C.Scholl, N.Yu.Shirikova, Y.Sun, A.V.Sushkov,  
H.-F.Wirth - Phys.Atomic Nuclei 70, 1336 (2007)  
High-resolution study of  $0^+$  and  $2^+$  excitations in  $^{168}\text{Er}$  with the (p, t) reaction
- 2007CA25 D.B.Campbell, R.W.Laird, M.A.Riley, J.Simpson, F.G.Kondev, D.J.Hartley,  
R.V.F.Janssens, T.B.Brown, M.P.Carpenter, P.Fallon, S.M.Fischer, T.Lauritsen,  
D.Nisius, I.Ragnarsson - Phys.Rev. C 75, 064314 (2007)  
Rotational structures and their evolution with spin in  $^{152}\text{Gd}$
- 2007CA26 L.S.Caceres, M.Gorska, A.Jungclaus, P.H.Regan, A.B.Garnsworthy, S.Pietri,  
Zs.Podolyak, D.Rudolph, S.J.Steer, H.Grawe, D.L.Balabanski, F.Becker,  
P.Bednarczyk, G.Benzoni, B.Blank, C.Brandau, A.M.Bruce, F.Camera,  
W.N.Catford, I.J.Cullen, Zs.Dombradi, P.Doornenbal, E.Estevez, H.Geissel,  
W.Gelletly, J.Gerl, J.Grebosz, A.Heinz, R.Hoischen, G.Ilie, J.Jolie, G.A.Jones,  
M.Kmiecik, I.Kojouharov, F.G.Kondev, T.Kurtukian-Nieto, N.Kurz, S.Lalkowski,  
L.Liu, A.Maj, S.Myalski, F.Montes, M.Pfutzner, W.Prokopowicz, T.Saito,  
H.Schaffner, S.Schwertel, T.Shizuma, A.J.Simons, S.Tashenov, P.M.Walker,  
E.Werner-Malento, O.Wieland, H.J.Wollersheim - Acta Phys.Pol. B38, 1271 (2007)

---

REFERENCES

---

- Identification of Excited States in the N = Z Nucleus  $^{82}\text{Nb}$
- 2007CA28 M.Caamano, D.Cortina-Gil, W.Mittig, H.Sava,jols, M.Chartier, C.E.Demonchy, B.Fernandez, M.B.Gomez Hornillos, A.Gillibert, B.Jurado, O.Kiselev, R.Lemmon, A.Obertelli, F.Rejmund, M.Rejmund, P.Roussel-Chomaz, R.Wolski - Phys.Rev.Lett. 99, 062502 (2007)  
Resonance State in  $^7\text{H}$
- 2007CA35 C.M.Campbell, N.Aoi, D.Bazin, M.D.Bowen, B.A.Brown, J.M.Cook, D.-C.Dinca, A.Gade, T.Glasmacher, M.Horoi, S.Kanno, T.Motobayashi, L.A.Riley, H.Sagawa, H.Sakurai, K.Starosta, H.Suzuki, S.Takeuchi, J.R.Terry, K.Yoneda, H.Zwahlen - Phys.Lett. B 652, 169 (2007)  
Quadrupole collectivity in silicon isotopes approaching neutron number N=28
- 2007CH50 S.Chekanov, and the ZEUS Collaboration - Phys.Lett. B 649, 111 (2007)  
Measurement of  $D^{*\pm}$  meson production in  $e^\pm p$  scattering at low  $Q^2$
- 2007CI05 J.A.Cizewski, R.Hatarik, K.L.Jones, S.D.Pain, J.S.Thomas, M.S.Johnson, D.W.Bardayan, J.C.Blackmon, M.S.Smith, R.L.Kozub - Nucl.Instrum.Methods Phys.Res. B261, 938 (2007)  
(d,  $p\gamma$ ) Reactions and the surrogate reaction technique
- 2007C017 F.Confortola, D.Bemmerer, H.Costantini, A.Formicola, Gy.Gyurky, P.Bezzon, R.Bonetti, C.Broggini, P.Corisiero, Z.Elekes, Zs.Fulop, G.Gervino, A.Guglielmetti, C.Gustavino, G.Imbriani, M.Junker, M.Laubenstein, A.Lemut, B.Limata, V.Lozza, M.Marta, R.Menegazzo, P.Prati, V.Roca, C.Rolfs, C.Rossi Alvarez, E.Somorjai, O.Straniero, F.Strieder, F.Terrasi, H.P.Trautvetter, and the LUNA Collaboration - Phys.Rev. C 75, 065803 (2007); Pub.Note: Phys.Rev. C 75, 069903 (2007)  
Astrophysical S factor of the  $^3\text{He}(\alpha, \gamma)^7\text{Be}$  reaction measured at low energy via detection of prompt and delayed  $\gamma$  rays
- 2007C018 P.L.Cole, J.L.Farley, E.T.E.Reedy, R.SpaULDING, J.F.Harmon, D.P.Wells - Nucl.Instrum.Methods Phys.Res. B261, 822 (2007)  
Measuring the 20.2-ms half life of the 472-keV line from the isomer Na-24m with pulsed photons at the Idaho Accelerator Center
- 2007C021 L.Corradi - Nucl.Phys. A787, 160c (2007)  
Reaction mechanism and nuclear structure explored in binary reactions: status and perspectives
- 2007DA23 D.Dashdorj, G.E.Mitchell, T.Kawano, J.A.Becker, U.Agvaanluvsan, M.B.Chadwick, J.R.Cooper, M.Devlin, N.Fotiades, P.E.Garrett, R.O.Nelson, C.Y.Wu, W.Young - Nucl.Instrum.Methods Phys.Res. B261, 948 (2007)  
Neutron induced inelastic cross-sections of  $^{150}\text{Sm}$  for  $E_n = 1\text{-}35$  MeV
- 2007DE28 M.A.de Huu, A.M.van den Berg, N.Biasi, R.De Leo, M.Hagemann, M.N.Harakeh, J.Heyse, M.Hunyadi, S.Micheletti, H.Okamura, H.J.Wortche - Phys.Lett. B 649, 35 (2007)  
Experimental determination of the  $J^\pi$  components of the spin-dipole resonance in  $^{12}\text{B}$

---

*REFERENCES*

---

- 2007DE31 D.J.DeSimone, C.Haertling, J.R.Tesmer, Y.Q.Wang - Nucl.Instrum.Methods Phys.Res. B261, 405 (2007)  
Measurement of the D(p, p)D cross section at laboratory backward angles of 151 degrees and 167 degrees
- 2007DE37 G.de Angelis - Nucl.Phys. A787, 74c (2007)  
Nuclear Structure far from Stability at LNL: From high intensity stable to radioactive nuclear beams
- 2007DOZY C.Domingo-Pardo, for the n\_TOF Collaboration - arXiv:0707.3679v1 [nucl-ex] (2007)  
Measurement of the radiative neutron capture cross section of  $^{206}\text{Pb}$  and its astrophysical implications
- 2007DR05 S.S.Drapey, V.A.Zheltonozhsky, L.V.Sadovnikov, N.V.Strilchuk, O.G.Shkulkova - Bull.Rus.Acad.Sci.Phys. 71, 887 (2007); Izv.Akad.Nauk RAS, Ser.Fiz. 71, 915 (2007)  
Study of penetration effects in the E1 and M1 transitions in  $^{44}\text{Sc}$
- 2007EI02 R.Eichler, N.V.Aksenov, A.V.Belozerov, G.A.Bozhikov, V.I.Chepigin, R.Dressler, S.N.Dmitriev, H.W.Gaggeler, V.A.Gorshkov, F.Haenssler, M.G.Itkis, V.Ya.Lebedev, A.Laube, O.N.Malyshev, Yu.Ts.Oganessian, O.V.Petruschkin, D.Piguet, P.Rasmussen, S.V.Shishkin, A.V.Shutov, A.I.Svirikhin, E.E.Tereshatov, G.K.Vostokin, M.Wegrzecki, A.V.Yeremin - Nucl.Phys. A787, 373c (2007)  
Confirmation of the Decay of  $^{283}\text{112}$  and First Indication for Hg-like Behavior of Element 112
- 2007FE13 J.O.Fernandez Niello, J.M.Figueira, D.A briola, A.Arazi, O.A.Capurro, G.V.Marti, D.Martinez Heinmann, A.J.Pacheco, E.de Barbara, I.Padron, P.R.S.Gomes, J.Lubian - Nucl.Phys. A787, 484c (2007)  
Study of the Threshold Anomaly in the Scattering of Li Isotopes on  $^{27}\text{Al}$
- 2007FI07 S.M.Fischer, C.J.Lister, M.P.Carpenter, N.J.Hammond, R.V.F.Janssens, E.F.Moore, G.Mukherjee, D.Seweryniak, S.Sinha, S.J.Freeman, J.Carney, D.P.Balamuth, Y.Sun - Phys.Rev. C 75, 064310 (2007)  
Mapping the periphery of deformation in the  $A \sim 80$  region: A study of  $^{83}\text{Nb}$
- 2007F005 W.Fong, J.L.Matthews, M.L.Dowell, E.R.Kinney, T.Soos, M.Y.Wang, S.A.Wood, P.A.M.Gram, G.A.Rebka, Jr., D.A.Roberts - Phys.Rev. C 75, 064605 (2007)  
Inclusive pion double charge exchange in light p-shell nuclei
- 2007F006 N.Fotiades, R.O.Nelson, M.Devlin, J.A.Becker - Phys.Rev. C 76, 014302 (2007)  
New levels and a lifetime measurement in  $^{202}\text{Tl}$

## REFERENCES

---

- 2007FOZY S.Fortier, E.Tryggestad, E.Rich, D.Beaumel, E.Becheva, Y.Blumenfeld, F.Delaunay, A.Drouart, A.Fomichev, N.Frascaria, S.Gales, L.Gaudefroy, A.Gillibert, J.Guillot, F.Hammache, K.W.Kemper, E.Khan, V.Lapoux, V.Lima, L.Nalpas, A.Obertelli, E.C.Pollacco, F.Skaza, U.Datta Pramanik, P.Roussel-Chomaz, D.Santonocito, J.A.Scrapaci, O.Sorlin, S.V.Stepantsov, G.M.Ter Akopian, R.Wolski - Proc.Intern.Symposium on Exotic Nuclei, Khanty-Mansiysk, Russia, 17-22 July, 2006, Yu.E.Penionzhkevich, E.A.Cherepanov, Eds. p.3 (2007); AIP Conf.Proc. 912 (2007)  
Search for resonances in  $^4n$ ,  $^7H$  and  $^9He$  via transfer reactions
- 2007FR11 R.H.France III, E.L.Wilds, J.E.McDonald, M.Gai - Phys.Rev. C 75, 065802 (2007)  
Further measurement of the  $\beta$ -delayed  $\alpha$ -particle emission of  $^{16}N$
- 2007FRZW N.Frank, A.Schiller, T.Baumann, D.Bazin, J.Brown, P.A.DeYoung, J.E.Finck, A.Gade, J.Hinnefeld, R.Howes, J.-L.Lecouey, B.Luther, W.A.Peters, H.Scheit, M.Thoennessen - ArXiv:0708.2706v1 [nucl-ex] (2007)  
Observation of the First Excited State in  $^{23}O$
- 2007FU07 Y.-Y.Fu, S-H.Zhou, T.Koike, S.Kinoshita, Y.Ma, Y.Miura, K.Miwa, Y.Miyagi, K.Shirotori, T.Suzuki, H.Tamura, K.Tsukada, M.Ukai, K.Futatsukawa, K.Hosomi, M.Kawai, M.Mimori, N.Terada, N.Maruyama, K.Aoki, H.Fujioka, Y.Kakiguchi, T.Nagae, D.Nakajima, H.Noumi, T.Takahashi, T.N.Takahashi, A.Toyota, M.Dairaku, T.Fukuda, S.Minami, W.Imoto, S.Ajimura, K.Tanida - Chin.Phys.Lett. 24, 2216 (2007)  
Measurement of Gamma-Rays from  $^{11}_\Lambda B$  and  $^{12}_L C$
- 2007FU09 C.Fu, V.Z.Goldberg, A.M.Mukhamedzhanov, G.G.Chubarian, G.V.Rogachev, B.Skorodumov, M.McCleskey, Y.Zhai, T.Al-Abdullah, G.Tabacaru, L.Trache, R.E.Tribble - Phys.Rev. C 76, 021603 (2007)  
Single and double proton emissions from the  $^{14}O + ^4He$  interaction
- 2007GA26 P.E.Garrett, A.Andreyev, R.A.E.Austin, G.C.Ball, D.Bandyopadhyay, J.A.Becker, A.J.Boston, R.S.Chakrawarthy, D.Cline, R.J.Cooper, R.Churchman, D.Cross, D.Dashdorj, G.A.Demand, M.R.Dimmock, T.E.Drake, P.Finlay, F.Gagon-Miosan, A.T.Gallant, K.L.Green, A.N.Grint, G.F.Grinyer, G.Hackman, L.J.Harkness, A.B.Hayes, R.Kanungo, W.D.Kulp, K.G.Leach, G.Lee, J.R.Leslie, J.-P.Martin, C.Mattoon, W.J.Mills, A.C.Morton, S.Mythili, L.Nelson, O.Newman, P.J.Nolan, E.Padilla-Rodal, C.J.Pearson, A.A.Phillips, M.Porter-Peden, J.J.Ressler, R.Roy, C.Ruiz, H.Savajols, F.Sarazin, M.A.Schumaker, D.P.Scraggs, H.C.Scraggs, M.D.Strange, C.E.Svensson, J.C.Waddington, J.M.Wan, A.Whitbeck, S.J.Williams, J.Wong, J.L.Wood, C.Y.Wu, E.F.Zganjar - Acta Phys.Pol. B38, 1169 (2007)  
Nuclear Structure Research at TRIUMF
- 2007GA29 S.Galanopoulos, R.Vlastou, C.T.Papadopoulos, M.Kokkoris, G.Perdikakis, M.Serris, P.Demetriou - Nucl.Instrum.Methods Phys.Res. B261, 969 (2007)  
Experimental and theoretical studies of (n, p) reactions on Ge isotopes

## REFERENCES

---

- 2007GA34 A.Gade, P.Adrich, D.Bazin, M.D.Bowen, B.A.Brown, C.M.Campbell, J.M.Cook, S.Ettenauer, T.Glasmacher, K.W.Kemper, S.McDaniel, A.Obertelli, T.Otsuka, A.Ratkiewicz, K.Siwek, J.R.Terry, J.A.Tostevin, Y.Utsuno, D.Weisshaar - Phys.Rev.Lett. 99, 072502 (2007)  
Spectroscopy of  $^{36}\text{Mg}$ : Interplay of Normal and Intruder Configurations at the Neutron-Rich Boundary of the "Island of Inversion"
- 2007GA38 A.Gade, P.Adrich, D.Bazin, M.D.Bowen, B.A.Brown, C.M.Campbell, J.M.Cook, T.Glasmacher, K.Hosier, S.McDaniel, D.McGlinchery, A.Obertelli, L.A.Riley, K.Siwek, D.Weisshaar - Phys.Rev. C 76, 024317 (2007)  
Spectroscopy of  $^{20}\text{Mg}$ : The isobaric mass multiplet equation for the  $2^+$  states of the  $A = 20$ ,  $T = 2$  quintet and distant mirror nuclei
- 2007GI08 A.Gillibert, N.Alamanos, M.Alvarez, F.Auger, D.Beaumel, E.Becheva, Y.Blumenfeld, R.Dayras, F.Delaunay, A.Drouart, G.de France, L.Giot, B.Jurado, N.Keeley, K.W.Kemper, V.Lapoux, W.Mittig, X.Mougeot, L.Nalpas, A.Obertelli, N.Patronis, A.Pakou, E.C.Pollacco, R.Raabe, P.Roussel-Chomaz, F.Rejmund, M.Rejmund, H.Savajols, J.A.Scarpaci, J.L.Sida, F.Skaza, S.Stepantsov, Ch.Theisen, R.Wolski - Nucl.Phys. A787, 423c (2007)  
Structure of exotic nuclei from direct reactions
- 2007GI10 J.Giovinazzo, B.Blank, C.Borcea, G.Canchel, J.-C.Dalouzy, C.E.Demonchy, F.de Oliveira Santos, C.Dossat, S.Grevy, L.Hay, J.Huikari, S.Leblanc, I.Matea, J.-L.Pedroza, L.Perrot, J.Pibernat, L.Serani, C.Stodel, J.-C.Thomas - Phys.Rev.Lett. 99, 102501 (2007)  
First Direct Observation of Two Protons in the Decay of  $^{45}\text{Fe}$  with a Time-Projection Chamber
- 2007GO21 C.Goodin, Y.X.Luo, J.K.Hwang, A.V.Ramayya, J.H.Hamilton, J.O.Rasmussen, S.J.Zhu, A.Gelberg, G.M.Ter-Akopian - Nucl.Phys. A787, 231c (2007)  
Study of fission process and neutron-rich nuclei
- 2007GO24 M.S.Golovkov, L.V.Grigurenko, A.S.Fomichev, A.V.Gorshkov, V.A.Gorshkov, S.A.Krupko, Yu.Ts.Oganessian, A.M.Rodin, S.I.Sidorchuk, R.S.Slepnev, S.V.Stepantsov, G.M.Ter-Akopian, R.Wolski, A.A.Korsheninnikov, E.Yu.Nikolskii, V.A.Kuzmin, B.G.Novatskii, D.N.Stepanov, P.Roussel-Chomaz, W.Mittig - Phys.Rev. C 76, 021605 (2007)  
New insight into the low-energy  $^9\text{He}$  spectrum
- 2007GOZW L.I.Govor, A.M.Demidov, V.A.Kurkin, I.V.Mikhailov - Contrib. 57th International Conf. "Nucleus-2007" on Problems on Fundamental Problems of Nuclear Physics, Atomic Power Engineering and Nuclear Technologies, Voronezh, p.102 (2007)  
Life Times of  $^{88}\text{Sr}$  Levels from the  $\text{Sr}(n, n'\gamma)$  Reaction
- 2007GOZY M.S.Golovkov, L.V.Grigurenko, A.S.Fomichev, V.A.Gorshkov, A.V.Gorshkov, S.A.Krupko, Yu.Ts.Oganessian, A.M.Rodin, S.I.Sidorchuk, R.S.Slepnev, S.V.Stepantsov, G.M.Ter-Akopian, R.Wolski, A.A.Korsheninnikov, E.Yu.Nikolskii, P.Roussel-Chomaz, W.Mittig - Proc.Intern.Symposium on Exotic Nuclei, Khanty-Mansiysk, Russia, 17-22 July, 2006, Yu.E.Penionzhkevich, E.A.Cherepanov, Eds. p.32 (2007); AIP Conf.Proc. 912 (2007)

---

*REFERENCES*

---

- First Results of a  ${}^8\text{He} + \text{d}$  Experiment
- 2007GR11 U.Greife, J.Livesay, C.Jewett, K.Chipps, F.Sarazin, D.Bardayan, J.Blackmon, C.Nesaraja, M.S.Smith, A.Champagne, R.Fitzgerald, K.Jones, J.Thomas, R.Kozub, L.Buchmann, J.Caggiano, D.Hunter, D.Hutcheon, A.Olin, D.Ottewell, J.Rogers, C.Ruiz, G.Ruprecht, M.Trinczek, C.Vockenhuber, S.Bishop, J.D'Auria, M.Lamay, W.Liu, C.Wrede, M.L.Chatterjee, A.A.Chen, J.Pearson, S.Engel, A.M.Laird, D.Gigliotti, A.Hussein - Nucl.Instrum.Methods Phys.Res. B261, 1089 (2007)  
Recent results of experiments with radioactive  ${}^{21}\text{Na}$  and  ${}^7\text{Be}$  ion beams
- 2007GR18 G.F.Grinyer, M.B.Smith, C.Andreoiu, A.N.Andreyev, G.C.Ball, P.Bricault, R.S.Chakrawarthy, J.J.Daoud, P.Finlay, P.E.Garrett, G.Hackman, B.Hyland, J.R.Leslie, A.C.Morton, C.J.Pearson, A.A.Phillips, M.A.Schumaker, C.E.Svensson, J.J.Valiente-Dobon, S.J.Williams, E.F.Zganjar - Phys.Rev. C 76, 025503 (2007)  
Half-life of the superallowed  $\beta^+$  emitter  ${}^{18}\text{Ne}$
- 2007GRZY F.Grenier, A.Chbihi, R.Roy, G.Verde, D.Theriault, J.D.Frankland, J.P.Wieleczko, B.Borderie, R.Bougault, R.Dayras, E.Galichet, D.Guinet, P.Lautesse, N.Le Neindre, O.Lopez, J.Moisan, L.Nalpas, M.Parlog, M.F.Rivet, E.Rosato, B.Tamain, E.Vient, M.Vigilante - arXiv.0706.4414v1 [nucl-ex] (2007)  
Decay modes of  ${}^{10}\text{C}$  nuclei unbound state
- 2007HA20 U.Hager, V.-V.Elomaa, T.Eronen, J.Hakala, A.Jokinen, A.Kankainen, S.Rahaman, S.Rinta-Antila, A.Saastamoinen, T.Sonoda, J.Aysto - Phys.Rev. C 75, 064302 (2007)  
Precision mass measurements of neutron-rich Tc, Ru, Rh, and Pd isotopes
- 2007HA24 K.Y.Hara, H.Harada, F.Kitatani, S.Goko, S.Hohara, T.Kaihori, A.Makinaga, H.Utsunomiya, H.Toyokawa, K.Yamada - J.Nucl.Sci.Technol.(Tokyo) 44, 938 (2007)  
Measurements of the  ${}^{152}\text{Sm}(\gamma, n)$  Cross Section with Laser-Compton Scattering  $\gamma$  Rays and the Photon Difference Method
- 2007HA29 H.Haba, T.Akiyama, D.Kaji, H.Kikunaga, T.Kurabayashi, K.Morimoto, K.Morita, K.Ooe, N.Sato, A.Shinohara, T.Takabe, Y.Tashiro, A.Toyoshima, A.Yoneda, T.Yoshimura - Eur.Phys.J. D 45, 81 (2007)  
Startup of superheavy element chemistry at RIKEN
- 2007HA32 U.Hager, A.Jokinen, V.-V.Elomaa, T.Eronen, J.Hakala, A.Kankainen, S.Rahaman, J.Rissanen, I.D.Moore, S.Rinta-Antila, A.Saastamoinen, T.Sonoda, J.Aysto - Nucl.Phys. A793, 20 (2007)  
Precision mass measurements of neutron-rich yttrium and niobium isotopes

## REFERENCES

---

- 2007HE20 B.Herskind, G.B.Hagemann, Th.Dossing, C.R.Hansen, N.Schunck, G.Sletten, S.Odegard, H.Hubel, P.Bringel, A.Burger, A.Neusser, A.K.Singh, A.Al-Khatib, S.B.Patel, B.M.Nyako, A.Algora, Z.Dombradi, J.Gal, G.Kalinka, D.Sohler, J.Molnar, J.Timar, L.Zolnai, K.Juhasz, A.Bracco, S.Leoni, F.Camera, G.Benzoni, P.Mason, A.Paleni, B.Million, O.Wieland, P.Bednarczyk, F.Azaiez, Th.Byrski, D.Curien, O.Dakov, G.Duchene, F.Khalfallah, B.Gall, L.Piqeras, J.Robin, J.Dudek, N.Rowley, N.Redon, F.Hannachi, J.N.Scheurer, J.N.Wilson, A.Lopez-Martens, A.Korichi, K.Hauschild, J.Roccazz, S.Siem, P.Fallon, I.Y.Lee, A.Gorgen, A.Maj, M.Kmiecik, M.Brekiesz, J.Styczen, K.Zuber, J.C.Lisle, B.Cederwall, K.Lagergren, A.O.Evans, G.Rainovski, G.De Angelis, G.La Rana, R.Moro, R.M.Lieder, E.O.Lieder, W.Gast, H.Jager, A.A.Pasternak, C.M.Petrache, D.Petrache - *Acta Phys.Pol.* B38, 1421 (2007)  
Light Charged Particles as Gateway to Hyperdeformation
- 2007HI06 D.J.Hinde, R.L.Ahlefeldt, R.G.Thomas, K.Hagino, M.L.Brown, M.Dasgupta, M.Evers, L.R.Gasques, M.D.Rodriguez - *Phys.Rev. C* 76, 014617 (2007)  
Probing the tail of the nuclear potential between identical nuclei with quasi-elastic Mott scattering
- 2007H013 F.Hofmann, C.Baumer, A.M.van den Berg, D.Frekers, V.M.Hannen, M.N.Harakeh, M.de Huu, Y.Kalmykov, P.von Neumann-Cosel, V.Yu.Ponomarev, S.Rakers, B.Reitz, A.Richter, K.Schweda, A.Shevchenko, J.Wambach, H.J.Wortche - *Phys.Rev. C* 76, 014314 (2007)  
Proton scattering at intermediate energies on  $^{58}\text{Ni}$ : How well is it understood?
- 2007HU16 M.Hunyadi, A.M.van den Berg, N.Biasi, M.Csatlos, L.Csige, B.Davids, M.Fujiwara, U.Garg, J.Gulyas, M.N.Harakeh, M.A.de Huu, A.Krasznahorkay, D.Sohler, H.J.Wortche - *Acta Phys.Pol.* B38, 1479 (2007)  
Recent Results from the Decay Studies of High-Energy Isoscalar Giant Resonances
- 2007HU17 M.Humayun, A.D.BRANDON - *Astrophys.J.* 664, L59 (2007)  
s-process implications from osmium isotope anomalies in chondrites
- 2007HU20 M.Hunyadi, A.M.van den Berg, B.Davids, M.N.Harakeh, M.A.de Huu, H.J.Wortche, M.Csatlos, J.Gulyas, A.Krasznahorkay, D.Sohler, U.Garg, M.Fujiwara, N.Biasi - *Phys.Atomic Nuclei* 70, 1407 (2007)  
Direct neutron decay of the isoscalar giant dipole resonance
- 2007IB01 F.Ibrahim, D.Verney, M.Lebois, B.Roussiere, S.Essabaa, S.Franchoo, S.Gales, D.Guillemaud-Mueller, C.Lau, F.Le Blanc, J.F.Le Du, M.C.Mhamed, A.C.Mueller, J.Sauvage, and the ALTO Collaboration - *Nucl.Phys.* A787, 110c (2007)  
The ALTO facility at IPN Orsay and study of neutron rich nuclei in the vicinity of  $^{78}\text{Ni}$
- 2007I001 M.Ionescu-Bujor, A.Iordachescu, N.Marginean, C.A.Ur, G.Suliman, D.Bucurescu, D.L.Balabanski, F.Brandolini, S.Chmel, K.A.Gladnishki, H.Hubel, R.Marginean, G.Neyens - *Acta Phys.Pol.* B38, 1249 (2007)  
Quadrupole Moments for Isomeric States with Normal and Intruder Configurations in Neutron-Deficient Pb Nuclei

---

REFERENCES

---

- 2007I002 M.Iodice, for the Jefferson Lab Hall A Collaboration - Phys.Rev.Lett. 99, 052501 (2007)  
High Resolution Spectroscopy of  $^{12}\Lambda$ B by Electroproduction
- 2007IS09 T.Ishii, H.Makii, M.Asai, H.Koura, S.Shigematsu, K.Tsukada, A.Toyoshima, M.Matsuda, A.Makishima, J.Kaneko, H.Toume, I.Hossain, T.Shizuma, S.Ichikawa, T.Kohno, M.Ogawa - Phys.Rev. C 76, 011303 (2007)  
Ground-state bands of neutron-rich  $^{236}\text{Th}$  and  $^{242}\text{U}$  nuclei and implication of spherical shell closure at N = 164
- 2007IS11 T.Ishii, S.Shigematsu, H.Makii, M.Asai, K.Tsukada, A.Toyoshima, M.Matsuda, A.Makishima, T.Shizuma, J.Kaneko, I.Hossain, H.Toume, M.Ohara, S.Ichikawa, T.Kohno, M.Ogawa - Phys.Atomic Nuclei 70, 1457 (2007)  
In-beam  $\gamma$ -ray study of the neutron-rich nuclei  $^{240}\text{U}$ ,  $^{246}\text{Pu}$ , and  $^{250}\text{Cm}$  produced by the ( $^{18}\text{O}$ ,  $^{16}\text{O}$ ) reaction
- 2007JAZZ M.Janek, T.Saito, V.P.Ladygin, T.Uesaka, M.Hatano, A.Yu.Isupov, H.Kato, N.B.Ladygina, Y.Maeda, A.I.Malakhov, J.Nishikawa, T.Ohnishi, H.Okamura, S.G.Reznikov, H.Sakai, S.Sakoda, N.Sakamoto, Y.Satou, K.Sekiguchi, K.Suda, A.Tamii, N.Uchigashima, T.A.Vasiliev, K.Yako - arXiv.0706.3568v1 [nucl-ex] (2007)  
Analyzing powers  $A_{yy}$ ,  $A_{xx}$ ,  $A_{xz}$  and  $A_y$  in the  $\text{dd} \rightarrow {}^3\text{He}$ n reaction at 270 MeV
- 2007JE03 C.Jewett, C.Baktash, D.Bardayan, J.Blackmon, K.Chipps, A.Galindo-Uribarri, U.Greife, C.Gross, K.Jones, F.Liang, J.Livesay, R.Kozub, C.Nesaraja, D.Radford, F.Sarazin, M.S.Smith, J.Thomas, C.-H.Yu - Nucl.Instrum.Methods Phys.Res. B261, 945 (2007)  
Excited states in  $^{22}\text{Mg}$  via the  $^{12}\text{C}(^{12}\text{C}, 2n)^{22}\text{Mg}$  reaction
- 2007J009 K.L.Jones, A.S.Adekola, D.W.Bardayan, J.C.Blackmon, K.Y.Chae, K.Chipps, J.A.Cizewski, D.J.Dean, L.Erikson, R.P.Fitzgerald, A.L.Gaddis, U.Greife, C.Harlin, R.Hatarik, J.A.Howard, M.S.Johnson, R.L.Kozub, J.F.Liang, R.J.Livesay, Z.Ma, B.H.Moazen, P.D.O'Malley, C.D.Nesaraja, S.D.Pain, N.P.Patterson, S.V.Paulauskas, D.Shapira, J.F.Shriner Jr, D.J.Sissom, M.S.Smith, T.P.Swan, J.S.Thomas - Acta Phys.Pol. B38, 1205 (2007)  
Single Neutron Transfer Experiments Close to the r-Process Path
- 2007JU03 B.Jurado, H.Savjols, W.Mittig, N.A.Orr, P.Roussel-Chomaz, D.Baiborodin, W.N.Catford, M.Chartier, C.E.Demonchy, Z.Dlouhy, A.Gillibert, L.Giot, A.Khouaja, A.Lepine-Szily, S.Lukyanov, J.Mrazek, Y.E.Penionzhkevich, S.Pita, M.Rousseau, A.C.Villari - Phys.Lett. B 649, 43 (2007)  
Mass measurements of neutron-rich nuclei near the N = 20 and 28 shell closures
- 2007KA33 Y.Kanda, A.Yoshioka - J.Radioanal.Nucl.Chem. 273, 507 (2007)  
Physical and chemical forms of radionuclides of  $^{38}\text{S}$ ,  $^{38}\text{Cl}$ ,  $^{39}\text{Cl}$  and  $^{82}\text{Br}$ , produced at a high-energy proton accelerator facility
- 2007KA38 N.Kalantar-Nayestanaki - Nucl.Phys. A790, 69c (2007)  
Study of three-nucleon systems at KVI

---

**REFERENCES**

---

- 2007KI13 H.J.Kim, S.C.Kim, S.K.Kim, T.Y.Kim, H.S.Lee, J.Lee, M.J.Lee, Y.D.Kim, J.I.Lee, J.Y.Lee, M.J.Hwang, Y.J.Kwon, I.S.Hahn, M.H.Lee - Nucl.Phys. A793, 171 (2007)  
Searches for the  $\beta^+$  / EC decays of  $^{64}\text{Zn}$  and  $^{112}\text{Sn}$ , and the  $\beta\beta$  decay transitions of  $^{124}\text{Sn}$  to the excited states of  $^{124}\text{Te}$
- 2007KM01 M.Kmiecik, A.Maj, M.Brekiesz, K.Mazurek, P.Bednarczyk, J.Grebosz, W.Meczynski, J.Styczen, M.Zieblinski, K.Zuber, P.Papka, C.Beck, D.Curien, F.Haas, V.Rauch, M.Rousseau, J.Dudek, N.Schunck, A.Bracco, F.Camera, G.Benzoni, O.Wieland, B.Herskind, E.Farnea, G.De Angelis - Acta Phys.Pol. B38, 1437 (2007)  
Strong Deformation Effects in Hot Rotating  $^{46}\text{Ti}$
- 2007KNZZ G.N.Knyazheva, E.M.Kozulin, R.N.Sagaidak, M.G.Itkis, N.A.Kondratiev, A.M.Stefanini, B.R.Bhera, L.Corradi, E.Fioretto, A.Gadea, A.Latina, S.Szilner, M.Trotta, S.Beghini, G.Montagnoli, F.Scarlassara, F.Haas, N.Rowley, P.R.S.Gomes, A.Szanto de Toledo - Proc.Intern.Symposium on Exotic Nuclei, Khanty-Mansiysk, Russia, 17-22 July, 2006, Yu.E.Penionzhkevich, E.A.Cherepanov, Eds. p.185 (2007);  
 $^{40,48}\text{Ca} + ^{144,154}\text{Sm}$ : Deformation and Shell
- 2007KO43 S.Komarov, R.J.Charity, C.J.Chiara, W.Reviol, D.G.Sarantites, L.G.Sobotka, A.L.Caraley, M.P.Carpenter, D.Seweryniak - Phys.Rev. C 75, 064611 (2007)  
Search for the fade out of a collective enhancement of the nuclear level density
- 2007KO54 P.E.Koehler, J.L.Ullmann, T.A.Bredeweg, J.M.O'Donnell, R.Reifarth, R.S.Rundberg, D.J.Vieira, J.M.Wouters - Phys.Rev. C 76, 025804 (2007)  
Spin measurements for  $^{147}\text{Sm} + \text{n}$  resonances: Further evidence for nonstatistical effects
- 2007KOZY P.E.Koehler, J.L.Ullmann, T.A.Bredeweg, J.M.O'Donnell, R.Reifarth, R.S.Rundberg, D.J.Vieira, J.M.Wouters - ArXiv:0708.0218v1 [nucl-ex] (2007)  
Spin measurements for  $^{147}\text{Sm} + \text{n}$  resonances: Further evidence for non-statistical effects
- 2007KU12 S.Kumar, R.Palit, H.C.Jain, I.Mazumdar, P.K.Joshi, S.Roy, A.Y.Deo, Z.Naik, S.S.Malik, A.K.Jain - Phys.Rev. C 76, 014306 (2007)  
High spin structure of  $^{139}\text{Nd}$
- 2007KU13 V.Kumar, P.Das, R.P.Singh, R.Kumar, S.Muralithar, R.K.Bhowmik - Phys.Rev. C 76, 014309 (2007)  
Multiparticle M1 band in  $^{134}\text{La}$
- 2007KUZX A.A.Kulko, N.A.Demekhina, R.Kalpakchieva, Yu.A.Muzychka, Yu.E.Penionzhkevich, D.N.Rassadov, N.K.Skobelev, D.A.Testov - Proc.Intern.Symposium on Exotic Nuclei, Khanty-Mansiysk, Russia, 17-22 July, 2006, Yu.E.Penionzhkevich, E.A.Cherepanov, Eds. p.196 (2007); AIP Conf.Proc. 912 (2007)  
Excitation Functions for Complete Fusion and Transfer Reactions in the Interaction of  $^4\text{He}$  Nuclei with  $^{197}\text{Au}$

REFERENCES

---

- 2007KUZY W.D.Kulp, J.L.Wood, P.E.Garrett, C.Y.Wu, D.Cline, J.M.Allmond, D.Bandyopadhyay, D.Dashdorj, S.N.Choudry, A.B.Hayes, H.Hua, S.R.Lesher, M.Mynk, M.T.McEllistrem, C.J.McKay, J.N.Orce, R.Teng, S.W.Yates - arXiv.0706.4129v2 [nucl-ex] (2007)  
Shape Coexistence and Mixing in  $^{152}\text{Sm}$
- 2007LA20 T.Lauritsen, R.V.F.Janssens, T.L.Khoo, I.Ahmad, M.P.Carpenter, F.G.Kondev, C.J.Lister, E.F.Moore, D.Seweryniak, S.Zhu, T.Dossing, B.Herskind, A.Korichi, A.Lopez-Martens, R.M.Clark, P.Fallon, G.Lane, A.O.Macchiavelli, D.Ward, A.M.Heinz, D.G.Jenkins, A.J.Larabee, B.Meredith, J.Kozemczak, P.Chowdhury - Phys.Rev. C 75, 064309 (2007)  
Rotational damping, ridges, and the quasicontinuum of  $\gamma$  rays in  $^{152}\text{Dy}$
- 2007LA22 E.A.Lawrie, P.Vymers, Ch.Vieu, J.J.Lawrie, C.Schuck, R.A.Bark, R.Lindsay, S.M.Maliage, S.M.Mullins, S.H.T.Murray, T.M.Ramashidzha, J.F.Sharpey-Schafer - Acta Phys.Pol. B38, 1417 (2007)  
Pair of Bands in the Oblate Doubly-Odd  $^{198}\text{Tl}$  Nucleus
- 2007LA23 A.C.Larsen, M.Guttormsen, R.Chankova, F.Ingebretsen, T.Lonnroth, S.Messelt, S.W.Odegard, J.Rekstad, S.Siem, N.U.H.Syed, A.Schiller, A.Voinov - Acta Phys.Pol. B38, 1495 (2007)  
Radiative Strength Functions of Warm Nuclei in the  $1\text{f}_{7/2}$  Shell
- 2007LA25 L.Lamia, S.Romano, N.Carlin, S.Cherubini, V.Crucilla, M.M.De Moura, M.G.Del Santo, M.G.Munhoz, M.Gulino, R.Liguori Neto, M.La Cognata, F.Mudo, R.G.Pizzone, S.M.R.Puglia, M.L.Sergi, F.A.Souza, C.Spitaleri, A.A.P.Suaide, E.Szanto, A.Szanto de Toledo, S.Tudisco, A.Tumino - Nucl.Phys. A787, 309c (2007)  
Boron depletion: indirect measurement of the  $^{10}\text{B}(\text{p}, \alpha)^7\text{Be}$  S(E)-factor
- 2007LAZW A.P.Lashko, T.N.Lashko - Contrib. 57th International Conf. "Nucleus-2007" on Problems on Fundamental Problems of Nuclear Physics, Atomic Power Engineering and Nuclear Technologies, Voronezh, p.109 (2007)  
The Intensities of  $\beta$ -Transitions to the 1364 and 1697 keV,  $9^-$  Levels of the  $^{178}\text{Hf}$  Occurring in the  $^{178}\text{Ta}$  Decay
- 2007LAZX A.P.Lashko, T.N.Lashko - Contrib. 57th International Conf. "Nucleus-2007" on Problems on Fundamental Problems of Nuclear Physics, Atomic Power Engineering and Nuclear Technologies, Voronezh, p.108 (2007)  
Energy Determination of the  $3 / 2^- \rightarrow 7 / 2^-$  268 keV Transition in the  $^{191}\text{Pt}$  Decay
- 2007LE24 A.Lepine-Szily, R.Lichtenthaler, for the RIBRAS Collaboration - Nucl.Phys. A787, 94c (2007)  
First results of the Radioactive Ion Beam facility in Brasil (RIBRAS): Elastic scattering of  $^6\text{He}$  and  $^8\text{Li}$  beams on light and medium mass targets
- 2007LE26 D.W.Lee, K.Perajarvi, J.Powell, J.P.O'Neil, D.M.Moltz, V.Z.Goldberg, J.Cerny - Phys.Rev. C 76, 024314 (2007)  
Low-lying resonant states in  $^{16}\text{F}$  using a  $^{15}\text{O}$  radioactive ion beam

---

REFERENCES

---

- 2007LI43 C.J.Lin, H.Q.Zhang, F.Yang, M.Ruan, Z.H.Liu, Y.W.Wu, X.K.Wu, P.Zhou, C.L.Zhang, G.L.Zhang, G.P.An, H.M.Jia, X.X.Xu - Nucl.Phys. A787, 281c (2007)  
Effects of breakup of weakly bound projectile and neutron transfer on fusion reactions around Coulomb barrier
- 2007LIZY E.O.Lieder, R.M.Lieder, A.A.Pasternak - Contrib. 57th International Conf. "Nucleus-2007" on Problems on Fundamental Problems of Nuclear Physics, Atomic Power Engineering and Nuclear Technologies, Voronezh, p.94 (2007)  
Lifetimes and Transition Probabilities in Dipole Bands of  $^{139}\text{Sm}$  and  $^{142}\text{Gd}$ , Measured with EUROBALL
- 2007MA40 H.Mach, L.M.Fraile, O.Arndt, A.Blatzhev, N.Boelaert, M.J.G.Borge, R.Boutami, H.Bradley, N.Braun, B.A.Brown, P.A.Butler, A.Covello, Z.Dlouhy, C.Fransen, H.O.U.Fynbo, A.Gargano, Ch.Hinke, P.Hoff, A.Joinet, A.Jokinen, J.Jolie, U.Koster, A.Korgul, K.-L.Kratz, T.Kroll, W.Kurcewicz, J.Nyberg, E.-M.Reillo, E.Ruchowska, W.Schwerdtfeger, G.S.Simpson, M.Stanouli, O.Tengblad, P.G.Thirolf, W.B.Walters - Acta Phys.Pol. B38, 1213 (2007)  
The Single-Particle and Collective Features in the Nuclei Just Above  $^{132}\text{Sn}$
- 2007MA43 I.Mazumdar, H.C.Jain, R.Palit, D.A.Gothe, P.K.Joshi, M.Aggarwal - Acta Phys.Pol. B38, 1463 (2007)  
Search for Rare Shape Transition in Hot Rotating  $^{188}\text{Os}$  Nucleus
- 2007MA46 Y.Maeda, H.Sakai, K.Fujita, M.B.Greenfield, K.Hatanaka, M.Hatano, J.Kamiya, T.Kawabata, H.Kuboki, H.Okamura, J.Rapaport, T.Saito, Y.Sakemi, M.Sasano, K.Sekiguchi, Y.Shimizu, K.Suda, Y.Tameshige, A.Tamii, T.Wakasa, K.Yako, J.Bломgren, P.Mermod, A.Ohrn, M.Osterlund, H.Witala, A.Deltuva, A.C.Fonseca, P.U.Sauer, W.Glockle, J.Golak, H.Kamada, A.Nogga, R.Skibinski - Phys.Rev. C 76, 014004 (2007)  
Differential cross section and analyzing power measurements for (n-pol, d) elastic scattering at 248 MeV
- 2007MA48 Z.Ma, D.W.Bardayan, J.C.Blackmon, R.P.Fitzgerald, M.W.Guidry, W.R.Hix, K.L.Jones, R.L.Kozub, R.J.Livesay, M.S.Smith, J.S.Thomas, D.W.Visser - Phys.Rev. C 76, 015803 (2007); Erratum Phys.Rev. C 76, 039901 (2007)  
Astrophysically important  $^{31}\text{S}$  states studied with the  $^{32}\text{S}(\text{p}, \text{d})^{31}\text{S}$  reaction
- 2007MA55 J.Marton - Nucl.Phys. A790, 328c (2007)  
Precision studies on strong interaction in pionic hydrogen
- 2007MA57 A.Marinov, I.Rodushkin, Y.Kashiv, L.Halicz, I.Segal, A.Pape, R.V.Gentry, H.W.Miller, D.Kolb, R.Brandt - Phys.Rev. C 76, 021303 (2007)  
Existence of long-lived isomeric states in naturally-occurring neutron-deficient Th isotopes
- 2007MA58 H.Makii, Y.Nagai, K.Mishima, M.Segawa, T.Shima, M.Igashira - Phys.Rev. C 76, 022801 (2007)  
Neutron-induced reactions using a  $\gamma$ -ray detector in a  $^{12}\text{C}(\alpha, \gamma)^{16}\text{O}$  reaction study

---

*REFERENCES*

---

- 2007MA60 H.Mardanpour, H.R.Amir-Ahmadi, R.Benard, A.Biegun, M.Eslami-Kalantari, N.Kalantar-Nayestanaki, M.Kis, St.Kistryn, A.Kozela, H.Kuboki, Y.Maeda, M.Mahjour-Shafiei, J.G.Messchendorp, K.Miki, S.Noji, A.Ramazani, H.Sakai, M.Sasano, K.Sekiguchi, E.Stephan, R.Sworst, Y.Takahashi, K.Yako - Nucl.Phys. A790, 426c (2007)  
Study of three-nucleon force effects in p(pol) + d break-up with BINA
- 2007MA61 Y.Maeda, H.Sakai, K.Fujita, M.Hatano, J.Kamiya, T.Kawabata, H.Kuboki, K.Hatanaka, H.Okamura, T.Saito, Y.Sakemi, M.Sasano, K.Sekiguchi, Y.Shimizu, K.Suda, Y.Tameshige, A.Tamii, T.Wakasa, K.Yako, M.B.Greenfield, H.Kamada, H.Witala - Nucl.Phys. A790, 430c (2007)  
Measurements of the (n(pol)d) scattering at 250 MeV and three-nucleon forces
- 2007MA66 V.Mazur, Z.M.Bigan, D.M.Symochko - 52, 744 (2007)  
Excitation cross-section of the  $11 / 2^-$  isomeric states of the  $^{109}\text{Pd}$  and  $^{111}\text{Cd}$  nuclei for ( $\gamma$ , n) reactions in the gamma-quantum energy range of 8-18 MeV
- 2007ME12 V.Meot, J.Aupiais, P.Morel, G.Gosselin, F.Gobet, J.N.Scheurer, M.Tarisien - Phys.Rev. C 75, 064306 (2007)  
Half-life of the first excited state of  $^{201}\text{Hg}$
- 2007ME16 J.G.Messchendorp - Nucl.Phys. A790, 434c (2007)  
Proton-deuteron radiative capture at intermediate energies
- 2007MI25 S.Michimasa, S.Shimoura, H.Iwasaki, M.Tamaki, S.Ota, N.Aoi, H.Baba, N.Iwasa, S.Kanno, S.Kubono, K.Kurita, M.Kurokawa, T.Minemura, T.Motobayashi, M.Notani, H.J.Ong, A.Saito, H.Sakurai, E.Takeshita, S.Takeuchi, Y.Yanagisawa, A.Yoshida - Nucl.Phys. A787, 569c (2007)  
Proton Shell Structure in Neutron-rich  $^{23}\text{F}$
- 2007MI31 K.Miki, H.Sakai, K.Itoh, K.Kawabata, H.Kuboki, Y.Maeda, S.Noji, S.Sakaguchi, N.Sakamoto, Y.Sasamoto, M.Sasano, Y.Satou, K.Sekiguchi, K.Suda, Y.Takahashi, T.Uesaka, K.Yako - Nucl.Phys. A790, 442c (2007)  
Measurement of the  $^2\text{H}(\text{d}, \text{pn})$  reaction at 0 degrees at 270 MeV
- 2007MO20 B.H.Moazen, D.W.Bardayan, J.C.Blackmon, K.Y.Chae, K.Chipps, C.P.Domizioli, R.Fitzgerald, U.Greife, W.R.Hix, K.L.Jones, R.L.Kozub, E.J.Lingerfelt, R.J.Livesay, C.D.Nesara, S.D.Pain, L.F.Roberts, J.F.Shriner, Jr., M.S.Smith, J.S.Thomas - Phys.Rev. C 75, 065801 (2007)  
Measurement of the 183 keV resonance in  $^{17}\text{O}(\text{p}, \alpha)^{14}\text{N}$  using a novel technique
- 2007MY02 S.Myalski, M.Kmiecik, A.Maj, P.H.Regan, A.B.Garnsworthy, S.Pietri, D.Rudolph, Zs.Podolyak, S.J.Steer, F.Becker, P.Bednarczyk, J.Gerl, M.Gorska, H.Grawe, I.Kojouharov, H.Schaffner, H.J.Wollersheim, W.Prokopowicz, J.Grebosz, G.Benzoni, B.Blank, C.Brandau, A.M.Bruce, L.Caceres, F.Camera, W.N.Catford, I.J.Cullen, Zs.Dombradi, P.Doornenbal, E.Estevez, H.Geissel, W.Gelletly, A.Heinz, R.Hoischen, G.Ilie, G.A.Jones, A.Jungclaus, A.Kelic, F.G.Kondev, T.Kurtukian-Nieto, N.Kurz, S.Lalkovski, Z.Liu, F.Montes, M.Pfutzner, T.Saito, T.Shizuma, A.J.Simons, S.Schwertel, S.Tachenov, P.M.Walker, E.Werner-Malento, O.Wieland - Acta Phys.Pol. B38, 1277 (2007)

**REFERENCES**

---

- Isomeric Ratio for the  $I^\pi = 8^+$  Yrast State in  $^{96}\text{Pd}$  Produced in the Relativistic Fragmentation of  $^{107}\text{Ag}$
- 2007NA13 B.S.Nara Singh, A.N.Steer, D.G.Jenkins, R.Wadsworth, M.A.Bentley, P.J.Davies, R.Glover, N.S.Pattabiraman, C.J.Lister, T.Grahn, P.T.Greenlees, P.Jones, R.Julin, S.Juutinen, M.Leino, M.Nyman, J.Pakarinen, P.Rahkila, J.Saren, C.Scholey, J.Sorri, J.Uusitalo, P.A.Butler, M.Dimmock, D.T.Joss, J.Thomson, B.Cederwall, B.Hadinia, M.Sandzelius - Phys.Rev. C 75, 061301 (2007)  
Coulomb shifts and shape changes in the mass 70 region
- 2007NA18 S.Nakayama, E.Matsumoto, R.Hayami, K.Fushimi, H.Kawasuso, K.Yasuda, T.Yamagata, H.Akimune, H.Ikemizu, M.Fujiwara, M.Yosoi, K.Nakanishi, K.Kawase, H.Hashimoto, T.Oota, K.Sagara, T.Kudoh, S.Asaji, T.Ishida, M.Tanaka, M.B.Greenfield - Phys.Rev. C 76, 021305 (2007)  
Analog of the giant dipole resonance in  $^4\text{He}$
- 2007NAZW Y.Nagai, T.Shima, A.Tomyo, H.Makii, K.Mishima, M.Segawa, H.Ueda, Y.Temma - Proc.2006 Symposium on Nuclear Data, RICOTTI, Tokai-mura, Japan, Jan. 25-26 (2007) T.Fukahori, Ed.p.III.01 (2007)  
Critical Role of Nuclear Data in Nuclear Astrophysics
- 2007NE10 G.Neyens, L.Aтанасова, D.L.Balabanski, F.Becker, P.Bednarczyk, L.Caceres, P.Doornenbal, J.Gerl, M.Gorska, J.Grebosz, M.Hass, G.Ilie, N.Kurz, I.Kojouharov, R.Lozeva, A.Maj, M.Pfutzner, S.Pietri, Zs.Podolyak, W.Prokopowicz, T.R.Saitoh, H.Schaffner, G.Simpson, N.Vermeulen, E.Werner-Malento, J.Walker, H.J.Wollersheim, D.Bazzacco, G.Benzoni, A.Blažhev, N.Błasi, A.Bracco, C.Brandau, F.Camera, S.K.Chamoli, S.Chmel, F.C.L.Crespi, J.M.Daugas, M.De Rydt, P.Detistov, C.Fahlander, E.Farnea, G.Georgiev, K.Gladnishki, R.Hoischen, M.Ionescu-Bujor, A.Iordachescu, J.Jolie, A.Jungclaus, M.Kmiecik, A.Krasznahorkay, R.Kuleša, S.Lakshmi, G.Lo Bianco, S.Mallion, K.Mazurek, W.Mecyzński, D.Montanari, S.Myalsky, O.Perru, D.Rudolph, G.Rusev, A.Saltarelli, R.Schwengner, J.Styczen, K.Turzo, J.J.Valiente-Dobon, O.Wieland, M.Zieblinski - Acta Phys.Pol. B38, 1237 (2007)  
 $\gamma$  Factor Measurements on Relativistic Isomeric Beams Produced by Fragmentation and U-Fission: The g-Rising Project at GSI
- 2007OB02 A.Oberstedt, S.Oberstedt, M.Gawrys, N.Kornilov - Phys.Rev.Lett. 99, 042502 (2007)  
Identification of a Shape Isomer in  $^{235}\text{U}$
- 2007OG02 Yu.Ts.Oganessian, V.K.Utyonkov, Yu.V.Lobanov, F.Sh.Abdullin, A.N.Polyakov, R.N.Sagaidak, I.V.Shirokovsky, Yu.S.Tsyganov, A.A.Voinov, G.G.Gulbekian, S.L.Bogomolov, B.N.Gikal, A.N.Mezentsev, V.G.Subbotin, A.M.Sukhov, K.Subotic, V.I.Zagrebaev, G.K.Vostokin, M.G.Itkis, R.A.Henderson, J.M.Kenneally, J.H.Landrum, K.J.Moody, D.A.Shaughnessy, M.A.Stoyer, N.J.Stoyer, P.A.Wilk - Phys.Rev. C 76, 011601 (2007)  
Synthesis of the isotope  $^{282}\text{Nb}$  in the  $^{237}\text{Np} + ^{48}\text{Ca}$  fusion reaction
- 2007OG05 Yu.Ts.Oganessian - Nucl.Phys. A787, 343c (2007)  
Synthesis and Decay Properties of Heaviest Nuclei with  $^{48}\text{Ca}$ -Induced Reactions

REFERENCES

---

- 2007OR04 J.N.Orce, S.N.Choudry, B.Crider, E.Elhami, S.Mukhopadhyay, M.Scheck, M.T.McEllistrem, S.W.Yates - Phys.Rev. C 76, 021302 (2007)  
 $2_1^+ \rightarrow 0_1^+$  transition strengths in Sn nuclei
- 2007OS03 V.Ostashko, M.Lattuada, O.Goryunov, A.Di Pietro, D.Miljanic, M.Zadro, A.Musumara, M.-G.Pellegriti, S.Romano, S.Tudisco, A.Tumino, P.Figuera - Ukr.J.Phys. 52, 525 (2007)  
 $^8\text{Be}$  nucleus resonances at the excitation energy  $E_x < 35$  MeV in the three-particle reaction  $^9\text{Be} + ^{13}\text{C} \rightarrow ^{14}\text{C} + \alpha + \alpha$
- 2007PA26 C.Pauly, and the CELSIUS-WASA Collaboration - Phys.Lett. B 649, 122 (2007)  
The pp  $\rightarrow$  pp $\pi\pi\pi$  reaction channels in the threshold region
- 2007PA27 R.D.Page, L.Bianco, I.G.Darby, J.Uusitalo, D.T.Joss, T.Grahn, R.-D.Herzberg, J.Pakarinen, J.Thomson, S.Eeckhaudt, P.T.Greenlees, P.M.Jones, R.Julin, S.Juutinen, S.Ketelhut, M.Leino, A.-P.Leppanen, M.Nyman, P.Rahkila, J.Saren, C.Scholey, A.Steer, M.B.Gomez Hornillos, J.S.Al-Khalili, A.J.Cannon, P.D.Stevenson, S.Erturk, B.Gall, B.Hadinia, M.Venhart, J.Simpson - Phys.Rev. C 75, 061302 (2007)  
 $\alpha$  decay of  $^{159}\text{Re}$  and proton emission from  $^{155}\text{Ta}$
- 2007PA33 V.V.Parkar, K.Mahata, S.Santra, S.Kailas, A.Shrivastava, K.Ramachandran, A.Chatterjee, V.Jha, P.Singh - Nucl.Phys. A792, 187 (2007)  
Fusion cross sections for  $^7\text{Li} + ^{12}\text{C}$  system at near barrier energies
- 2007PAZX S.R.Palvanov, M.I.Mamajusopova - Contrib. 57th International Conf. "Nucleus-2007" on Problems on Fundamental Problems of Nuclear Physics, Atomic Power Engineering and Nuclear Technologies, Voronezh, p.146 (2007)  
Isomeric Yield Ratios of the Reaction  $^{120}\text{Te}(\gamma, n)^{119m,g}\text{Te}$  and  $^{130}\text{Te}(\gamma, n)^{129m,g}\text{Te}$
- 2007PAZY S.R.Palvanov - Contrib. 57th International Conf. "Nucleus-2007" on Problems on Fundamental Problems of Nuclear Physics, Atomic Power Engineering and Nuclear Technologies, Voronezh, p.145 (2007)  
Isomeric Yield Ratios of the Reaction  $^{144}\text{Sm}(\gamma, n)^{143m,g}\text{Sm}$
- 2007PE14 O.L.Pechenaya, C.J.Chiara, D.G.Sarantites, W.Reviol, R.J.Charity, M.P.Carpenter, R.V.F.Janssens, T.Lauritsen, C.J.Lister, D.Seweryniak, S.Zhu, L.-L.Andersson, E.K.Johansson, D.Rudolph - Phys.Rev. C 76, 011304 (2007)  
Level structure of  $^{92}\text{Rh}$ : Implications for the two-proton decay of  $^{94}\text{Ag}^m$
- 2007PRZZ E.Prokhorova, F.Gonnenwein, Yu.Kopatch, M.Mutterer, F.Hanappe, V.Kinnard, L.Stuttge, O.Dorvaux, H.-J.Wollersheim - Proc.Intern.Symposium on Exotic Nuclei, Khanty-Mansiysk, Russia, 17-22 July, 2006, Yu.E.Penionzhkevich, E.A.Cherepanov, Eds. p.179 (2007); AIP Conf.Proc. 912 (2007)  
Angular Correlations Between Fragment Spin and Prompt Neutron Evaporation in Spontaneous Fission of  $^{252}\text{Cf}$ : CORA-Demon Experiment
- 2007RE12 R.A.Rebeles, A.Hermanne, S.Takacs, F.Tarkanyi, S.F.Kovalev, A.Ignatyuk - Nucl.Instrum.Methods Phys.Res. B260, 672 (2007)

---

***REFERENCES***

---

- Alpha induced reactions on  $_{nat}Sn$ : An experimental study of excitation functions and possible production pathways
- 2007RE14 W.Reviol, D.G.Sarantites, C.J.Chiara, M.Montero, O.L.Pechenaya - Acta Phys.Pol. B38, 1547 (2007)  
In-Beam Spectroscopy in the Actinide Region Using an Evaporation Residue Detector
- 2007RE17 K.E.Rehm - Nucl.Phys. A787, 289c (2007)  
Experiments in Nuclear Astrophysics
- 2007RE18 P.H.Regan, A.B.Garnsworthy, S.Pietri, L.Caceres, M.Gorska, D.Rudolph, Zs.Podolyak, S.J.Steer, R.Hoischen, J.Gerl, H.J.Wollersheim, J.Grebosz, H.Schaffner, W.Prokopowicz, I.Kojouharov, F.Becker, P.Bednarczyk, P.Doornenball, H.Geissel, H.Grawe, A.Kelic, N.Kurz, F.Montes, T.Saito, S.Tashenov, E.Werner-Malento, A.Heinz, L.Aтанасова, D.Balabanski, G.Benzoni, B.Blank, A.Blažhev, C.Brandau, A.M.Bruce, W.N.Catford, F.Camera, I.J.Cullen, M.E.Estevez, C.Fahlander, W.Gelletly, G.Ilie, A.Jungclaus, J.Jolie, T.Kurtukian-Nieto, Z.Liu, M.Kmiecik, A.Maj, S.Myalski, S.Schwertel, T.Shizuma, A.J.Simons, P.M.Walker, O.Wieland - Nucl.Phys. A787, 491c (2007)  
Isomer Spectroscopy Using Relativistic Projectile Fragmentation at the N=Z Line for A  $\sim$  80  $\rightarrow$  90
- 2007RE19 M.Rejmund, S.Bhattacharyya, A.Navin, W.Mittig, L.Gaudefroy, M.Gelin, G.Mukherjee, F.Rejmund, P.Roussel-Chomaz, Ch.Theisen - Phys.Rev. C 76, 021304 (2007)  
Shell evolution and the N = 34 "magic number"
- 2007R016 E.Roeckl, I.Mukha, L.Batist, A.Blažhev, J.Doring, H.Grawe, L.Grignoroff, M.Huyse, Z.Janas, R.Kirchner, M.La Commara, C.Mazzocchi, S.L.Tabor, P.Van Duppen - Acta Phys.Pol. B38, 1121 (2007)  
One-Proton and Two-Proton Radioactivity of the (21 $^{+}$ ) Isomer in  $^{94}Ag$
- 2007R017 F.J.Rodriguez, J.A.Liendo, B.T.Roeder, W.Weintraub, K.W.Kemper, N.Keeley, F.Marechal - Nucl.Instrum.Methods Phys.Res. B261, 1005 (2007)  
Spin and parity determinations of excited  $^{15}N$  based on polarized and unpolarized  $^{12}C(^{7}Li, \alpha)^{15}N$  reaction data at  $E_{lab} = 34$  MeV
- 2007RUZY N.I.Rukhadze, P.Benes, Ch.Briancon, V.B.Brudanin, P.Chermak, V.G.Egorov, K.N.Gusev, A.A.Klimenko, V.E.Kovalenko, A.Kovalik, A.V.Salamatin, I.Stekl, V.V.Timkin, Ts.Vylov - Contrib. 57th International Conf. "Nucleus-2007" on Problems on Fundamental Problems of Nuclear Physics, Atomic Power Engineering and Nuclear Technologies, Voronezh, p.181 (2007)  
Search for  $2\nu EC / EC$  Decay Capture of  $^{106}Cd$
- 2007RZ02 T.Rzaca-Urban, W.Urban, J.L.Durell, A.G.Smith, I.Ahmad - Phys.Rev. C 76, 027302 (2007)  
New excited states in  $^{82}Ge$ : Possible weakening of the N = 50 closed shell

---

*REFERENCES*

---

- 2007SA36 M.Sandzelius, B.Hadinia, B.Cederwall, K.Andgren, E.Ganioglu, I.G.Darby, M.R.Dimmock, S.Eeckhaudt, T.Grahn, P.T.Greenlees, E.Ideguchi, P.M.Jones, D.T.Joss, R.Julin, S.Juutinen, A.Khaplanov, M.Leino, L.Nelson, M.Niikura, M.Nyman, R.D.Page, J.Pakarinen, E.S.Paul, M.Petri, P.Rahkila, J.Saren, C.Scholey, J.Sorri, J.Uusitalo, R.Wadsworth, R.Wyss - Phys.Rev.Lett. 99, 022501 (2007)  
Identification of Excited States in the  $T_z=1$  Nucleus  $^{110}\text{Xe}$ : Evidence for Enhanced Collectivity near the  $N=Z=50$  Double Shell Closure
- 2007SA38 H.Sakai - Nucl.Phys. A790, 122c (2007)  
Experimental status of three-nucleon force study by nucleon-deuteron system
- 2007SA39 K.Sagara, M.Tomiyama, S.Shimomoto, T.Ishida, T.Kudoh, S.Kuroita, T.Morikawa, M.Shiota, H.Ohira, H.Kamada, H.Witala - Nucl.Phys. A790, 348c (2007)  
Discrepancy in pd breakup reaction at  $E_p=13$  MeV
- 2007SC26 C.Scholl, P.Petkov, V.Werner, A.Linnemann, T.Adachi, A.Dewald, A.Fitzler, C.Fransen, Y.Fujita, J.Jolie, K.Langanke, A.F.Lisetskiy, G.Martinez-Pinedo, D.Mucher, J.N.Orce, N.Petralla, N.Warr, K.O.Zell, P.von Brentano - Phys.Rev. C 75, 064321 (2007)  
New spin assignments in the odd-odd  $N = Z$  nucleus  $^{42}\text{Sc}$  and the breaking of the  $^{40}\text{Ca}$  core
- 2007SC29 H.Schatz - Nucl.Phys. A787, 299c (2007)  
Nuclear Astrophysics with Fast Rare Isotope Beams
- 2007SC31 K.Schonning, for the CELSIUS / WASA Collaboration - Nucl.Phys. A790, 319c (2007)  
The production of  $\omega$  mesons in pd  $\rightarrow$   $^3\text{He}\omega$  near the kinematic threshold
- 2007SC32 A.Schiller, N.Frank, T.Baumann, D.Bazin, B.A.Brown, J.Brown, P.A.DeYoung, J.E.Finck, A.Gade, J.Hinnefeld, R.Howes, J.-L.Lecouey, B.Luther, W.A.Peters, H.Scheit, M.Thoennessen, J.A.Tostevin - Phys.Rev.Lett. 99, 112501 (2007)  
Selective Population and Neutron Decay of an Excited State of  $^{23}\text{O}$
- 2007SE02 D.Seweryniak, P.J.Woods, M.P.Carpenter, T.Davinson, R.V.F.Janssens, D.G.Jenkins, T.Lauritsen, C.J.Lister, J.Shergur, S.Sinha, A.Woehr - Phys.Rev. C 75, 062801 (2007)  
Level structure of  $^{26}\text{Si}$  and its implications for the astrophysical reaction rate of  $^{25}\text{Al}(p, \gamma)^{26}\text{Si}$
- 2007SE04 D.Seweryniak, M.P.Carpenter, S.Gros, A.A.Hecht, N.Hotelting, R.V.F.Janssens, T.L.Khoo, T.Lauritsen, C.J.Lister, G.Lotay, D.Peterson, A.P.Robinson, W.B.Walters, X.Wang, P.J.Woods, S.Zhu - Phys.Rev.Lett. 99, 022504 (2007)  
Single-Neutron States in  $^{101}\text{Sn}$
- 2007SE05 V.O.Sergeev, F.F.Valiev - Bull.Rus.Acad.Sci.Phys. 71, 827 (2007); Izv.Akad.Nauk RAS, Ser.Fiz. 71, 854 (2007)  
Unique second-forbidden  $\beta$  transitions: Decay of  $^{137}\text{Cs}$

## REFERENCES

---

- 2007SE06 D.Seweryniak, B.Blank, M.P.Carpenter, C.N.Davids, T.Davinson, S.J.Freeman, N.Hammond, N.Hotelting, R.V.F.Janssens, T.L.Khoo, Z.Liu, G.Mukherjee, A.Robinson, C.Scholey, S.Sinha, J.Shergur, K.Starosta, W.B.Walters, A.Woehr, P.J.Woods - Phys.Rev.Lett. 99, 082502 (2007)  
Effect of a Triaxial Nuclear Shape on Proton Tunneling: The Decay and Structure of  $^{145}\text{Tm}$
- 2007SE07 M.Segawa, T.Masaki, Y.Nagai, Y.Temma, T.Shima, K.Mishima, M.Igashira, S.Goriely, A.Koning, S.Hilaire - Phys.Rev. C 76, 022802 (2007)  
Neutron capture cross sections of  $^{186}\text{Os}$ ,  $^{187}\text{Os}$ , and  $^{189}\text{Os}$  for the Re-Os chronology
- 2007SE08 N.Severijns, A.A.Belyaev, A.L.Erzinkyan, P.-D.Eversheim, V.T.Filimonov, V.V.Golovko, G.M.Gurevich, P.Herzog, I.S.Kraev, A.A.Lukhanin, V.I.Noga, V.P.Parfenova, T.Phalet, A.V.Rusakov, Yu.G.Toporov, C.Tramm, V.N.Vyachin, F.Wauters, D.Zakoucky, E.Zotov - Phys.Rev. C 76, 024304 (2007)  
 $\alpha$ -decay half-life of  $^{253}\text{Es}$  in metallic Fe at temperatures between 4 K and 50 mK
- 2007SE11 K.Sekiguchi, H.Sakai, N.Sakamoto, H.Kuboki, M.Sasano, Y.Takahashi, K.Yako, T.Kawabata, Y.Maeda, S.Sakaguchi, Y.Sasamoto, K.Suda, T.Uesaka, H.Okamura, K.Itoh, T.Wakasa - Nucl.Phys. A790, 450c (2007)  
Study of spin parts of three nucleon forces via (d(pol)p) breakup reactions at intermediate energies
- 2007SEZW V.O.Sergeev - Contrib. 57th International Conf. "Nucleus-2007" on Problems on Fundamental Problems of Nuclear Physics, Atomic Power Engineering and Nuclear Technologies, Voronezh, p.101 (2007)  
Excitation of  $^{97}\text{Rh}$  Levels in (p,  $\gamma$ ) Reaction
- 2007SI16 G.Simpson, J.Genevey, J.A.Pinston, W.Urban, A.Zlomaniec, R.Orlandi, A.Scherillo, I.Tsekhanovich, A.G.Smith, A.Thallon, B.J.Varley, J.Jolie, N.Warr - Acta Phys.Pol. B38, 1321 (2007)  
Nuclear Structure Studies of Microsecond Isomers Near A =100
- 2007SI19 J.M.Sisterson - Nucl.Instrum.Methods Phys.Res. B261, 993 (2007)  
Cross section measurements for neutron-induced reactions off C, Al,  $\text{SiO}_2$ , Si and Au producing relatively short-lived radionuclides at neutron energies between 70 and 160 MeV
- 2007SIZY S.I.Sidorchuk, A.S.Fomichev, M.S.Golovkov, V.A.Gorshkov, A.V.Gorshkov, S.A.Krupko, Yu.Ts.Oganessian, A.M.Rodin, R.S.Slepnev, S.V.Stepantsov, G.M.Ter-Akopian, R.Wolski, A.A.Korsheninnikov, E.Yu.Nikolskii, P.Roussel-Chomaz, W.Mittig - Proc.Intern.Symposium on Exotic Nuclei, Khanty-Mansiysk, Russia, 17-22 July, 2006, Yu.E.Penionzhkevich, E.A.Cherepanov, Eds. p.43 (2007); AIP Conf.Proc. 912 (2007)  
Three-Body Correlations In  $^6\text{He}$  Revealed In The Quasi-Free Knockout Reaction  $^4\text{He}(^6\text{He}, 2\alpha)2\text{n}$
- 2007SP04 A.Spyrou, H.-W.Becker, A.Lagoyannis, S.Harissopoulos, C.Rolfs - Phys.Rev. C 76, 015802 (2007)

---

***REFERENCES***

---

- Cross-section measurements of capture reactions relevant to the p process using a  $4\pi$   $\gamma$ -summing method
- 2007ST12      B.Streicher, S.Antalic, S.Saro, M.Venhart, F.P.Hessberger, S.Hofmann, D.Ackermann, B.Kindler, I.Kojojouharov, B.Lommel, R.Mann, B.Sulignano, P.Kuusiniemi - Acta Phys.Pol. B38, 1561 (2007)  
Alpha-Gamma Decay Studies of  $^{261}\text{Sg}$
- 2007ST16      K.Starosta, A.Dewald, A.Dunomes, P.Adrich, A.M.Amthor, T.Baumann, D.Bazin, M.Bowen, B.A.Brown, A.Chester, A.Gade, D.Galaviz, T.Glasmacher, T.Ginter, M.Hausmann, M.Horoi, J.Jolie, B.Melon, D.Miller, V.Moeller, R.P.Norris, T.Pissulla, M.Portillo, W.Rother, Y.Shimbara, A.Stolz, C.Vaman, P.Voss, D.Weisshaar, V.Zelevinsky - Phys.Rev.Lett. 99, 042503 (2007)  
Shape and Structure of N=Z  $^{64}\text{Ge}$ : Electromagnetic Transition Rates from the Application of the Recoil Distance Method to a Knockout Reaction
- 2007ST17      R.Stanoeva, V.Bradnova, S.Vokal, P.I.Zarubin, I.G.Zarubina, N.A.Kachalova, A.D.Kovalenko, A.I.Malakhov, G.I.Orlova, N.G.Peresadko, P.A.Rukoyatkin, V.V.Rusakova, E.Stan, M.Haiduc, S.P.Kharlamov, I.Tsakov, T.V.Shchedrina - Phys.Atomic Nuclei 70, 1216 (2007); Yad.Fiz. 70, 1255 (2007)  
Peripheral fragmentation of  $^8\text{B}$  nuclei in nuclear emulsion at an energy of 1.2 GeV per nucleon
- 2007ST18      N.J.Stoyer, J.H.Landrum, P.A.Wilk, K.J.Moody, J.M.Kenneally, D.A.Shaughnessy, M.A.Stoyer, J.F.Wild, R.W.Lougheed, S.N.Dmitriev, Yu.Ts.Oganessian, S.V.Shishkin, N.V.Aksenov, E.E.Tereshatov, G.A.Bozhikov, G.K.Vostokin, V.K.Utyonkov, A.A.Yeremin - Nucl.Phys. A787, 388c (2007)  
Chemical Identification of a Long-Lived Isotope of Dubnium, a Descendant of Element 115
- 2007ST19      M.A.Stoyer, W.B.Walters, C.Y.Wu, D.Cline, H.Hua, A.B.Hayes, R.Teng, R.M.Clark, P.Fallon, A.Goergen, A.O.Macchiavelli, K.Vetter, P.Mantica, B.Tomlin - Nucl.Phys. A787, 455c (2007)  
Spectroscopy of neutron-rich Pd and Cd isotopes near A=120
- 2007ST20      J.R.Stone, G.Goldring, N.J.Stone, N.Severijns, M.Hass, D.Zakoucky, T.Giles, U.Koster, I.S.Kraev, S.Lakshmi, M.Lindroos, F.Wauters - Phys.Rev. C 76, 025502 (2007)  
Confirmation of parity violation in the  $\gamma$  decay of  $^{180}\text{Hf}^m$
- 2007STZY      J.R.Stone, G.Goldring, N.J.Stone, N.Severijns, M.Hass, D.Zakoucky, T.Giles, U.Koster, I.S.Kraev, S.Lakshmi, M.Lindroos, F.Wauters - arXiv:0707.1061v1 [nucl-ex] (2007)  
Confirmation of Parity Violation in the Gamma Decay of  $^{180}\text{Hf}^m$

---

***REFERENCES***

---

- 2007SZ05 S.Szilner, C.A.Ur, L.Corradi, N.Marginean, G.Pollarolo, A.M.Stefanini, S.Beghini, B.R.Behera, E.Fioretto, A.Gadea, B.Guiot, A.Latina, P.Mason, G.Montagnoli, F.Scarlassara, M.Trotta, G.de Angelis, F.Della Vedova, E.Farnea, F.Haas, S.Lenzi, S.Lunardi, R.Marginean, R.Menegazzo, D.R.Napoli, M.Nespolo, I.V.Pokrovsky, F.Recchia, M.Romoli, M.-D.Salsac, N.Soic, J.J.Valiente-Dobon - Phys.Rev. C 76, 024604 (2007)  
Multinucleon transfer reactions in closed-shell nuclei
- 2007TA14 S.Takacs, F.Tarkanyi, B.Kiraly, A.Hermanne, M.Sonck - Nucl.Instrum.Methods Phys.Res. B260, 495 (2007)  
Evaluated activation cross sections of longer-lived radionuclides produced by deuteron induced reactions on natural nickel
- 2007TA15 O.B.Tarasov, T.Baumann, A.M.Amthor, D.Bazin, C.M.Folden III, A.Gade, T.N.Ginter, M.Hausmann, M.Matos, D.J.Morrissey, A.Nettleton, M.Portillo, A.Schiller, B.M.Sherrill, A.Stolz, M.Thoennessen - Phys.Rev. C 75, 064613 (2007)  
New isotope  $^{44}\text{Si}$  and systematics of the production cross sections of the most neutron-rich nuclei
- 2007TA16 S.Takacs, B.Kiraly, F.Tarkanyi, A.Hermanne - Nucl.Instrum.Methods Phys.Res. B262, 7 (2007)  
Evaluated activation cross sections of longer-lived radionuclides produced by deuteron induced reactions on natural titanium
- 2007TA17 E.R.Tardiff, T.E.Chupp, W.Lorenzon, S.R.Nuss-Warren, J.A.Behr, M.R.Pearson, K.Gulyuz, R.S.Lefferts, N.Pietralla, G.Rainovski, J.F.Sell, G.D.Sprouse - Nucl.Instrum.Methods Phys.Res. A579, 472 (2007)  
Polarization and relaxation of  $^{209}\text{Rn}$
- 2007TA23 Y.Tameshige, K.Sagara, T.Kudoh, M.Shiota, S.Shimomoto, T.Wakasa, K.Hatanaka, A.Tamii, Y.Sakemi, Y.Shimizu, H.P.Yoshida, H.Kamada, H.Witala - Nucl.Phys. A790, 446c (2007)  
Tensor analyzing powers of pd radiative capture at  $E_{d(pol)} = 137 \text{ MeV}$
- 2007TA25 L.Tang, and the Jlab E01-011 Collaboration - Nucl.Phys. A790, 679c (2007)  
The HKS experiment on  $\Lambda$ -hypernuclear spectroscopy via electroproduction at JLab
- 2007TAZW V.H.Tan, T.T.Anh, N.C.Hai, P.N.Son, T.Fukahori - Proc.2006 Symposium on Nuclear Data, RICOTTI, Tokai-mura, Japan, Jan. 25-26 (2007) T.Fukahori, Ed.p.V.02 (2007)  
Measurement of Neutron Capture Cross Sections of  $^{139}\text{La}$ ,  $^{152}\text{Sm}$  and  $^{191,193}\text{Ir}$  at 55 and 144keV
- 2007TH07 N.J.Thompson, P.H.Regan, A.B.Garnsworthy, A.D.Ayangeakaa, H.C.Ai, L.Amon, R.B.Cakirli, R.F.Casten, C.R.Fitzpatrick, S.J.Freeman, G.Guerdal, A.Heinz, G.A.Jones, E.A.McCutchan, J.Qian, V.Werner, S.J.Williams, R.Winkler - Acta Phys.Pol. B38, 1381 (2007)  
Spectroscopy of  $^{91}\text{Zr}_{51}$  at Medium to High Spins

---

*REFERENCES*

---

- 2007TI07 J.Timar, T.Koike, N.Pietralla, G.Rainovski, D.Sohler, T.Ahn, G.Berek, A.Costin, K.Dusling, T.C.Li, E.S.Paul, K.Starosta, C.Vaman - Phys.Rev. C 76, 024307 (2007)  
High-spin structure of  $^{105}\text{Ag}$ : Search for chiral doublet bands
- 2007TR08 V.Tripathi, S.L.Tabor, P.F.Mantica, Y.Utsuno, P.Bender, J.Cook, C.R.Hoffman, S.Lee, T.Otsuka, J.Pereira, M.Perry, K.Pepper, J.S.Pinter, J.Stoker, A.Volya, D.Weisshaar - Phys.Rev. C 76, 021301 (2007)  
Competition between normal and intruder states inside the "island of inversion"
- 2007TRZX H.P.Trautvetter, D.Bemmerer, R.Bonetti, C.Broggini, A.Caciolli, F.Confortola, P.Corvisiero, H.Costantini, Z.Elekes, A.Formicola, Zs.Fulop, G.Gervino, A.Guglielmetti, Gy.Gyurky, C.Gustavino, G.Imbriani, M.Junker, A.Lemut, B.Limata, M.Marta, C.Mazzocchi, R.Menegazzo, P.Prati, V.Roca, C.Rolfs, C.Rossi Alvarez, E.Somorjai, O.Straniero, F.Strieder, F.Terrasi, S.Vezzu, A.Vomiero - ArXiv:0708.3376v1 [nucl-ex] (2007)  
Ground state capture in  $^{14}\text{N}(\text{p}, \gamma)^{15}\text{O}$  studied above the 259 keV resonance at LUNA
- 2007TU04 A.Tumino, C.Spitaleri, G.G.Rapisarda, S.Cherubini, S.Blagus, M.Bogovac, V.Crucilla, Z.Elekes, Z.Fulop, M.Gulino, G.Gyurky, G.Kiss, M.La Cognata, L.Lamia, Dj.Miljanic, M.Milin, F.Mudo, A.Mukhamedzhanov, R.G.Pizzone, D.Rendic, S.Romano, M.L.Sergi, E.Somorjai - Nucl.Phys. A787, 337c (2007)  
No signature of nuclear-Coulomb interference in the proton-proton elastic scattering via the Trojan Horse Method
- 2007UG01 C.Ugalde, A.E.Champagne, S.Daigle, C.Iliadis, R.Longland, J.R.Newton, E.Osenbaugh-Stewart, J.A.Clark, C.Deibel, A.Parikh, P.D.Parker, C.Wrede - Phys.Rev. C 76, 025802 (2007)  
Experimental evidence for a natural parity state in  $^{26}\text{Mg}$  and its impact on the production of neutrons for the s process
- 2007VA10 A.A.Vasenko, N.D.Galanina, K.E.Gusev, V.S.Demidov, E.V.Demidova, I.V.Kirpichnikov, A.Yu.Sokolov, A.S.Starostin, N.A.Khaldeeva - Phys.Atomic Nuclei 70, 1160 (2007); Yad.Fiz. 70, 1199 (2007)  
Investigation of semicoherent interactions of 1-GeV protons with silicon
- 2007VAZK Yu.A.Vaganov, J.S.Ibrahim, V.G.Kalinnikov, V.I.Stegailov, Zh.Sereeter, D.V.Filosofov, Yu.V.Yushkevich - Contrib. 57th International Conf. "Nucleus-2007" on Problems on Fundamental Problems of Nuclear Physics, Atomic Power Engineering and Nuclear Technologies, Voronezh, p.76 (2007)  
On Excitation of Three-Quasiparticle States in  $^{159,161}\text{Ho}$  Nuclei in Beta Decay of  $^{159,161}\text{Er}$
- 2007VI09 I.N.Vishnevsky, V.A.Zheltonozhsky, L.P.Katsubo, N.V.Strilchuk, P.N.Trifonov, S.N.Fedotkin - Bull.Rus.Acad.Sci.Phys. 71, 884 (2007); Izv.Akad.Nauk RAS, Ser.Fiz. 71, 912 (2007)  
Excitation of  $^{113m,115m}\text{In}$  by positrons

## REFERENCES

---

- 2007VI10 I.N.Vishnevsky, S.S.Drapey, V.A.Zheltonozhsky, E.O.Kochergina, N.V.Strilchuk - Bull.Rus.Acad.Sci.Phys. 71, 890 (2007); Izv.Akad.Nauk RAS, Ser.Fiz. 71, 918 (2007)  
Investigation of excitation of Ag atoms in internal conversion of  $\gamma$  rays
- 2007VI11 A.C.C.Villari, C.Eleon, R.Alves-Conde, J.C.Angelique, C.Barue, C.Canet, M.Dubois, M.Dupuis, J.L.Flambard, G.Gaubert, P.Jardin, N.Lecesne, P.Leherissier, F.Lemagnen, R.Leroy, L.Maunoury, J.Y.Pacquet, F.Pellemoine, M.G.Saint-Laurent, C.Stodel, J.C.Thomas - Nucl.Phys. A787, 126c (2007)  
SPIRAL at GANIL: Latest Results and Plans for the Future
- 2007VIZY I.N.Vishnevsky, V.A.Zheltonozhsky, A.N.Savrasov, L.V.Sadovnikov, N.V.Strilchuk - Contrib. 57th International Conf. "Nucleus-2007" on Problems on Fundamental Problems of Nuclear Physics, Atomic Power Engineering and Nuclear Technologies, Voronezh, p.135 (2007)  
Excitation of 8<sup>-</sup> Isomeric States in <sup>120</sup>Sb and <sup>152</sup>Eu by Reactions with  $\gamma$ -Rays and Neutrons
- 2007VIZZ I.N.Vishnevsky, V.A.Zheltonozhsky, I.N.Kadenko, E.V.Kulich, V.A.Plujko, N.V.Strilchuk - Contrib. 57th International Conf. "Nucleus-2007" on Problems on Fundamental Problems of Nuclear Physics, Atomic Power Engineering and Nuclear Technologies, Voronezh, p.121 (2007)  
Integral Cross-Sections of the Photonuclear Reactions on <sup>118</sup>Sn and <sup>121</sup>Sb Nuclei
- 2007WA20 J.G.Wang, S.J.Zhu, J.H.Hamilton, A.V.Ramayya, J.K.Hwang, Y.X.Luo, Y.J.Chen, J.O.Rasmussen, I.Y.Lee, X.L.Che, H.B.Ding, K.Li, C.T.Goodin, Q.Xu - Phys.Rev. C 75, 064301 (2007)  
First identification of collective bands and octupole correlations in the neutron-rich <sup>143</sup>La nucleus
- 2007WA21 X.Wang, R.V.F.Janssens, E.F.Moore, U.Garg, Y.Gu, S.Frauendorf, M.P.Carpenter, S.S.Ghugre, N.J.Hammond, T.Lauritsen, T.Li, G.Mukherjee, N.S.Pattabiraman, D.Seweryniak, S.Zhu - Phys.Rev. C 75, 064315 (2007)  
Lifetime measurements of triaxial strongly deformed bands in <sup>163</sup>Tm
- 2007WAZY T.Wakasa, M.Dozono, E.Ihara, S.Asaji, K.Fujita, K.Hatanaka, M.Ichimura, T.Ishida, T.Kaneda, H.Matsubara, Y.Nagasue, T.Noro, Y.Sakemi, Y.Shimizu, H.Takeda, Y.Tameshige, A.Tamii, Y.Yamada - ArXiv:0708.2813v1 [nucl-ex] (2007)  
Study of nuclear correlation effects via <sup>12</sup>C(p(pol), n(pol))<sup>12</sup>N(g.s., 1<sup>+</sup>) at 296 MeV
- 2007WI08 O.Wieland, A.Bracco, F.Camera, G.Benzoni, N.Biasi, F.C.L.Crespi, S.Leoni, B.Million, S.Barlini, V.L.Kravchuk, F.Gramegna, A.Lanchais, A.Maj, M.Kmiecik, G.Casini, M.Chiari, A.Nannini, M.Bruno, E.Geraci - Acta Phys.Pol. B38, 1447 (2007)  
Damping Mechanism of the Giant Dipole Resonance in Hot Nuclei with A =130
- 2007WI09 E.L.Wilds, Jr., R.H.France III, J.E.McDonald, Z.Zhao, M.Gai - Phys.Rev. C 76, 018501 (2007)  
Upper limits on the first-forbidden rank-one  $\beta$  decay of <sup>20</sup>F

---

*REFERENCES*

---

- 2007W002 E.Wojcik, M.Kicinska-Habior, O.Kijewska, M.Kowalczyk, M.Kisielinski, J.Choinski - Acta Phys.Pol. B38, 1469 (2007)  
Giant Dipole Radiation and Isospin Mixing in Hot Nuclei with A = 32 - 60
- 2007YA06 T.Yamaguchi, T.Suzuki, T.Ohnishi, K.Summerer, F.Becker, M.Fukuda, H.Geissel, M.Hosoi, R.Janik, K.Kimura, S.Mandal, G.Munzenberg, S.Nakajima, T.Ohtsubo, A.Ozawa, A.Prochazka, M.Shindo, B.Sitar, P.Strmen, T.Suda, K.Sugawara, I.Szarka, A.Takisawa, M.Takechi, K.Tanaka - Nucl.Phys. A787, 471c (2007)  
Nuclear radii of neutron-deficient Kr isotopes studied via their interaction cross-sections at relativistic energies
- 2007YA08 C.Yazidjian, G.Audi, D.Beck, K.Blaum, S.George, C.Guenaut, F.Herfurth, A.Herlert, A.Kellerbauer, H.-J.Kluge, D.Lunney, L.Schweikhard - Phys.Rev. C 76, 024308 (2007)  
Evidence for a breakdown of the isobaric multiplet mass equation: A study of the A = 35, T = 3 / 2 isospin quartet
- 2007YAZX C.Yazidjian, G.Audi, D.Beck, K.Blaum, S.George, C.Guenaut, F.Herfurth, A.Herlert, A.Kellerbauer, H.-J.Kluge, D.Lunney, L.Schweikhard - arXiv:0707.3201v1 [nucl-ex] (2007)  
Evidence for a breakdown of the Isobaric Multiplet Mass Equation: A study of the A=35, T=3 / 2 isospin quartet
- 2007YOZZ A.Yoshimi, H.Ueno, D.Kameda, K.Asahi, D.Nagae, M.Takemura, K.Shimada, K.Takase, T.Sugimoto, M.Uchida, T.Arai, T.Inoue, J.Murata, H.Kawamura - Proc.Intern.Symposium on Exotic Nuclei, Khanty-Mansiysk, Russia, 17-22 July, 2006, Yu.E.Penionzhkevich, E.A.Cherepanov, Eds. p.105 (2007); AIP Conf.Proc. 912 (2007)  
Electric Quadrupole Moments of Neutron Rich Al Isotope
- 2007ZAZX D.Zakoucky, J.R.Stone, G.goldring, N.J.Stone, N.Severijns, M.Hass, T.Giles, U.Koester, I.S.Kraev, S.Lakshmi, M.Lindroos, F.Wauters, and the NICOLE and ISOLDE Collaboration - Proc. XLV Intern.Winter Meeting on Nuclear Physics, Bormio, Italy, 15 - 20 January 2007, I.Iori, A.Tarantola eds., p.348 (2007)  
Parity non-conservation observed in nuclear  $\gamma$ -decay
- 2007ZE03 R.G.T.Zegers - Nucl.Phys. A787, 329c (2007)  
Measurement of weak rates for stellar evolution via the ( $t$ ,  ${}^3He$ ) reaction
- 2007ZEZZ R.G.T.Zegers, T.Adachi, H.Akimune, S.M.Austin, A.M.van den Berg, B.A.Brown, Y.Fujita, M.Fujiwara, S.Gales, C.J.Guess, M.N.Harakeh, H.Hashimoto, K.Hatanaka, R.Hayami, G.W.Hitt, M.E.Howard, M.Itoh, T.Kawabata, K.Kawase, M.Kinoshita, M.Matsubara, K.Nakanishi, S.Nakayama, S.Okumura, T.Ohta, Y.Sakemi, Y.Shimbara, Y.Shimizu, C.Scholl, C.Simenel, Y.Tameshige, A.Tamii, M.Uchida, T.Yamagata, M.Yosoi - arXiv:0707.2840v1 [nucl-ex] (2007)  
On the extraction of weak transition strengths via the ( ${}^3He$ ,  $t$ ) reaction at 420 MeV
- 2007ZH34 H.Zhou, F.Deng, X.Ding, M.Hua, Q.Zhu, C.Wang, Q.Zhao, G.Fan - Nucl.Sci.Eng. 157, 354 (2007)

---

*REFERENCES*

- Discrete Gamma Radiation in Interaction of 14.9-MeV Neutrons with Natural Copper
- 2007ZHZZ V.A.Zheltonozhsky, V.M.Mazur, E.V.Kulich, N.V.Strilchuk, P.N.Trifonov - Contrib. 57th International Conf. "Nucleus-2007" on Problems on Fundamental Problems of Nuclear Physics, Atomic Power Engineering and Nuclear Technologies, Voronezh, p.136 (2007)  
Isomer High-Spin States Excitation on  $^{190}\text{Ir}$  and  $^{196,198}\text{Au}$  in Reactions with  $\gamma$ -Rays and Neutrons
- 2007ZI03 J.A.Zimmerman, F.D.Becchetti, H.C.Griffin, D.A.Roberts, M.Y.Lee, T.W.O'Donnell, J.A.Brown, R.M.Ronningen, T.Glasmacher, R.W.Ibbotson, H.Scheit, B.Pritychenko, D.W.Anthony, P.A.Lofy, M.Steiner - Nucl.Instrum.Methods Phys.Res. A579, 476 (2007)  
Nuclear reactions with radioactive, isomer beams: Coulomb excitation of  $^{18}\text{F}_{g,s}$  and its  $J^\pi = 5^+$  isomer  $^{18}\text{F}^m$  using a large position-sensitive NaI array