Recent References: July 1, 2011 to September 30, 2011

National Nuclear Data Center, Brookhaven National Laboratory

Document generated: October 3, 2011

This document lists experimental references added to Nuclear Science References (NSR) during the period July 1, 2011 to September 30, 2011. The first section lists keynumbers and keywords sorted by mass and nuclide. The second section lists all references, ordered by keynumber.

For more information, and access to the most recent NSR updates, please visit the NSR web site at http://www.nndc.bnl.gov/nsr/.

Contents

| Keynumbers and Keywords | | |
|-------------------------|-----|--|
| References | 119 | |

Keynumbers and Keywords

| ^{1}n | 2010AC02 | NUCLEAR REACTIONS $^{1}H(e, e'K^{+})$, E=1507 MeV; measured |
|------------------|------------|---|
| | | electron and kaon spectra; deduced missing mass spectrum, Λ -, |
| | | Σ -hyperons. JOUR NUPAB 835 313c |
| | 2010AH04 | NUCLEAR REACTIONS ¹ H(γ , K ⁺), (γ , K ⁺ π^+), (γ , K ⁺ π^-), (γ , |
| | | $K^{-}\pi^{+}$), $(\gamma, \Sigma^{+}\pi^{-})$, $(\gamma, \Sigma^{-}\pi^{+})$, E ≈ 1.5 -2.4 GeV; measured missing |
| | | mass spectra; deduced $\Lambda(1405)$ photoproduction σ . JOUR NUPAB 835 |
| | | 329c |
| | 2010LIZW | NUCLEAR REACTIONS ² H(⁸ Li, ⁹ Li), E(cm)=7.8 MeV; ² H(⁸ Li, ⁹ Be), |
| | | E(cm)=8.0 MeV; ¹ H(⁸ Li, ⁷ Li), E(cm)=4.0 MeV; measured E(particle), |
| | | I(particle, θ): deduced single-particle spectroscopic factors using |
| | | DWBA, S-factors, ⁶ Li(n, γ), E=0.01-0.10 MeV σ , ¹ H(¹⁷ F, ¹⁸ Ne), |
| | | $E(cm)=0.3-1.6$ MeV: measured $E(particle)$ I(particle θ): calculated σ |
| | | using B matrix: deduced $\sigma(\theta)$ proton widths of ¹⁸ Ne levels ¹ H(¹² N |
| | | γ) E(cm)=9.4 MeV: deduced ¹³ O to ¹² N+p single particle |
| | | spectroscopic factor. S factor. CONF Tsukuba(Nuclear Physics |
| | | Trends) Proc.P322.Liu |
| | 2010SHZW | NUCLEAR REACTIONS ² H(γ , p), E=15-37 MeV; ⁴ He(γ , p), (γ , n), |
| | | Enullo-45 MeV: measured reaction products: deduced σ . Comparison |
| | | with ENDE / B-VIL other data, momentum-space approach |
| | | calculations CONF Tsukuba(Nuclear Physics Trends) |
| | | Proc P315 Shima |
| | 2011AR77 | BADIOACTIVITY ${}^{1}n(\beta^{-})$: measured In(t): deduced T _{1/2} . |
| | 2011111022 | Comparison with PDG data and Serebrov experiment. CONF |
| | | Dubna(ISINN-18) P11 Arzumanov |
| | 2011BE27 | NUCLEAR REACTIONS ${}^{3}H(d, 2d) = -36.0 \text{ MeV}$: measured |
| | ZUIIDLZI | deuteron spectra: deduced $\sigma(\theta)$ $\sigma(\theta, E)$ IOUR BRSPE 75.025 |
| | 2011KH7V | BADIOACTIVITY ${}^{1}n(\beta^{-})$: measured In(t) Io(t) Io(t) on coin |
| | 2011/11/21 | apc coin: deduced radiative peak energy width branching ratio |
| | | CONF Dubna(ISINN-18) P73 Khafizov |
| | 2011LIZZ | NUCLEAR REACTIONS ${}^{2}H({}^{12}N, {}^{13}O)$. E=70 MeV; measured |
| | | E(particle), I(particle, θ); deduced $\sigma(\theta)$, S-factors; calculated $\sigma(\theta)$ |
| | | using FRESCO, REPT CNS-REP-86,P15,Liu |
| $^{1}\mathrm{H}$ | 2010AH04 | NUCLEAR REACTIONS ¹ H(γ , K ⁺), (γ , K ⁺ π^+), (γ , K ⁺ π^-), (γ , |
| | | $K^{-}\pi^{+}$). (γ , $\Sigma^{+}\pi^{-}$). (γ , $\Sigma^{-}\pi^{+}$). E \approx 1.5-2.4 GeV: measured missing |
| | | mass spectra: deduced $\Lambda(1405)$ photoproduction σ JOUR NUPAB 835 |
| | | 329c |
| | 2010B47V | NUCLEAB BEACTIONS ${}^{1}H({}^{17}F {}^{17}F')$ E(cm)=600 keV: measured |
| | LOIODHLI | reaction products: deduced 3 ⁺ resonance strength reaction rate |
| | | ${}^{1}\text{H}({}^{7}\text{Li}, \gamma)$ E=12 MeV: measured reaction products: deduced σ at |
| | | E(cm) = 1.5 MeV S-factor Daresbury Recoil Separator CONF |
| | | Heidelberg (NIC XI) Proc P202 Bardavan |
| | 20100477 | NUCLEAR REACTIONS ${}^{4}\text{He}({}^{19}\text{F}){}^{22}\text{Ne})$ E=6-12.3 MeV massured |
| | 201001121 | En In: deduced vields CONF Heidelberg (NIC XI) Proc P217 Chao |
| | 20104170 | NUCLEAR REACTIONS $^{2}H(\gamma, n)$ E=0.20 MeV: massured Eq. 16 |
| | ZOIOUNZŃ | En $In(A, t)$ To E measurement at FIRE Dreaden Bessenderf CONE |
| | | En, $m(v, t)$. FOF measurement at ELDE, Dresden-Rossendorf. CONF Heidelberg (NIC XI) Dress D00 Herroelee |
| | | neidenberg (NIC AI) Froc, F90, nannaske |

A=1 (continued)

| 2010HAZR | NUCLEAR REACTIONS 4 He(11 C, 14 N), E(cm)=0-4.5 MeV; measured |
|----------|---|
| | thick target Ep, Ip, $E\alpha$, $I\alpha$, E(particle), I(particle); deduced σ to |
| | individual low-lying states, reaction rates; calculated reaction rates |
| | using NON-SMOKER. CONF Heidelberg (NIC XI) |
| | Proc,P62,Hayakawa |
| 2010IWZX | NUCLEAR REACTIONS ² H(polarized γ , n), E=2.2-3.7 MeV; |
| | measured En, $In(\theta)$; deduced $\sigma(\theta)$, $\sigma(M1, \theta)$, $\sigma(E1, \theta)$. Comparison |
| | with other data, JENDL3.3. CONF Kobe(Tours Nuc.Phys.and |
| | Astroph.VII) Proc.P301,Iwamoto |
| 2010LIZW | NUCLEAR REACTIONS ² H(⁸ Li, ⁹ Li), E(cm)=7.8 MeV; ² H(⁸ Li, ⁹ Be), |
| | E(cm)=8.0 MeV; ¹ H(⁸ Li, ⁷ Li), E(cm)=4.0 MeV; measured E(particle), |
| | I(particle, θ); deduced single-particle spectroscopic factors using |
| | DWBA, S-factors, ${}^{6}\text{Li}(n, \gamma)$, E=0.01-0.10 MeV σ . ${}^{1}\text{H}({}^{17}\text{F}, {}^{18}\text{Ne})$, |
| | $E(cm)=0.3-1.6$ MeV; measured $E(particle)$, $I(particle, \theta)$; calculated σ |
| | using R matrix; deduced $\sigma(\theta)$, proton widths of ¹⁸ Ne levels. ¹ H(¹² N, |
| | γ), E(cm)=9.4 MeV; deduced ¹³ O to ¹² N+p single particle |
| | spectroscopic factor, S factor. CONF Tsukuba(Nuclear Physics |
| | Trends) Proc.P322,Liu |
| 2010PIZW | NUCLEAR REACTIONS ⁶ Li(³ He, 2α), E=17.5 MeV; measured E α , |
| | $I\alpha(\theta)$; deduced spectator momentum distribution, $\sigma(\theta, E(cm)=2.94)$ |
| | MeV), ⁶ Li(d, α) σ . Trojan horse method. CONF Sinaia (Exotic Nucei |
| | and Nuc.Part.Astroph.III)Proc.P202,Pizzone |
| 2010SPZY | NUCLEAR REACTIONS ${}^{2}H({}^{3}He, pt)$, E=17 MeV; measured Ep, Ip, |
| | E(particle), I(particle), (particle)p-coin; deduced ${}^{2}H(d, p) \sigma$, S-factors, |
| | reaction rate for low energy using Trojan horse method. CONF Sinaia |
| | (Exotic Nucei and Nuc.Part.Astroph.III)Proc.P420,Sparta |
| 2011ARZZ | RADIOACTIVITY ${}^{1}n(\beta^{-})$; measured In(t); deduced T _{1/2} . |
| | Comparison with PDG data and Serebrov experiment. CONF |
| | Dubna(ISINN-18),P11,Arzumanov |
| 2011AT02 | NUCLEAR REACTIONS ^{1,2} H, C, O(n, n'), $E < 0.0253 \text{ eV}$; measured |
| | En, In, TOF; deduced yields, production rates of ultracold neutrons. |
| | Comparison with GEANT4 UCN-Monte Carlo code. JOUR EULEE 95 |
| | 12001 |
| 2011HAZY | NUCLEAR REACTIONS ${}^{4}\text{He}({}^{11}\text{C}, {}^{14}\text{N}), ({}^{11}\text{B}, {}^{14}\text{C})(\text{cm})=1-4.5 \text{ MeV};$ |
| | measured thick target $E\alpha$, $I\alpha$, Ep , Ip , $E(particle)$, $I(particle)$; deduced |
| | σ to individual states; calculated σ to individual states using |
| | NON-SMOKER code. REPT CNS-REP-86,P7,Hayakawa |
| 2011KHZY | RADIOACTIVITY ${}^{1}n(\beta^{-})$; measured Ip(t), Ie(t), I γ (t), ep-coin, |
| | $ep\gamma$ -coin; deduced radiative peak energy, width, branching ratio. |
| | CONF Dubna(ISINN-18),P73,Khafizov |
| 2011SE06 | NUCLEAR REACTIONS 1 H(polarized d, d), E=250 MeV / nucleon; |
| | measured deuteron and proton spectra, dp-coin, deuteron analyzing |
| | powers. ¹ H(polarized d, d), $E=70$, 100, 135, 200 MeV / nucleon; |
| | analyzed previous analyzing powers data. Comparison with |
| | three-nucleon Faddeev calculations based on nucleon-nucleon (NN) |
| | potentials alone or combined with two models of three nucleon forces: |
| | the Tucson-Melbourne 99 (TM99) and Urbana IX. JOUR PRVCA 83 |
| | 061001 |

A=1 (continued)

2011TEZZ NUCLEAR REACTIONS ¹H(¹⁷Ne, ¹⁷Ne), E=0-4.9 MeV / nucleon;¹H(¹⁴O, ¹⁴O), E(cm)=0.5-4.5 MeV; measured Ep, Ip, E(particle), I(particle); deduced σ , resonance energy. REPT CNS-REP-86,P17,Teranishi

A=2

| ² H | 2010AG13 | NUCLEAR REACTIONS ² H, ⁷ Li, ⁹ Be, ¹³ C(K ⁻ , π^-), E at rest; measured Λ hypernucleus binding energy, formation probability. JOUR NUPAB 835 414c |
|----------------|----------|--|
| | 2010AG14 | RADIOACTIVITY ⁴ He(p), (d), ⁵ He(d); measured d momentum distribution from non-mesonic two-body hypernuclei decay; deduced decay branching ratios. FINUDA facility. JOUR NUPAB 835 439c |
| | 2010KA38 | NUCLEAR REACTIONS ² H, ¹² C(γ , $\pi^+\pi^-$), E=0.8-1.1 GeV; measured pion spectra; deduced K ⁰ photoproduction. JOUR NUPAB 835 317c |
| | 2010LIZW | NUCLEAR REACTIONS ² H(⁸ Li, ⁹ Li), E(cm)=7.8 MeV; ² H(⁸ Li, ⁹ Be), E(cm)=8.0 MeV; ¹ H(⁸ Li, ⁷ Li), E(cm)=4.0 MeV; measured E(particle), I(particle, θ); deduced single-particle spectroscopic factors using DWBA, S-factors, ⁶ Li(n, γ), E=0.01-0.10 MeV σ . ¹ H(¹⁷ F, ¹⁸ Ne), E(cm)=0.3-1.6 MeV; measured E(particle), I(particle, θ); calculated σ using R matrix; deduced $\sigma(\theta)$, proton widths of ¹⁸ Ne levels. ¹ H(¹² N, γ), E(cm)=9.4 MeV; deduced ¹³ O to ¹² N+p single particle spectroscopic factor, S factor. CONF Tsukuba(Nuclear Physics Trends) Proc.P322,Liu |
| | 2011AT02 | NUCLEAR REACTIONS ^{1,2} H, C, O(n, n'), E<0.0253 eV; measured En, In, TOF; deduced yields, production rates of ultracold neutrons. Comparison with GEANT4 UCN-Monte Carlo code. JOUR EULEE 95 12001 |
| | 2011FR11 | NUCLEAR REACTIONS ^{2,3} H(n, n), E=14.1 MeV; measured reaction products En, In; deduced $\sigma(\theta)$. An internal confinement fusion facility. JOUR PRLTA 107 122502 |
| | 2011T006 | NUCLEAR REACTIONS ³ He(γ , p), E=7-16 MeV; measured reaction products, Ep, Ip; deduced σ . Comparison with theoretical calculations and experimental data. JOUR PYLBB 702 121 |

| $^{3}\mathrm{H}$ | 2010AG14 | RADIOACTIVITY ⁴ He(p), (d), ⁵ He(d); measured d momentum |
|------------------|----------|--|
| | | distribution from non-mesonic two-body hypernuclei decay; deduced |
| | | decay branching ratios. FINUDA facility. JOUR NUPAB 835 439c |
| | 2010KAZL | NUCLEAR REACTIONS ⁶ Li(d, α), E=25-70 keV; measured liquid, |
| | | solid thick target reaction products; deduced yield, S-factor, screening |
| | | potential. ${}^{2}H(d, p)$, E=30-70 keV; measured reaction products; |
| | | deduced ultrasonic cavitation influence. CONF Kobe(Tours |
| | | Nuc.Phys.and Astroph.VII) Proc.P151,Kasagi |

A=3 (continued)

| | 2010SHZW | NUCLEAR REACTIONS ² H(γ , p), E=15-37 MeV; ⁴ He(γ , p), (γ , n), Enullo-45 MeV; measured reaction products; deduced σ . Comparison |
|-----|----------|---|
| | | with ENDF / B-VII, other data, momentum-space approach |
| | | calculations. CONF Tsukuba(Nuclear Physics Trends) |
| | | Proc.P315,Shima |
| | 2011FR11 | NUCLEAR REACTIONS 2,3 H(n, n), E=14.1 MeV; measured reaction |
| | | products En, In; deduced $\sigma(\theta)$. An internal confinement fusion facility. |
| 0 | | JOUR PRETA 107 122502 |
| зНе | 2010SHZW | NUCLEAR REACTIONS ${}^{2}\text{H}(\gamma, p)$, E=15-37 MeV; ${}^{4}\text{He}(\gamma, p)$, (γ, n) , |
| | | Enullo-45 MeV; measured reaction products; deduced σ . Comparison |
| | | with ENDF / B-VII, other data, momentum-space approach |
| | | calculations. CONF Tsukuba(Nuclear Physics Trends) |
| | | Proc.P315,Shima |
| | 2011FR10 | NUCLEAR MOMENTS ^{3,4} He; measured microwave spectra; deduced |
| | | spin magnetic moment of antiproton. Comparison with previous |
| | | measurements. JOUR HYIND 199 337 |
| | 2011P010 | NUCLEAR REACTIONS ${}^{3}H(\alpha, nt){}^{3}He$, E=67.2 MeV; measured |
| | | reaction products, $E\alpha$, $I\alpha$. ⁶ Li; deduced higher lying states in ⁶ Li, |
| | | resonances. Comparison with experimental data. JOUR JUPSA 80 |
| | | 094204 |

| ⁴ H | 2010NAZW | NUCLEAR REACTIONS ⁴ He(⁷ Li, ⁷ Be), E=455 MeV; measured E(particle), I(particle), $E\gamma$, $I\gamma$, (particle) γ -coin; deduced GDR, SDR $d\sigma(E)$; calculated GDR, SDR $d\sigma(E)$, $d\sigma(E)$ for ⁴ He excited by neutrinos. Comparison with other calculations. CONF Kobe(Tours Nuc.Phys.and Astroph.VII) Proc.P280.Nakayama |
|-----------------|----------|--|
| ⁴ He | 2010AG14 | RADIOACTIVITY ⁴ He(p), (d), ⁵ He(d); measured d momentum distribution from non-mesonic two-body hypernuclei decay; deduced decay branching ratios EINUDA facility JOUR NUPAB 835 439c |
| | 2010DEZV | NUCLEAR REACTIONS ² H(²⁸ Si, n), (³² S, n), (³⁶ Ar, n), E \approx 320-325 MeV; measured reaction products. ¹ H(²⁹ P, ²⁶ Si), E \approx 230 MeV; ¹ H(³³ Cl, ³⁰ S), E=208, 229, 250 MeV; ¹ H(³⁷ K, ³⁴ Ar), E=235, 255, 275 MeV; measured E α , I $\alpha(\theta)$, E(particle), I(particle); deduced σ ; calculated σ using NON-SMOKER. Heavy ions from reactions on deuterium used as beams for reactions on hydrogen. Cross sections not presented in the paper. CONF Heidelberg (NIC XI) Proc.P56,Deibel |
| | 2010KAZL | NUCLEAR REACTIONS ⁶ Li(d, α), E=25-70 keV; measured liquid, solid thick target reaction products; deduced yield, S-factor, screening potential. ² H(d, p), E=30-70 keV; measured reaction products; deduced ultrasonic cavitation influence. CONF Kobe(Tours Nuc.Phys.and Astroph.VII) Proc.P151,Kasagi |
| | 2010YAZX | NUCLEAR REACTIONS ⁴ He(⁷ Li, x), E=13.7 MeV; ⁴ He(⁷ Li, ⁷ Li), E(cm)=1.0-4.5 MeV; measured thick target E α , I α , E β , I β , E γ , I γ , E(particle), I(particle); deduced d σ (E), $\sigma(\theta)$. CONF Heidelberg (NIC XI) Proc,P214,Yamaguchi |

A=4 (continued)

| 2011BA30 | NUCLEAR REACTIONS ${}^{2}H(d, \gamma)$, E not given; measured $E\gamma$, $I\gamma$, $E\beta$, |
|----------|--|
| | I β ; deduced upper limit on the relative yield from the J=1 state. |
| | JOUR JTPHE 113 68 |
| 2011BIZZ | NUCLEAR REACTIONS ⁴ He(²¹ Na, ²¹ Na'), E(cm)=1.6-6.2 MeV; |
| | measured E α , I $\alpha(\theta)$, Ep, Ip; deduced $\sigma(\theta)$, resonance parameters; |
| | calculated $\sigma(\theta)$ using multichannel R-matrix theory. REPT |
| | CNS-REP-86,P5,Binh |
| 2011FR10 | NUCLEAR MOMENTS ^{3,4} He; measured microwave spectra; deduced |
| | spin magnetic moment of antiproton. Comparison with previous |
| | measurements. JOUR HYIND 199 337 |
| 2011NO12 | NUCLEAR REACTIONS 4 He(36 Ar, 36 Ar), E=150 MeV; measured |
| | thick target $E\alpha$, $I\alpha(\theta)$. ⁴⁰ Ca deduced resonance parameters, moments |
| | of inertia. JOUR ZAANE 47 96 |
| 2011SU16 | RADIOACTIVITY ⁸ Li(β^-), ($\beta^-\alpha$)[from ⁷ Li(d, p), E=3.5 MeV]; ⁸ B |
| | $(\beta^+), (\beta^+\alpha)$ [from ⁶ Li(³ He, n), E=4.7 MeV]; measured E $\beta, I\beta, \beta(\theta)$ |
| | from spin polarized ⁸ Li and ⁸ B; deduced alignment and $\beta\alpha$ angular |
| | correlation terms and contributing matrix elements, weak magnetism |
| | term. β -NMR technique. Comparison with conserved vector current |
| | (CVC) predictions. JOUR PRVCA 83 065501 |
| | |

A=5

| ^{5}n | 2011BE31 | NUCLEAR REACTIONS ⁴ He(p-bar, π^+), (p-bar, π^-), E at rest; |
|-------------------|----------|---|
| | | measured reaction products; deduced pion $\sigma(E)$, multiplicity. JOUR |
| | | ZAANE 47 82 |
| $^{5}\mathrm{He}$ | 2010AG14 | RADIOACTIVITY 4 He(p), (d), 5 He(d); measured d momentum |
| | | distribution from non-mesonic two-body hypernuclei decay; deduced |
| | | decay branching ratios. FINUDA facility. JOUR NUPAB 835 439c |
| | 2011BE31 | NUCLEAR REACTIONS ⁴ He(p-bar, π^+), (p-bar, π^-), E at rest; |
| | | measured reaction products; deduced pion $\sigma(E)$, multiplicity. JOUR |
| | | ZAANE 47 82 |

| ⁶ He | 2011VE07 | RADIOACTIVITY ⁶ He(β^-); measured recoil ions, E β , I β ; deduced β - ν angular correlation coefficients. GEANT4 simulation. JOUR HYIND 199 29 |
|-----------------|----------|---|
| ⁶ Li | 2011DU19 | NUCLEAR REACTIONS ⁶ Li, ¹² C, ¹⁹ F, ²⁷ Al(p, γ), (p, p), E=590-1150 keV; measured reaction products, proton spectra; deduced $\sigma(\theta)$, S-factors. Optical model calculations, comparison with experimental data. JOUR PANUE 74 984 |
| | 2011P010 | NUCLEAR REACTIONS ${}^{3}\text{H}(\alpha, \text{ nt}){}^{3}\text{He}$, E=67.2 MeV; measured reaction products, E α , I α . ${}^{6}\text{Li}$; deduced higher lying states in ${}^{6}\text{Li}$, resonances. Comparison with experimental data. JOUR JUPSA 80 094204 |

A=6 (continued)

| | 2011VE07 | RADIOACTIVITY ⁶ He(β^{-}); measured recoil ions, E β , I β ; deduced |
|-------------------|----------|--|
| | | β - ν angular correlation coefficients. GEANT4 simulation. JOUR |
| | | HYIND 199 29 |
| $^{6}\mathrm{Be}$ | 2011COZZ | NUCLEAR REACTIONS ${}^{3}\text{He}({}^{7}\text{Be}, \alpha)$, E=53.4 MeV; measured |
| | | reaction products; deduced $\sigma(E)$. ¹⁹⁷ Au(⁷ Be, ⁷ Be), E=53.4 MeV; |
| | | measured reaction products; deduced $\sigma(\theta)$. REPT |
| | | CNS-REP-86,P19,Condori |
| | | |

| ⁷ Li | 2010AG13 | NUCLEAR REACTIONS ² H, ⁷ Li, ⁹ Be, ¹³ C(K ⁻ , π^-), E at rest; measured Λ hypernucleus binding energy, formation probability. JOUR NUPAB 835 414c |
|------------------|-----------|---|
| | 2010YAZY | NUCLEAR REACTIONS ⁷ Be(p, γ), (p, p), E(cm)=0.3-6.5 MeV; measured reaction products; calculated R-matrix fit; deduced |
| | | $\sigma(\theta=0-8^0)$, new 1 ⁻ resonance. ⁷ Li(α, α), E=0-8 MeV; measured E α , |
| | | I α . CONF Tsukuba(Nuclear Physics Trends) Proc.P247, Yamaguchi |
| | 2011VEZY | NUCLEAR REACTIONS ¹⁰ B(polarized n, α), E=cold; measured E γ , |
| | | $I\gamma(\theta)$; deduced γ asymmetry, weak neutral current constant. CONF |
| | 004451107 | Dubna(ISINN-18), P235, Vesna NUCLEAD DEACTIONS 10 D() E 4 5 M M |
| | 2011ZH27 | NUCLEAR REACTIONS $^{10}B(n, \alpha)$, $E=4$, 5 MeV; measured reaction |
| | | products, E α , I α ; deduced σ . Comparison with experimental data and ENDE / B VILO. IFFE 3.1 and IENDI. 4.0 evoluted nuclear libraries |
| | | IOUR CPLEE 28 082801 |
| ⁷ Be | 20108478 | NUCLEAR REACTIONS ⁷ Be(p, γ), (p, p), E(cm)=0.3-6.5 MeV: |
| | | measured reaction products; calculated R-matrix fit; deduced |
| | | $\sigma(\theta=0-8^{\circ})$, new 1 ⁻ resonance. ⁷ Li(α, α), E=0-8 MeV; measured E α , |
| | | Iα. CONF Tsukuba(Nuclear Physics Trends) Proc.P247,Yamaguchi |
| | 2011DU19 | NUCLEAR REACTIONS ⁶ Li, ¹² C, ¹⁹ F, ²⁷ Al(p, γ), (p, p), E=590-1150 |
| | | keV; measured reaction products, proton spectra; deduced $\sigma(\theta)$, |
| | | S-factors. Optical model calculations, comparison with experimental |
| | | data. JOUR PANUE 74 984 |
| | 2011WA20 | NUCLEAR MOMENTS ^{7,9,10,11} Be; measured microwave resonance |
| | | and transition spectra; deduced the ground state hyperfine constants. JOUR HYIND 199 269 |
| $^{7}\mathrm{B}$ | 2011CH32 | NUCLEAR REACTIONS ${}^{9}\text{Be}({}^{9}\text{C}, X)$, E=70 MeV / nucleon, |
| | | [secondary ${}^{9}C$ beam from ${}^{9}Be({}^{16}O, X)$, E=150 MeV / nucleon primary |
| | | beam]; measured particle spectra using HiRA array, angular |
| | | correlations between the particles in particle-decay channels. ⁸ Be, |
| | | 7,8,9 B, 8,10 C; deduced levels, width, J, π , isospin, branching ratios, |
| | | excitation spectra of outgoing particles from many-particle decays of |
| | | ground and excited states. JOUK PKVGA 84 014320 |

| ⁸ Li | 2011SU16 | RADIOACTIVITY ⁸ Li(β^-), ($\beta^-\alpha$)[from ⁷ Li(d, p), E=3.5 MeV]; ⁸ B (β^+), ($\beta^+\alpha$)[from ⁶ Li(³ He, n), E=4.7 MeV]; measured E β , I β , $\beta(\theta)$ from spin polarized ⁸ Li and ⁸ B; deduced alignment and $\beta\alpha$ angular correlation terms and contributing matrix elements, weak magnetism term. β -NMR technique. Comparison with conserved vector current |
|-----------------|----------|---|
| ⁸ Be | 2010BAZV | (CVC) predictions. JOUR PRVCA 83 065501 NUCLEAR REACTIONS ¹ H(¹⁷ F, ¹⁷ F'), E(cm)=600 keV; measured reaction products; deduced 3 ⁺ resonance strength, reaction rate. ¹ H(⁷ Li, γ), E=12 MeV; measured reaction products; deduced σ at E(cm)=1.5 MeV, S-factor. Daresbury Recoil Separator. CONF Heidelberg (NIC XI) Proc.P202.Bardavan |
| | 2010KIZU | RADIOACTIVITY ⁸ B(β^+); measured E α , E α , $\alpha\alpha$ -coin; deduced relative <i>null</i> σ (E). CONF Heidelberg (NIC XI) Proc.P16.Kirsebom |
| | 2011CH32 | NUCLEAR REACTIONS ⁹ Be(⁹ C, X), E=70 MeV / nucleon, [secondary ⁹ C beam from ⁹ Be(¹⁶ O, X), E=150 MeV / nucleon primary beam]; measured particle spectra using HiRA array, angular correlations between the particles in particle-decay channels. ⁸ Be, ^{7,8,9} B, ^{8,10} C; deduced levels, width, J, π , isospin, branching ratios, excitation spectra of outgoing particles from many-particle decays of ground and excited states. JOUR PRVCA 84 014320 |
| | 2011KI14 | RADIOACTIVITY ⁸ B(β^+)[from ⁶ Li(³ He, n), E=7.0 MeV]; measured β spectra, β -delayed α spectra, E α , $\alpha\alpha$ -coin. ⁸ Be; deduced excitation distribution. Discussed implication of ⁸ B neutrino spectrum. ²⁰ Na(β^+); measured β -delayed α spectrum and used for calibration. Monte-Carlo simulations of β decay of ⁸ B. R-matrix parameterization. JOUR PRVCA 83 065802 |
| | 2011SU16 | RADIOACTIVITY ⁸ Li(β^-), ($\beta^-\alpha$)[from ⁷ Li(d, p), E=3.5 MeV]; ⁸ B (β^+), ($\beta^+\alpha$)[from ⁶ Li(³ He, n), E=4.7 MeV]; measured E β , I β , $\beta(\theta)$ from spin polarized ⁸ Li and ⁸ B; deduced alignment and $\beta\alpha$ angular correlation terms and contributing matrix elements, weak magnetism term. β -NMR technique. Comparison with conserved vector current (CVC) predictions. JOUR PRVCA 83 065501 |
| ⁸ B | 2010KIZU | RADIOACTIVITY ⁸ B(β^+); measured E α , E α , $\alpha\alpha$ -coin; deduced relative null σ (E). CONF Heidelberg (NIC XI) Proc,P16,Kirsebom |
| | 2010YAZY | NUCLEAR REACTIONS ⁷ Be(p, γ), (p, p), E(cm)=0.3-6.5 MeV; measured reaction products; calculated R-matrix fit; deduced $\sigma(\theta=0-8^0)$, new 1 ⁻ resonance. ⁷ Li(α, α), E=0-8 MeV; measured E α , I α CONF Tsukuba(Nuclear Physics Trends) Proc P247 Yamaguchi |
| | 2011CH32 | NUCLEAR REACTIONS ⁹ Be(⁹ C, X), E=70 MeV / nucleon, [secondary ⁹ C beam from ⁹ Be(¹⁶ O, X), E=150 MeV / nucleon primary beam]; measured particle spectra using HiRA array, angular correlations between the particles in particle-decay channels. ⁸ Be, ^{7,8,9} B, ^{8,10} C; deduced levels, width, J, π , isospin, branching ratios, excitation spectra of outgoing particles from many-particle decays of ground and excited states. JOUR PRVCA 84 014320 |

A=8 (continued)

| 2011KI14 | RADIOACTIVITY ⁸ B(β^+)[from ⁶ Li(³ He, n), E=7.0 MeV]; measured β |
|----------|--|
| | spectra, β -delayed α spectra, $\mathbf{E}\alpha$, $\alpha\alpha$ -coin. ⁸ Be; deduced excitation |
| | distribution. Discussed implication of ⁸ B neutrino spectrum. |
| | ²⁰ Na(β^+); measured β -delayed α spectrum and used for calibration. |
| | Monte-Carlo simulations of β decay of ⁸ B. R-matrix parameterization. |
| | JOUR PRVCA 83 065802 |
| 2011CH32 | NUCLEAR REACTIONS ${}^{9}Be({}^{9}C, X)$, E=70 MeV / nucleon, |
| | [secondary ⁹ C beam from ⁹ Be(¹⁶ O, X), E=150 MeV / nucleon primary |
| | beam]; measured particle spectra using HiRA array, angular |
| | correlations between the particles in particle-decay channels. ⁸ Be, |
| | ^{7,8,9} B, ^{8,10} C; deduced levels, width, J, π , isospin, branching ratios, |
| | excitation spectra of outgoing particles from many-particle decays of |
| | ground and excited states. JOUR PRVCA 84 014320 |
| | |

A=9

| ⁹ Be | 2010AG13 | NUCLEAR REACTIONS ² H, ⁷ Li, ⁹ Be, ¹³ C(K ⁻ , π^-), E at rest; measured Λ hypernucleus binding energy, formation probability. JOUR |
|-----------------|----------|---|
| | 2011AR10 | NUCLEAR REACTIONS ¹⁰ B(d, t), (d, ³ He), E=25 MeV; measured reaction products; deduced $\sigma(\theta)$, asymptotic normalization coefficients. |
| | 2011PI08 | DWBA, optical model. JOUR BRSPE 75 920 NUCLEAR REACTIONS ⁹ Be, ¹⁹⁷ Au(⁶ He, ⁶ He), E=16.2, 21.3 MeV, [⁶ He secondary beam from ⁹ Be(⁷ Li, ⁶ He), E=22.18, 26.10 MeV primary beam]; measured ⁶ He spectra, cross sections, $\sigma(\theta)$, biparametric |
| | | spectrum. Effect of the collective couplings to the excited states. Coupled channels calculations, using a double-folding potential, and three- and four-body continuum-discretized coupled-channels (CDCC) calculations. JOUR PRVCA 83 064603 |
| | 2011WA20 | NUCLEAR MOMENTS ^{7,9,10,11} Be; measured microwave resonance and transition spectra; deduced the ground state hyperfine constants. IOUB HVIND 199 269 |
| ⁹ B | 2011AR10 | NUCLEAR REACTIONS ¹⁰ B(d, t), (d, ³ He), E=25 MeV; measured reaction products; deduced $\sigma(\theta)$, asymptotic normalization coefficients. DWBA, optical model, JOUR BRSPE 75 920 |
| | 2011CH32 | NUCLEAR REACTIONS ⁹ Be(⁹ C, X), E=70 MeV / nucleon, [secondary ⁹ C beam from ⁹ Be(¹⁶ O, X), E=150 MeV / nucleon primary beam]; measured particle spectra using HiRA array, angular correlations between the particles in particle-decay channels. ⁸ Be, ^{7,8,9} B, ^{8,10} C; deduced levels, width, J, π , isospin, branching ratios, excitation spectra of outgoing particles from many-particle decays of ground and excited states. JOUR PRVCA 84 014320 |
| | 2011SC18 | NUCLEAR REACTIONS ⁹ Be(³ He, t), E=140 MeV / nucleon; measured E(t), I(t), $\sigma(\theta)$. ⁹ B; deduced levels, J, π , L-transfer, widths, Gamow-Teller transition strengths, DWBA analysis of $\sigma(\theta)$ data. Comparison with data from (p, n) reaction. Systematics of level energies, GT strengths and shapes of A=9 nuclei: ⁹ Li, ⁹ Be, ⁹ B and ⁹ C. JOUR PRVCA 84 014308 |

 $^{8}\mathrm{C}$

| $^{10}\mathrm{Be}$ | 2011WA20 | NUCLEAR MOMENTS ^{7,9,10,11} Be; measured microwave resonance |
|--------------------|----------|---|
| | | and transition spectra; deduced the ground state hyperfine constants. |
| | | JOUR HYIND 199 269 |
| $^{10}\mathrm{C}$ | 2010LI49 | NUCLEAR REACTIONS ${}^{1}H({}^{10}B, n){}^{10}C$, E=95 MeV; measured |
| | | reaction products, $E\gamma$, $I\gamma$; deduced excited state lifetime, B(E2). |
| | | Doppler Shift Attenuation Method (DSAM). JOUR BAPSA 55 MG5 |
| | 2011CH32 | NUCLEAR REACTIONS ⁹ Be(⁹ C, X), E=70 MeV / nucleon, |
| | | [secondary ⁹ C beam from ⁹ Be(¹⁶ O, X), E=150 MeV / nucleon primary |
| | | beam]; measured particle spectra using HiRA array, angular |
| | | correlations between the particles in particle-decay channels. ⁸ Be, |
| | | 7,8,9 B, 8,10 C; deduced levels, width, J, π , isospin, branching ratios, |
| | | excitation spectra of outgoing particles from many-particle decays of |
| | | ground and excited states. JOUR PRVCA 84 014320 |
| | | |

A=11

| $^{11}\mathrm{Be}$ | 2011WA20 | NUCLEAR MOMENTS ^{7,9,10,11} Be; measured microwave resonance and transition spectra; deduced the ground state hyperfine constants. |
|--------------------|----------|--|
| ¹¹ B | 2010KAZO | NUCLEAR REACTIONS ¹¹ B, ¹³ C(α , α '), E=388 MeV; measured E α , $I\alpha(\theta)$; deduced $\sigma(\theta)$; calculated $\sigma(\theta)$ using DWBA with α -cluster structure. CONF Tsukuba(Nuclear Physics Trends) Proc P207 Kawabata |
| | 2010KI15 | RADIOACTIVITY ¹² C(p), (n); measured hypernucleus decay particle spectra, Ep, Ip, En, In, pn-coin, pp-coin, nn-coin, pion spectra; deduced hypernucleus nucleon decay width. Non-mesonic weak decay. JOUR NUPAB 835 434c |
| | 2010MA72 | NUCLEAR REACTIONS ¹² C(π^+ , K ⁺), (π^+ , K ⁺ p), E at 1.05 GeV / c; measured hypernuclei E γ , I γ ; deduced levels, J, π , γ -multipolarity, Λ binding energy, JOUR NUPAB 835 422c |
| | 2011KHZW | NUCLEAR REACTIONS ¹⁴ N, ¹⁶ O(n, α), E=1.7-7 MeV; ²⁰ Ne(n, α), E=4-7 MeV; ^{36,40} Ar(n, α), E=1.5-7 MeV; measured E α , I α using digital spectrometer; deduced σ to low-lying states. Comparison with other data, O and N reactions also to ENDF / B-VII. CONF |
| ¹¹ C | 2010KI15 | Dubna (ISINN-18), P153, Knryachkov RADIOACTIVITY ${}^{12}C(p)$, (n); measured hypernucleus decay particle spectra, Ep, Ip, En, In, pn-coin, pp-coin, nn-coin, pion spectra; deduced hypernucleus nucleon decay width. Non-mesonic weak decay. JOUR NUPAB 835 434c |
| | 2011YAZZ | NUCLEAR REACTIONS ⁴ He(⁷ Be, γ), E=14.7 MeV; measured E γ , I γ . REPT CNS-REP-86,P1,Yamaguchi |

A=12

¹²C 2010KA38 NUCLEAR REACTIONS ²H, ¹²C(γ , $\pi^+\pi^-$), E=0.8-1.1 GeV; measured pion spectra; deduced K⁰ photoproduction. JOUR NUPAB 835 317c

A=12 (continued)

| 2010KI15 | RADIOACTIVITY ¹² C(p), (n); measured hypernucleus decay particle |
|----------|---|
| | spectra, Ep, Ip, En, In, pn-coin, pp-coin, nn-coin, pion spectra; |
| | deduced hypernucleus nucleon decay width. Non-mesonic weak decay. |
| | JOUR NUPAB 835 434c |
| 2010MA72 | NUCLEAR REACTIONS ${}^{12}C(\pi^+, K^+)$, (π^+, K^+p) , E at 1.05 GeV / c: |
| | measured hypernuclei $E\gamma$, $I\gamma$; deduced levels, J, π , γ -multipolarity, Λ |
| | binding energy. JOUR NUPAB 835 422c |
| 2011AB05 | NUCLEAR REACTIONS $^{12}C(p, p)$, E<2.7-7 MeV: measured reaction |
| | products. Ep. Ip: deduced $\sigma(\theta)$. IBANDL library, comparison with |
| | theoretical calculations. JOUR NIMBE 269 2011 |
| 2011BA25 | NUCLEAR REACTIONS ${}^{12}C({}^{8}B, {}^{8}B)$, E=25.8 MeV: ${}^{12}C({}^{7}Be, {}^{7}Be)$. |
| | E = 18.8 MeV: ¹² C(⁶ Li, ⁶ Li), $E = 12.3 MeV$: measured particle spectra. |
| | tof. $\sigma(\theta)$. Optical model analysis of $\sigma(\theta)$ data using Woods-Saxon and |
| | double-folding type potentials. ${}^{12}C(^{8}B, {}^{8}B)$: deduced effect of breakup |
| | by coupled-channels calculations using continuum discretized |
| | coupled-channel method and cluster-model folding potentials. |
| | Experimental data for ${}^{12}C(\alpha, \alpha)$, (⁶ He, ⁶ He), (⁷ Li, ⁷ Li), (⁹ Be, ⁹ Be). |
| | $(^{11}B, ^{11}B), (^{16}O, ^{16}O), E(cm) = 2.8-22.8 \text{ MeV}$ used to extract reduced |
| | reaction σ . JOUR PRVCA 84 014603 |
| 2011DU19 | NUCLEAR REACTIONS ⁶ Li, ¹² C, ¹⁹ F, ²⁷ Al(p, γ), (p, p), E=590-1150 |
| | keV: measured reaction products, proton spectra; deduced $\sigma(\theta)$, |
| | S-factors. Optical model calculations, comparison with experimental |
| | data. JOUR PANUE 74 984 |
| 2011GI03 | NUCLEAR REACTIONS ${}^{9}\text{Be}({}^{9}\text{Be}, X){}^{15}\text{N}$ / ${}^{16}\text{N}$ / ${}^{12}\text{C}$ / ${}^{13}\text{C}$ / ${}^{15}\text{C}$ / |
| | 16 C, E=30, 35, 40 MeV; 12 C(18 O, X) 27 Mg / 28 Mg, E=50, 60 MeV; 11 B, |
| | $^{12}C(^{18}O, X)^{26}Mg / {}^{27}Mg / {}^{25}Mg / {}^{24}Na$, E not given; measured |
| | reaction products, $E\gamma$, $I\gamma$; deduced production yields. Comparison with |
| | PACE, LisFus and GEMINI calculations. JOUR NIMAE 648 109 |
| 2011GI05 | NUCLEAR REACTIONS ${}^{9}\text{Be}(\alpha, n\gamma)$, E=0.3-7.9 MeV; measured |
| | reaction products; deduced σ , reaction rate, analytical representation |
| | parameters. JOUR BRSPE 75 931 |
| 2011GR11 | NUCLEAR REACTIONS ${}^{12}C({}^{16}O, {}^{16}O), ({}^{16}O, {}^{12}C), E=28 \text{ MeV};$ |
| | measured reaction products; deduced $\sigma(\theta)$. α -cluster transfer, DWBA |
| | model, DWUCK5 program. JOUR BRSPE 75 961 |
| 2011WA15 | NUCLEAR REACTIONS ${}^{12}C({}^{112}Sn, {}^{112}Sn'), ({}^{114}Sn, {}^{114}Sn'), ({}^{116}Sn, {}^{116}Sn, {}^{116}Sn')$ |
| | ¹¹⁶ Sn'), E=4 MeV / nucleon; ${}^{12}C({}^{122}Sn, {}^{122}Sn')$, (${}^{124}Sn, {}^{124}Sn'$), E=3.8 |
| | MeV / nucleon; measured $E\gamma$, $I\gamma$, $(^{12}C)\gamma$ -coin, $(^{12}C)\gamma\gamma(\theta)$, precession |
| | angles. ^{112,114,116,122,124} Sn; deduced g-factors, configurations. |
| | Comparison with RQRPA, QRPA, and shell-model calculations. |
| | $^{12}\mathrm{C}(^{124}\mathrm{Sn},\mathrm{X})^{130}\mathrm{Xe}$ / $^{126}\mathrm{Te}$ / $^{128}\mathrm{Te},\mathrm{E}{=}3.8~\mathrm{MeV}$ / nucleon; measured |
| | $E\gamma$, $I\gamma$. JOUR PRVCA 84 014319 |
| 2011ZHZY | NUCLEAR REACTIONS ${}^{12}C({}^{17}F, {}^{17}F)$, E=60 MeV; measured |
| | E(particle), I(particle, θ); deduced $\sigma(\theta)$. REPT |
| | CNS-REP-86,P21,Zhang |

| 2010AG13 | NUCLEAR REACTIONS ² H, ⁷ Li, ⁹ Be, ¹³ C(K ⁻ , π^-), E at rest; measured Λ hypernucleus binding energy, formation probability. JOUR |
|----------|--|
| 2010KAZO | NUPAB 835 414c NUCLEAR REACTIONS ¹¹ B, ¹³ C(α , α '), E=388 MeV; measured E α , I $\alpha(\theta)$; deduced $\sigma(\theta)$; calculated $\sigma(\theta)$ using DWBA with α -cluster |
| | structure. CONF Tsukuba(Nuclear Physics Trends) Proc P207 Kawabata |
| 2010ZIZZ | NUCLEAR REACTIONS ${}^{2}H({}^{12}C, p)$, E(cm)=2, 3, 4, 5 MeV; measured Ep, Ip; deduced σ . ${}^{12}C({}^{12}C, p)$, E(cm)=2-8 MeV; measured reaction products; deduced C yields and the influence of deuterium |
| 2011GI03 | impurity on yields. CONF Heidelberg (NIC XI) Proc,P19,Zickefoose NUCLEAR REACTIONS ${}^{9}Be({}^{9}Be, X)^{15}N / {}^{16}N / {}^{12}C / {}^{13}C / {}^{15}C / {}^{16}C, E=30, 35, 40 \text{ MeV}; {}^{12}C({}^{18}O, X)^{27}Mg / {}^{28}Mg, E=50, 60 \text{ MeV}; {}^{11}B, {}^{12}C({}^{18}O, X)^{26}Mg / {}^{27}Mg / {}^{25}Mg / {}^{24}Na, E \text{ not given; measured}$ |
| | reaction products, $E\gamma$, $I\gamma$; deduced production yields. Comparison with PACE, LisFus and GEMINI calculations, JOUR NIMAE 648 109 |
| 2011KHZW | NUCLEAR REACTIONS ¹⁴ N, ¹⁶ O(n, α), E=1.7-7 MeV; ²⁰ Ne(n, α), E=4-7 MeV; ^{36,40} Ar(n, α), E=1.5-7 MeV; measured E α , I α using digital spectrometer; deduced σ to low-lying states. Comparison with other data, O and N reactions also to ENDE / B-VIL CONE |
| | Dubna (ISINN-18),P153,Khryachkov |
| 2011BA27 | NUCLEAR REACTIONS 12 C(23 Al, 22 Mg), [13 Al secondary beam from C(32 S, X)E=95 MeV / nucleon primary reaction], E=57 MeV / nucleon: measured fragment spectra, inclusive and exclusive |
| | longitudinal momentum distributions, and widths, $E\gamma$, |
| | (fragment) γ -coin. ²² Mg; deduced levels, J, π , σ , spectroscopic factors, |
| | asymptotic normalization coefficients. ~ Al; deduced g.s. $J\pi$, configuration mixing. Comparison with Glauber and large-scale shell |
| | model calculations. ²² Mg(p, γ) ²³ Al, E<1 MeV; deduced stellar |
| | reaction rates; discussed astrophysical significance of 22 Na |
| 20110110 | nucleosynthesis in ONe novae. JOUR PRVCA 84 015803 NUCLEAD DEACTIONS ⁶ I; ${}^{12}C$ ${}^{19}E$ ${}^{27}Al(p, r)$ (p, p) E=500 1150 |
| 2011D019 | keV: measured reaction products, proton spectra; deduced $\sigma(\theta)$. |
| | S-factors. Optical model calculations, comparison with experimental |
| | data. JOUR PANUE 74 984 |
| 2010LIZW | NUCLEAR REACTIONS ² H(°Li, ⁹ Li), $E(cm)=7.8$ MeV; ² H(°Li, ⁹ Be), E(cm)=8.0 MeV; ¹ H(⁸ Li, ⁷ Li), $E(cm)=4.0$ MeV; measured $E(particle)$ |
| | $I(\text{particle}, \theta);$ deduced single-particle spectroscopic factors using DWBA S-factors ⁶ Li(n α) E=0.01-0.10 MeV σ ¹ H(¹⁷ F ¹⁸ Ne) |
| | $E(cm)=0.3-1.6$ MeV; measured $E(particle)$, $I(particle, \theta)$; calculated σ |
| | using R matrix; deduced $\sigma(\theta)$, proton widths of ¹⁸ Ne levels. ¹ H(¹² N, |
| | γ), E(cm)=9.4 MeV; deduced ¹³ O to ¹² N+p single particle |
| | Trends) Proc.P322,Liu |
| | 2010AG13 2010KAZO 2010ZIZZ 2011GI03 2011KHZW 2011BA27 2011DU19 2010LIZW |

A=14

No references found

| $^{15}\mathrm{C}$ | 2011GI03 | NUCLEAR REACTIONS ${}^{9}\text{Be}({}^{9}\text{Be}, X){}^{15}\text{N}$ / ${}^{16}\text{N}$ / ${}^{12}\text{C}$ / ${}^{13}\text{C}$ / ${}^{15}\text{C}$ / |
|-------------------|----------|--|
| | | 16 C, E=30, 35, 40 MeV; 12 C(18 O, X) 27 Mg / 28 Mg, E=50, 60 MeV; 11 B, |
| | | ${ m ^{12}C(^{18}O, X)^{26}Mg} / { m ^{27}Mg} / { m ^{25}Mg} / { m ^{24}Na}$, E not given; measured |
| | | reaction products, $E\gamma$, $I\gamma$; deduced production yields. Comparison with |
| | | PACE, LisFus and GEMINI calculations. JOUR NIMAE 648 109 |
| $^{15}\mathrm{N}$ | 2011GI03 | NUCLEAR REACTIONS $^9\mathrm{Be}(^9\mathrm{Be},\mathrm{X})^{15}\mathrm{N}$ / $^{16}\mathrm{N}$ / $^{12}\mathrm{C}$ / $^{13}\mathrm{C}$ / $^{15}\mathrm{C}$ / |
| | | 16 C, E=30, 35, 40 MeV; 12 C(18 O, X) 27 Mg / 28 Mg, E=50, 60 MeV; 11 B, |
| | | ${ m ^{12}C(^{18}O, X)^{26}Mg} / { m ^{27}Mg} / { m ^{25}Mg} / { m ^{24}Na}$, E not given; measured |
| | | reaction products, $E\gamma$, $I\gamma$; deduced production yields. Comparison with |
| | | PACE, LisFus and GEMINI calculations. JOUR NIMAE 648 109 |
| | | |

| ¹⁶ C | 2011GI03 | NUCLEAR REACTIONS ⁹ Be(⁹ Be, X) ¹⁵ N / ¹⁶ N / ¹² C / ¹³ C / ¹⁵ C / ¹⁶ C, E=30, 35, 40 MeV; ¹² C(¹⁸ O, X) ²⁷ Mg / ²⁸ Mg, E=50, 60 MeV; ¹¹ B, ¹² C(¹⁸ O, X) ²⁶ Mg / ²⁷ Mg / ²⁵ Mg / ²⁴ Na, E not given; measured reaction products, $E\gamma$, $I\gamma$; deduced production yields. Comparison with PACE LieFus and CEMINI calculations. JOUR NIMAE 648, 100 |
|-----------------|----------|---|
| ¹⁶ N | 2011GI03 | NUCLEAR REACTIONS ${}^{9}Be({}^{9}Be, X){}^{15}N / {}^{16}N / {}^{12}C / {}^{13}C / {}^{15}C / {}^{16}C, E=30, 35, 40 \text{ MeV}; {}^{12}C({}^{18}O, X){}^{27}Mg / {}^{28}Mg, E=50, 60 \text{ MeV}; {}^{11}B, {}^{12}C({}^{18}O, X){}^{26}Mg / {}^{27}Mg / {}^{25}Mg / {}^{24}Na, E \text{ not given; measured}$ reaction products, E γ , I γ ; deduced production yields. Comparison with PACE, LisFus and GEMINI calculations. JOUR NIMAE 648 109 |
| | 2011K029 | NUCLEAR REACTIONS ¹⁹ F(n, xp), (n, d), (n, x α), (n, t), (n, p), (n, α), E=14.2 MeV; measured reaction products, Ep, Ip, α -spectra; deduced $\sigma(\theta, E)$. Comparison with JENDL-3.3 and ENDF / B-VII.0 evaluated nuclear reaction libraries. JOUR JNSTA 48 1146 |
| ¹⁶ O | 2010CAZL | NUCLEAR REACTIONS ¹⁵ N(p, γ), E=400 keV; measured E γ , I γ ; deduced σ , yields, S-factor. Results still under evaluation and not reported. CONE Heidelberg (NIC XI) Proc P117 Caciolli |
| | 2010CAZM | NUCLEAR REACTIONS ${}^{15}N(p, \gamma)$, E(cm)=80-230 keV; measured E γ , I γ ; deduced S-factor; calculated R-matrix fit. Comparison with other data. LUNA experiment. CONF Frascati(Nuclear Physics in Astrophysics IV 2009), P012036 |
| | 20100UZZ | NUCLEAR REACTIONS ¹² C(⁷ Li, t), E=28, 34 MeV; measured E(particle), I(particle, θ); deduced $\sigma(\theta)$ to individual states, S-factor; calculated $\sigma(\theta)$ to individual states using finite-range DWBA FRESCO code. ¹² C(α, γ), E(cm)=0.5-3.5 MeV; deduced E1, E2 S-factor; calculated S-factor using R-matrix. CONF Heidelberg (NIC XI) Proc.P129,Oulebsir |
| | 2011GR11 | NUCLEAR REACTIONS ¹² C(¹⁶ O, ¹⁶ O), (¹⁶ O, ¹² C), E=28 MeV; measured reaction products; deduced $\sigma(\theta)$. α -cluster transfer, DWBA model, DWUCK5 program, JOUR BRSPE 75 961 |
| | 2011LA13 | NUCLEAR REACTIONS ² H(¹⁹ F, n α), E=50 MeV; ¹⁹ F(³ He, α d), E=18.2 MeV; measured reaction products, ¹⁶ O recoils; deduced σ (E, θ), S-factors, reaction rates. Comparison with previous results. JOUR ASJOA 739 L54 |

A=16 (continued)

| 2011SC23 | NUCLEAR REACTIONS ${}^{4}\text{He}({}^{12}\text{C}, \gamma)$, E=3.3-4.5 MeV; measured |
|----------|---|
| | reaction products, $E\gamma$, $I\gamma$; deduced S-factors. R-matrix analysis. JOUR |
| | PYLBB 703 557 |
| 2011WH01 | NUCLEAR REACTIONS ¹² C(⁶ Li, d) ¹⁶ O, E=42 MeV; measured |
| | deuteron and α spectra, (⁴ He+ ¹² C)d-coin. ¹⁶ O; deduced levels, α |
| | decay widths. Cluster structures in ¹⁶ O. JOUR PRVCA 83 064324 |
| 2011WA17 | NUCLEAR REACTIONS ${}^{16}O(\text{polarized p, n}){}^{16}F, E=296 \text{ MeV};$ |
| | measured E(n), I(n), polarized neutrons, TOF, cross section spectrum, |
| | analyzing powers, polarized σ . Comparison with DWIA calculations. |
| | 16 F; deduced levels, J, π , Gamow-Teller and spin-dipole states. JOUR |
| | PRVCA 84 014614 |

A=17

| ^{17}O | 2011KHZW | NUCLEAR REACTIONS ¹⁴ N, ¹⁶ O(n, α), E=1.7-7 MeV; ²⁰ Ne(n, α), |
|----------|----------|--|
| | | E=4-7 MeV; 36,40 Ar(n, α), E=1.5-7 MeV; measured E α , I α using |
| | | digital spectrometer; deduced σ to low-lying states. Comparison with |
| | | other data, O and N reactions also to ENDF / B-VII. CONF |
| | | Dubna(ISINN-18),P153,Khryachkov |
| | 2011KO29 | NUCLEAR REACTIONS 19 F(n, xp), (n, d), (n, x α), (n, t), (n, p), (n, |
| | | α), E=14.2 MeV; measured reaction products, Ep, Ip, α -spectra; |
| | | deduced $\sigma(\theta, E)$. Comparison with JENDL-3.3 and ENDF / B-VII.0 |
| | | evaluated nuclear reaction libraries. JOUR JNSTA 48 1146 |

A=18

| ¹⁸ O | 2011KO29 | NUCLEAR REACTIONS $^{19}F(n, xp)$, (n, d) , $(n, x\alpha)$, (n, t) , (n, p) , (n, p) , (n, p) |
|------------------|----------|--|
| | | α), E=14.2 MeV; measured reaction products, Ep, Ip, α -spectra; |
| | | deduced $\sigma(\theta, E)$. Comparison with JENDL-3.3 and ENDF / B-VII.0 |
| | | evaluated nuclear reaction libraries. JOUR JNSTA 48 1146 |
| | 2011T007 | RADIOACTIVITY ²² Ne(α) [from ¹⁴ C(¹² C, α), E=44 MeV]; measured |
| | | decay products, $E\alpha$, $I\alpha$. ²² Ne; deduced excited states in ²² Ne, energies, |
| | | J, π , angular correlations for α -decay, α -clusters. Comparison with |
| | | shell model. JOUR JTPLA 94 6 |
| ¹⁸ Ne | 2010ALZZ | NUCLEAR REACTIONS ${}^{16}O({}^{3}He, n)$, E=15 MeV; measured |
| | | E(particle), I(particle, θ), En, In(θ), (particle)n-coin. ¹⁸ Ne deduced |
| | | states, resonances. CONF Heidelberg (NIC XI) |
| | | Proc,P215,Almaraz-Calderon |

 $^{16}\mathrm{F}$

| $^{19}\mathrm{C}$ | 2011YA13 | NUCLEAR REACTIONS ${}^{1}H({}^{9}Be, X)$, $({}^{18}C, X)$, $({}^{19}C, X)$, $({}^{20}C, X)$, |
|-------------------|----------|--|
| | | E=40 MeV / nucleon; measured reaction products on thick target |
| | | using superconducting TOF spectrometer. ¹⁹ C deduced neutron halo. |
| | | ^{19,20} C deduced density distribution, fragmentation σ , charge-pickup σ , |
| | | neutron removal σ , total σ ; calculated ^{19,20} C density distribution using |
| | | finite-range optical limit, Glauber model. JOUR NUPAB 864 1 |
| ^{19}O | 2011KO29 | NUCLEAR REACTIONS ${}^{19}F(n, xp)$, (n, d) , $(n, x\alpha)$, (n, t) , (n, p) |
| | | α), E=14.2 MeV; measured reaction products, Ep, Ip, α -spectra; |
| | | deduced $\sigma(\theta, E)$. Comparison with JENDL-3.3 and ENDF / B-VII.0 |
| | | evaluated nuclear reaction libraries. JOUR JNSTA 48 1146 |
| ^{19}F | 2011DU19 | NUCLEAR REACTIONS ⁶ Li, ¹² C, ¹⁹ F, ²⁷ Al(p, γ), (p, p), E=590-1150 |
| | | keV; measured reaction products, proton spectra; deduced $\sigma(\theta)$, |
| | | S-factors. Optical model calculations, comparison with experimental |
| | | data. JOUR PANUE 74 984 |
| 19 Na | 2010SIZW | RADIOACTIVITY ²⁰ Mg, ²³ Al, ³¹ Cl(p)[from ¹ H(²⁴ Mg, γ), E=48 M eV |
| | | / nucleon; ${}^{1}H({}^{32}S, \gamma)$, E=40 MeV / nucleon; ${}^{3}He({}^{20}Ne, 3n)$, E=25 |
| | | MeV / nucleon on thick target]; measured β -delayed Ep, Ip. CONF |
| | | Sinaia (Exotic Nucei and Nuc.Part.Astroph.III)Proc.P415,Simmons |

| $^{20}\mathrm{C}$ | 2011PE21 | NUCLEAR REACTIONS ⁹ Be, ¹⁸⁴ W(²² O, X) ²⁰ C, E=101 MeV / |
|-------------------|----------|--|
| | | Comparison with systematics, shell model calculations. JOUR PRLTA |
| | | 107 102501 |
| | 2011YA13 | NUCLEAR REACTIONS ${}^{1}H({}^{9}Be, X)$, $({}^{18}C, X)$, $({}^{19}C, X)$, $({}^{20}C, X)$, |
| | | E=40 MeV / nucleon; measured reaction products on thick target |
| | | using superconducting TOF spectrometer. ¹⁹ C deduced neutron halo. |
| | | ^{19,20} C deduced density distribution, fragmentation σ , charge-pickup σ , |
| | | neutron removal σ , total σ ; calculated ^{19,20} C density distribution using |
| 20 | | finite-range optical limit, Glauber model. JOUR NUPAB 864 1 |
| ²⁰ Ne | 2010BEZK | NUCLEAR REACTIONS ¹⁷ O(α , n), E=800-2300 keV; measured En, |
| | | In, $E\gamma$, $I\gamma$; deduced yield, reaction rate; calculated yield using R-matrix |
| | | AZURE code. CONF Heidelberg (NIC XI) Proc, P183, Best |
| | 2011DU19 | NUCLEAR REACTIONS ⁶ Li, ¹² C, ¹⁹ F, ²⁷ Al(p, γ), (p, p), E=590-1150 |
| | | keV; measured reaction products, proton spectra; deduced $\sigma(\theta)$, |
| | | S-factors. Optical model calculations, comparison with experimental |
| | | data. JOUR PANUE 74 984 |
| | 2011KI14 | RADIOACTIVITY $^{\circ}B(\beta^+)$ [from $^{\circ}Li(^{\circ}He, n)$, E=7.0 MeV]; measured β |
| | | spectra, β -delayed α spectra, $E\alpha$, $\alpha\alpha$ -coin. °Be; deduced excitation |
| | | distribution. Discussed implication of ⁸ B neutrino spectrum. |
| | | ²⁰ Na(β^+); measured β -delayed α spectrum and used for calibration. |
| | | Monte-Carlo simulations of β decay of ⁸ B. R-matrix parameterization. |
| 20.5.7 | | JOUR PRVCA 83 065802 |
| ²⁰ Na | 2010WRZZ | NUCLEAR REACTIONS ²⁰ Ne, ²⁴ Mg, ²⁸ Si, ³² S, ³⁶ Ar(³ He, t), $E=32$ |
| | | MeV; measured E(particle), I(particle, θ); deduced reaction rates of |
| | | 35 Ar(p, γ). Compared to those by Iliadis et al. CONF Heidelberg (NIC |
| | | XI) Proc,P55,Wrede |

A=20 (continued)

| | 2011KI14 | RADIOACTIVITY ⁸ B(β^+)[from ⁶ Li(³ He, n), E=7.0 MeV]; measured β |
|-----------|----------|--|
| | | spectra, β -delayed α spectra, $\mathbf{E}\alpha$, $\alpha\alpha$ -coin. ⁸ Be; deduced excitation |
| | | distribution. Discussed implication of ⁸ B neutrino spectrum. |
| | | ²⁰ Na(β^+); measured β -delayed α spectrum and used for calibration. |
| | | Monte-Carlo simulations of β decay of ⁸ B. R-matrix parameterization. |
| | | JOUR PRVCA 83 065802 |
| ^{20}Mg | 2010SIZW | RADIOACTIVITY ²⁰ Mg, ²³ Al, ³¹ Cl(p)[from ¹ H(²⁴ Mg, γ), E=48 M eV |
| | | / nucleon; ${}^{1}H({}^{32}S, \gamma)$, E=40 MeV / nucleon; ${}^{3}He({}^{20}Ne, 3n)$, E=25 |
| | | MeV / nucleon on thick target]; measured β -delayed Ep, Ip. CONF |
| | | Sinaia (Exotic Nucei and Nuc.Part.Astroph.III)Proc.P415,Simmons |

A=21

| ^{21}O | 2011FE06 | NUCLEAR REACTIONS ${}^{2}H({}^{20}O, p)$, E=10.5 MeV / nucleon; |
|--------------------|----------|--|
| | | measured E(p), I(p), E γ , I γ , $\sigma(\theta)$, p ²⁰ O-, p ²⁰ O γ -coin. ²¹ O; deduced |
| | | levels, J, $\pi,$ L-transfer, spectroscopic factors, configurations. Adiabatic |
| | | distorted-wave approximation analysis of $\sigma(\theta)$ data. Comparison with |
| | | shell-model calculations. JOUR PRVCA 84 011301 |
| $^{21}\mathrm{Ne}$ | 2010TAZU | NUCLEAR REACTIONS 4 He(17 O, γ), E(cm)=0.621-1.597 MeV; |
| | | measured E(particle), I(particle), $E\gamma$, $I\gamma$ using DRAGON recoil |
| | | separator at TRIUMF; deduced (α , γ) yields, new resonance in ¹⁷ O+ α |
| | | system. CONF Heidelberg (NIC XI) Proc,P45,Taggart |

A=22

| $^{22}\mathrm{Ne}$ | 2011T007 | RADIOACTIVITY ²² Ne(α) [from ¹⁴ C(¹² C, α), E=44 MeV]; measured |
|--------------------|----------|---|
| | | decay products, $E\alpha$, $I\alpha$. ²² Ne; deduced excited states in ²² Ne, energies, |
| | | J, π , angular correlations for α -decay, α -clusters. Comparison with |
| | | shell model. JOUR JTPLA 94 6 |
| 22 Na | 2010SAZK | RADIOACTIVITY ²³ Al(β^+), (EC)[from ¹ H(²⁴ Mg, ²³ Al), E=48 MeV / |
| | | nucleon]; $^{23}Mg(p)$ [from ^{23}Al]; measured β -delayed Ep, Ip; evaluated |
| | | 7786 keV resonance strength in 22 Na(p, γ) taking place in ONe novae. |
| | | CONF Sinaia (Exotic Nucei and |
| | | Nuc.Part.Astroph.III)Proc.P411,Saastamoi |
| | 2010SAZN | RADIOACTIVITY ²³ Mg(p)[from ²³ Al(β^+)[from ¹ H(²⁴ Mg, ²³ Al), E=48 |
| | | MeV / nucleon]]; measured E β , I β , β -delayed Ep, Ip; deduced E, J, π |
| | | for state corresponding to the lowest-energy proton group, resonance |
| | | strength. CONF Heidelberg (NIC XI) Proc, P211, Saastamoinen |
| | 2011DI09 | NUCLEAR REACTIONS Ti(d, X) ⁴⁸ V, 27 Al(d, X) ²² Na / 24 Na, |
| | | ${}^{55}Mn(d, p), {}^{55}Mn(d, X){}^{54}Mn / {}^{52}Mn / {}^{51}Cr, E{<}40 MeV; measured$ |
| | | reaction products, $E\gamma$, $I\gamma$; deduced production σ , thick target yields. |
| | | Comparison with ALICE-IPPE and EMPIRE-II calculations. JOUR |
| | | NIMBE 269 1878 |
| ^{22}Mg | 2010SIZW | RADIOACTIVITY ²⁰ Mg, ²³ Al, ³¹ Cl(p)[from ¹ H(²⁴ Mg, γ), E=48 M eV |
| | | / nucleon; ${}^{1}H({}^{32}S, \gamma)$, E=40 MeV / nucleon; ${}^{3}He({}^{20}Ne, 3n)$, E=25 |
| | | MeV / nucleon on thick target]; measured β -delayed Ep, Ip. CONF |
| | | Sinaia (Exotic Nucei and Nuc.Part.Astroph.III)Proc.P415,Simmons |

Page 16

A=22 (continued)

2011BA27 NUCLEAR REACTIONS ¹²C(²³Al, ²²Mg), [²³Al secondary beam from C(³²S, X)E=95 MeV / nucleon primary reaction], E=57 MeV / nucleon; measured fragment spectra, inclusive and exclusive longitudinal momentum distributions, and widths, E γ , (fragment) γ -coin. ²²Mg; deduced levels, J, π , σ , spectroscopic factors, asymptotic normalization coefficients. ²³Al; deduced g.s. J π , configuration mixing. Comparison with Glauber and large-scale shell model calculations. ²²Mg(p, γ)²³Al, E<1 MeV; deduced stellar reaction rates; discussed astrophysical significance of ²²Na nucleosynthesis in ONe novae. JOUR PRVCA 84 015803

| ²³ Na | 2010ZIZZ | NUCLEAR REACTIONS ${}^{2}H({}^{12}C, p)$, $E(cm)=2, 3, 4, 5$ MeV; measured Ep, Ip; deduced σ . ${}^{12}C({}^{12}C, p)$, $E(cm)=2-8$ MeV; measured reaction products; deduced C yields and the influence of deuterium |
|------------------|----------|---|
| ²³ Mg | 2010SAZK | RADIOACTIVITY ²³ Al(β^+), (EC)[from ¹ H(²⁴ Mg, ²³ Al), E=48 MeV / nucleon]; ²³ Mg(p)[from ²³ Al]; measured β -delayed Ep, Ip; evaluated 7786 keV resonance strength in ²² Na(p, γ) taking place in ONe novae. CONF Sinaia (Exotic Nucei and |
| | 2010SAZN | Nuc.Part.Astroph.III)Proc.P411,Saastamoi RADIOACTIVITY ²³ Mg(p)[from ²³ Al(β^+)[from ¹ H(²⁴ Mg, ²³ Al), E=48 MeV / nucleon]]; measured E β , I β , β -delayed Ep, Ip; deduced E, J, π for state corresponding to the lowest-energy proton group, resonance |
| | 2010SAZO | strength. CONF Heidelberg (NIC XI) Proc,P211,Saastamoinen NUCLEAR REACTIONS ²² Na(p, γ), E=198, 213, 232, 288, 454, 610 keV; measured E γ , I γ ; deduced yields, reaction rates, resonance |
| ²³ Al | 2010SAZK | RADIOACTIVITY ²³ Al(β^+), (EC)[from ¹ H(²⁴ Mg, ²³ Al), E=48 MeV / nucleon]; ²³ Mg(p)[from ²³ Al]; measured β -delayed Ep, Ip; evaluated 7786 keV resonance strength in ²² Na(p, γ) taking place in ONe novae. CONF Sinaia (Exotic Nucei and |
| | 2010SIZW | Nuc.Part.Astroph.III)Proc.P411,Saastamoi RADIOACTIVITY $^{20}\text{Mg},^{23}\text{Al},^{31}\text{Cl}(p)[\text{from }^{1}\text{H}(^{24}\text{Mg},\gamma), E=48 \text{ M eV} / \text{nucleon; }^{1}\text{H}(^{32}\text{S},\gamma), E=40 \text{ MeV} / \text{nucleon; }^{3}\text{He}(^{20}\text{Ne}, 3n), E=25 \text{ MeV} / \text{nucleon on thick target}]; measured \beta-delayed Ep, Ip. CONF$ |
| | 2011BA27 | Sinaia (Exotic Nucei and Nuc.Part.Astroph.III)Proc.P415,Simmons NUCLEAR REACTIONS ¹² C(²³ Al, ²² Mg), [²³ Al secondary beam from C(³² S, X)E=95 MeV / nucleon primary reaction], E=57 MeV / nucleon; measured fragment spectra, inclusive and exclusive longitudinal momentum distributions, and widths, E γ , (fragment) γ -coin. ²² Mg; deduced levels, J, π , σ , spectroscopic factors, asymptotic normalization coefficients. ²³ Al; deduced g.s. J π , configuration mixing. Comparison with Glauber and large-scale shell model calculations. ²² Mg(p, γ) ²³ Al, E<1 MeV; deduced stellar reaction rates; discussed astrophysical significance of ²² Na |
| | | reaction rates; discussed astrophysical significance of ²² Na nucleosynthesis in ONe novae, JOUR PRVCA 84 015803 |

| ²⁴ Na | 2011DI09 | NUCLEAR REACTIONS Ti(d, X) ⁴⁸ V, ²⁷ Al(d, X) ²² Na / ²⁴ Na, ⁵⁵ Mn(d, p), ⁵⁵ Mn(d, X) ⁵⁴ Mn / ⁵² Mn / ⁵¹ Cr, E<40 MeV; measured reaction products, $E\gamma$, $I\gamma$; deduced production σ , thick target yields. Comparison with ALICE-IPPE and EMPIRE-II calculations. JOUR NIMBE 269 1878 |
|------------------|----------|--|
| | 2011GI03 | NUCLEAR REACTIONS ${}^{9}Be({}^{9}Be, X)^{15}N / {}^{16}N / {}^{12}C / {}^{13}C / {}^{15}C / {}^{16}C, E=30, 35, 40 \text{ MeV}; {}^{12}C({}^{18}O, X)^{27}Mg / {}^{28}Mg, E=50, 60 \text{ MeV}; {}^{11}B, {}^{12}C({}^{18}O, X)^{26}Mg / {}^{27}Mg / {}^{25}Mg / {}^{24}Na, E \text{ not given; measured}$ reaction products, E γ , I γ ; deduced production yields. Comparison with PACE, LisFus and GEMINI calculations. JOUR NIMAE 648 109 |
| ²⁴ Mg | 2011KAZU | NUCLEAR REACTIONS ²⁴ Mg(α , α '), E=400 MeV; measured E α , I $\alpha(\theta)$; deduced $\sigma(\theta)$ to individual states, strength distribution (EWSR); calculated $\sigma(\theta)$ using DWBA. CONF Okinawa(New Faces of Atomic Nuclei) Proc.P194,Kawabata |
| | 2011ZH22 | NUCLEAR REACTIONS ^{28,29,30} Si(n, $x\gamma$), (n, $n^2\gamma$), (n, $2n\gamma$), (n, $np\gamma$), (n, $d\gamma$), (n, $p\gamma$), (n, $\alpha\gamma$), (n, $n\alpha\gamma$), E=14.9 MeV; measured reaction products, E γ , I γ ; deduced energies, M1 and E2 transition types. Comparison with GNASH nuclear reaction code calculations. JOUR NIMAE 648 192 |
| ²⁴ Al | 2010ICZX | RADIOACTIVITY ²⁴ Si(β^+)[from ²⁸ Si fragmentation on Ni target at 100 MeV / nucleon]; measured β -delayed E γ , I γ (t). ²⁴ Al deduced isomeric transition, T _{1/2} , levels, J, π , branching ratio, B(GT); calculated B(GT). CONF Kobe(Tours Nuc.Phys.and Astroph.VII) Proc.P290,Ichikawa |
| | 2010ICZY | RADIOACTIVITY ²⁴ Si(β^+), (EC)[from ²⁸ Si fragmentation on ⁹ Be]; measured β -delayed proton, β -delayed γ ; deduced decay scheme, log ft, B(GT). CONF Tsukuba(Nuclear Physics Trends) Proc.P265,Ichikawa |
| | 2010WRZZ | NUCLEAR REACTIONS ²⁰ Ne, ²⁴ Mg, ²⁸ Si, ³² S, ³⁶ Ar(³ He, t), E=32 MeV; measured E(particle), I(particle, θ); deduced reaction rates of ³⁵ Ar(p, γ). Compared to those by Iliadis et al. CONF Heidelberg (NIC XI) Proc,P55,Wrede |
| ²⁴ Si | 2010ICZX | RADIOACTIVITY ²⁴ Si(β^+)[from ²⁸ Si fragmentation on Ni target at 100 MeV / nucleon]; measured β -delayed E γ , I γ (t). ²⁴ Al deduced isomeric transition, T _{1/2} , levels, J, π , branching ratio, B(GT); calculated B(GT). CONF Kobe(Tours Nuc.Phys.and Astroph.VII) Proc.P290,Ichikawa |
| | 2010ICZY | RADIOACTIVITY ²⁴ Si(β^+), (EC)[from ²⁸ Si fragmentation on ⁹ Be]; measured β -delayed proton, β -delayed γ ; deduced decay scheme, log ft, B(GT). CONF Tsukuba(Nuclear Physics Trends) Proc.P265,Ichikawa |
| | 2011F008 | RADIOACTIVITY ²⁵ P(p), ²⁶ S(2p) [from Be(³² S, X) ²⁶ S / ²⁵ P, E=50.3 MeV / nucleon]; measured reaction products, TOF, Ep, Ip; deduced yields, $T_{1/2}$ limits. Comparison with other data. JOUR IMPEE 20 1491 |
| ²⁴ S | 2011F008 | RADIOACTIVITY ²⁵ P(p), ²⁶ S(2p) [from Be(³² S, X) ²⁶ S / ²⁵ P, E=50.3 MeV / nucleon]; measured reaction products, TOF, Ep, Ip; deduced yields, $T_{1/2}$ limits. Comparison with other data. JOUR IMPEE 20 1491 |

| ^{25}Mg | 2010MAZG | NUCLEAR REACTIONS $^{24,25,26}Mg(n, \gamma)$, E=1 eV-1 MeV; measured |
|-----------------|----------|---|
| 0 | | $E\gamma$, $I\gamma$ using PHWT (Pulse Height Weighting Technique); deduced |
| | | yields, resonance shape at 20 keV. n_TOF at CERN. CONF Heidelberg |
| | | (NIC XI) Proc,P194,Massimi |
| | 2011GI03 | NUCLEAR REACTIONS ${}^{9}\text{Be}({}^{9}\text{Be}, X){}^{15}\text{N}$ / ${}^{16}\text{N}$ / ${}^{12}\text{C}$ / ${}^{13}\text{C}$ / ${}^{15}\text{C}$ / |
| | | 16 C, E=30, 35, 40 MeV; 12 C(18 O, X) 27 Mg / 28 Mg, E=50, 60 MeV; 11 B, |
| | | $^{12}\mathrm{C}(^{18}\mathrm{O},\mathrm{X})^{26}\mathrm{Mg}$ / $^{27}\mathrm{Mg}$ / $^{25}\mathrm{Mg}$ / $^{24}\mathrm{Na},\mathrm{E}$ not given; measured |
| | | reaction products, $\mathbf{E}\gamma$, $\mathbf{I}\gamma$; deduced production yields. Comparison with |
| | | PACE, LisFus and GEMINI calculations. JOUR NIMAE 648 109 |
| | 2011ZH22 | NUCLEAR REACTIONS 28,29,30 Si(n, x γ), (n, n' γ), (n, 2n γ), (n, np γ), |
| | | (n, d γ), (n, p γ), (n, $\alpha\gamma$), (n, n $\alpha\gamma$), E=14.9 MeV; measured reaction |
| | | products, $E\gamma$, $I\gamma$; deduced energies, M1 and E2 transition types. |
| | | Comparison with GNASH nuclear reaction code calculations. JOUR |
| | | NIMAE 648 192 |
| ²⁵ P | 2011F008 | RADIOACTIVITY ${}^{25}P(p)$, ${}^{26}S(2p)$ [from Be(${}^{32}S, X$) ${}^{26}S / {}^{25}P, E=50.3$ |
| | | MeV / nucleon]; measured reaction products, TOF, Ep, Ip; deduced |
| | | yields, $\mathrm{T}_{1/2}$ limits. Comparison with other data. JOUR IMPEE 20 |
| | | 1491 |

| 2010MAZG | NUCLEAR REACTIONS $^{24,25,26}Mg(n, \gamma)$, E=1 eV-1 MeV; measured |
|----------|--|
| | $E\gamma$, $I\gamma$ using PHWT (Pulse Height Weighting Technique); deduced |
| | yields, resonance shape at 20 keV. n_TOF at CERN. CONF Heidelberg |
| | (NIC XI) Proc.P194.Massimi |
| 2011GI03 | NUCLEAR REACTIONS ${}^{9}\text{Be}({}^{9}\text{Be}, X){}^{15}\text{N}$ / ${}^{16}\text{N}$ / ${}^{12}\text{C}$ / ${}^{13}\text{C}$ / ${}^{15}\text{C}$ / |
| | 16 C, E=30, 35, 40 MeV; 12 C(18 O, X) 27 Mg / 28 Mg, E=50, 60 MeV; 11 B, |
| | $^{12}C(^{18}O, X)^{26}Mg / ^{27}Mg / ^{25}Mg / ^{24}Na$. E not given; measured |
| | reaction products. $E\gamma$. $I\gamma$: deduced production yields. Comparison with |
| | PACE, LisFus and GEMINI calculations. JOUR NIMAE 648 109 |
| 2011ZH22 | NUCLEAR REACTIONS 28,29,30 Si(n, x γ), (n, n' γ), (n, 2n γ), (n, np γ), |
| | (n, d γ), (n, p γ), (n, a γ), (n, na γ), E=14.9 MeV; measured reaction |
| | products, $E\gamma$, $I\gamma$; deduced energies, M1 and E2 transition types. |
| | Comparison with GNASH nuclear reaction code calculations. JOUR |
| | NIMAE 648 192 |
| 2010CHZU | NUCLEAR REACTIONS ²⁸ Si(p, t), E=40 MeV; measured Ep, Ip(θ), |
| | pp-coin using Oak Ridge ORRUBA detectors, E(triton), I(triton, θ) |
| | using SIDAR detector at HRIBF, P(triton)-coin; deduced $d\sigma(E)$, |
| | resonances, ²⁶ P p-decay branching ratios; calculated proton angular |
| | correlations using FRESCO, CONF Heidelberg (NIC XI) |
| | Proc.P205.Chipps |
| 2010DEZU | NUCLEAR REACTIONS 24 Mg(3 He, n), E=7.9 MeV; measured En, In |
| | using EDEN neutron array, $E\gamma$, $I\gamma$, $n\gamma$ -coin, ²⁶ Si deduced resonances. |
| | CONF Heidelberg (NIC XI) Proc.P212.de Sereville |
| 2011F008 | RADIOACTIVITY ²⁵ P(p), ²⁶ S(2p) [from Be(³² S, X) ²⁶ S / ²⁵ P, E=50.3 |
| | MeV / nucleon]; measured reaction products, TOF, Ep, Ip; deduced |
| | vields, $T_{1/2}$ limits. Comparison with other data. JOUR IMPEE 20 |
| | 1491 |
| | 2010MAZG 2011GI03 2011ZH22 2010CHZU 2010DEZU 2011F008 |

| $^{27}\mathrm{Mg}$ | 2010MAZG | NUCLEAR REACTIONS 24,25,26 Mg(n, γ), E=1 eV-1 MeV; measured E γ , I γ using PHWT (Pulse Height Weighting Technique); deduced yields, resonance shape at 20 keV. n_TOF at CERN. CONF Heidelberg (NIC XI) Proc,P194,Massimi |
|--------------------|----------|--|
| | 2011GI03 | NUCLEAR REACTIONS ${}^{9}Be({}^{9}Be, X){}^{15}N / {}^{16}N / {}^{12}C / {}^{13}C / {}^{15}C / {}^{16}C, E=30, 35, 40 \text{ MeV}; {}^{12}C({}^{18}O, X){}^{27}Mg / {}^{28}Mg, E=50, 60 \text{ MeV}; {}^{11}B, {}^{12}C({}^{18}O, X){}^{26}Mg / {}^{27}Mg / {}^{25}Mg / {}^{24}Na, E \text{ not given; measured}$ reaction products, E γ , I γ ; deduced production yields. Comparison with PACE, LisFus and GEMINI calculations. JOUR NIMAE 648 109 |
| | 2011ZH22 | NUCLEAR REACTIONS 28,29,30 Si(n, x γ), (n, n' γ), (n, 2n γ), (n, np γ), (n, d γ), (n, p γ), (n, $\alpha\gamma$), (n, n $\alpha\gamma$), E=14.9 MeV; measured reaction products, E γ , I γ ; deduced energies, M1 and E2 transition types. Comparison with GNASH nuclear reaction code calculations. JOUR NIMAE 648 192 |
| ²⁷ Al | 2011CA20 | NUCLEAR REACTIONS ²⁷ Al(¹⁶ O, ¹⁶ O), (¹⁶ O, ¹⁶ O'), E=100 MeV; measured reaction products; deduced $\sigma(\theta)$. MAGNEX quadrupole-dipole magnetic spectrometer. JOUR NIMAE 648 46 |
| | 2011DU19 | NUCLEAR REACTIONS ⁶ Li, ¹² C, ¹⁹ F, ²⁷ Al(p, γ), (p, p), E=590-1150 keV; measured reaction products, proton spectra; deduced $\sigma(\theta)$, S-factors. Optical model calculations, comparison with experimental data. JOUR PANUE 74 984 |
| | 2011ZH22 | NUCLEAR REACTIONS 28,29,30 Si(n, x γ), (n, n' γ), (n, 2n γ), (n, np γ), (n, d γ), (n, p γ), (n, $\alpha\gamma$), (n, n $\alpha\gamma$), E=14.9 MeV; measured reaction products, E γ , I γ ; deduced energies, M1 and E2 transition types. Comparison with GNASH nuclear reaction code calculations. JOUR NIMAE 648 192 |
| ²⁷ Si | 2011ZH22 | NUCLEAR REACTIONS ^{28,29,30} Si(n, x γ), (n, n' γ), (n, 2n γ), (n, np γ), (n, d γ), (n, p γ), (n, $\alpha\gamma$), (n, n $\alpha\gamma$), E=14.9 MeV; measured reaction products, E γ , I γ ; deduced energies, M1 and E2 transition types. Comparison with GNASH nuclear reaction code calculations. JOUR NIMAE 648 192 |

| ^{28}Mg | 2011GI03 | NUCLEAR REACTIONS $^9\mathrm{Be}(^9\mathrm{Be},\mathrm{X})^{15}\mathrm{N}$ / $^{16}\mathrm{N}$ / $^{12}\mathrm{C}$ / $^{13}\mathrm{C}$ / $^{15}\mathrm{C}$ / |
|-----------|----------|--|
| | | 16 C, E=30, 35, 40 MeV; 12 C(18 O, X) 27 Mg / 28 Mg, E=50, 60 MeV; 11 B, |
| | | $^{12}\mathrm{C}(^{18}\mathrm{O},\mathrm{X})^{26}\mathrm{Mg}$ / $^{27}\mathrm{Mg}$ / $^{25}\mathrm{Mg}$ / $^{24}\mathrm{Na},\mathrm{E}$ not given; measured |
| | | reaction products, $\mathrm{E}\gamma,\mathrm{I}\gamma;$ deduced production yields. Comparison with |
| | | PACE, LisFus and GEMINI calculations. JOUR NIMAE 648 109 |
| ^{28}Al | 2010MAZJ | RADIOACTIVITY ²⁸ P(β^+)[polarized from ⁹ Be(²⁸ Si, ²⁸ P), E=100 |
| | | MeV / nucleon charge exchange]; measured polarized target Ee+, |
| | | Ie ⁺ (θ , t) uing β -NMR technique. ²⁸ Al, ²⁸ P deduced magnetic moment, |
| | | quadrupole coupling constant. CONF Tsukuba(Nuclear Physics |
| | | Trends) Proc.P260,Matsuta |
| | | |

A=28 (continued)

| | 2011ZH22 | NUCLEAR REACTIONS ^{28,29,30} Si(n, x γ), (n, n' γ), (n, 2n γ), (n, np γ), (n, d γ), (n, p γ), (n, $\alpha\gamma$), (n, n $\alpha\gamma$), E=14.9 MeV; measured reaction products, E γ , I γ ; deduced energies, M1 and E2 transition types. Comparison with GNASH nuclear reaction code calculations. JOUR NIMAE 648 192 |
|------------------|----------|---|
| | 20112H22 | RADIOACTIVITY 25 Al(β) [from 26 Si(n, p), E=14.9 MeV]; measured decay products, E β , I β ; deduced energies, M1 and E2 transition types. Comparison with GNASH nuclear reaction code calculations. JOUR NIMAE 648 192 |
| ²⁸ Si | 2010MAZJ | RADIOACTIVITY ²⁸ P(β^+)[polarized from ⁹ Be(²⁸ Si, ²⁸ P), E=100 MeV / nucleon charge exchange]; measured polarized target Ee ⁺ , Ie ⁺ (θ , t) uing β -NMR technique. ²⁸ Al, ²⁸ P deduced magnetic moment, quadrupole coupling constant. CONF Tsukuba(Nuclear Physics Trends) Proc.P260,Matsuta |
| | 2011DU19 | NUCLEAR REACTIONS ⁶ Li, ¹² C, ¹⁹ F, ²⁷ Al(p, γ), (p, p), E=590-1150 keV; measured reaction products, proton spectra; deduced $\sigma(\theta)$, S-factors. Optical model calculations, comparison with experimental data. JOUR PANUE 74 984 |
| | 2011ZH22 | NUCLEAR REACTIONS ^{28,29,30} Si(n, $x\gamma$), (n, $n'\gamma$), (n, $2n\gamma$), (n, $np\gamma$), (n, $d\gamma$), (n, $p\gamma$), (n, $\alpha\gamma$), (n, $n\alpha\gamma$), E=14.9 MeV; measured reaction products, E γ , I γ ; deduced energies, M1 and E2 transition types. Comparison with GNASH nuclear reaction code calculations. JOUR NIMAE 648 192 |
| | 2011ZH22 | RADIOACTIVITY ²⁸ Al(β^-) [from ²⁸ Si(n, p), E=14.9 MeV]; measured decay products, E β , I β ; deduced energies, M1 and E2 transition types. Comparison with GNASH nuclear reaction code calculations. JOUR NIMAE 648 192 |
| ²⁸ P | 2010MAZJ | RADIOACTIVITY ²⁸ P(β^+)[polarized from ⁹ Be(²⁸ Si, ²⁸ P), E=100 MeV / nucleon charge exchange]; measured polarized target Ee ⁺ , Ie ⁺ (θ , t) uing β -NMR technique. ²⁸ Al, ²⁸ P deduced magnetic moment, quadrupole coupling constant. CONF Tsukuba(Nuclear Physics Trends) Proc.P260,Matsuta |
| | 2010WRZZ | NUCLEAR REACTIONS ²⁰ Ne, ²⁴ Mg, ²⁸ Si, ³² S, ³⁶ Ar(³ He, t), E=32 MeV; measured E(particle), I(particle, θ); deduced reaction rates of ³⁵ Ar(p, γ). Compared to those by Iliadis et al. CONF Heidelberg (NIC XI) Proc,P55,Wrede |

A=29

²⁹Al 2011ZH22 NUCLEAR REACTIONS ^{28,29,30}Si(n, x γ), (n, n' γ), (n, 2n γ), (n, np γ), (n, d γ), (n, p γ), (n, n γ), (n, n $\alpha\gamma$), E=14.9 MeV; measured reaction products, E γ , I γ ; deduced energies, M1 and E2 transition types. Comparison with GNASH nuclear reaction code calculations. JOUR NIMAE 648 192

A=29 (continued)

| $^{29}\mathrm{Si}$ | 2011ZH22 | NUCLEAR REACTIONS 28,29,30 Si(n, x γ), (n, n' γ), (n, 2n γ), (n, np γ), (n, d γ), (n, p γ), (n, n γ), (n, np γ), $\Sigma = 14.9$ MeV: measured reaction |
|--------------------|----------|--|
| | | products, $E\gamma$, $I\gamma$; deduced energies, M1 and E2 transition types. |
| | | Comparison with GNASH nuclear reaction code calculations. JOUR |
| | | NIMAE 648 192 |
| $^{29}\mathrm{P}$ | 2010DEZV | NUCLEAR REACTIONS ${}^{2}H({}^{28}Si, n), ({}^{32}S, n), ({}^{36}Ar, n), E \approx 320-325$ |
| | | MeV; measured reaction products. ${}^{1}H({}^{29}P, {}^{26}Si)$, E \approx 230 MeV; ${}^{1}H({}^{33}Cl,$ |
| | | 30 S), E=208, 229, 250 MeV; 1 H(37 K, 34 Ar), E=235, 255, 275 MeV; |
| | | measured E α , I $\alpha(\theta)$, E(particle), I(particle); deduced σ ; calculated σ |
| | | using NON-SMOKER. Heavy ions from reactions on deuterium used as |
| | | beams for reactions on hydrogen. Cross sections not presented in the |
| | | paper. CONF Heidelberg (NIC XI) Proc, P56, Deibel |

A=30

| ³⁰ Al | 2011ZH22 | NUCLEAR REACTIONS ^{28,29,30} Si(n, $x\gamma$), (n, $n'\gamma$), (n, $2n\gamma$), (n, $np\gamma$), (n, $d\gamma$), (n, $p\gamma$), (n, $\alpha\gamma$), (n, $n\alpha\gamma$), E=14.9 MeV; measured reaction products, $E\gamma$, $I\gamma$; deduced energies, M1 and E2 transition types. Comparison with GNASH nuclear reaction code calculations. JOUR NIMAE 648 192 |
|------------------|----------|--|
| ³⁰ Si | 2011ZH22 | NUCLEAR REACTIONS ^{28,29,30} Si(n, x γ), (n, n' γ), (n, 2n γ), (n, np γ), (n, d γ), (n, p γ), (n, $\alpha\gamma$), (n, n $\alpha\gamma$), E=14.9 MeV; measured reaction products, E γ , I γ ; deduced energies, M1 and E2 transition types. Comparison with GNASH nuclear reaction code calculations. JOUR NIMAE 648 192 |
| ³⁰ S | 2010SEZU | NUCLEAR REACTIONS ²⁸ Si(³ He, n), E=9 MeV; measured $E\gamma$, $I\gamma(\theta)$, $\gamma\gamma$ -coin, In, En, $n\gamma$ -coin. Analysis of data in progress. CONF Heidelberg (NIC XI) Proc, P213, Setoodehnia |
| | 2010SEZV | NUCLEAR REACTIONS ${}^{32}S(p, t)$, E=33.5, 34.5 MeV; measured E(particle), I(particle, θ). ${}^{30}S$ deduced 3^+ , 2^+ levels. CONF Frascati(Nuclear Physics in Astrophysics IV 2009), P012042 |
| | 2010SIZW | RADIOACTIVITY ²⁰ Mg, ²³ Al, ³¹ Cl(p)[from ¹ H(²⁴ Mg, γ), E=48 M eV / nucleon; ¹ H(³² S, γ), E=40 MeV / nucleon; ³ He(²⁰ Ne, 3n), E=25 MeV / nucleon on thick target]; measured β -delayed Ep, Ip. CONF Sinaia (Exotic Nucei and Nuc.Part.Astroph.III)Proc.P415,Simmons |

| ^{31}Cl | 2010SIZW | RADIOACTIVITY ²⁰ Mg, ²³ Al, ³¹ Cl(p)[from ¹ H(²⁴ Mg, γ), E=48 M eV |
|-----------|----------|--|
| | | / nucleon; ${}^{1}H({}^{32}S, \gamma)$, E=40 MeV / nucleon; ${}^{3}He({}^{20}Ne, 3n)$, E=25 |
| | | MeV / nucleon on thick target]; measured β -delayed Ep, Ip. CONF |
| | | Sinaia (Exotic Nucei and Nuc.Part.Astroph.III)Proc.P415,Simmons |

| ^{32}Cl | 2010MAZH | NUCLEAR REACTIONS ${}^{32}S({}^{3}He, t)$, E=30 MeV; measured |
|-----------|----------|--|
| | | $E(particle)$, $I(particle, \theta)$ using Enge split-pole spectrograph; deduced |
| | | energy of states relevant for novae, new excited state, proton branching |
| | | ratio for resonances. CONF Heidelberg (NIC XI) Proc, P53, Matos |
| | 2010WRZZ | NUCLEAR REACTIONS ²⁰ Ne, ²⁴ Mg, ²⁸ Si, ³² S, ³⁶ Ar(³ He, t), E=32 |
| | | MeV; measured E(particle), I(particle, θ); deduced reaction rates of |
| | | 35 Ar(p, γ). Compared to those by Iliadis et al. CONF Heidelberg (NIC |
| | | XI) Proc,P55,Wrede |

A=33

| ^{33}S | 2011KHZW | NUCLEAR REACTIONS ¹⁴ N, ¹⁶ O(n, α), E=1.7-7 MeV; ²⁰ Ne(n, α), |
|-----------|----------|--|
| | | E=4-7 MeV; 36,40 Ar(n, α), E=1.5-7 MeV; measured E α , I α using |
| | | digital spectrometer; deduced σ to low-lying states. Comparison with |
| | | other data, O and N reactions also to ENDF / B-VII. CONF |
| | | Dubna(ISINN-18),P153,Khryachkov |
| ^{33}Cl | 2010DEZV | NUCLEAR REACTIONS ${}^{2}H({}^{28}Si, n), ({}^{32}S, n), ({}^{36}Ar, n), E \approx 320-325$ |
| | | MeV; measured reaction products. ${}^{1}H({}^{29}P, {}^{26}Si), E\approx 230 \text{ MeV}; {}^{1}H({}^{33}Cl,$ |
| | | 30 S), E=208, 229, 250 MeV; 1 H(37 K, 34 Ar), E=235, 255, 275 MeV; |
| | | measured E α , I $\alpha(\theta)$, E(particle), I(particle); deduced σ ; calculated σ |
| | | using NON-SMOKER. Heavy ions from reactions on deuterium used as |
| | | beams for reactions on hydrogen. Cross sections not presented in the |
| | | paper. CONF Heidelberg (NIC XI) Proc, P56, Deibel |
| | 2010MAZI | NUCLEAR REACTIONS ${}^{12}C({}^{23}Al, 2p)$, E ≈ 65 MeV / nucleon; |
| | | measured E(particle), I(particle, θ), Ep, Ip(θ), pp-coin, E γ , I γ ; deduced |
| | | relative proton momenta, excitation energy spectra. CONF |
| | | Tsukuba(Nuclear Physics Trends) Proc.P377,Ma |

A=34

³⁴Cl 2010PAZT NUCLEAR REACTIONS ³⁴S(³He, t), ³³S(³He, d), E=25 MeV; measured reaction products; deduced new states; ³³S(p, γ), E*=5572 keV, E* \approx 5350-5850 keV; measured E γ , I γ at CENPA; ¹H(³³S, γ), E* \approx 5300-5650 keV; measured E(particle), I(particle), E γ , I γ , (particle) γ -coin using DRAGON. CONF Heidelberg (NIC XI) Proc,P52,Parikh

A=35

No references found

³⁶K **2010WRZZ** NUCLEAR REACTIONS ²⁰Ne, ²⁴Mg, ²⁸Si, ³²S, ³⁶Ar(³He, t), E=32 MeV; measured E(particle), I(particle, θ); deduced reaction rates of ³⁵Ar(p, γ). Compared to those by Iliadis et al. CONF Heidelberg (NIC XI) Proc,P55,Wrede

A=37

 ^{37}S NUCLEAR REACTIONS ¹⁴N, ¹⁶O(n, α), E=1.7-7 MeV;²⁰Ne(n, α), 2011KHZW E=4-7 MeV; 36,40 Ar(n, α), E=1.5-7 MeV; measured E α , I α using digital spectrometer; deduced σ to low-lying states. Comparison with other data, O and N reactions also to ENDF / B-VII. CONF Dubna(ISINN-18),P153,Khryachkov $^{37}\mathrm{K}$ NUCLEAR REACTIONS $^2\mathrm{H}(^{28}\mathrm{Si},\,\mathrm{n}),\,(^{32}\mathrm{S},\,\mathrm{n}),\,(^{36}\mathrm{Ar},\,\mathrm{n}),\,\mathrm{E}{\approx}320\text{-}325$ 2010DEZV MeV; measured reaction products. ${}^{1}H({}^{29}P, {}^{26}Si), E\approx 230 \text{ MeV}; {}^{1}H({}^{33}Cl,$ 30 S), E=208, 229, 250 MeV; 1 H(37 K, 34 Ar), E=235, 255, 275 MeV; measured $E\alpha$, $I\alpha(\theta)$, E(particle), I(particle); deduced σ ; calculated σ using NON-SMOKER. Heavy ions from reactions on deuterium used as beams for reactions on hydrogen. Cross sections not presented in the paper. CONF Heidelberg (NIC XI) Proc, P56, Deibel

A=38

³⁸Ar 2010WAZV NUCLEAR REACTIONS ⁴¹Ca(n, α), E=3-100 keV; measured E α , I α ; deduced σ , MACS, resonances. GELINA facility; σ compared with De Smet data. CONF Heidelberg (NIC XI) Proc,P199,Wagemans

A=39

³⁹Si **2011S022** NUCLEAR REACTIONS Be(⁴⁰P, p), (⁴¹P, np), (⁴²S, n2p), (⁴³S, 2n2p), (⁴²P, p), (⁴³S, np), (⁴⁴S, 2np), E=41.5 MeV / nucleon; measured reaction products, $E\gamma$, $I\gamma$. ^{39,41}Si; deduced level scheme, J, π , low-lying intruder and deformed states. ⁴⁸Ca secondary beams. JOUR PYLBB 703 417

A=40

| ^{40}Ar | 2011IDZZ | NUCLEAR REACTIONS ${}^{26}Mg({}^{18}O, 2n2p)$, E=70 MeV; measured E γ , |
|-----------|----------|--|
| | | $I\gamma(\theta)$, E(particle), I(particle), (particle) γ -coin, $\gamma\gamma$ -coin; deduced levels, |
| | | J, π . Only levels presented in the paper; detailed analysis in progress. |
| | | REPT CNS-REP-86, P23, Ideguchi |
| | 2011SZ02 | NUCLEAR REACTIONS 208 Pb(40 Ar, X), E=255 MeV; measured E γ , |
| | | I γ , $\gamma\gamma$ -, (particle) γ -coin using Prisa-Clara system. ^{40,41,42,43} Ar; |
| | | deduced levels, J, π . Comparison with shell model calculations, and |
| | | with energy level systematics of N=20-28 argon nuclei. JOUR PRVCA |
| | | 84 014325 |

Page 24

$A{=}40$ (continued)

| 40 0 | 001100000 | NUCLEAD DEACTIONS 40.48 () E 11.0.16.0 M M |
|------------------|-----------|---|
| ¹⁰ Ca | 2011M010 | NUCLEAR REACTIONS $10, 10$ Ca(n, n), E=11.9, 10.9 MeV; measured |
| | | $E(n), I(n), \sigma, \sigma(E, \theta), time-of-flight spectra. 40Ca(n, n), E=9.9-85.0;$ |
| | | $^{48}Ca(n, n), E=7.97-16.9 \text{ MeV}; {}^{54}Ca(n, n), E=5.5-26.0 \text{ MeV}; {}^{58,60}Ni(n, n)$ |
| | | n), E=4.5-24.0 MeV; 92 Mo(n, n), E=7.0-30.4 MeV; 116,118 Sn(n, n), |
| | | $E=9.95-24.0 \text{ MeV}; {}^{120}Sn(n, n), E=9.94-16.91 \text{ MeV}; {}^{124}Sn(n, n),$ |
| | | $E=11.0-24.0 \text{ MeV}; {}^{208}Pb(n, n), E=4.0-185.0 \text{ MeV}; {}^{50}Ti(p, p),$ |
| | | $E=6.0-65.0 \text{ MeV}; {}^{52}Cr(p, p), E=10.77-39.9 \text{ MeV}; {}^{54}Fe, {}^{64}Ni(p, p),$ |
| | | $E=9.69-65.0 \text{ MeV}; {}^{58}\text{Ni}(p, p), E=7.0-192.0 \text{ MeV}; {}^{60}\text{Ni}(p, p),$ |
| | | $E=7.0-178.0 \text{ MeV}; {}^{62}\text{Ni}(p, p), E=8.02-156.0 \text{ MeV}; {}^{90}\text{Zr}(p, p),$ |
| | | $E=5.57-185.0 \text{ MeV}; {}^{92}Mo(p, p), E=12.5-49.45 \text{ MeV}; {}^{114}Sn(p, p),$ |
| | | $E=30.4 \text{ MeV}; {}^{116}Sn(p, p), E=16.0-61.4 \text{ MeV}; {}^{118,122,124}Sn(p, p),$ |
| | | $E=16.0-49.35 \text{ MeV}; {}^{120}Sn(p, p), E=9.8-156.0 \text{ MeV}; {}^{208}Pb(p, p),$ |
| | | E=9.0-200.0 MeV; analyzed total cross sections, $\sigma(E, \theta)$, single-particle |
| | | levels, spectroscopic factors, occupation probabilities, mass dependence |
| | | on cross section. Dispersal optical model (DOM) analysis. JOUR |
| | | PRVCA 83 064605 |
| | 2011N012 | NUCLEAR REACTIONS ⁴ He(³⁶ Ar, ³⁶ Ar), E=150 MeV; measured |
| | | thick target E α , I $\alpha(\theta)$. ⁴⁰ Ca deduced resonance parameters, moments |
| | | of inertia. JOUR ZAANE 47.96 |

| ⁴¹ Si | 2011S022 | NUCLEAR REACTIONS Be(⁴⁰ P, p), (⁴¹ P, np), (⁴² S, n2p), (⁴³ S, 2n2p), (⁴² P, p), (⁴³ S, np), (⁴⁴ S, 2np), E=41.5 MeV / nucleon; measured reaction products, $E\gamma$, $I\gamma$. ^{39,41} Si; deduced level scheme, J, π , |
|--------------------|-----------|---|
| 41 g | 001411440 | low-lying intruder and deformed states. ⁴⁸ Ca secondary beams. JOUR PYLBB 703 417 NUCLEAD DEACTIONS ²⁰⁸ DI (36C, X) E, 215 M V |
| 5 | 2011WA13 | NUCLEAR REACTIONS $2^{\circ\circ}$ Pb($^{\circ\circ}$ S, X), E=215 MeV; measured E γ , I γ , (particle) γ -coin using PRISMA spectrometer and CLARA array. |
| | | ⁴⁴ S; deduced levels, J, π , multipolarity, configurations. Comparison with previous Coulomb excitation study and large-scale shell-model calculations using SDPF-U effective interaction. JOUR PRVCA 83 061304 |
| $^{41}\mathrm{Ar}$ | 2011SZ02 | NUCLEAR REACTIONS ²⁰⁸ Pb(⁴⁰ Ar, X), E=255 MeV; measured E γ , I γ , $\gamma\gamma$ -, (particle) γ -coin using Prisa-Clara system. ^{40,41,42,43} Ar; deduced levels, J. π . Comparison with shell model calculations, and |
| | | with energy level systematics of $N=20-28$ argon nuclei. JOUR PRVCA 84 014325 |
| ⁴¹ K | 2011KA24 | NUCLEAR REACTIONS 40 Ar(p, γ), E=1-3 MeV; measured E γ , I γ ; deduced excitation function, resonance states, resonance strengths. JOUR BRSPE 75 917 |

⁴²Ar 2011SZ02 NUCLEAR REACTIONS ²⁰⁸Pb(⁴⁰Ar, X), E=255 MeV; measured E γ , I γ , $\gamma\gamma$ -, (particle) γ -coin using Prisa-Clara system. ^{40,41,42,43}Ar; deduced levels, J, π . Comparison with shell model calculations, and with energy level systematics of N=20-28 argon nuclei. JOUR PRVCA 84 014325

A=43

⁴³Ar 2011SZ02 NUCLEAR REACTIONS ²⁰⁸Pb(⁴⁰Ar, X), E=255 MeV; measured E γ , I γ , $\gamma\gamma$ -, (particle) γ -coin using Prisa-Clara system. ^{40,41,42,43}Ar; deduced levels, J, π . Comparison with shell model calculations, and with energy level systematics of N=20-28 argon nuclei. JOUR PRVCA 84 014325

A=44

| ^{44}S | 2011SA25 | NUCLEAR REACTIONS ${}^{9}\text{Be}({}^{46}\text{Ar}, 2\text{p}), [{}^{46}\text{Ar secondary beam}$ |
|-----------|----------|--|
| | | produced in $Be(^{48}Ca, X)$, $E=140 \text{ MeV} / \text{nucleon primary reaction}]$, |
| | | E=99.9 MeV / nucleon; measured E γ , I γ , $\gamma\gamma$ -, (fragment) γ -coin using |
| | | SeGA array, cross sections. ⁴⁴ S; deduced levels, J, π , longitudinal |
| | | momentum distributions, and configurations. Two-proton knockout |
| | | reaction. Comparison with shell-model calculations using the SDPF-U |
| | | interaction. JOUR PRVCA 83 061305 |
| ^{44}Sc | 2011KIZY | NUCLEAR REACTIONS ${}^{45}Sc(\gamma, n)$, E=50, 60, 70 MeV; measured E γ , |
| | | I _{γ} ; deduced isomeric σ ratio. Comparison with other data. CONF |
| | | Dubna(ISINN-18),P257,Kim |

A=45

⁴⁵Cr 2011P009 RADIOACTIVITY ⁴⁸Ni(2p), (β^+p) [from Ni(⁵⁸Ni, X), E=160 MeV / nucleon]; measured E(p), I(p), time-of-flight using optical time-projection chamber (OPTC), half-life; deduced branching ratios for the two-proton and delayed-proton decay modes. ⁴⁶Fe(β^+p); measured E(p), I(p). JOUR PRVCA 83 061303

| ^{46}V | 2011WAZY | RADIOACTIVITY 46 Cr (β^+) [from 36 Ar $+{}^{12}$ C]; measured E(nucleus), |
|--------------------|----------|---|
| | | I(nucleus, t), E β , I β (t), β -delayed E γ , I γ , $\beta\gamma$ -coin. ⁴⁶ Cr, ⁴⁶ V deduced |
| | | $T_{1/2}$, γ branching ratio. REPT CNS-REP-86,P13,Wakabayashi |
| $^{46}\mathrm{Cr}$ | 2011WAZY | RÁDIOACTIVITY 46 Cr(β^+)[from 36 Ar+ 12 C]; measured E(nucleus), |
| | | I(nucleus, t), E β , I β (t), β -delayed E γ , I γ , $\beta\gamma$ -coin. ⁴⁶ Cr, ⁴⁶ V deduced |
| | | $\mathrm{T}_{1/2},\gamma$ branching ratio. REPT CNS-REP-86,P13,Wakabayashi |

A=46 (continued)

RADIOACTIVITY ⁴⁸Ni(2p), $(\beta^+ p)$ [from Ni(⁵⁸Ni, X), E=160 MeV / $^{46}\mathrm{Fe}$ 2011P009 nucleon]; measured E(p), I(p), time-of-flight using optical time-projection chamber (OPTC), half-life; deduced branching ratios for the two-proton and delayed-proton decay modes. ${}^{46}\text{Fe}(\beta^+\text{p});$ measured E(p), I(p). JOUR PRVCA 83 061303

A = 47

| ${ m ^{47}V}$ | 2011ZHZZ | NUCLEAR REACTIONS 47,48,49 Ti, 53,54 Cr(p, n), E=7-11 MeV; |
|--------------------|----------|---|
| | | measured En, In; calculated $\sigma(E)$; deduced $\sigma(E)$, residual nuclear level |
| | | density. CONF Dubna(ISINN-18),P225,Zhuravlev |
| $^{47}\mathrm{Fe}$ | 2011P009 | RADIOACTIVITY ⁴⁸ Ni(2p), $(\beta^+ p)$ [from Ni(⁵⁸ Ni, X), E=160 MeV / |
| | | nucleon]; measured $E(p)$, $I(p)$, time-of-flight using optical |
| | | time-projection chamber (OPTC), half-life; deduced branching ratios |
| | | for the two-proton and delayed-proton decay modes. 46 Fe $(\beta^+ p)$; |
| | | measured E(p), I(p). JOUR PRVCA 83 061303 |

A = 48

| ⁴⁸ Ca | 2011MU10 | NUCLEAR REACTIONS ^{40,48} Ca(n, n), E=11.9, 16.9 MeV; measured E(n), I(n), σ , $\sigma(E, \theta)$, time-of-flight spectra. ⁴⁰ Ca(n, n), E=9.9-85.0; ⁴⁸ Ca(n, n), E=7.97-16.9 MeV; ⁵⁴ Ca(n, n), E=5.5-26.0 MeV; ^{58,60} Ni(n, n), E=4.5-24.0 MeV; ⁹² Mo(n, n), E=7.0-30.4 MeV; ^{116,118} Sn(n, n), E=9.95-24.0 MeV; ¹²⁰ Sn(n, n), E=9.94-16.91 MeV; ¹²⁴ Sn(n, n), E=11.0-24.0 MeV; ²⁰⁸ Pb(n, n), E=4.0-185.0 MeV; ⁵⁰ Ti(p, p), E=6.0-65.0 MeV; ⁵² Cr(p, p), E=10.77-39.9 MeV; ⁵⁴ Fe, ⁶⁴ Ni(p, p), E=9.69-65.0 MeV; ⁵⁸ Ni(p, p), E=7.0-192.0 MeV; ⁶⁰ Ni(p, p), E=7.0-178.0 MeV; ⁶² Ni(p, p), E=8.02-156.0 MeV; ⁹⁰ Zr(p, p), E=5.57-185.0 MeV; ⁹² Mo(p, p), E=12.5-49.45 MeV; ¹¹⁴ Sn(p, p), E=30.4 MeV; ¹¹⁶ Sn(p, p), E=16.0-61.4 MeV; ^{118,122,124} Sn(p, p), E=16.0-49.35 MeV; ¹²⁰ Sn(p, p), E=9.8-156.0 MeV; ²⁰⁸ Pb(p, p), |
|------------------|----------|--|
| | 2011S022 | on cross section. Dispersal optical model (DOM) analysis. JOUR PRVCA 83 064605 NUCLEAR REACTIONS Be(⁴⁰ P, p), (⁴¹ P, np), (⁴² S, n2p), (⁴³ S, 2n2p), (⁴² P, p), (⁴³ S, np), (⁴⁴ S, 2np), E=41.5 MeV / nucleon; measured reaction products, $E\gamma$, $I\gamma$. ^{39,41} Si; deduced level scheme, J, π , |
| ⁴⁸ Ti | 2011AD14 | low-lying intruder and deformed states. ⁴⁸ Ca secondary beams. JOUR PYLBB 703 417 NUCLEAR REACTIONS ⁴⁸ Ti, ⁵² Cr, ⁸⁰ Se(n, n γ), E=thermal; measured E γ , I γ . ⁴⁸ Ti, ⁵² Cr, ⁸⁰ Se; deduced level energies, lifetime, T _{1/2} . Doppler Shift Attenuation method (DSA). JOUR BRSPE 75 914 |

A=48 (continued)

| $^{48}\mathrm{V}$ | 2011DI09 | NUCLEAR REACTIONS Ti(d, X) ⁴⁸ V, ²⁷ Al(d, X) ²² Na / ²⁴ Na, ⁵⁵ Mn(d, p), ⁵⁵ Mn(d, X) ⁵⁴ Mn / ⁵² Mn / ⁵¹ Cr, E<40 MeV; measured reaction products, $E\gamma$, $I\gamma$; deduced production σ , thick target yields. Comparison with ALICE-IPPE and EMPIRE-II calculations. JOUR NIMBE 269 1878 | | |
|-------------------|----------|--|--|--|
| | 2011ZHZZ | NUCLEAR REACTIONS ^{47,48,49} Ti, ^{53,54} Cr(p, n), E=7-11 MeV; measured En, In; calculated $\sigma(E)$; deduced $\sigma(E)$, residual nuclear level density. CONE Dubne (ISINN 18) B225 Zhumaulau | | |
| ⁴⁸ Ni | 2011P009 | RADIOACTIVITY ⁴⁸ Ni(2p), $(\beta^+ p)$ [from Ni(⁵⁸ Ni, X), E=160 MeV / nucleon]; measured E(p), I(p), time-of-flight using optical time-projection chamber (OPTC), half-life; deduced branching ratios for the two-proton and delayed-proton decay modes. ⁴⁶ Fe($\beta^+ p$); measured E(p), I(p). JOUR PRVCA 83 061303 | | |
| | $A{=}49$ | | | |
| $^{49}\mathrm{V}$ | 2011ZHZZ | NUCLEAR REACTIONS ^{47,48,49} Ti, ^{53,54} Cr(p, n), E=7-11 MeV; measured En, In; calculated $\sigma(E)$; deduced $\sigma(E)$, residual nuclear level density. CONF Dubna(ISINN-18),P225,Zhuravlev | | |
| | | $A{=}50$ | | |
| ⁵⁰ Ti | 2011MU10 | NUCLEAR REACTIONS ^{40,48} Ca(n, n), E=11.9, 16.9 MeV; measured E(n), I(n), σ , $\sigma(E, \theta)$, time-of-flight spectra. ⁴⁰ Ca(n, n), E=9.9-85.0; ⁴⁸ Ca(n, n), E=7.97-16.9 MeV; ⁵⁴ Ca(n, n), E=5.5-26.0 MeV; ^{58,60} Ni(n, n), E=4.5-24.0 MeV; ⁹² Mo(n, n), E=7.0-30.4 MeV; ^{116,118} Sn(n, n), E=9.95-24.0 MeV; ¹²⁰ Sn(n, n), E=9.94-16.91 MeV; ¹²⁴ Sn(n, n), E=11.0-24.0 MeV; ²⁰⁸ Pb(n, n), E=4.0-185.0 MeV; ⁵⁰ Ti(p, p), E=6.0-65.0 MeV; ⁵² Cr(p, p), E=10.77-39.9 MeV; ⁵⁴ Fe, ⁶⁴ Ni(p, p), E=9.69-65.0 MeV; ⁵⁸ Ni(p, p), E=7.0-192.0 MeV; ⁶⁰ Ni(p, p), E=7.0-178.0 MeV; ⁶² Ni(p, p), E=8.02-156.0 MeV; ⁹⁰ Zr(p, p), E=5.57-185.0 MeV; ⁹² Mo(p, p), E=12.5-49.45 MeV; ¹¹⁴ Sn(p, p), E=30.4 MeV; ¹¹⁶ Sn(p, p), E=16.0-61.4 MeV; ^{118,122,124} Sn(p, p), E=16.0-49.35 MeV; ¹²⁰ Sn(p, p), E=9.8-156.0 MeV; ²⁰⁸ Pb(p, p), E=9.0-200.0 MeV; analyzed total cross sections, $\sigma(E, \theta)$, single-particle levels, spectroscopic factors, occupation probabilities, mass dependence on cross section. Dispersal optical model (DOM) analysis. JOUR PRVCA 83 064605 | | |

A=51

⁵¹Cr 2011DI09 NUCLEAR REACTIONS Ti(d, X)⁴⁸V, ²⁷Al(d, X)²²Na / ²⁴Na, ⁵⁵Mn(d, p), ⁵⁵Mn(d, X)⁵⁴Mn / ⁵²Mn / ⁵¹Cr, E<40 MeV; measured reaction products, $E\gamma$, $I\gamma$; deduced production σ , thick target yields. Comparison with ALICE-IPPE and EMPIRE-II calculations. JOUR NIMBE 269 1878

A=51 (continued)

2011FI06 NUCLEAR REACTIONS ¹¹⁵Sn $(\alpha, \gamma)^{119}$ Te, ¹¹⁵Sn $(\alpha, n)^{118}$ Te, ¹¹⁶Sn $(\alpha, n)^{119}$ Te, E(cm)=9.3-14.8 MeV; ⁴⁸Ti $(\alpha, n)^{51}$ Cr, E not given; measured E γ , I γ , cross sections. Comparison with previous data and predictions of statistical model calculations. JOUR PRVCA 83 064609

| $^{52}\mathrm{Cr}$ | 2011AD14 | NUCLEAR REACTIONS ⁴⁸ Ti, ⁵² Cr, ⁸⁰ Se(n, $n\gamma$), E=thermal; |
|--------------------|----------|--|
| | | measured $E\gamma$, $I\gamma$. $11, 2Cr$, $2Se$; deduced level energies, lifetime, |
| | 00110 | $T_{1/2}$. Doppler Shift Attenuation method (DSA). JOUR BRSPE 75 914 |
| | 2011MU10 | NUCLEAR REACTIONS $40,40$ (a, n), E=11.9, 16.9 MeV; measured |
| | | $E(n), I(n), \sigma, \sigma(E, \theta), time-of-flight spectra. 40Ca(n, n), E=9.9-85.0;$ |
| | | 46 Ca(n, n), E=7.97-16.9 MeV; 54 Ca(n, n), E=5.5-26.0 MeV; 58,00 Ni(n, |
| | | n), E=4.5-24.0 MeV; ${}^{92}Mo(n, n)$, E=7.0-30.4 MeV; ${}^{110,118}Sn(n, n)$, |
| | | $E=9.95-24.0 \text{ MeV}; {}^{120}Sn(n, n), E=9.94-16.91 \text{ MeV}; {}^{124}Sn(n, n),$ |
| | | E=11.0-24.0 MeV; 208 Pb(n, n), E=4.0-185.0 MeV; 50 Ti(p, p), |
| | | $E=6.0-65.0 \text{ MeV}; {}^{52}Cr(p, p), E=10.77-39.9 \text{ MeV}; {}^{54}Fe, {}^{64}Ni(p, p),$ |
| | | $E=9.69-65.0 \text{ MeV}; {}^{58}\text{Ni}(p, p), E=7.0-192.0 \text{ MeV}; {}^{60}\text{Ni}(p, p),$ |
| | | $E=7.0-178.0 \text{ MeV}; {}^{62}\text{Ni}(p, p), E=8.02-156.0 \text{ MeV}; {}^{90}\text{Zr}(p, p),$ |
| | | $E=5.57-185.0 \text{ MeV}; {}^{92}Mo(p, p), E=12.5-49.45 \text{ MeV}; {}^{114}Sn(p, p),$ |
| | | $E=30.4 \text{ MeV}; {}^{116}Sn(p, p), E=16.0-61.4 \text{ MeV}; {}^{118,122,124}Sn(p, p),$ |
| | | $E=16.0-49.35 \text{ MeV}; {}^{120}Sn(p, p), E=9.8-156.0 \text{ MeV}; {}^{208}Pb(p, p),$ |
| | | E=9.0-200.0 MeV; analyzed total cross sections, $\sigma(E, \theta)$, single-particle |
| | | levels, spectroscopic factors, occupation probabilities, mass dependence |
| | | on cross section. Dispersal optical model (DOM) analysis. JOUR |
| | | PRVCA 83 064605 |
| ^{52}Mn | 2010FUZQ | NUCLEAR REACTIONS 52 Cr(3 He, t), E=140 MeV / nucleon; |
| | | measured E(particle), I(particle); calculated ⁵² Ni β -decay f-factor, |
| | | $T_{1/2}$, GT transition strengths. CONF Kobe(Tours Nuc.Phys.and |
| | | Astroph.VII) Proc.P297,Fujita |
| | 2011DI09 | NUCLEAR REACTIONS Ti(d, X) ⁴⁸ V, 27 Al(d, X) ²² Na / 24 Na, |
| | | ${}^{55}Mn(d, p), {}^{55}Mn(d, X){}^{54}Mn / {}^{52}Mn / {}^{51}Cr, E{<}40 MeV; measured$ |
| | | reaction products, $E\gamma$, $I\gamma$; deduced production σ , thick target yields. |
| | | Comparison with ALICE-IPPE and EMPIRE-II calculations. JOUR |
| | | NIMBE 269 1878 |
| 52 Ni | 2011AS08 | RADIOACTIVITY 54 Zn(2p) [from Ni(58 Ni, X), E=75.5 MeV / |
| | | nucleon]; measured decay products, proton spectra; deduced branching |
| | | ratio, total decay energy, angular and energy correlations, $T_{1/2}$. |
| | | Comparison with theoretical calculations. JOUR PRLTA $107^{\prime}\ 102502$ |

| 53 Ca | 2011SA25 | NUCLEAR REACTIONS ⁹ Be(⁴⁶ Ar, 2p), [⁴⁶ Ar secondary beam |
|------------|----------|--|
| | | produced in $Be(^{48}Ca, X)$, $E=140 \text{ MeV} / \text{nucleon primary reaction}]$, |
| | | E=99.9 MeV / nucleon; measured E γ , I γ , $\gamma\gamma$ -, (fragment) γ -coin using |
| | | SeGA array, cross sections. ⁴⁴ S; deduced levels, J, π , longitudinal |
| | | momentum distributions, and configurations. Two-proton knockout |
| | | reaction. Comparison with shell-model calculations using the SDPF-U |
| | | interaction. JOUR PRVCA 83 061305 |
| ^{53}Mn | 2011ZHZZ | NUCLEAR REACTIONS 47,48,49 Ti, 53,54 Cr(p, n), E=7-11 MeV; |
| | | measured En, In; calculated $\sigma(E)$; deduced $\sigma(E)$, residual nuclear level |
| | | density. CONF Dubna(ISINN-18),P225,Zhuravlev |

| ⁵⁴ Ar | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^-); measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr, ^{54,60,66,68,70,74} Mn, ^{54,60,66,68,870,74} Fe, ^{60,66,68,70,74} Co, ^{60,66,68,70,74} Ni, ^{66,68,70,74} Cu, ^{66,68,70,74} Zn, ^{68,70,74} Ga, ^{70,74} Ge, ⁷⁴ As(β^-); calculated EC O are large from any properties of the term of the DDM and the CONF |
|-------------------|----------|--|
| | | Q-values from experimental data, FRDM and FFD-14 models. CONF Heidelberg (NIC XI) Proc D221 Estrado |
| $^{54}\mathrm{K}$ | 2010ESZY | RADIOACTIVITY ${}^{54}Sc$, ${}^{54}Ti$, ${}^{66}Mn$, ${}^{66}Fe$, ${}^{70,74}Ni$, ${}^{70,74}Cu(\beta^{-})$; |
| | | measured mass using 1OF-B ρ ; deduced EC Q-values. 5'Ar, 5'A, 5'A, 5'A, 6'Ca, 54, 60 Sc, 5'A, 60, 66, 68 Ti, 5'A, 60, 66, 68, 70 V, 5'A, 60, 66, 68, 70, 7'A Cr, |
| | | ^{54,60,66,68,70,74} Mn, ^{54,60,66,68,68,70,74} Fe, ^{60,66,68,70,74} Co, ^{60,66,68,70,74} Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| 54 Ca | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Ca, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr, |
| | | 54,60,66,68,70,74Mn, 54,60,66,68,68,70,74Fe, 60,66,68,70,74Co, 60,66,68,70,74Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^{-}); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |

A=54 (continued)

| | 2011MU10 | NUCLEAR REACTIONS ^{40,48} Ca(n, n), E=11.9, 16.9 MeV; measured E(n), I(n), σ , σ (E, θ), time-of-flight spectra. ⁴⁰ Ca(n, n), E=9.9-85.0; ⁴⁸ Ca(n, n), E=7.97-16.9 MeV; ⁵⁴ Ca(n, n), E=5.5-26.0 MeV; ^{58,60} Ni(n, n), E=4.5-24.0 MeV; ⁹² Mo(n, n), E=7.0-30.4 MeV; ^{116,118} Sn(n, n), E=9.95-24.0 MeV; ¹²⁰ Sn(n, n), E=9.94-16.91 MeV; ¹²⁴ Sn(n, n), E=11.0-24.0 MeV; ²⁰⁸ Pb(n, n), E=4.0-185.0 MeV; ⁵⁰ Ti(p, p), E=6.0-65.0 MeV; ⁵² Cr(p, p), E=10.77-39.9 MeV; ⁵⁴ Fe, ⁶⁴ Ni(p, p), E=9.69-65.0 MeV; ⁵² Ni(p, p), E=7.0-192.0 MeV; ⁶⁰ Ni(p, p), E=7.0-178.0 MeV; ⁶² Ni(p, p), E=8.02-156.0 MeV; ⁹⁰ Zr(p, p), E=30.4 MeV; ¹¹⁶ Sn(p, p), E=16.0-61.4 MeV; ^{118,122,124} Sn(p, p), E=16.0-49.35 MeV; ¹²⁰ Sn(p, p), E=9.8-156.0 MeV; ²⁰⁸ Pb(p, p), E=9.0-200.0 MeV; analyzed total cross sections, σ (E, θ), single-particle levels, spectroscopic factors, occupation probabilities, mass dependence on cross section. Dispersal optical model (DOM) analysis. JOUR |
|--------------------|----------|--|
| $^{54}\mathrm{Sc}$ | 2010ESZY | PRVCA 83 064605 RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^-); measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60} Sc, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr, ^{54,60,66,68,70,74} Ma, ^{54,60,66,68,70,74} Cr, ^{60,66,68,70,74} Cr, ^{54,60,66,68,70,74} Cr, ^{54,60,66,70} C |
| | | ^{66,68,70,74} Cu, ^{66,68,70,74} Zn, ^{68,70,74} Ga, ^{70,74} Ge, ⁷⁴ As(β^-); calculated EC Q-values from experimental data, FRDM and HFB-14 models. CONF Heidelberg (NIC XI) Proc.P221.Estrade |
| ⁵⁴ Ti | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^-); measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60} , ^{66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr, ^{54,60,66,68,70,74} Mn, ^{54,60,66,68,70,74} Fe, ^{60,66,68,70,74} Co, ^{60,66,68,70,74} Ni, ^{66,68,70,74} Cu, ^{66,68,70,74} Ca, ^{70,74} Ga, ^{70,74} Ge, ⁷⁴ As(β^-); calculated EC Q-values from experimental data, FRDM and HFB-14 models. CONF |
| $^{54}\mathrm{V}$ | 2010ESZY | Heidelberg (NIC XI) Proc,P221,Estrade RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^-); measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr, ^{54,60,66,68,70,74} Mn, ^{54,60,66,68,68,70,74} Fe, ^{60,66,68,70,74} Co, ^{60,66,68,70,74} Ni, ^{66,68,70,74} Cu, ^{66,68,70,74} Zn, ^{68,70,74} Ga, ^{70,74} Ge, ⁷⁴ As(β^-); calculated EC Q-values from experimental data, FRDM and HFB-14 models. CONF Haidelberg (NIC XI) Proc P221 Fatada |
| ⁵⁴ Cr | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^-); measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60} Ge, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr, ^{54,60,66,68,70,74} Mn, ^{54,60,66,68,70,74} Fe, ^{60,66,68,70,74} Co, ^{60,66,68,70,74} Ni, ^{66,68,70,74} Cu, ^{66,68,70,74} Ca, ^{68,70,74} Ga, ^{70,74} Ge, ⁷⁴ As(β^-); calculated EC Q-values from experimental data, FRDM and HFB-14 models. CONF Heidelberg (NIC XI) Proc,P221,Estrade |

KEYNUMBERS AND KEYWORDS

A=54 (continued)

| $^{54}\mathrm{Mn}$ | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
|--------------------|-----------|--|
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, |
| | | 54,60 Ca, 54,60 Sc, 54,60,66,68 Ti, 54,60,66,68,70 V, 54,60,66,68,70,74 Cr, |
| | | 54,60,66,68,70,74 Mn, $54,60,66,68,68,70,74$ Fe, $60,66,68,70,74$ Co, $60,66,68,70,74$ Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| | 2011D109 | NUCLEAR REACTIONS TI(d, X) ⁴⁰ V, ²¹ Al(d, X) ²² Na / ²⁴ Na, 55M (1 X) ⁵⁴ M (52M (51C) F (40 M X) |
| | | min(d, p), ^{co} Min(d, X) ^{co} Min / ^{co} Min / ^{co} Cr, E<40 MeV; measured |
| | | reaction products, $E\gamma$, $I\gamma$; deduced production δ , thick target yields. |
| | | NIMBE 260 1878 |
| | 20117H77 | NICLEAR BEACTIONS 47,48,49 Ti 53,54 Cr(n n) E=7-11 MeV: |
| | 201101100 | measured En. In: calculated $\sigma(E)$: deduced $\sigma(E)$, residual nuclear level |
| | | density. CONF Dubna(ISINN-18),P225.Zhuravlev |
| $^{54}\mathrm{Fe}$ | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, |
| | | 54,60 Ca, 54,60 Sc, 54,60,66,68 Ti, 54,60,66,68,70 V, 54,60,66,68,70,74 Cr, |
| | | 54,60,66,68,70,74 Mn, $54,60,66,68,68,70,74$ Fe, $60,66,68,70,74$ Co, $60,66,68,70,74$ Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As (β^{-}) ; calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | 001111110 | Heidelberg (NIC XI) Proc, P221, Estrade |
| | 2011M010 | NUCLEAR REACTIONS ¹⁰ , ¹⁰ Ca(n, n), E=11.9, 10.9 MeV; measured $F(n)$ $I(n) = \sigma (F, \theta)$ time of flight spectra $\frac{40}{2}C_{2}(n, n)$ $E=0.0.85.0$ |
| | | $^{48}C_{2}(n, n) = -7.07_{-16.0} M_{eV} \cdot {}^{54}C_{2}(n, n) = -5.26_{-0.0} M_{eV} \cdot {}^{58,60}N_{i}(n, n)$ |
| | | n) $E=45-240 \text{ MeV}$; $9^{2}M_{0}(n n) E=70-304 \text{ MeV}$; $116,118 \text{ Sn}(n n)$ |
| | | E = 9.95-24.0 MeV; ¹²⁰ Sn(n, n), $E = 9.94-16.91 MeV;$ ¹²⁴ Sn(n, n), |
| | | $E=11.0-24.0 \text{ MeV}; {}^{208}Pb(n, n), E=4.0-185.0 \text{ MeV}; {}^{50}Ti(p, p),$ |
| | | $E=6.0-65.0 \text{ MeV}; {}^{52}Cr(p, p), E=10.77-39.9 \text{ MeV}; {}^{54}Fe, {}^{64}Ni(p, p),$ |
| | | $E=9.69-65.0 \text{ MeV}; {}^{58}Ni(p, p), E=7.0-192.0 \text{ MeV}; {}^{60}Ni(p, p),$ |
| | | $E=7.0-178.0 \text{ MeV}; {}^{62}\text{Ni}(p, p), E=8.02-156.0 \text{ MeV}; {}^{90}\text{Zr}(p, p),$ |
| | | $E=5.57-185.0 \text{ MeV}; {}^{92}\text{Mo}(p, p), E=12.5-49.45 \text{ MeV}; {}^{114}\text{Sn}(p, p), $ |
| | | $E=30.4 \text{ MeV}; {}^{116}Sn(p, p), E=16.0-61.4 \text{ MeV}; {}^{118,122,124}Sn(p, p),$ |
| | | $E=16.0-49.35 \text{ MeV}; {}^{120}\text{Sn}(p, p), E=9.8-156.0 \text{ MeV}; {}^{200}\text{Pb}(p, p),$ |
| | | E=9.0-200.0 MeV; analyzed total cross sections, $\sigma(E, \theta)$, single-particle |
| | | evens, spectroscopic factors, occupation probabilities, mass dependence |
| | | PRVCA 83 064605 |
| ^{54}Co | 2010ESZY | BADIOACTIVITY ⁵⁴ Sc ⁵⁴ Ti ⁶⁶ Mn ⁶⁶ Fe ^{70,74} Ni ^{70,74} Cu(β^{-}). |
| 00 | 20102021 | measured mass using TOF-B ρ : deduced EC Q-values. ⁵⁴ Ar. ⁵⁴ K. |
| | | ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr, |
| | | 54,60,66,68,70,74 Mn, 54,60,66,68,68,70,74 Fe, 60,66,68,70,74 Co, 60,66,68,70,74 Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As (β^{-}) ; calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| F 4 | | Heidelberg (NIC XI) Proc, P221, Estrade |
| ^{ə4} Zn | 2011AS08 | RADIOACTIVITY ³⁴ Zn(2p) [from Ni(⁵⁸ Ni, X), E=75.5 MeV / |
| | | nucleon]; measured decay products, proton spectra; deduced branching |
| | | ratio, total decay energy, angular and energy correlations, $T_{1/2}$. |
| | | Comparison with theoretical calculations. JOUK PKLIA 107 102502 |

| $^{55}\mathrm{V}$ | 2011DE20 | NUCLEAR REACTIONS ${}^{9}Be({}^{48}Ca, np){}^{55}V, ({}^{48}Ca, 2n){}^{55}Cr, E=172$ |
|--------------------|----------|---|
| | | MeV; measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin, $\gamma(\theta)$, DCO using Gammasphere Array. |
| | | 55 V, 55 Cr; deduced levels, J, π , high-spin levels, configurations, |
| | | multipolarities, alignments. Comparison with shell-model, and the |
| | | projected shell model calculations. JOUR PRVCA 83 064305 |
| $^{55}\mathrm{Cr}$ | 2011DE20 | NUCLEAR REACTIONS ${}^{9}Be({}^{48}Ca, np){}^{55}V, ({}^{48}Ca, 2n){}^{55}Cr, E=172$ |
| | | MeV; measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin, $\gamma(\theta)$, DCO using Gammasphere Array. |
| | | ⁵⁵ V, ⁵⁵ Cr; deduced levels, J, π , high-spin levels, configurations, |
| | | multipolarities, alignments. Comparison with shell-model, and the |
| | | projected shell model calculations. JOUR PRVCA 83 064305 |
| | | |
| | | |
| | | $A{=}56$ |

| ^{56}Mn | 2011DI09 | NUCLEAR REACTIONS Ti(d, X) ⁴⁸ V, ²⁷ Al(d, X) ²² Na / ²⁴ Na, |
|--------------------|----------|---|
| | | $^{55}Mn(d, p)$, $^{55}Mn(d, X)^{54}Mn / {}^{52}Mn / {}^{51}Cr$, E<40 MeV; measured |
| | | reaction products, $E\gamma$, $I\gamma$; deduced production σ , thick target yields. |
| | | Comparison with ALICE-IPPE and EMPIRE-II calculations. JOUR |
| | | NIMBE 269 1878 |
| $^{56}\mathrm{Fe}$ | 2011WAZZ | NUCLEAR REACTIONS 56 Fe(n, n'), E \approx 1000-6000 keV; measured En, |
| | | In, $E\gamma$, $n\gamma$ -coin; deduced σ gated by 847 keV state in ⁵⁶ Fe. Compared |
| | | with ENDFB-VII and Perey data. CONF |
| | | Dubna(ISINN-18),P127,Wagner |
| | | |

A=57

No references found

A=58

| ⁵⁸ Ni | 2011MU10 | NUCLEAR REACTIONS ^{40,48} Ca(n, n), E=11.9, 16.9 MeV; measured E(n), I(n), σ , σ (E, θ), time-of-flight spectra. ⁴⁰ Ca(n, n), E=9.9-85.0; ⁴⁸ Ca(n, n), E=7.97-16.9 MeV; ⁵⁴ Ca(n, n), E=5.5-26.0 MeV; ^{58,60} Ni(n, n), E=4.5-24.0 MeV; ⁹² Mo(n, n), E=7.0-30.4 MeV; ^{116,118} Sn(n, n), E=9.95-24.0 MeV; ¹²⁰ Sn(n, n), E=9.94-16.91 MeV; ¹²⁴ Sn(n, n), E=11.0-24.0 MeV; ²⁰⁸ Pb(n, n), E=4.0-185.0 MeV; ⁵⁰ Ti(p, p), E=6.0-65.0 MeV; ⁵² Cr(p, p), E=10.77-39.9 MeV; ⁵⁴ Fe, ⁶⁴ Ni(p, p), E=9.69-65.0 MeV; ⁵⁸ Ni(p, p), E=7.0-192.0 MeV; ⁶⁰ Ni(p, p), E=7.0-178.0 MeV; ⁶² Ni(p, p), E=8.02-156.0 MeV; ⁹⁰ Zr(p, p), E=5.57-185.0 MeV; ⁹² Mo(p, p), E=12.5-49.45 MeV; ¹¹⁴ Sn(p, p), E=30.4 MeV; ¹¹⁶ Sn(p, p), E=16.0-61.4 MeV; ^{118,122,124} Sn(p, p), E=16.0-49.35 MeV; ¹²⁰ Sn(p, p), E=9.8-156.0 MeV; ²⁰⁸ Pb(p, p), E=9.0-200.0 MeV; analyzed total cross sections, σ (E, θ), single-particle levels, spectroscopic factors, occupation probabilities, mass dependence |
|------------------|----------|---|
| | | on cross section. Dispersal optical model (DOM) analysis. JOUR PRVCA 83 064605 |

Page 33

A=58 (continued)

⁵⁸Cu 2011VI03 NUCLEAR MOMENTS ^{58,59,60,61,62}Cu; measured hyperfine spectrum; deduced ground state nuclear moments, g factors, quadrupole moments, ground-state hyperfine parameters. Comparison with large-scale shell model calculations, GXPF1A effective interaction. JOUR PYLBB 703 34

A=59

⁵⁹Cu 2011VI03 NUCLEAR MOMENTS ^{58,59,60,61,62}Cu; measured hyperfine spectrum; deduced ground state nuclear moments, g factors, quadrupole moments, ground-state hyperfine parameters. Comparison with large-scale shell model calculations, GXPF1A effective interaction. JOUR PYLBB 703 34

A = 60

| 60 Ca | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
|--------------------|----------|--|
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, |
| | | 54,60 Ca, 54,60 Sc, 54,60,66,68 Ti, 54,60,66,68,70 V, 54,60,66,68,70,74 Cr, |
| | | ^{54,60,66,68,70,74} Mn, ^{54,60,66,68,68,70,74} Fe, ^{60,66,68,70,74} Co, ^{60,66,68,70,74} Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| $^{60}\mathrm{Sc}$ | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, |
| | | 54,60 Ca, 54,60 Sc, 54,60,66,68 Ti, 54,60,66,68,70 V, 54,60,66,68,70,74 Cr, |
| | | ^{54,60,66,68,70,74} Mn, ^{54,60,66,68,68,70,74} Fe, ^{60,66,68,70,74} Co, ^{60,66,68,70,74} Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| $^{60}\mathrm{Ti}$ | 2010ESZY | RADIOACTIVITY 54 Sc, 54 Ti, 66 Mn, 66 Fe, 70,74 Ni, 70,74 Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, |
| | | 54,60 Ca, 54,60 Sc, 54,60,66,68 Ti, 54,60,66,68,70 V, 54,60,66,68,70,74 Cr, |
| | | 54,60,66,68,70,74Mn, 54,60,66,68,68,70,74Fe, 60,66,68,70,74Co, 60,66,68,70,74Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| ^{60}V | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, |
| | | 54,60 Ca, 54,60 Sc, 54,60,66,68 Ti, 54,60,66,68,70 V, 54,60,66,68,70,74 Cr, |
| | | ^{54,60,66,68,70,74} Mn, ^{54,60,66,68,68,70,74} Fe, ^{60,66,68,70,74} Co, ^{60,66,68,70,74} Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| | | |

KEYNUMBERS AND KEYWORDS

A=60 (continued)

| $^{60}\mathrm{Cr}$ | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
|--------------------|----------|--|
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, |
| | | 54,60 Ca, 54,60 Sc, 54,60,66,68 Ti, 54,60,66,68,70 V, 54,60,66,68,70,74 Cr, |
| | | 54,60,66,68,70,74 Mn, 54,60,66,68,68,70,74 Fe, 60,66,68,70,74 Co, 60,66,68,70,74 Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As (β^{-}) ; calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| ^{60}Mn | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr. |
| | | 54,60,66,68,70,74Mn, 54,60,66,68,68,70,74Fe, 60,66,68,70,74Co, 60,66,68,70,74Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| $^{60}\mathrm{Fe}$ | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr, |
| | | 54,60,66,68,70,74Mn, 54,60,66,68,68,70,74Fe, 60,66,68,70,74Co, 60,66,68,70,74Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^{-}); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| 60 Co | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68,71} , ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr. |
| | | 54,60,66,68,70,74Mn, 54,60,66,68,68,70,74Fe, 60,66,68,70,74Co, 60,66,68,70,74Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| ⁶⁰ Ni | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr. |
| | | 54,60,66,68,70,74Mn, 54,60,66,68,68,70,74Fe, 60,66,68,70,74Co, 60,66,68,70,74Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| | | |

A=60 (continued)

| | 2011MU10 | NUCLEAR REACTIONS ^{40,48} Ca(n, n), E=11.9, 16.9 MeV; measured |
|--------------------|----------|--|
| | | $E(n)$, $I(n)$, σ , $\sigma(E, \theta)$, time-of-flight spectra. ⁴⁰ Ca(n, n), E=9.9-85.0; |
| | | 48 Ca(n, n), E=7.97-16.9 MeV; 54 Ca(n, n), E=5.5-26.0 MeV; 58,60 Ni(n, |
| | | n), E=4.5-24.0 MeV; 92 Mo(n, n), E=7.0-30.4 MeV; 116,118 Sn(n, n), |
| | | $E=9.95-24.0 \text{ MeV}; {}^{120}Sn(n, n), E=9.94-16.91 \text{ MeV}; {}^{124}Sn(n, n),$ |
| | | $E=11.0-24.0 \text{ MeV}; {}^{208}Pb(n, n), E=4.0-185.0 \text{ MeV}; {}^{50}Ti(p, p),$ |
| | | $E=6.0-65.0 \text{ MeV}; {}^{52}Cr(p, p), E=10.77-39.9 \text{ MeV}; {}^{54}Fe, {}^{64}Ni(p, p),$ |
| | | $E=9.69-65.0 \text{ MeV}; {}^{58}\text{Ni}(p, p), E=7.0-192.0 \text{ MeV}; {}^{60}\text{Ni}(p, p),$ |
| | | $E=7.0-178.0 \text{ MeV}; {}^{62}\text{Ni}(p, p), E=8.02-156.0 \text{ MeV}; {}^{90}\text{Zr}(p, p),$ |
| | | $E=5.57-185.0 \text{ MeV}; {}^{92}Mo(p, p), E=12.5-49.45 \text{ MeV}; {}^{114}Sn(p, p),$ |
| | | $E=30.4 \text{ MeV}; {}^{116}Sn(p, p), E=16.0-61.4 \text{ MeV}; {}^{118,122,124}Sn(p, p),$ |
| | | $E=16.0-49.35 \text{ MeV}; {}^{120}Sn(p, p), E=9.8-156.0 \text{ MeV}; {}^{208}Pb(p, p),$ |
| | | E=9.0-200.0 MeV; analyzed total cross sections, $\sigma(E, \theta)$, single-particle |
| | | levels, spectroscopic factors, occupation probabilities, mass dependence |
| | | on cross section. Dispersal optical model (DOM) analysis. JOUR |
| | | PRVCA 83 064605 |
| $^{60}\mathrm{Cu}$ | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca ^{54,60} Sc ^{54,60} Sc ^{54,60,66,68} Ti ^{54,60,66,68,70} V ^{54,60,66,68,70,74} Cr |
| | | 54,60,66,68,70,74 Mn, $54,60,66,68,68,70,74$ Fe, $60,66,68,70,74$ Co, $60,66,68,70,74$ Ni |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| | 2011VI03 | NUCLEAR MOMENTS ^{58,59,60,61,62} Cu; measured hyperfine spectrum; |
| | | deduced ground state nuclear moments, g factors, quadrupole |
| | | moments, ground-state hyperfine parameters. Comparison with |
| | | large-scale shell model calculations, GXPF1A effective interaction. |
| | | JOUR PYLBB 703 34 |

| 2010GIZY | NUCLEAR REACTIONS $^2\mathrm{H}(^{60}\mathrm{Fe},\mathrm{p}),$ E=27 MeV / nucleon; measured |
|----------|---|
| | $E(particle), I(particle), E\gamma, I\gamma$. ⁶¹ Fe deduced resonances. CONF |
| | Heidelberg (NIC XI) Proc, P190, Giron |
| 2011GLZZ | NUCLEAR REACTIONS 64 Zn(n, α), E=2.5, 4.0, 5.0, 5.5, 6.0 MeV; |
| | 67 Zn(n, α), E=4.0, 5.0, 6.0 MeV; measured E α , I $\alpha(\theta)$; deduced σ , $\sigma(\theta)$ |
| | to specified group of states. Comparison with JEF-2.2, JEFF-3.1 / A, |
| | ROSFOND, TENDL-2009, JENDL / HE-2007and other data. CONF |
| | Dubna(ISINN-18),P143,Gledenov |
| 2011TH03 | NUCLEAR REACTIONS 64 Zn(p, α), E=13-16 MeV; measured |
| | reaction products; deduced possibility for production of 61 Cu. JOUR |
| | JLCRD 54 S237 |
| 2011VI03 | NUCLEAR MOMENTS ^{58,59,60,61,62} Cu; measured hyperfine spectrum; |
| | deduced ground state nuclear moments, g factors, quadrupole |
| | moments, ground-state hyperfine parameters. Comparison with |
| | large-scale shell model calculations, GXPF1A effective interaction. |
| | JOUR PYLBB 703 34 |
| | 2010GIZY 2011GLZZ 2011TH03 2011VI03 |
| ⁶² Ni | 2011MU10 | NUCLEAR REACTIONS ^{40,48} Ca(n, n), E=11.9, 16.9 MeV; measured E(n), I(n), σ , σ (E, θ), time-of-flight spectra. ⁴⁰ Ca(n, n), E=9.9-85.0; ⁴⁸ Ca(n, n), E=7.97-16.9 MeV; ⁵⁴ Ca(n, n), E=5.5-26.0 MeV; ^{58,60} Ni(n, n), E=4.5-24.0 MeV; ⁹² Mo(n, n), E=7.0-30.4 MeV; ^{116,118} Sn(n, n), E=9.95-24.0 MeV; ¹²⁰ Sn(n, n), E=9.94-16.91 MeV; ¹²⁴ Sn(n, n), E=11.0-24.0 MeV; ²⁰⁸ Pb(n, n), E=4.0-185.0 MeV; ⁵⁰ Ti(p, p), E=6.0-65.0 MeV; ⁵² Cr(p, p), E=10.77-39.9 MeV; ⁵⁴ Fe, ⁶⁴ Ni(p, p), E=9.69-65.0 MeV; ⁵⁸ Ni(p, p), E=7.0-192.0 MeV; ⁶⁰ Ni(p, p), E=7.0-178.0 MeV; ⁶² Ni(p, p), E=8.02-156.0 MeV; ⁹⁰ Zr(p, p), E=5.57-185.0 MeV; ⁹² Mo(p, p), E=12.5-49.45 MeV; ¹¹⁴ Sn(p, p), E=30.4 MeV; ¹¹⁶ Sn(p, p), E=16.0-61.4 MeV; ^{118,122,124} Sn(p, p), E=16 0-49.35 MeV; ¹²⁰ Sn(p, p), E=9.8-156.0 MeV; ²⁰⁸ Pb(p, p) |
|------------------|----------|--|
| | | E=10.049.05 MeV, σ Sh(p, p), E=3.0490.0 MeV, σ B(p, p), E=9.0-200.0 MeV; analyzed total cross sections, $\sigma(E, \theta)$, single-particle levels, spectroscopic factors, occupation probabilities, mass dependence on cross section. Dispersal optical model (DOM) analysis. JOUR PPVCA 83.064605 |
| ⁶² Cu | 2011VI03 | NUCLEAR MOMENTS ^{58,59,60,61,62} Cu; measured hyperfine spectrum; deduced ground state nuclear moments, g factors, quadrupole moments, ground-state hyperfine parameters. Comparison with large-scale shell model calculations, GXPF1A effective interaction. JOUR PYLBB 703 34 |
| ⁶² Zn | 2011CH33 | NUCLEAR REACTIONS Mo(d, X) ⁹⁹ Mo, ¹⁰⁰ Mo(p, X) ⁹⁹ Mo, Cu(p, X) ⁶² Zn / ⁶⁵ Zn E=9.7-58.5 MeV; measured reaction products, $E\gamma$, $I\gamma$; deduced σ , thick target yields. JOUR ARISE 69 1447 |
| | 2011SI17 | NUCLEAR REACTIONS Cu(d, X) ⁶⁴ Cu, E=1.5-19.88 MeV; ⁶³ Cu(d, 2n) ⁶³ Zn, E=4.56-19.49 MeV; ⁶³ Cu(d, 3n) ⁶² Zn, E=16.44-19.88 MeV; ⁶⁵ Cu(d, p) ⁶⁶ Cu, E=4.56-19.49 MeV; ⁶⁵ Cu(d, 2n) ⁶⁵ Zn, E=4.25-19.88 MeV; ⁶⁵ Cu(d, 2p) ⁶⁵ Ni, E=11.36-19.88 MeV; measured E γ , I γ , σ (E), activation method. Comparison with previous experimental data, and with evaluated data files. Cu(d, d), E=11.8, 15, 21.6 MeV; ^{63,65} Cu(d, d), E=12, 34.4 MeV; analyzed $\sigma(\theta)$ data; Cu(d, d), ^{63,65} Cu(d, d), E<60 MeV; analyzed $\sigma(E)$ data; deduced optical potential model parameters for reaction cross sections. Deuteron breakup mechanism, and direct reaction stripping discussed. JOUR PRVCA 84 014605 |

| 63 Co | 2011DI08 | NUCLEAR REACTIONS 64 Ni(238 U, X), E=6.5 MeV / nucleon; |
|------------|----------|--|
| | | measured particle spectra, $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin, half-lives by recoil distance |
| | | Doppler shift and the differential decay curve methods with a plunger |
| | | device EXOGAM array. 63,65 Co; deduced levels, J, π , B(E2). |
| | | Systematics of excitation energies and $B(E2)$ values in the even-N Fe, |
| | | Co, and Ni nuclides. Comparison with large-scale shell model |
| | | calculations in the pf and $pfg_{9/2}$ valence space. JOUR PRVCA 83 |
| | | 064321 |

KEYNUMBERS AND KEYWORDS

A=63 (continued)

| ⁶³ Ni | 2010DIZW | NUCLEAR REACTIONS ⁶⁴ Ni(γ , n), E=10.3, 11.5, 13.4 MeV (bremsstrahlung endpoint energy); measured reaction products using AMS (Accelarator Mass Spectrometry); deduced yields; calculated yields using TALYS 1.2, NON-SMOKER. Results not given for E=10.3 MeV. CONF Heidelberg (NIC XI) Proc.P49.Dillmann |
|------------------|----------|--|
| | 2010LEZW | NUCLEAR REACTIONS 62 Ni(n, γ), E=1-10000 eV; measured En, In, E γ , Ig using n_TOF; deduced yield. Comparison with JENDL-4.0, ENDF / B-VII. CONF Heidelberg (NIC XI) Proc.P48.Lederer |
| ⁶³ Cu | 2011SI17 | NUCLEAR REACTIONS Cu(d, X) ⁶⁴ Cu, E=1.5-19.88 MeV; ⁶³ Cu(d, 2n) ⁶³ Zn, E=4.56-19.49 MeV; ⁶³ Cu(d, 3n) ⁶² Zn, E=16.44-19.88 MeV; ⁶⁵ Cu(d, p) ⁶⁶ Cu, E=4.56-19.49 MeV; ⁶⁵ Cu(d, 2n) ⁶⁵ Zn, E=4.25-19.88 MeV; ⁶⁵ Cu(d, 2p) ⁶⁵ Ni, E=11.36-19.88 MeV; measured E γ , I γ , σ (E), activation method. Comparison with previous experimental data, and with evaluated data files. Cu(d, d), E=11.8, 15, 21.6 MeV; ^{63,65} Cu(d, d), E=12, 34.4 MeV; analyzed $\sigma(\theta)$ data; Cu(d, d), ^{63,65} Cu(d, d), E<60 MeV; analyzed $\sigma(E)$ data; deduced optical potential model parameters for reaction cross sections. Deuteron breakup mechanism, and direct reaction stripping discussed _IOUR_PRVCA_84_014605 |
| ⁶³ Zn | 2011SI17 | NUCLEAR REACTIONS Cu(d, X) ⁶⁴ Cu, E=1.5-19.88 MeV; ⁶³ Cu(d, 2n) ⁶³ Zn, E=4.56-19.49 MeV; ⁶³ Cu(d, 3n) ⁶² Zn, E=16.44-19.88 MeV; ⁶⁵ Cu(d, p) ⁶⁶ Cu, E=4.56-19.49 MeV; ⁶⁵ Cu(d, 2n) ⁶⁵ Zn, E=4.25-19.88 MeV; ⁶⁵ Cu(d, 2p) ⁶⁵ Ni, E=11.36-19.88 MeV; measured E γ , I γ , σ (E), activation method. Comparison with previous experimental data, and with evaluated data files. Cu(d, d), E=11.8, 15, 21.6 MeV; ^{63,65} Cu(d, d), E=12, 34.4 MeV; analyzed $\sigma(\theta)$ data; Cu(d, d), ^{63,65} Cu(d, d), E<60 MeV; analyzed $\sigma(E)$ data; deduced optical potential model parameters for reaction cross sections. Deuteron breakup mechanism, and direct reaction stripping discussed. JOUR PRVCA 84 014605 |

A=64

⁶⁴Ni 2011GLZZ NUCLEAR REACTIONS ⁶⁴Zn(n, α), E=2.5, 4.0, 5.0, 5.5, 6.0 MeV; ⁶⁷Zn(n, α), E=4.0, 5.0, 6.0 MeV; measured E α , I $\alpha(\theta)$; deduced σ , $\sigma(\theta)$ to specified group of states. Comparison with JEF-2.2, JEFF-3.1 / A, ROSFOND, TENDL-2009, JENDL / HE-2007and other data. CONF Dubna(ISINN-18),P143,Gledenov

A=64 (continued)

| | 2011MU10 | NUCLEAR REACTIONS 40,48 Ca(n, n), E=11.9, 16.9 MeV; measured E(n), I(n), σ , $\sigma(E, \theta)$, time-of-flight spectra. 40 Ca(n, n), E=9.9-85.0; 48 Ca(n, n), E=7.97-16.9 MeV; 54 Ca(n, n), E=5.5-26.0 MeV; 58,60 Ni(n, n), E=4.5-24.0 MeV; 92 Mo(n, n), E=7.0-30.4 MeV; 116,118 Sn(n, n), E=9.95-24.0 MeV; 120 Sn(n, n), E=9.94-16.91 MeV; 124 Sn(n, n), E=11.0-24.0 MeV; 208 Pb(n, n), E=4.0-185.0 MeV; 50 Ti(p, p), E=6.0-65.0 MeV; 52 Cr(p, p), E=10.77-39.9 MeV; 54 Fe, 64 Ni(p, p), E=9.69-65.0 MeV; 58 Ni(p, p), E=7.0-192.0 MeV; 60 Ni(p, p), E=7.0-178.0 MeV; 62 Ni(p, p), E=8.02-156.0 MeV; 90 Zr(p, p), E=30.4 MeV; 116 Sn(p, p), E=16.0-61.4 MeV; 118,122,124 Sn(p, p), E=16.0-49.35 MeV; 120 Sn(p, p), E=9.8-156.0 MeV; 208 Pb(p, p), E=9.0-200.0 MeV; analyzed total cross sections, $\sigma(E, \theta)$, single-particle |
|------------------|----------|---|
| | | levels, spectroscopic factors, occupation probabilities, mass dependence on cross section. Dispersal optical model (DOM) analysis. JOUR PRVCA 83 064605 |
| ⁶⁴ Cu | 2011EL06 | NUCLEAR REACTIONS ⁶⁴ Ni(p, n), E not given; measured reaction products; deduced effective method for production of ⁶⁴ Cu. JOUR JLCRD 54 S244 |
| | 2011SI17 | NUCLEAR REACTIONS Cu(d, X) ⁶⁴ Cu, E=1.5-19.88 MeV; ⁶³ Cu(d, 2n) ⁶³ Zn, E=4.56-19.49 MeV; ⁶³ Cu(d, 3n) ⁶² Zn, E=16.44-19.88 MeV; ⁶⁵ Cu(d, p) ⁶⁶ Cu, E=4.56-19.49 MeV; ⁶⁵ Cu(d, 2n) ⁶⁵ Zn, E=4.25-19.88 MeV; ⁶⁵ Cu(d, 2p) ⁶⁵ Ni, E=11.36-19.88 MeV; measured $E\gamma$, $I\gamma$, $\sigma(E)$, activation method. Comparison with previous experimental data, and with evaluated data files. Cu(d, d), E=11.8, 15, 21.6 MeV; ^{63,65} Cu(d, d), E=12, 34.4 MeV; analyzed $\sigma(\theta)$ data; Cu(d, d), ^{63,65} Cu(d, d), E<60 MeV; analyzed $\sigma(E)$ data; deduced optical potential model parameters for reaction cross sections. Deuteron breakup mechanism, and direct reaction stripping discussed _IOUR_PRVCA_84_014605 |
| ⁶⁴ Zn | 2010BEZ0 | RADIOACTIVITY 64,70 Zn, 180,186 W(2 β); measured E γ , I γ ; deduced T _{1/2} limits. ZnWO ₄ samples, Gran Sasso. CONF Frascati(Nuclear Physics in Astrophysics IV 2009). P012038 |
| ⁶⁴ Ge | 2011ROZZ | RADIOACTIVITY ⁶⁹ Br, ⁶⁵ As(p) [from ⁶⁹ Kr, ⁶⁵ As(β^+)]; measured decay products, E γ , I γ ; deduced T _{1/2} , isobar analogue states. PC A M Rogers,7/29/2011 |

| ⁶⁵ Co | 2011DI08 | NUCLEAR REACTIONS ⁶⁴ Ni(²³⁸ U, X), E=6.5 MeV / nucleon; measured particle spectra, $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin, half-lives by recoil distance Doppler shift and the differential decay curve methods with a plunger device EXOGAM array. ^{63,65} Co; deduced levels, J, π , B(E2). Systematics of excitation energies and B(E2) values in the even-N Fe, Co, and Ni nuclides. Comparison with large-scale shell model |
|------------------|----------|---|
| | | Co, and Ni nuclides. Comparison with large-scale shell model calculations in the pf and $\rm pfg_{9/2}$ valence space. JOUR PRVCA 83 064321 |

KEYNUMBERS AND KEYWORDS

$A{=}65$ (continued)

| ⁶⁵ Ni | 2011SI17 | NUCLEAR REACTIONS Cu(d, X) ⁶⁴ Cu, E=1.5-19.88 MeV; ⁶³ Cu(d, 2n) ⁶³ Zn, E=4.56-19.49 MeV; ⁶³ Cu(d, 3n) ⁶² Zn, E=16.44-19.88 MeV; ⁶⁵ Cu(d, p) ⁶⁶ Cu, E=4.56-19.49 MeV; ⁶⁵ Cu(d, 2n) ⁶⁵ Zn, E=4.25-19.88 MeV; ⁶⁵ Cu(d, 2p) ⁶⁵ Ni, E=11.36-19.88 MeV; measured $E\gamma$, $I\gamma$, σ (E), activation method. Comparison with previous experimental data, and with evaluated data files. Cu(d, d), E=11.8, 15, 21.6 MeV; ^{63,65} Cu(d, d), E=12, 34.4 MeV; analyzed $\sigma(\theta)$ data; Cu(d, d), ^{63,65} Cu(d, d), E<60 MeV; analyzed $\sigma(E)$ data; deduced optical potential model parameters for reaction cross sections. Deuteron breakup mechanism, and direct reaction stripping discussed. JOUR PRVCA 84 014605 |
|------------------|----------|--|
| ⁶⁵ Cu | 2011SI17 | NUCLEAR REACTIONS Cu(d, X) ⁶⁴ Cu, E=1.5-19.88 MeV; ⁶³ Cu(d, 2n) ⁶³ Zn, E=4.56-19.49 MeV; ⁶³ Cu(d, 3n) ⁶² Zn, E=16.44-19.88 MeV; ⁶⁵ Cu(d, p) ⁶⁶ Cu, E=4.56-19.49 MeV; ⁶⁵ Cu(d, 2n) ⁶⁵ Zn, E=4.25-19.88 MeV; ⁶⁵ Cu(d, 2p) ⁶⁵ Ni, E=11.36-19.88 MeV; measured $E\gamma$, $I\gamma$, σ (E), activation method. Comparison with previous experimental data, and with evaluated data files. Cu(d, d), E=11.8, 15, 21.6 MeV; ^{63,65} Cu(d, d), E=12, 34.4 MeV; analyzed $\sigma(\theta)$ data; Cu(d, d), ^{63,65} Cu(d, d), E<60 MeV; analyzed $\sigma(E)$ data; deduced optical potential model parameters for reaction cross sections. Deuteron breakup mechanism, and direct reaction stripping discussed. JOUR PRVCA 84 014605 |
| ⁶⁵ Zn | 2011CH33 | NUCLEAR REACTIONS Mo(d, X) ⁹⁹ Mo, ¹⁰⁰ Mo(p, X) ⁹⁹ Mo, Cu(p, X) ⁶² Zn / ⁶⁵ Zn E=9.7-58.5 MeV; measured reaction products, $E\gamma$, $I\gamma$; deduced σ , thick target yields. JOUR ARISE 69 1447 |
| | 2011SI17 | NUCLEAR REACTIONS Cu(d, X) ⁶⁴ Cu, E=1.5-19.88 MeV; ⁶³ Cu(d, 2n) ⁶³ Zn, E=4.56-19.49 MeV; ⁶³ Cu(d, 3n) ⁶² Zn, E=16.44-19.88 MeV; ⁶⁵ Cu(d, p) ⁶⁶ Cu, E=4.56-19.49 MeV; ⁶⁵ Cu(d, 2n) ⁶⁵ Zn, E=4.25-19.88 MeV; ⁶⁵ Cu(d, 2p) ⁶⁵ Ni, E=11.36-19.88 MeV; measured $E\gamma$, $I\gamma$, $\sigma(E)$, activation method. Comparison with previous experimental data, and with evaluated data files. Cu(d, d), E=11.8, 15, 21.6 MeV; ^{63,65} Cu(d, d), E=12, 34.4 MeV; analyzed $\sigma(\theta)$ data; Cu(d, d), ^{63,65} Cu(d, d), E<60 MeV; analyzed $\sigma(E)$ data; deduced optical potential model parameters for reaction cross sections. Deuteron breakup mechanism, and direct reaction stripping discussed JOUR PRVCA 84 014605 |
| ^{65}As | 2011ROZZ | RADIOACTIVITY ⁶⁹ Br, ⁶⁵ As(p) [from ⁶⁹ Kr, ⁶⁵ As(β^+)]; measured decay products, E γ , I γ ; deduced T _{1/2} , isobar analogue states. PC A M Rogers,7/29/2011 |

| 66 Ti | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
|------------|----------|--|
| | | measured mass using TOF-B _{ρ} ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, |
| | | 54,60 Ca, 54,60 Sc, 54,60,66,68 Ti, 54,60,66,68,70 V, 54,60,66,68,70,74 Cr, |
| | | 54,60,66,68,70,74Mn, 54,60,66,68,68,70,74Fe, 60,66,68,70,74Co, 60,66,68,70,74Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^{-}); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| | | |

A=66 (continued)

| $^{66}\mathrm{V}$ | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
|-------------------|----------|---|
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, |
| | | 54,60 Ca, 54,60 Sc, 54,60,66,68 Ti, 54,60,66,68,70 V, 54,60,66,68,70,74 Cr, |
| | | 54,60,66,68,70,74 Mn, $54,60,66,68,68,70,74$ Fe, $60,66,68,70,74$ Co, $60,66,68,70,74$ Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| 66 C | 00105077 | Heidelberg (NIC XI) Proc, P221, Estrade DADIOACTIVITY 548, 54T; 66M; 66E, 70.74N; 70.74C; $(2-)$. |
| Or | 20102521 | RADIOACTIVITT Sc, TI, Mill, Te, Mill, Mill, Te, Mill, Mill, Mill, Sc, Ti, Mill, Te, Mill, Mill, Mill, Sc, Ti, Mill, Te, Mill, Mill, Mill, Sc, Ti, Mill, Mil |
| | | 54,60 Ca. 54,60 Sc. 54,60,66,68 Ti. 54,60,66,68,70 V. 54,60,66,68,70,74 Cr. |
| | | 54,60,66,68,70,74 Mn, 54,60,66,68,68,70,74 Fe, 60,66,68,70,74 Co, 60,66,68,70,74 Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| 00 | | Heidelberg (NIC XI) Proc,P221,Estrade |
| ⁶⁶ Mn | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^-); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ³⁴ Ar, ³⁴ K, ^{54,60} Ca ^{54,60} Sc ^{54,60,66,68} Ti ^{54,60,66,68,70} V ^{54,60,66,68,70,74} Cr |
| | | 54,60,66,68,70,74 Mn, $54,60,66,68,68,70,74$ Fe, $60,66,68,70,74$ Co, $60,66,68,70,74$ Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| 66 - | | Heidelberg (NIC XI) Proc, P221, Estrade |
| ^{oo} Fe | 2010ESZY | RADIOACTIVITY ³⁴ Sc, ³⁴ Ti, ⁶⁰ Mn, ⁶⁰ Fe, ⁷⁶ , ⁷⁴ Ni, ⁷⁶ , ⁴ Cu(β^{-}); |
| | | measured mass using 1 OF-B ρ ; deduced EC Q-values. ⁵⁴ AF, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70} V, ^{54,60,66,68,70} Cr, |
| | | 54,60,66,68,70,74 Mn, 54,60,66,68,68,70,74 Fe, 60,66,68,70,74 Co, 60,66,68,70,74 Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As (β^{-}) ; calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| 66.0 | 00405357 | Heidelberg (NIC XI) Proc, P221, Estrade DADLOA CHUUTX 54C, 54T; 66A, 66D, 70, 74N; 70, 74C, $(2-)$ |
| ⁰⁰ Co | 2010ESZY | RADIOACTIVITY Sc. 511, com, core, 10, 10, 10, 10, 10, (β); |
| | | 54,60Ca $54,60$ Sc $54,60,66,68$ Ti $54,60,66,68,70$ V $54,60,66,68,70,74$ Cr |
| | | 54,60,66,68,70,74 Mn, $54,60,66,68,68,70,74$ Fe, $60,66,68,70,74$ Co, $60,66,68,70,74$ Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| ⁶⁶ Ni | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ³⁴ Ar, ³⁴ K, ^{54,60} C _a , ^{54,60} C _b , ^{54,60} C _b , ^{54,60,66,68} T _i , ^{54,60,66,68,70} V ^{54,60,66,68,70,74} C _r |
| | | 54,60,66,68,70,74 Mn. $54,60,66,68,68,70,74$ Fe. $60,66,68,70,74$ Co. $60,66,68,70,74$ Ni. |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| ⁶⁶ Cu | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ³⁴ Ar, ³⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr. |
| | | 54,60,66,68,70,74Mn, 54,60,66,68,68,70,74Fe, 60,66,68,70,74Co, 60,66,68,70,74Ni, |
| | | ^{66,68,70,74} Cu, ^{66,68,70,74} Zn, ^{68,70,74} Ga, ^{70,74} Ge, ⁷⁴ As(β^{-}); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |

A=66 (continued)

| | 2011SI17 | NUCLEAR REACTIONS Cu(d, X) ⁶⁴ Cu, E=1.5-19.88 MeV; ⁶³ Cu(d, 2n) ⁶³ Zn, E=4.56-19.49 MeV; ⁶³ Cu(d, 3n) ⁶² Zn, E=16.44-19.88 MeV; ⁶⁵ Cu(d, p) ⁶⁶ Cu, E=4.56-19.49 MeV; ⁶⁵ Cu(d, 2n) ⁶⁵ Zn, E=4.25-19.88 |
|------------------|----------|--|
| | | MeV; 65 Cu(d, 2p) 65 Ni, E=11.36-19.88 MeV; measured E γ , I γ , σ (E), activation method. Comparison with previous experimental data, and with evaluated data files. Cu(d, d), E=11.8, 15, 21.6 MeV; 63,65 Cu(d, |
| | | d), E=12, 34.4 MeV; analyzed $\sigma(\theta)$ data; Cu(d, d), ^{63,65} Cu(d, d), E<60 MeV; analyzed $\sigma(E)$ data; deduced optical potential model parameters for reaction cross sections. Deuteron breakup mechanism, |
| ⁶⁶ Zn | 2010ESZY | and direct reaction stripping discussed. JOUR PRVCA 84 014605 RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^-); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr, ^{54,60,66,68,70,74} Mn ^{54,60,66,68,70,74} Fe ^{60,66,68,70,74} Co ^{60,66,68,70,74} Ni |
| | | ^{66,68,70,74} Cu, ^{66,68,70,74} Zn, ^{68,70,74} Ga, ^{70,74} Ge, ⁷⁴ As(β^-); calculated EC Q-values from experimental data, FRDM and HFB-14 models. CONF |
| ⁶⁶ Ga | 2010ESZY | Heidelberg (NIC XI) Proc,P221,Estrade RADIOACTIVITY ⁵⁴ Sc. ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^-): |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr, ^{54,60,66,68,70,74} Mr, ^{54,60,66,68,70,74} Tr, ^{60,66,68,70,74} Mr, ^{54,60,66,68,70,74} Tr, ^{60,66,68,70,74} Mr, ^{54,60,66,68,70,74} Mr, ^{54,60,66,68,70,74} Tr, ^{60,66,68,70,74} Tr, ^{60,66,6} |
| | | $_{66,68,70,74}$ Cu, $_{66,68,70,74}$ Zn, $_{68,70,74}$ Ga, $_{70,74}$ Ge, $_{74}$ As(β^{-}); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF Heidelberg (NIC XI) Proc.P221.Estrade |
| ^{66}As | 2011AG15 | NUCLEAR REACTIONS ⁵⁸ Ni(^{8}B , X) ⁶⁶ As, E=22.4-26.9 MeV; |
| | | measured reaction products, proton spectra; deduced fusion σ , fusion and breakup yields. JOUR PRLTA 107 092701 |

A=67

No references found

| ⁶⁸ Ti | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^-); measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} G = ^{54,60} G = ^{54,60} G = ^{65,75} F, ⁵⁴ K = ^{66,65} G = ^{70,74} Cu(β^-); |
|------------------|----------|---|
| | | 54,60,66,68,70,74 Mn, 54,60,66,68,68,70,74 Fe, 60,66,68,70,74 Co, 60,66,68,70,74 Ni, 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC Q-values from experimental data, FRDM and HFB-14 models. CONF Heidelberg (NIC XI) Proc,P221,Estrade |

A=68 (continued)

| $^{68}\mathrm{V}$ | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
|-------------------|----------|---|
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, |
| | | 54,60 Ca, 54,60 Sc, 54,60,66,68 Ti, 54,60,66,68,70 V, 54,60,66,68,70,74 Cr, |
| | | 54,60,66,68,70,74 Mn, 54,60,66,68,68,70,74 Fe, 60,66,68,70,74 Co, 60,66,68,70,74 Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| 68Cr | 2010E97V | Heidelderg (NIC AI) Proc, P221, Estrade PADIOACTIVITY 54Se 54T; 66Mp 66Ee 70, 74N; 70, 74Cu(2-). |
| 01 | 2010£521 | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, |
| | | 54.60.66.68.70.74 M ₂ 54.60.66.68.68.70.74 T ₂ 60.66.68.70.74 Cr, |
| | | 66.68.70.74 Cu $66.68.70.74$ Cu $66.68.70.74$ Cu $68.70.74$ Cu 70.74 Cu |
| | | $\Omega_{\rm rel}$ Ω_{\rm |
| | | Heidelberg (NIC XI) Proc.P221.Estrade |
| $^{68}{ m Mn}$ | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca ^{54,60} Sc ^{54,60,66,68,70} V ^{54,60,66,68,70} V ^{54,60,66,68,70,74} Cr |
| | | 54,60,66,68,70,74 Mn, $54,60,66,68,68,70,74$ Fe, $60,66,68,70,74$ Co, $60,66,68,70,74$ Ni. |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| 68 Fe | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70} Cr, |
| | | 54,60,66,68,70,74 Mn, 54,60,66,68,68,70,74 Fe, 60,66,68,70,74 Co, 60,66,68,70,74 Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As (β^{-}) ; calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| 68 0 | 00405357 | Heidelberg (NIC XI) Proc, P221, Estrade DADIOA CHUUTIN 54G, 54T; 66M, 66D, 70, 74M; 70, 74G, $(2-)$ |
| 00°C0 | 2010ESZY | RADIOACTIVITY S_{c} , S_{1} , S_{m} , S_{e} , S_{c} , S_{1} , S_{m} , S_{e} |
| | | measured mass using 1 OF-D ρ ; deduced EC Q-valuesAr, -K, 54,60 $_{\rm Co}$ 54,60 $_{\rm Co}$ 54,60,66,68 $_{\rm Ti}$; 54,60,66,68,70 V 54,60,66,68,70,74 $_{\rm Cr}$ |
| | | $54,60,66,68,70,74_{Mn}$, $54,60,66,68,68,70,74_{Fe}$, $60,66,68,70,74_{Co}$, $60,66,68,70,74_{Ni}$ |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| ⁶⁸ Ni | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70} V, ^{54,60,66,68,70} V, |
| | | $^{54,60,66,68,70,74}Mn, {}^{54,60,66,68,68,70,74}Fe, {}^{60,66,68,70,74}Co, {}^{60,66,68,70,74}Ni,$ |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As (β^{-}) ; calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| 68 0 | | Heidelberg (NIC XI) Proc, P221, Estrade |
| ⁰⁰ Cu | 2010ESZY | RADIOACTIVITY 34 Sc, 34 Ti, 30 Mn, 30 Fe, $10, 14$ Ni, $10, 14$ Cu(β); |
| | | measured mass using 1 OF-B ρ ; deduced EC Q-values. * Ar, * K, 54,60 Ca, 54,60 Sc, 54,60,66,68 Ti, 54,60,66,68,70 V, 54,60,66,68,70 Cr, |
| | | 54,60,66,68,70,74 Mn, $54,60,66,68,68,70,74$ Fe, $60,66,68,70,74$ Co, $60,66,68,70,74$ Ni, |
| | | 00,00,10,14 Cu, 00,08,10,14 Zn, 08,10,14 Ga, 10,14 Ge, 14 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF Heidelberg (NIC XI) Proc,P221,Estrade |

KEYNUMBERS AND KEYWORDS

A=68 (continued)

| $^{68}\mathrm{Zn}$ | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
|--------------------|----------|---|
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, |
| | | 54,60 Ca, 54,60 Sc, 54,60,66,68 Ti, 54,60,66,68,70 V, 54,60,66,68,70,74 Cr, |
| | | 54,60,66,68,70,74 Mn, 54,60,66,68,68,70,74 Fe, 60,66,68,70,74 Co, 60,66,68,70,74 Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc,P221,Estrade |
| 68 Ga | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr. |
| | | 54,60,66,68,70,74 Mn, $54,60,66,68,68,70,74$ Fe, $60,66,68,70,74$ Co, $60,66,68,70,74$ Ni. |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| | 2011FL05 | NUCLEAR REACTIONS 68 Zn(p, n), E=7 MeV; measured reaction |
| | | products; deduced target yields, method feasibility. JOUR JLCRD 54 |
| | | S249 |
| $^{68}\mathrm{Ge}$ | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68,70} V, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr. |
| | | 54,60,66,68,70,74Mn, 54,60,66,68,68,70,74Fe, 60,66,68,70,74Co, 60,66,68,70,74Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| 68 Se | 2011ROZZ | RADIOACTIVITY ⁶⁹ Br, ⁶⁵ As(p) [from ⁶⁹ Kr, ⁶⁵ As(β^+)]; measured |
| | | decay products, E $\gamma,$ I $\gamma;$ deduced $T_{1/2},$ isobar analogue states. PC A M Rogers,7/29/2011 |
| | | |

A=69

 ^{69}Br 2011R0ZZ RADIOACTIVITY $^{69}\text{Br},\,^{65}\text{As}(p)$ [from $^{69}\text{Kr},\,^{65}\text{As}(\beta^+)$]; measured decay products, E γ , I γ ; deduced T_{1/2}, isobar analogue states. PC A M Rogers,7/29/2011

A=70

 $\begin{array}{lll} ^{70}\mathrm{V} & \mbox{2010ESZY} & \mbox{RADIOACTIVITY $^{54}\mathrm{Sc}, $^{54}\mathrm{Ti}, $^{66}\mathrm{Mn}, $^{66}\mathrm{Fe}, $^{70,74}\mathrm{Ni}, $^{70,74}\mathrm{Cu}(\beta^-)$; \\ & \mbox{measured mass using TOF-B}\rho$; deduced EC Q-values. $^{54}\mathrm{Ar}, $^{54}\mathrm{K}, $^{54,60}\mathrm{Ca}, $^{54,60}\mathrm{Sc}, $^{54,60,66,68}\mathrm{Ti}, $^{54,60}\mathrm{C6}, $^{68,70}\mathrm{V}, $^{54,60,66,68,70,74}\mathrm{Cr}, $^{54,60,66,68,70,74}\mathrm{Mn}, $^{54,60,66,68,70,74}\mathrm{Fe}, $^{60,66,68,70,74}\mathrm{Co}, $^{60,66,68,70,74}\mathrm{Cr}, $^{54,60,66,68,70,74}\mathrm{Cu}, $^{66,68,70,74}\mathrm{Cn}, $^{67,74}\mathrm{Ga}, $^{70,74}\mathrm{Ge}, $^{74}\mathrm{As}(\beta^-)$; calculated EC Q-values from experimental data, FRDM and HFB-14 models. CONF Heidelberg (NIC XI) Proc,P221,Estrade \\ \end{array}$

A=70 (continued)

| $^{70}\mathrm{Cr}$ | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
|--------------------|----------|--|
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, |
| | | 54,60 Ca, 54,60 Sc, 54,60,66,68 Ti, 54,60,66,68,70 V, 54,60,66,68,70,74 Cr, |
| | | 54,60,66,68,70,74 Mn, 54,60,66,68,68,70,74 Fe, 60,66,68,70,74 Co, 60,66,68,70,74 Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As (β^{-}) ; calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| - | | Heidelberg (NIC XI) Proc, P221, Estrade |
| ^{70}Mn | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr, |
| | | ^{54,60,66,68,70,74} Mn, ^{54,60,66,68,68,70,74} Fe, ^{60,66,68,70,74} Co, ^{60,66,68,70,74} Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^{-}); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| 70 Fe | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70} V, ^{54,60,66,68,70} V, |
| | | 54,60,66,68,70,74 Mn, 54,60,66,68,68,70,74 Fe, 60,66,68,70,74 Co, 60,66,68,70,74 Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| 70 Co | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70} V, ^{54,60,66,68,70} V, |
| | | 54,60,66,68,70,74 Mn, 54,60,66,68,68,70,74 Fe, 60,66,68,70,74 Co, 60,66,68,70,74 Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| ⁷⁰ Ni | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70} V, ^{54,60,66,68,70} V, |
| | | 54,60,66,68,70,74 Mn, 54,60,66,68,68,70,74 Fe, 60,66,68,70,74 Co, 60,66,68,70,74 Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As (β^{-}) ; calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| 70 Cu | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr, |
| | | 54,60,66,68,70,74 Mn, 54,60,66,68,68,70,74 Fe, 60,66,68,70,74 Co, 60,66,68,70,74 Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As (β^{-}) ; calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| ⁷⁰ Zn | 2010BEZ0 | RADIOACTIVITY ^{64,70} Zn, ^{180,186} W(2β); measured E γ , I γ ; deduced |
| | | $\mathrm{T}_{1/2}$ limits. ZnWO_4 samples, Gran Sasso. CONF Frascati (Nuclear |
| | | Physics in Astrophysics IV 2009), P012038 |

A=70 (continued)

| | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
|--------------------|----------|--|
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, |
| | | 54,60 Ca, 54,60 Sc, 54,60,66,68 Ti, 54,60,66,68,70 V, 54,60,66,68,70,74 Cr, |
| | | ^{54,60,66,68,70,74} Mn, ^{54,60,66,68,68,70,74} Fe, ^{60,66,68,70,74} Co, ^{60,66,68,70,74} Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| 70 Ga | 2010ESZY | RADIOACTIVITY 54 Sc, 54 Ti, 66 Mn, 66 Fe, 70,74 Ni, 70,74 Cu(β^-); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70} V, ^{54,60,66,68,70} V, |
| | | 54,60,66,68,70,74Mn, 54,60,66,68,68,70,74Fe, 60,66,68,70,74Co, 60,66,68,70,74Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| $^{70}\mathrm{Ge}$ | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, |
| | | ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70} V, ^{54,60,66,68,70} V, |
| | | 54,60,66,68,70,74 Mn, 54,60,66,68,68,70,74 Fe, 60,66,68,70,74 Co, 60,66,68,70,74 Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As (β^{-}) ; calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| ^{70}As | 2010ESZY | RADIOACTIVITY 54 Sc, 54 Ti, 66 Mn, 66 Fe, 70,74 Ni, 70,74 Cu(β^-); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr, |
| | | 54,60,66,68,70,74Mn, 54,60,66,68,68,70,74Fe, 60,66,68,70,74Co, 60,66,68,70,74Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |

A=71

⁷¹Zn 2011UN01 NUCLEAR REACTIONS ¹⁸¹Ta(¹⁶O, X)^{71m}Zn / ⁷⁵Ge / ⁷⁷Kr / ^{85m}Y / 86 Y / ⁸⁸Kr / ^{90m}Y / ^{91m}Y / ⁹³Y / ¹⁰⁵Ru / ¹⁰⁵In / ¹¹⁰In / ^{110m}In / ^{111m}In / ^{111m}In / ^{113m}In / ¹¹⁷Cd / ¹¹⁷Sb / ¹²¹Xe / ¹²⁹Sb / ¹³²La / ¹³²Ce / ^{132mI} / ¹³⁷Nd / ^{141m}Sm / ¹⁹²Tl / ^{192m}Tl / ^{193m}Tl / ^{194m}Tl / ^{194m}Tl / ¹⁹¹Hg / ^{191m}Hg / ¹⁹²Hg / ¹⁹³Hg / ^{193m}Hg / ¹⁹⁰Au / ¹⁹¹Au / ¹⁹²Au / , E=97, 100; measured E γ , I γ , recoil-catcher activation method, production σ , isotopic yields with data for ¹⁵⁹Tb+¹⁶O, ¹⁵⁹Tm+¹⁶O, ²⁰⁸Pb+²⁰Ne, ²³²Th+⁷Li, ²³²Th+¹¹B, ²³⁸U+¹¹B, ²³⁸U+²²Ne systems. JOUR PRVCA 84 014612

A=72

No references found

No references found

A = 74

| $^{74}\mathrm{Cr}$ | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
|--------------------|----------|---|
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54.60} C ₀ , ^{54.60} C ₀ , ^{54.60} C ₀ , ^{54.60.66.68} T; ^{54.60.66.68.70} V, ^{54.60.66.68.70.74} C ₂ |
| | | $54,60,66,68,70,74_{Mn}$ $54,60,66,68,68,70,74_{Fe}$ $60,66,68,70,74_{Co}$ $60,66,68,70,74_{Ni}$ |
| | | $_{66,68,70,74}C_{\rm III}$ $_{66,68,70,74}C_{\rm III}$ $_{66,68,70,74}C_{\rm III}$ $_{66,68,70,74}C_{\rm IIII}$ $_{66,68,70,74}C_{\rm IIII}$ $_{66,68,70,74}C_{\rm IIIII}$ $_{66,68,70,74}C_{\rm IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII$ |
| | | Q-values from experimental data. FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc.P221.Estrade |
| ^{74}Mn | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca ^{54,60} Sc ^{54,60,66,68,70} V ^{54,60,66,68,70} V ^{54,60,66,68,70,74} Cr |
| | | 54,60,66,68,70,74 Mn. $54,60,66,68,68,70,74$ Fe. $60,66,68,70,74$ Co. $60,66,68,70,74$ Ni. |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| 74 🗗 | | Heidelberg (NIC XI) Proc, P221, Estrade |
| ′ ⁴ Fe | 2010ESZY | RADIOACTIVITY ³⁴ Sc, ³⁴ Ti, ⁶⁰ Mn, ⁶⁰ Fe, ⁷⁰ , ¹⁴ Ni, ⁷⁰ , ¹⁴ Cu(β^-); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵¹ Ar, ⁵¹ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70} V, ^{54,60,66,68,70} Cr, |
| | | $^{54,60,66,68,70,74}Mn, {}^{54,60,66,68,68,70,74}Fe, {}^{60,66,68,70,74}Co, {}^{60,66,68,70,74}Ni,$ |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As (β^{-}) ; calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| - | | Heidelberg (NIC XI) Proc,P221,Estrade |
| ⁷⁴ Co | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^-); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr, |
| | | 54,60,66,68,70,74 Mn, 54,60,66,68,68,70,74 Fe, 60,66,68,70,74 Co, 60,66,68,70,74 Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^{-}); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| ⁷⁴ Ni | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68} Ti, ^{54,60,66,68,70} V, ^{54,60,66,68,70,74} Cr, |
| | | 54,60,66,68,70,74 Mn, 54,60,66,68,68,70,74 Fe, 60,66,68,70,74 Co, 60,66,68,70,74 Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| $^{74}\mathrm{Cu}$ | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca, ^{54,60} Sc, ^{54,60,66,68,70} V ^{54,60,66,68,70} V ^{54,60,66,68,70,74} Cr |
| | | 54,60,66,68,70,74 Mn, 54,60,66,68,68,70,74 Fe, 60,66,68,70,74 Co, 60,66,68,70,74 Ni. |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |

A=74 (continued)

| $^{74}\mathrm{Zn}$ | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
|--------------------|----------|--|
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, |
| | | 54,60 Ca, 54,60 Sc, 54,60,66,68 Ti, 54,60,66,68,70 V, 54,60,66,68,70,74 Cr, |
| | | 54,60,66,68,70,74 Mn, 54,60,66,68,68,70,74 Fe, 60,66,68,70,74 Co, 60,66,68,70,74 Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As (β^{-}) ; calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| 74 Ga | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} C ₀ , ^{54,60} C ₀ , ^{54,60} C ₀ , ^{54,60,66,68} T; ^{54,60,66,68,70} V ^{54,60,66,68,70} V |
| | | $54,60,66,68,70,74_{Mn}$ $54,60,66,68,68,70,74_{Fe}$ $60,66,68,70,74_{Co}$ $60,66,68,70,74_{Ni}$ |
| | | 66,68,70,74 Cu, 66,68,70,74 Zu, 68,70,74 Ga, 70,74 Ge, 74 As(β^-): calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models, CONF |
| | | Heidelberg (NIC XI) Proc.P221.Estrade |
| $^{74}\mathrm{Ge}$ | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, ^{54,60} Ca ^{54,60} Ca ^{54,60} Sc ^{54,60,66,68} Ti ^{54,60,66,68,70} V ^{54,60,66,68,70,74} Cr |
| | | 54,60,66,68,70,74 Mn $54,60,66,68,68,70,74$ Fe $60,66,68,70,74$ Co $60,66,68,70,74$ Ni |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As(β^-): calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |
| ^{74}As | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^{-}); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, |
| | | 54,60 Ca, 54,60 Sc, 54,60,66,68 Ti, 54,60,66,68,70 V, 54,60,66,68,70,74 Cr, |
| | | 54,60,66,68,70,74 Mn, $54,60,66,68,68,70,74$ Fe, $60,66,68,70,74$ Co, $60,66,68,70,74$ Ni, |
| | | 66,68,70,74 Cu, 66,68,70,74 Zn, 68,70,74 Ga, 70,74 Ge, 74 As (β^{-}) ; calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| - | | Heidelberg (NIC XI) Proc, P221, Estrade |
| ⁷⁴ Se | 2010ESZY | RADIOACTIVITY ⁵⁴ Sc, ⁵⁴ Ti, ⁶⁶ Mn, ⁶⁶ Fe, ^{70,74} Ni, ^{70,74} Cu(β^-); |
| | | measured mass using TOF-B ρ ; deduced EC Q-values. ⁵⁴ Ar, ⁵⁴ K, |
| | | 54,60 Ca, $54,60$ Sc, $54,00,00,00$ Ti, $54,00,00,00$ Ti, $54,00,00,00$ C, 70 V, $54,00,00,00$ Cr, $54,60,66,68,70,74$ Cr, $54,60,68,70,74$ Cr, $54,60,60,70,74$ Cr, $54,60,60,70,74$ Cr, $54,60,$ |
| | | 54,00,00,00,10,14 Mn, $54,00,00,00,00,00,00,10,14$ Fe, $00,00,00,10,14$ Co, $00,00,00,10,14$ Ni, |
| | | 00,00,10,14 Cu, 00,00,10,14 Zn, 00,10,14 Ga, 10,14 Ge, 14 As(β^-); calculated EC |
| | | Q-values from experimental data, FRDM and HFB-14 models. CONF |
| | | Heidelberg (NIC XI) Proc, P221, Estrade |

| 75 Ge | 2011UN01 | NUCLEAR REACTIONS 181 Ta $(^{16}$ O, X) 71m Zn / 75 Ge / 77 Kr / 85m Y / |
|------------|----------|---|
| | | , ${}^{86}\text{Y} / {}^{88}\text{Kr} / {}^{90m}\text{Y} / {}^{91m}\text{Y} / {}^{93}\text{Y} / {}^{105}\text{Ru} / {}^{105}\text{In} / {}^{110}\text{In} / {}^{110m}\text{In} /$ |
| | | 111m In / 113m In / 117 Cd / 117 Sb / 121 Xe / 129 Sb / 132 La / 132 Ce / |
| | | 132m I / 137 Nd / 141m Sm / 192 Tl / 192m Tl / 193 Tl / 193m Tl / 194 Tl / |
| | | 194m Tl / 191 Hg / 191m Hg / 192 Hg / 193 Hg / 193m Hg / 190 Au / 191 Au / |
| | | 192 Au / , E=97, 100; measured E γ , I γ , recoil-catcher activation |
| | | method, production σ , isotopic yields, mass distribution of fission |
| | | fragments. Comparison of isotopic yields with data for ¹⁵⁹ Tb+ ¹⁶ O, |
| | | 159 Tm+ 16 O, 208 Pb+ 20 Ne, 232 Th+ 7 Li, 232 Th+ 11 B, 238 U+ 11 B, |
| | | $^{238}\mathrm{U}{+}^{22}\mathrm{Ne}$ systems. JOUR PRVCA 84 014612 |
| | | |

No references found

A=77

⁷⁷Kr 2011UN01 NUCLEAR REACTIONS ¹⁸¹Ta(¹⁶O, X)^{71m}Zn / ⁷⁵Ge / ⁷⁷Kr / ^{85m}Y / 86 Y / ⁸⁸Kr / ^{90m}Y / ^{91m}Y / ⁹³Y / ¹⁰⁵Ru / ¹⁰⁵In / ¹¹⁰In / ^{110m}In / ^{111m}In / ^{113m}In / ¹¹⁷Cd / ¹¹⁷Sb / ¹²¹Xe / ¹²⁹Sb / ¹³²La / ¹³²Ce / ^{132mI} / ¹³⁷Nd / ^{141m}Sm / ¹⁹²Tl / ^{192m}Tl / ^{193m}Tl / ¹⁹⁴Tl / ^{194m}Tl / ¹⁹¹Hg / ^{191m}Hg / ¹⁹²Hg / ¹⁹³Hg / ^{193m}Hg / ¹⁹⁰Au / ¹⁹¹Au / ¹⁹²Au / , E=97, 100; measured E γ , I γ , recoil-catcher activation method, production σ , isotopic yields, mass distribution of fission fragments. Comparison of isotopic yields with data for ¹⁵⁹Tb+¹⁶O, ¹⁵⁹Tm+¹⁶O, ²⁰⁸Pb+²⁰Ne, ²³²Th+⁷Li, ²³²Th+¹¹B, ²³⁸U+¹¹B, ²³⁸U+²²Ne systems. JOUR PRVCA 84 014612

A=78

No references found

A = 79

⁷⁹Se **2010JIZZ** RADIOACTIVITY ⁷⁹Se(β^-); measured T_{1/2} using AMS (Accelerator Mass Spectrometry) and LSC (Liquid Scintillation Counting). CONF Tsukuba(Nuclear Physics Trends) Proc.P144,Jiang RADIOACTIVITY ⁷⁹Se(β^-); measured T_{1/2} using AMS (Accelerator Mass Spectrometry) and LSC (Liquid Scintillation Counting). CONF Tsukuba(Nuclear Physics Trends) Proc.P144,Jiang

A = 80

| 80 Se | 2011AD14 | NUCLEAR REACTIONS ⁴⁸ Ti, ⁵² Cr, ⁸⁰ Se(n, $n\gamma$), E=thermal; |
|--------------------|----------|--|
| | | measured $\mathrm{E}\gamma$, $\mathrm{I}\gamma$. ⁴⁸ Ti, ⁵² Cr, ⁸⁰ Se; deduced level energies, lifetime, |
| | | $T_{1/2}$. Doppler Shift Attenuation method (DSA). JOUR BRSPE 75 914 |
| $^{80}\mathrm{Br}$ | 2011WA21 | NÚCLEAR REACTIONS 76 Ge(¹¹ B, 3n α), (⁷ Li, 3n), E=54 MeV; |
| | | measured reaction products, $E\gamma$, $I\gamma$, γ - γ -coin.; deduced new band on |
| | | the top of yrast, $B(M1) / B(E2)$, quadrupole deformation parameters, |
| | | angular momentum. JOUR PYLBB 703 40 |

A=81

No references found

No references found

A = 83

No references found

A = 84

⁸⁴Rb **2011ZH26** NUCLEAR REACTIONS ^{85,87}Rb, ⁸⁹Y, ^{140,142}Ce, ¹⁶⁹Tm, ¹⁷⁵Lu, ¹⁸¹Ta, ¹⁸⁵Re, ²³⁸U(n, 2n), E=14 MeV; measured reaction products, E γ , I γ ; deduced σ . Comparison with ENDF / B-VII.0 evaluated nuclear data library. JOUR NSENA 169 188

A = 85

| $^{85}\mathrm{Kr}$ | 2011AD18 | NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), |
|--------------------|----------|---|
| | | E=1.E-10-1.E3 MeV; measured reaction products, $E\gamma$, $I\gamma$. ^{85m} Kr, ⁹³ Y, |
| | | 97 Zr, 99 Mo, 103 Ru, 105 Rh, 132 Te, 131,133 I, 133,135 Xe, 140 Ba, 141,143 Ce, |
| | | 231 Th, 233 Pa, 237 U, 239 Np deduced reaction rates, T _{1/2} . 232 Th, U(n, |
| | | 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 |
| | | keV, 14, 25, 50, 100, 200 MeV; measured fission products, deduced |
| | | mass distribution; calculated mass distribution at two lowest energies |
| | | using TALYS. Neutron flux calculated using MCNPX with LA150 cross |
| | | section library. JOUR ZAANE 47 85 |
| 85 Sr | 2010KUZS | NUCLEAR REACTIONS 76 Ge(13 C, 4n), E=52 MeV; measured E γ , |
| | | I γ , $\gamma\gamma$ -coin; deduced levels, J, π , γ -transitions, high-spin states, DCO |
| | | ratios, angular momentum of individual states. CONF Sinaia (Exotic |
| | | Nucei and Nuc.Part.Astroph.III)Proc.P374,Kumar |
| ^{85}Y | 2011UN01 | NUCLEAR REACTIONS $^{181}\mathrm{Ta}(^{16}\mathrm{O},\mathrm{X})^{71m}\mathrm{Zn}$ / $^{75}\mathrm{Ge}$ / $^{77}\mathrm{Kr}$ / $^{85m}\mathrm{Y}$ / |
| | | , 86 Y / 88 Kr / 90m Y / 91m Y / 93 Y / 105 Ru / 105 In / 110 In / 110m In / |
| | | 111m In / 113m In / 117 Cd / 117 Sb / 121 Xe / 129 Sb / 132 La / 132 Ce / |
| | | 132m I / 137 Nd / 141m Sm / 192 Tl / 192m Tl / 193 Tl / 193m Tl / 194 Tl / |
| | | 194m Tl / 191 Hg / 191m Hg / 192 Hg / 193 Hg / 193m Hg / 190 Au / 191 Au / |
| | | 192 Au / , E=97, 100; measured E γ , I γ , recoil-catcher activation |
| | | method, production σ , isotopic yields, mass distribution of fission |
| | | fragments. Comparison of isotopic yields with data for $^{159}\text{Tb}+^{16}\text{O}$, |
| | | 159 Tm+ 16 O, 208 Pb+ 20 Ne, 232 Th+ 7 Li, 232 Th+ 11 B, 238 U+ 11 B, |
| | | $^{238}\mathrm{U}{+}^{22}\mathrm{Ne}$ systems. JOUR PRVCA 84 014612 |

A = 86

⁸⁶Se **2011LI34** RADIOACTIVITY ²⁵²Cf(SF); measured decay products, $E\gamma$, $I\gamma$, γ - γ - γ -coin. ^{88,90,92}Kr, ⁸⁶Se; deduced level schemes, energies, J, π . Comparison with nuclear systematics and angular correlation measurements. JOUR IMPEE 20 1825

A=86 (continued)

| ⁸⁶ Rb | 2011ZH26 | NUCLEAR REACTIONS ^{85,87} Rb, ⁸⁹ Y, ^{140,142} Ce, ¹⁶⁹ Tm, ¹⁷⁵ Lu, ¹⁸¹ Ta, ¹⁸⁵ Re, ²³⁸ U(n, 2n), E=14 MeV; measured reaction products, $E\gamma$, $I\gamma$; deduced σ . Comparison with ENDF / B-VII.0 evaluated nuclear data library. JOUR NSENA 160 188 |
|------------------|----------|--|
| ⁸⁶ Y | 2011BE28 | NUCLEAR REACTIONS 90 Zr(γ , 2np), (γ , 3np), 91 Zr(γ , 3np), (γ , 4np), E<84 MeV; measured E γ , I γ ; deduced yields, isomeric ratios. Comparison with TALYS code calculations. JOUR BRSPE 75 937 |
| | 2011ME10 | NUCLEAR REACTIONS $^{88}{\rm Sr}({\rm p,\ 2n}),^{86}{\rm Sr}({\rm p,\ n}),E{=}16.6{-}45.5$ MeV; measured reaction products, E $\gamma,I\gamma;$ deduced yields. JOUR JLCRD 54 S236 |
| | | A=87 |
| ⁸⁷ Y | 2011BE28 | NUCLEAR REACTIONS 90 Zr(γ , 2np), (γ , 3np), 91 Zr(γ , 3np), (γ , 4np), E<84 MeV; measured E γ , I γ ; deduced yields, isomeric ratios. Comparison with TALYS code calculations. JOUR BRSPE 75 937 |
| | 2011ME10 | NUCLEAR REACTIONS $^{88}Sr(p, 2n), ^{86}Sr(p, n), E=16.6-45.5 MeV;$ measured reaction products, E γ , I γ ; deduced yields. JOUR JLCRD 54 S236 |
| | | A=88 |
| ⁸⁸ Kr | 2011LI34 | RADIOACTIVITY ²⁵² Cf(SF); measured decay products, $E\gamma$, $I\gamma$, γ - γ - γ -coin. ^{88,90,92} Kr, ⁸⁶ Se; deduced level schemes, energies, J, π . Comparison with nuclear systematics and angular correlation measurements. JOUR IMPEE 20 1825 |
| ⁸⁸ Y | 2011ZH26 | NUCLEAR REACTIONS ^{85,87} Rb, ⁸⁹ Y, ^{140,142} Ce, ¹⁶⁹ Tm, ¹⁷⁵ Lu, ¹⁸¹ Ta, ¹⁸⁵ Re, ²³⁸ U(n, 2n), E=14 MeV; measured reaction products, $E\gamma$, $I\gamma$; deduced σ . Comparison with ENDF / B-VIL0 evaluated nuclear data |
| | | library. JOUR NSENA 169 188 |
| | | A=89 |
| 89 Zr | 2011CI05 | NUCLEAR REACTIONS ⁸⁹ Y(p, n), E=16.5 MeV; measured reaction products, $E\gamma$, $I\gamma$; deduced yield. Chemical separation and purification studies_JOUR_RAACA 99.631 |
| | 2011DE25 | NUCLEAR REACTIONS 89 Y(p, n), E=13 MeV; measured reaction products; deduced yields, feasibility for 89 Zr production. JOUR JLCRD 54 S248 |

| $^{90}\mathrm{Kr}$ | 2011LI34 | RADIOACTIVITY ²⁵² Cf(SF); measured decay products, $E\gamma$, $I\gamma$, γ - γ - γ -coin. ^{88,90,92} Kr, ⁸⁶ Se; deduced level schemes, energies, J, π . |
|--------------------|----------|---|
| | | Comparison with nuclear systematics and angular correlation |
| | | measurements. JOUR IMPEE 20 1825 |
| $^{90}\mathrm{Zr}$ | 2011MU10 | NUCLEAR REACTIONS 40,48 Ca(n, n), E=11.9, 16.9 MeV; measured |
| | | $E(n)$, $I(n)$, σ , $\sigma(E, \theta)$, time-of-flight spectra. ⁴⁰ Ca(n, n), E=9.9-85.0; |
| | | ${}^{48}Ca(n, n), E=7.97-16.9 \text{ MeV}; {}^{54}Ca(n, n), E=5.5-26.0 \text{ MeV}; {}^{58,60}Ni(n, n)$ |
| | | n), E=4.5-24.0 MeV; 92 Mo(n, n), E=7.0-30.4 MeV; 116,118 Sn(n, n), |
| | | E=9.95-24.0 MeV; 120 Sn(n, n), E=9.94-16.91 MeV; 124 Sn(n, n), |
| | | $E=11.0-24.0 \text{ MeV}; {}^{208}Pb(n, n), E=4.0-185.0 \text{ MeV}; {}^{50}Ti(p, p),$ |
| | | $E=6.0-65.0 \text{ MeV}; {}^{52}Cr(p, p), E=10.77-39.9 \text{ MeV}; {}^{54}Fe, {}^{64}Ni(p, p),$ |
| | | $E=9.69-65.0 \text{ MeV}; {}^{58}\text{Ni}(p, p), E=7.0-192.0 \text{ MeV}; {}^{60}\text{Ni}(p, p),$ |
| | | $E=7.0-178.0 \text{ MeV}; {}^{62}\text{Ni}(p, p), E=8.02-156.0 \text{ MeV}; {}^{90}\text{Zr}(p, p),$ |
| | | $E=5.57-185.0 \text{ MeV}; {}^{92}Mo(p, p), E=12.5-49.45 \text{ MeV}; {}^{114}Sn(p, p),$ |
| | | $E=30.4 \text{ MeV}; {}^{116}Sn(p, p), E=16.0-61.4 \text{ MeV}; {}^{118,122,124}Sn(p, p),$ |
| | | $E=16.0-49.35 \text{ MeV}; {}^{120}Sn(p, p), E=9.8-156.0 \text{ MeV}; {}^{208}Pb(p, p),$ |
| | | E=9.0-200.0 MeV; analyzed total cross sections, $\sigma(E, \theta)$, single-particle |
| | | levels, spectroscopic factors, occupation probabilities, mass dependence |
| | | on cross section. Dispersal optical model (DOM) analysis. JOUR |
| | | PRVCA 83 064605 |
| | | |

A=91

No references found

| $^{92}\mathrm{Kr}$ | 2011LI34 | RADIOACTIVITY ²⁵² Cf(SF); measured decay products, $E\gamma$, $I\gamma$, |
|--------------------|----------|--|
| | | γ - γ -coin. ^{88,90,92} Kr, ⁸⁶ Se; deduced level schemes, energies, J, π . |
| | | Comparison with nuclear systematics and angular correlation |
| | | measurements. JOUR IMPEE 20 1825 |
| 92 Zr | 2011LE23 | RADIOACTIVITY ⁹² Mo(β^+ EC); measured decay products, E β , I β ; |
| | | deduced $T_{1/2}$ limit. CaMoO ₄ scintillator. JOUR NIMAE 654 157 |
| $^{92}\mathrm{Nb}$ | 2010JIZZ | NUCLEAR REACTIONS 93 Nb(n, 2n), 238 U(n, 3n), E=14 MeV; |
| | | measured σ using AMS (Accelerator Mass Spectrometry). CONF |
| | | Tsukuba(Nuclear Physics Trends) Proc.P144, Jiang |
| ^{92}Mo | 2011LE23 | RADIOACTIVITY 92 Mo(β^+ EC); measured decay products, E β , I β ; |
| | | deduced $\mathrm{T}_{1/2}$ limit. CaMoO_4 scintillator. JOUR NIMAE 654 157 |

A=92 (continued)

2011MU10 NUCLEAR REACTIONS ^{40,48}Ca(n, n), E=11.9, 16.9 MeV; measured E(n), I(n), σ , σ (E, θ), time-of-flight spectra. ⁴⁰Ca(n, n), E=9.9-85.0; ⁴⁸Ca(n, n), E=7.97-16.9 MeV; ⁵⁴Ca(n, n), E=5.5-26.0 MeV; ^{58,60}Ni(n, n), E=4.5-24.0 MeV; ⁹²Mo(n, n), E=7.0-30.4 MeV; ^{116,118}Sn(n, n), E=9.95-24.0 MeV; ¹²⁰Sn(n, n), E=9.94-16.91 MeV; ¹²⁴Sn(n, n), E=11.0-24.0 MeV; ²⁰⁸Pb(n, n), E=4.0-185.0 MeV; ⁵⁰Ti(p, p), E=6.0-65.0 MeV; ⁵²Cr(p, p), E=10.77-39.9 MeV; ⁵⁴Fe, ⁶⁴Ni(p, p), E=9.69-65.0 MeV; ⁵⁸Ni(p, p), E=7.0-192.0 MeV; ⁶⁰Ni(p, p), E=7.0-178.0 MeV; ⁶²Ni(p, p), E=8.02-156.0 MeV; ⁹⁰Zr(p, p), E=5.57-185.0 MeV; ⁹²Mo(p, p), E=12.5-49.45 MeV; ¹¹⁴Sn(p, p), E=30.4 MeV; ¹¹⁶Sn(p, p), E=16.0-61.4 MeV; ^{118,122,124}Sn(p, p), E=16.0-49.35 MeV; ¹²⁰Sn(p, p), E=9.8-156.0 MeV; ²⁰⁸Pb(p, p), E=9.0-200.0 MeV; analyzed total cross sections, σ (E, θ), single-particle levels, spectroscopic factors, occupation probabilities, mass dependence on cross section. Dispersal optical model (DOM) analysis. JOUR PRVCA 83 064605

A=93

| ⁹³ Y | 2011AD18 | NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), E=1.E-10-1.E3 MeV; measured reaction products, E γ , I γ . ^{85m} Kr, ⁹³ Y, ⁹⁷ Zr, ⁹⁹ Mo, ¹⁰³ Ru, ¹⁰⁵ Rh, ¹³² Te, ^{131,133} I, ^{133,135} Xe, ¹⁴⁰ Ba, ^{141,143} Ce, ²³¹ Th, ²³³ Pa, ²³⁷ U, ²³⁹ Np deduced reaction rates, T _{1/2} . ²³² Th, U(n, 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 keV, 14, 25, 50, 100, 200 MeV; measured fission products, deduced |
|------------------|----------|---|
| | | mass distribution; calculated mass distribution at two lowest energies using TALYS. Neutron flux calculated using MCNPX with LA150 cross section library. JOUR ZAANE 47 85 |
| ⁹³ Tc | 2010SAZM | NUCLEAR REACTIONS ⁹² Mo(p, γ), E=2450-3500 keV; measured prompt E γ , I γ , $\gamma\gamma$ -coin, activation I β ; deduced σ using both methods; calculated σ using TALYS, NON-SMOKER. CONF Heidelberg (NIC XI) Proc,P244,Sauerwein |

| $^{94}\mathrm{Tc}$ | 2011LE22 | NUCLEAR REACTIONS 95,96,97,98,100 Mo(p, 2n), E=16-24 MeV; |
|--------------------|----------|---|
| | | measured reaction products, $E\gamma$, $I\gamma$; deduced production rates, yields. |
| | | JOUR JLCRD 54 S243 |
| | 2011MO21 | NUCLEAR REACTIONS ⁹⁴ Mo(p, n), E=13 MeV; measured reaction |
| | | products; deduced yields and activities. JOUR JLCRD 54 S245 $$ |

| 95 Zr | 2011TA17 | NUCLEAR REACTIONS 94 Zr(n, γ), E=0.001-60 keV; measured E(n), |
|--------------------|----------|---|
| | | I(n), capture yield using CERN n_TOF neutron source; deduced |
| | | resonance parameters E_R , gamma and neutron widths, capture kernels; |
| | | calculated Maxwellian-averaged capture cross sections. ⁹⁵ Zr; deduced |
| | | resonances, J, l-values, R-matrix analysis. Comparison with previous |
| | | studies. Discussed astrophysical implications. JOUR PRVCA 84 |
| | | 015801 |
| $^{95}\mathrm{Tc}$ | 2011LE22 | NUCLEAR REACTIONS 95,96,97,98,100 Mo(p, 2n), E=16-24 MeV; |
| | | measured reaction products, $E\gamma$, $I\gamma$; deduced production rates, yields. |
| | | JOUR JLCRD 54 S243 |

A=96

 $^{96}\mathrm{Tc}$ 2011LE22 NUCLEAR REACTIONS $^{95,96,97,98,100}\mathrm{Mo}(\mathrm{p},\,2\mathrm{n}),$ E=16-24 MeV; measured reaction products, E γ , I γ ; deduced production rates, yields. JOUR JLCRD 54 S243

A=97

| $^{97}\mathrm{Zr}$ | 2011AD18 | NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), |
|--------------------|----------|---|
| | | E=1.E-10-1.E3 MeV; measured reaction products, $E\gamma$, $I\gamma$. ^{85m} Kr, ⁹³ Y, |
| | | ⁹⁷ Zr, ⁹⁹ Mo, ¹⁰³ Ru, ¹⁰⁵ Rh, ¹³² Te, ^{131,133} I, ^{133,135} Xe, ¹⁴⁰ Ba, ^{141,143} Ce, |
| | | 231 Th, 233 Pa, 237 U, 239 Np deduced reaction rates, T _{1/2} . 232 Th, U(n, |
| | | 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 |
| | | keV, 14, 25, 50, 100, 200 MeV; measured fission products, deduced |
| | | mass distribution; calculated mass distribution at two lowest energies |
| | | using TALYS. Neutron flux calculated using MCNPX with LA150 cross |
| | | section library. JOUR ZAANE 47 85 |
| $^{97}\mathrm{Tc}$ | 2011LE22 | NUCLEAR REACTIONS 95,96,97,98,100 Mo(p, 2n), E=16-24 MeV; |
| | | measured reaction products, $E\gamma$, $I\gamma$; deduced production rates, yields. |
| | | JOUR JLCRD 54 S243 |

A=98

No references found

A=99

⁹⁹Nb **2011EJ01** NUCLEAR REACTIONS ¹⁰⁰Mo, ¹⁹⁷Au(γ , n), ¹⁰⁰Mo(γ , p), E=12-16 MeV; measured reaction products, E γ , I γ ; deduced relative yields, effective σ . JOUR JUPSA 80 094202

KEYNUMBERS AND KEYWORDS

A=99 (continued)

| ⁹⁹ Mo | 2011AD18 | NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), E=1.E-10-1.E3 MeV; measured reaction products, E γ , I γ . ^{85m} Kr, ⁹³ Y, ⁹⁷ Zr, ⁹⁹ Mo, ¹⁰³ Ru, ¹⁰⁵ Rh, ¹³² Te, ^{131,133} I, ^{133,135} Xe, ¹⁴⁰ Ba, ^{141,143} Ce, ²³¹ Th, ²³³ Pa, ²³⁷ U, ²³⁹ Np deduced reaction rates, T _{1/2} . ²³² Th, U(n, 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 |
|------------------|----------|--|
| | | keV, 14, 25, 50, 100, 200 MeV; measured fission products, deduced mass distribution; calculated mass distribution at two lowest energies using TALYS. Neutron flux calculated using MCNPX with LA150 cross contion library IOUR 74 ANE 47.85 |
| | 2011CH33 | Section horary. SOUR ZAANE 47 85 NUCLEAR REACTIONS Mo(d, X) ⁹⁹ Mo, ¹⁰⁰ Mo(p, X) ⁹⁹ Mo, Cu(p, X) ⁶² Zn / ⁶⁵ Zn E=9.7-58.5 MeV; measured reaction products, $E\gamma$, $I\gamma$; |
| | 2011EJ01 | NUCLEAR REACTIONS ¹⁰⁰ Mo, ¹⁹⁷ Au(γ , n), ¹⁰⁰ Mo(γ , p), E=12-16 MeV; measured reaction products, E γ , I γ ; deduced relative yields, |
| ⁹⁹ Tc | 2011LE22 | effective σ . JOUR JUPSA 80 094202 NUCLEAR REACTIONS ^{95,96,97,98,100} Mo(p, 2n), E=16-24 MeV; measured reaction products, E γ , I γ ; deduced production rates, yields. |
| | 2011SC21 | JOUR JLCRD 54 S243 NUCLEAR REACTIONS ¹⁰⁰ Mo(p, 2n), E=8-18 MeV; measured reaction products; deduced σ . JOUR JLCRD 54 S247 |

A=100

| $^{100}\mathrm{Mo}$ | 2011FL06 | RADIOACTIVITY ¹⁰⁰ Mo($2\beta^{-}$); measured $E\gamma$, $I\gamma$, $E\beta$, $I\beta$; deduced |
|---------------------|----------|---|
| | | $T_{1/2}$, nuclear matrix elements. JOUR NPBSE 217 53 |
| 100 Ru | 2011FL06 | RÁDIOACTIVITY ¹⁰⁰ Mo $(2\beta^{-})$; measured $E\gamma$, $I\gamma$, $E\beta$, $I\beta$; deduced |
| | | $T_{1/2}$, nuclear matrix elements. JOUR NPBSE 217 53 |
| $^{100}\mathrm{Rh}$ | 2011DI10 | NÚCLEAR REACTIONS ¹⁰³ Rh(d, X) ¹⁰⁰ Pd / ¹⁰¹ Pd / ¹⁰³ Pd / ¹⁰⁰ Rh / |
| | | $^{101}\mathrm{Rh}$ / $^{102}\mathrm{Rh}$ / $^{103}\mathrm{Ru},$ E<40 MeV; measured reaction products, E $\gamma,$ |
| | | I γ ; deduced σ , yields. Comparison with ALICE-IPPE, EMPIRE-II, |
| | | Talys calculations and experimental data. JOUR NIMBE 269 1963 |
| $^{100}\mathrm{Pd}$ | 2011DI10 | NUCLEAR REACTIONS $^{103}\rm{Rh}(d,X)^{100}\rm{Pd}$ / $^{101}\rm{Pd}$ / $^{103}\rm{Pd}$ / $^{100}\rm{Rh}$ / |
| | | 101 Rh / 102 Rh / 103 Ru, E<40 MeV; measured reaction products, E γ , |
| | | I γ ; deduced σ , yields. Comparison with ALICE-IPPE, EMPIRE-II, |
| | | Talys calculations and experimental data. JOUR NIMBE 269 1963 |

A = 101

| $^{101}\mathrm{Rh}$ | 2011DI10 | NUCLEAR REACTIONS ¹⁰³ Rh(d, X) ¹⁰⁰ Pd / ¹⁰¹ Pd / ¹⁰³ Pd / ¹⁰⁰ Rh / |
|---------------------|----------|---|
| | | 101 Rh / 102 Rh / 103 Ru, E<40 MeV; measured reaction products, E γ , |
| | | I γ ; deduced σ , yields. Comparison with ALICE-IPPE, EMPIRE-II, |
| | | Talys calculations and experimental data. JOUR NIMBE 269 1963 |
| $^{101}\mathrm{Pd}$ | 2011DI10 | NUCLEAR REACTIONS 103 Rh(d, X) 100 Pd / 101 Pd / 103 Pd / 100 Rh / |
| | | 101 Rh / 102 Rh / 103 Ru, E<40 MeV; measured reaction products, E γ , |
| | | I γ ; deduced σ , yields. Comparison with ALICE-IPPE, EMPIRE-II, |
| | | Talys calculations and experimental data. JOUR NIMBE 269 1963 |

¹⁰²Rh **2011DI10** NUCLEAR REACTIONS ¹⁰³Rh(d, X)¹⁰⁰Pd / ¹⁰¹Pd / ¹⁰³Pd / ¹⁰⁰Rh / ¹⁰¹Rh / ¹⁰²Rh / ¹⁰³Ru, E<40 MeV; measured reaction products, E γ , I γ ; deduced σ , yields. Comparison with ALICE-IPPE, EMPIRE-II, Talys calculations and experimental data. JOUR NIMBE 269 1963

A=103

| ¹⁰³ Ru 2011AD18 vibrational, rotational bands. CONF Tsukuba(Nuclear Physics Trends Proc.P253,Zhu NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), E=1.E-10-1.E3 MeV; measured reaction products, $E\gamma$, $I\gamma$. ^{85m} Kr, ⁹³ Y ⁹⁷ Zr, ⁹⁹ Mo, ¹⁰³ Ru, ¹⁰⁵ Rh, ¹³² Te, ^{131,133} I, ^{133,135} Xe, ¹⁴⁰ Ba, ^{141,143} Ce, ²³¹ Th, ²³³ Pa, ²³⁷ U, ²³⁹ Np deduced reaction rates, T _{1/2} . ²³² Th, U(n, 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 heV. 14, 25, 50, 100, 200 MeV; measured fiscien products adduced | |
|--|----|
| ¹⁰³ Ru 2011AD18 Proc.P253,Zhu NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), E=1.E-10-1.E3 MeV; measured reaction products, $E\gamma$, $I\gamma$. ^{85m} Kr, ⁹³ Y ⁹⁷ Zr, ⁹⁹ Mo, ¹⁰³ Ru, ¹⁰⁵ Rh, ¹³² Te, ^{131,133} I, ^{133,135} Xe, ¹⁴⁰ Ba, ^{141,143} Ce, ²³¹ Th, ²³³ Pa, ²³⁷ U, ²³⁹ Np deduced reaction rates, T _{1/2} . ²³² Th, U(n, 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 heV. 14, 25, 50, 100, 200 MeV; measured figure products, deduced | 3) |
| ¹⁰³ Ru 2011AD18 NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), E=1.E-10-1.E3 MeV; measured reaction products, E γ , I γ . ^{85m} Kr, ⁹³ Y ⁹⁷ Zr, ⁹⁹ Mo, ¹⁰³ Ru, ¹⁰⁵ Rh, ¹³² Te, ^{131,133} I, ^{133,135} Xe, ¹⁴⁰ Ba, ^{141,143} Ce, ²³¹ Th, ²³³ Pa, ²³⁷ U, ²³⁹ Np deduced reaction rates, T _{1/2} . ²³² Th, U(n, 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 heV. 14, 25, 50, 100, 200 MeV; measured fastion products, deduced | / |
| E=1.E-10-1.E3 MeV; measured reaction products, Eγ, Iγ. ^{85m} Kr, ⁹³ Y ⁹⁷ Zr, ⁹⁹ Mo, ¹⁰³ Ru, ¹⁰⁵ Rh, ¹³² Te, ^{131,133} I, ^{133,135} Xe, ¹⁴⁰ Ba, ^{141,143} Ce, ²³¹ Th, ²³³ Pa, ²³⁷ U, ²³⁹ Np deduced reaction rates, T _{1/2} . ²³² Th, U(n, 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 heV, 14, 25, 50, 100, 200 MeV; measured fastion products, deduced | |
| ²³¹ Th, ²³³ Pa, ²³⁷ U, ²³⁹ Np deduced reaction rates, $T_{1/2}$. ²³² Th, U(n, 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 heV. 14, 25, 50, 100, 200 MeV; measured fastion products deduced | , |
| 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 heV. 14, 25, 50, 100, 200 MeV; measured figure products deduced | |
| LAV 14 25 50 100 200 MaV, measured faster products deduced | |
| KEV. 14. ZO. OU. TUU, ZUU MEV. IDEASUTED INSSION DIOUNCIS, DECIDEED | |
| mass distribution: calculated mass distribution at two lowest energies | |
| using TALYS. Neutron flux calculated using MCNPX with LA150 cross | 35 |
| section library. JOUR ZAANE 47 85 | |
| 2011DI10 NUCLEAR REACTIONS ¹⁰³ Rh(d, X) ¹⁰⁰ Pd / ¹⁰¹ Pd / ¹⁰³ Pd / ¹⁰⁰ Rh | / |
| 101 Rh / 102 Rh / 103 Ru, E<40 MeV; measured reaction products, E γ , | ' |
| $I\gamma$; deduced σ , yields. Comparison with ALICE-IPPE, EMPIRE-II, | |
| Talys calculations and experimental data. JOUR NIMBE 269 1963 | |
| ¹⁰³ Pd 2011DI10 NUCLEAR REACTIONS ¹⁰³ Rh(d, X) ¹⁰⁰ Pd / ¹⁰¹ Pd / ¹⁰³ Pd / ¹⁰⁰ Rh | / |
| 101 Rh / 102 Rh / 103 Ru, E<40 MeV; measured reaction products, E γ , | |
| I γ ; deduced σ , yields. Comparison with ALICE-IPPE, EMPIRE-II, | |
| Talys calculations and experimental data. JOUR NIMBE 269 1963 | |
| ¹⁰³ Ag 2011DI11 NUCLEAR REACTIONS ^{102,104} Pd(p, γ), ¹⁰⁵ Pd(p, n), E=2.75-9 MeV | ; |
| measured E γ , I γ , total cross sections. ¹⁰⁴ Pd(p, n), ¹⁰⁵ Pd(p, γ) ^{106m} Ag | , |
| 100 Pd(p, n) 100m Ag, 110 Pd(p, n) 110m Ag, E=2.75-9 MeV; measured E γ , | |
| 1γ , partial cross sections; deduced S factors. Activation method. | |
| Relevant cross sections measured close to the astrophysical Gamow | , |
| window of the γ process. Comparison with previous measurements and | đ |
| theoretical predictions from Hauser-Feshbach model | |
| 103Cd = 00147747 = NUCLEAD DEACTIONS 94.96.98Mc(12C, 2n) = 50 MeV measured | |
| Ev. Let $\alpha(t)$ half lives $103.105.107$ Cd; deduced levels I π | |
| B(M1) $B(F2)$ Comparison with systematics of $B(M1)$ and $B(F2)$ | |
| D(M1), $D(D2)$. Comparison with systematics of $D(M1)$ and $D(D2)values for \Delta -102.112 Cd and for Z -40.50 N=54.74 nuclei IOUR$ | |
| PRVCA 84 014324 | |

A = 104

¹⁰⁴Pd **2010WEZZ** NUCLEAR REACTIONS ¹⁰³Rh(p, γ), E=2.0, 3.0 MeV; measured E γ , I γ , $\gamma\gamma$ -coin, En, In, I α . Cross section to be extracted. CONF Heidelberg (NIC XI) Proc, P248, Weigand

KEYNUMBERS AND KEYWORDS

A=104 (continued)

| | 2011DI11 | RADIOACTIVITY 104 Ag(EC); measured precise I γ . JOUR PRVCA |
|------------|----------|---|
| | | 84 015802 |
| ^{104}Ag | 2011BE29 | NUCLEAR REACTIONS 107 Ag(γ , 3n), 109 Ag(γ , 5n), 113 In(γ , 3n), |
| | | ¹¹⁵ In(γ , 5n), (γ , 7n), E=32-84 MeV; measured E γ , I γ ; deduced yields, |
| | | isomeric ratios. Comparison with TALYS code calculations. JOUR |
| | | BRSPE 75 941 |
| | 2011DI11 | NUCLEAR REACTIONS 102,104 Pd(p, γ), 105 Pd(p, n), E=2.75-9 MeV; |
| | | measured $E\gamma$, $I\gamma$, total cross sections. ¹⁰⁴ Pd(p, n), ¹⁰⁵ Pd(p, γ) ^{106m} Ag, |
| | | 106 Pd(p, n) 106m Ag, 110 Pd(p, n) 110m Ag, E=2.75-9 MeV; measured E γ , |
| | | $I\gamma$, partial cross sections; deduced S factors. Activation method. |
| | | Relevant cross sections measured close to the astrophysical Gamow |
| | | window of the γ process. Comparison with previous measurements and |
| | | theoretical predictions from Hauser-Feshbach model |
| | | "NON-SMOKER". JOUR PRVCA 84 015802 |
| | 2011DI11 | RADIOACTIVITY 104 Ag(EC); measured precise I γ . JOUR PRVCA |
| | | 84 015802 |

| $^{105}\mathrm{Mo}$ | 2010ZHZT | RADIOACTIVITY ²⁵² Cf(SF); measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin. ¹⁰³ Nb, ^{105,106} Mo, ^{107,108} Tc, ^{110,112} Ru deduced levels, J, π , collective |
|---------------------|----------|--|
| | | vibrational, rotational bands. CONF Tsukuba(Nuclear Physics Trends) |
| | | Proc.P253,Zhu |
| 105 Rh | 2011AD18 | NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), |
| | | E=1.E-10-1.E3 MeV; measured reaction products, $E\gamma$, $I\gamma$. 85m Kr, 93 Y, |
| | | ⁹⁷ Zr, ⁹⁹ Mo, ¹⁰³ Ru, ¹⁰⁵ Rh, ¹³² Te, ^{131,133} I, ^{133,135} Xe, ¹⁴⁰ Ba, ^{141,143} Ce, |
| | | ²³¹ Th, ²³³ Pa, ²³⁷ U, ²³⁹ Np deduced reaction rates, $T_{1/2}$. ²³² Th, U(n, |
| | | 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 |
| | | keV, 14, 25, 50, 100, 200 MeV; measured fission products, deduced |
| | | mass distribution; calculated mass distribution at two lowest energies |
| | | using TALYS. Neutron flux calculated using MCNPX with LA150 cross |
| 105 . | | section library. JOUR ZAANE 47 85 |
| ^{105}Ag | 2011DI11 | NUCLEAR REACTIONS 102,104 Pd(p, γ), 105 Pd(p, n), E=2.75-9 MeV; measured E γ , I γ , total cross sections. 104 Pd(p, n), 105 Pd(p, γ) 106m Ag, |
| | | $^{106}Pd(p, n)^{106m}Ag$, $^{110}Pd(p, n)^{110m}Ag$, E=2.75-9 MeV; measured E γ , |
| | | $I\gamma$, partial cross sections; deduced S factors. Activation method. |
| | | Relevant cross sections measured close to the astrophysical Gamow |
| | | window of the γ process. Comparison with previous measurements and |
| | | theoretical predictions from Hauser-Feshbach model |
| | | "NON-SMOKER". JOUR PRVCA 84 015802 |
| $^{105}\mathrm{Cd}$ | 2011KI17 | NUCLEAR REACTIONS 94,96,98 Mo(12 C, 3n), E=50 MeV; measured |
| | | $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin, $\gamma\gamma(t)$, half-lives. ^{103,105,107} Cd; deduced levels, J, π , |
| | | B(M1), $B(E2)$. Comparison with systematics of $B(M1)$ and $B(E2)$ |
| | | values for A=102-112 Cd, and for Z=40-50, N=54-74 nuclei. JOUR |
| | | PRVCA 84 014324 |

| $^{106}\mathrm{Mo}$ | 2010ZHZT | RADIOACTIVITY ²⁵² Cf(SF); measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin. ¹⁰³ Nb, ^{105,106} Mo, ^{107,108} Tc, ^{110,112} Ru deduced levels, J, π , collective |
|---------------------|----------|---|
| | | vibrational, rotational bands. CONF Tsukuba(Nuclear Physics Trends) Proc.P253,Zhu |
| ¹⁰⁶ Pd | 2011RU10 | RADIOACTIVITY ¹⁰⁶ Cd($2\beta^+$), (β^+ EC), (2EC); measured decay products, E γ , I γ , X-rays; deduced T _{1/2} limits. TGV-2 multidetector germanium spectrometer _IOUB_BRSPE 75 879 |
| ¹⁰⁶ Ag | 2010ZHZR | NUCLEAR REACTIONS ¹⁰⁰ Mo(¹¹ B, 5n), E=60 MeV; measured E γ , I γ , $\gamma\gamma$ -coin. ¹⁰⁶ Ag deduced levels, J, π , positive parity bands, rotational band, yrast, yrare, B(M1) / B(E2). ¹²⁴ Sn(¹¹ B, 5n), E=65 MeV; measured E γ , I γ , $\gamma\gamma$ -coin. ¹³⁰ Cs deduced levels, J, π , T _{1/2} , yrast, B(E2), B(M1). ¹⁵² Sm(²⁸ Si, 4n), E=140 MeV; measured E γ , I γ , $\gamma\gamma$ -coin. ¹⁷⁶ Os deduced levels, J, π , T _{1/2} , quadrupole moment, deformation, B(E2); calculated quadrupole moment using U(5), X(5), SU(3). CONF Tsukuba(Nuclear Physics Trends) Proc.P363,Zhu |
| | 2011DI11 | NUCLEAR REACTIONS ^{102,104} Pd(p, γ), ¹⁰⁵ Pd(p, n), E=2.75-9 MeV; measured E γ , I γ , total cross sections. ¹⁰⁴ Pd(p, n), ¹⁰⁵ Pd(p, γ) ^{106m} Ag, ¹⁰⁶ Pd(p, n), ^{106m} Ag, ¹⁰⁶ Pd(p, n), ^{106m} Ag, E=2.75-9 MeV; measured E γ , I γ , partial cross sections; deduced S factors. Activation method. Relevant cross sections measured close to the astrophysical Gamow window of the γ process. Comparison with previous measurements and theoretical predictions from Hauser-Feshbach model "NON-SMOKER". JOUR PRVCA 84 015802 |
| ¹⁰⁶ Cd | 2010BEZI | RADIOACTIVITY ¹⁰⁶ Cd(2 β); measured E β , I β , E γ , I γ ; deduced T _{1/2} limits for (0 ν 2EC), (2 $\nu\beta^+$ EC), (2 $\nu2\beta^+$), (0 $\nu2$ K), (0 ν LK); calculated possible resonant enhancement of (0 ν 2EC) within QRPA. Gran Sasso Natl Lab. CONF Sinaia (Exotic Nucei and Nuc.Part.Astroph.III)Proc.P354,Belli |
| | 2011KI15 | NUCLEAR REACTIONS ^{110,116} Cd(α , α'), E=16.4, 19.46 MeV; measured E α , yields and $\sigma(\theta)$. ¹⁰⁶ Cd, ¹¹² Sn(α , α'), E(cm)=15.6, 18.9 MeV; analyzed $\sigma(\theta)$ data. ^{110,116} Cd(α , α), E=8-20 MeV; analyzed $\sigma(E)$ data. Optical model analysis and predictions. Global parameterization of the α -nucleus potential used in astrophysical p-process calculations. JOUR PRVCA 83 065807 |
| | 2011RU10 | RADIOACTIVITY ¹⁰⁶ Cd($2\beta^+$), (β^+ EC), (2EC); measured decay products, E γ , I γ , X-rays; deduced T _{1/2} limits. TGV-2 multidetector germanium spectrometer. JOUR BRSPE 75 879 |

A = 107

| $^{107}\mathrm{Tc}$ | 2010ZHZT | RADIOACTIVITY ²⁵² Cf(SF); measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin. ¹⁰³ Nb, |
|---------------------|----------|--|
| | | 105,106 Mo, 107,108 Tc, 110,112 Ru deduced levels, J, π , collective |
| | | vibrational, rotational bands. CONF Tsukuba(Nuclear Physics Trends) |
| | | Proc.P253,Zhu |

A=107 (continued)

¹⁰⁷Cd **2011KI17** NUCLEAR REACTIONS 94,96,98 Mo(12 C, 3n), E=50 MeV; measured E γ , I γ , $\gamma\gamma$ -coin, $\gamma\gamma(t)$, half-lives. 103,105,107 Cd; deduced levels, J, π , B(M1), B(E2). Comparison with systematics of B(M1) and B(E2) values for A=102-112 Cd, and for Z=40-50, N=54-74 nuclei. JOUR PRVCA 84 014324

A = 108

| $^{108}\mathrm{Tc}$ | 2010ZHZT | RADIOACTIVITY ²⁵² Cf(SF); measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin. ¹⁰³ Nb, ^{105,106} Mo, ^{107,108} Tc, ^{110,112} Ru deduced levels, J, π , collective |
|---------------------|----------|--|
| | | vibrational, rotational bands. CONF Tsukuba(Nuclear Physics Trends) |
| | | Proc.P253,Zhu |
| 108 In | 2011BE29 | NUCLEAR REACTIONS $^{107}Ag(\gamma, 3n)$, $^{109}Ag(\gamma, 5n)$, $^{113}In(\gamma, 3n)$, |
| | | ¹¹⁵ In(γ , 5n), (γ , 7n), E=32-84 MeV; measured E γ , I γ ; deduced yields, |
| | | isomeric ratios. Comparison with TALYS code calculations. JOUR |
| | | BRSPE 75 941 |

A = 109

¹⁰⁹I **2011PR12** NUCLEAR REACTIONS ⁵⁸Ni(⁵⁴Fe, 2np)¹⁰⁹I, E=206 MeV; measured reaction products, $E\gamma$, $I\gamma$; deduced σ , lifetime or $T_{1/2}$ for the first excited state. Comparison with theoretical calculations, Recoil distance Doppler-shift method. JOUR PYLBB 704 118

| $^{110}\mathrm{Ru}$ | 2010ZHZT | RADIOACTIVITY ²⁵² Cf(SF); measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin. ¹⁰³ Nb, ^{105,106} Mo, ^{107,108} Tc, ^{110,112} Ru deduced levels, J, π , collective |
|---------------------|----------|--|
| | | vibrational, rotational bands. CONF Tsukuba (Nuclear Physics Trends) $$ |
| | | Proc.P253,Zhu |
| ^{110}Ag | 2011DI11 | NUCLEAR REACTIONS 102,104 Pd(p, γ), 105 Pd(p, n), E=2.75-9 MeV; |
| | | measured $E\gamma$, $I\gamma$, total cross sections. ¹⁰⁴ Pd(p, n), ¹⁰⁵ Pd(p, γ) ^{106m} Ag, |
| | | 106 Pd(p, n) 106m Ag, 110 Pd(p, n) 110m Ag, E=2.75-9 MeV; measured E γ , |
| | | $I\gamma$, partial cross sections; deduced S factors. Activation method. |
| | | Relevant cross sections measured close to the astrophysical Gamow |
| | | window of the γ process. Comparison with previous measurements and |
| | | theoretical predictions from Hauser-Feshbach model |
| | | "NON-SMOKER". JOUR PRVCA 84 015802 |
| $^{110}\mathrm{Cd}$ | 2011KI15 | NUCLEAR REACTIONS ^{110,116} Cd(α , α '), E=16.4, 19.46 MeV; |
| | | measured E α , yields and $\sigma(\theta)$. ¹⁰⁶ Cd, ¹¹² Sn(α, α'), E(cm)=15.6, 18.9 |
| | | MeV; analyzed $\sigma(\theta)$ data. ^{110,116} Cd(α, α), E=8-20 MeV; analyzed |
| | | $\sigma(E)$ data. Optical model analysis and predictions. Global |
| | | parameterization of the α -nucleus potential used in astrophysical |
| | | p-process calculations. JOUR PRVCA 83 065807 |

A=110 (continued)

¹¹⁰In 2011BE29 NUCLEAR REACTIONS ¹⁰⁷Ag(γ , 3n), ¹⁰⁹Ag(γ , 5n), ¹¹³In(γ , 3n), ¹¹⁵In(γ , 5n), (γ , 7n), E=32-84 MeV; measured E γ , I γ ; deduced yields, isomeric ratios. Comparison with TALYS code calculations. JOUR BRSPE 75 941

A = 111

No references found

A = 112

| $^{112}\mathrm{Ru}$ | 2010ZHZT | RADIOACTIVITY ²⁵² Cf(SF); measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin. ¹⁰³ Nb, ^{105,106} Mo, ^{107,108} Tc, ^{110,112} Ru deduced levels, J, π , collective vibrational, rotational bands. CONF Tsukuba(Nuclear Physics Trends) |
|---------------------|----------|--|
| | | Proc.P253,Zhu |
| ^{112}Sn | 2010FUZR | NUCLEAR REACTIONS ^{112,114,116,118,120,122,124} Sn(α, α'), E=400 |
| | | MeV; measured reaction products; deduced GM resonance strength |
| | | distributions, GM resonance parameters, asymmetry term of nuclear |
| | | compressibility. CONF Kobe(Tours Nuc.Phys.and Astroph.VII) |
| | | Proc.P274,Fujiwara |
| | 2011KI15 | NUCLEAR REACTIONS ^{110,116} Cd(α, α'), E=16.4, 19.46 MeV; |
| | | measured E α , yields and $\sigma(\theta)$. ¹⁰⁶ Cd, ¹¹² Sn(α , α'), E(cm)=15.6, 18.9 |
| | | MeV; analyzed $\sigma(\theta)$ data. ^{110,116} Cd(α, α), E=8-20 MeV; analyzed |
| | | $\sigma(E)$ data. Optical model analysis and predictions. Global |
| | | parameterization of the α -nucleus potential used in astrophysical |
| | | p-process calculations. JOUR PRVCA 83 065807 |
| | 2011WA15 | NUCLEAR MOMENTS ^{112,114,116,122,124} Sn; measured g factors of the |
| | | first $2+$, $4+$ and $3-$ states by transient field technique in Coulomb |
| | | excitation in inverse kinematics. Comparisons with shell-model and |
| | | other theoretical calculations. JOUR PRVCA 84 014319 |
| | 2011WA15 | NUCLEAR REACTIONS ${}^{12}C({}^{112}Sn, {}^{112}Sn'), ({}^{114}Sn, {}^{114}Sn'), ({}^{116}Sn, {}^{116}Sn, {}^{116}Sn')$ |
| | | 1 Sil, $E=4 MeV / nucleon; C(Sil, Sil), (Sil, Sil), E=3.8$ |
| | | angles. 112,114,116,122,124 Sn; deduced g-factors, configurations. |
| | | Comparison with RQRPA, QRPA, and shell-model calculations. |
| | | $^{12}C(^{124}Sn, X)^{130}Xe / ^{120}Te / ^{128}Te, E=3.8 \text{ MeV} / \text{nucleon; measured}$ |
| | | $E\gamma$, $I\gamma$. JOUR PRVCA 84 014319 |

A=113

¹¹³Cd **2010HAZO** NUCLEAR REACTIONS ¹¹²Cd(n, γ), E=thermal, reactor; measured E γ , I γ , σ using Cd-difference method. ¹¹³Cd deduced isomeric transition, resonance integral; calculated σ , isomer σ using Hauser-Feshbach. CONF Kobe(Tours Nuc.Phys.and Astroph.VII) Proc.P225,Hayakawa

A = 114

| ¹¹⁴ Rh | 2011LI25 | RADIOACTIVITY ²⁵² Cf(SF); measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin, fission yields ratios using the Gammasphere array. ¹¹⁴ Rh; deduced levels, J, π , rotational bands, signature inversion, configurations. Comparison with Triaxial Projected Shell Model calculations. Systematics of negative-parity yrast bands of odd-odd Rh nuclei with A=104-114. IOUR PRVCA 83.064310 |
|-------------------|----------|--|
| ¹¹⁴ Sn | 2010FUZR | NUCLEAR REACTIONS ^{112,114,116,118,120,122,124} Sn(α , α '), E=400 MeV; measured reaction products; deduced GM resonance strength distributions, GM resonance parameters, asymmetry term of nuclear compressibility. CONF Kobe(Tours Nuc.Phys.and Astroph.VII) Proc.P274.Fuijwara |
| | 2011MU10 | NUCLEAR REACTIONS ^{40,48} Ca(n, n), E=11.9, 16.9 MeV; measured E(n), I(n), σ, σ(E, θ), time-of-flight spectra. ⁴⁰ Ca(n, n), E=9.9-85.0; ⁴⁸ Ca(n, n), E=7.97-16.9 MeV; ⁵⁴ Ca(n, n), E=5.5-26.0 MeV; ^{58,60} Ni(n, n), E=4.5-24.0 MeV; ⁹² Mo(n, n), E=7.0-30.4 MeV; ^{116,118} Sn(n, n), E=9.95-24.0 MeV; ¹²⁰ Sn(n, n), E=9.94-16.91 MeV; ¹²⁴ Sn(n, n), E=11.0-24.0 MeV; ²⁰⁸ Pb(n, n), E=4.0-185.0 MeV; ⁵⁰ Ti(p, p), E=6.0-65.0 MeV; ⁵² Cr(p, p), E=10.77-39.9 MeV; ⁵⁴ Fe, ⁶⁴ Ni(p, p), E=9.69-65.0 MeV; ⁵² Ni(p, p), E=7.0-192.0 MeV; ⁶⁰ Ni(p, p), E=7.0-178.0 MeV; ⁶² Ni(p, p), E=8.02-156.0 MeV; ⁹⁰ Zr(p, p), E=5.57-185.0 MeV; ⁹² Mo(p, p), E=12.5-49.45 MeV; ¹¹⁴ Sn(p, p), E=30.4 MeV; ¹¹⁶ Sn(p, p), E=16.0-61.4 MeV; ^{118,122,124} Sn(p, p), E=16.0-49.35 MeV; ¹²⁰ Sn(p, p), E=9.8-156.0 MeV; ²⁰⁸ Pb(p, p), E=9.0-200.0 MeV; analyzed total cross sections, σ (E, θ), single-particle levels, spectroscopic factors, occupation probabilities, mass dependence on cross section. Dispersal optical model (DOM) analysis. JOUR PRVCA 83 064605 |
| | 2011WA15 | NUCLEAR MOMENTS ^{112,114,116,122,124} Sn; measured g factors of the first 2+, 4+ and 3- states by transient field technique in Coulomb excitation in inverse kinematics. Comparisons with shell-model and other theoretical calculations. JOUR PRVCA 84 014319 |
| | 2011WA15 | NUCLEAR REACTIONS ¹² C(¹¹² Sn, ¹¹² Sn'), (¹¹⁴ Sn, ¹¹⁴ Sn'), (¹¹⁶ Sn, ¹¹⁶ Sn'), E=4 MeV / nucleon; ¹² C(¹²² Sn, ¹²² Sn'), (¹²⁴ Sn, ¹²⁴ Sn'), E=3.8 MeV / nucleon; measured $E\gamma$, $I\gamma$, (¹² C) γ -coin, (¹² C) $\gamma\gamma(\theta)$, precession angles. ^{112,114,116,122,124} Sn; deduced g-factors, configurations. Comparison with RQRPA, QRPA, and shell-model calculations. ¹² C(¹²⁴ Sn, X) ¹³⁰ Xe / ¹²⁶ Te / ¹²⁸ Te, E=3.8 MeV / nucleon; measured $E\gamma$, $I\gamma$. JOUR PRVCA 84 014319 |

A = 115

| 115 Ru | 2011RI07 | RADIOACTIVITY ¹¹⁵ Ru(β^{-})[from U(p, f), E=25 MeV, selected by |
|-------------|----------|--|
| | | JYFLTRAP]; measured $E\gamma$, $I\gamma$, $E\beta$, $I\beta$, X-rays, $\beta\gamma$ -coin. ¹¹⁵ Rh |
| | | deduced levels, J, π , level log ft, level β -feeding, ICC(K) for 80.1 keV |
| | | transition, rotational constants for the K=1 / 2 intruder band. $^{115}\mathrm{Ru}$ |
| | | deduced ground state J, π , β -strength distribution. |
| | | Penning-trap-assisted β and γ spectroscopy, IGISOL facility. |
| | | Comparison with near-by isotopes of Ru and Rh. JOUR ZAANE 47 97 |

KEYNUMBERS AND KEYWORDS

A=115 (continued)

| ¹¹⁵ Rh | 2011LI29 | RADIOACTIVITY ²⁵² Cf(SF); measured E γ , I γ , $\gamma\gamma$ -coin using Gammasphere array. ¹¹⁵ Rh; deduced levels, J, π , bands, moment of inertia, signature splitting, fission yield ratios. Comparison with Rotor plus particle model calculations. Systematics of level energies, signature splittings and moments of inertia plots of ^{107,109,111,113,115} Rh nuclei. JOUR PRVCA 84 014304 |
|-------------------|----------|---|
| | 2011RI07 | RADIOACTIVITY ¹¹⁵ Ru(β^{-})[from U(p, f), E=25 MeV, selected by JYFLTRAP]; measured E γ , I γ , E β , I β , X-rays, $\beta\gamma$ -coin. ¹¹⁵ Rh deduced levels, J, π , level log ft, level β -feeding, ICC(K) for 80.1 keV transition, rotational constants for the K=1 / 2 intruder band. ¹¹⁵ Ru deduced ground state J, π , β -strength distribution. |
| ¹¹⁵ Sn | 2010KAZJ | Penning-trap-assisted β and γ spectroscopy, IGISOL facility. Comparison with near-by isotopes of Ru and Rh. JOUR ZAANE 47 97 NUCLEAR REACTIONS ^{116,117} Sn(γ , n), E=7-12.5 MeV; measured En, In; calculated σ using statistical model and different γ -ray E1 strength functions; deduced σ using Taylor expansion method, E1 γ strength, radiative neutron capture σ . Comparison with other data. CONF Kobe(Tours Nuc.Phys.and Astroph.VII) Proc.P234,Kamata |

A = 116

| $^{116}\mathrm{Cd}$ | 2011JA07 | RADIOACTIVITY ¹¹⁶ Cd, ¹³⁰ Te($2\beta^{-}$); measured E γ , I γ , E β , I β ; deduced transitions to quotied states T — limits – IOUP NPRSE 217.47 |
|---------------------|----------|--|
| | 2011KI15 | NUCLEAR REACTIONS ^{110,116} Cd(α, α'), E=16.4, 19.46 MeV; |
| | | measured E α , yields and $\sigma(\theta)$. ¹⁰⁶ Cd, ¹¹² Sn(α, α'), E(cm)=15.6, 18.9 |
| | | MeV; analyzed $\sigma(\theta)$ data. ^{110,116} Cd(α, α), E=8-20 MeV; analyzed |
| | | $\sigma(E)$ data. Optical model analysis and predictions. Global |
| | | parameterization of the α -nucleus potential used in astrophysical |
| | | p-process calculations. JOUR PRVCA 83 065807 |
| | 2011RA24 | ATOMIC MASSES ¹¹⁶ Cd, ¹³⁰ Te; measured cyclotron frequencies; |
| | | deduced double beta decay Q-values, mass differences. JOUR PYLBB |
| | | 703 412 |
| | 2011RA24 | RADIOACTIVITY ¹¹⁶ Cd, ¹³⁰ Te($2\beta^{-}$); calculated nuclear matrix |
| 110 | | elements. JOUR PYLBB 703 412 |
| ^{116}Sn | 2010FUZR | NUCLEAR REACTIONS ^{112,114,116,118,120,122,124} Sn(α, α'), E=400 |
| | | MeV; measured reaction products; deduced GM resonance strength |
| | | distributions, GM resonance parameters, asymmetry term of nuclear |
| | | compressibility. CONF Kobe(Tours Nuc.Phys.and Astroph.VII) |
| | | Proc.P274,Fujiwara |
| | 2010KAZJ | NUCLEAR REACTIONS 116,117 Sn(γ , n), E=7-12.5 MeV; measured |
| | | En, In; calculated σ using statistical model and different γ -ray E1 |
| | | strength functions; deduced σ using Taylor expansion method, E1 γ |
| | | strength, radiative neutron capture σ . Comparison with other data. |
| | | CONF Kobe(Tours Nuc.Phys.and Astroph.VII) Proc.P234.Kamata |
| | 2011JA07 | RADIOACTIVITY ¹¹⁶ Cd, ¹³⁰ Te($2\beta^{-}$); measured E γ , I γ , E β , I β ; |
| | | deduced transitions to excited states $T_{1/2}$ limits. JOUR NPBSE 217 47 |

A=116 (continued)

| | 2011MU10 | NUCLEAR REACTIONS ^{40,48} Ca(n, n), E=11.9, 16.9 MeV; measured E(n), I(n), σ , σ (E, θ), time-of-flight spectra. ⁴⁰ Ca(n, n), E=9.9-85.0; ⁴⁸ Ca(n, n), E=7.97-16.9 MeV; ⁵⁴ Ca(n, n), E=5.5-26.0 MeV; ^{58,60} Ni(n, n), E=4.5-24.0 MeV; ⁹² Mo(n, n), E=7.0-30.4 MeV; ^{116,118} Sn(n, n), E=9.95-24.0 MeV; ¹²⁰ Sn(n, n), E=9.94-16.91 MeV; ¹²⁴ Sn(n, n), E=11.0-24.0 MeV; ²⁰⁸ Pb(n, n), E=4.0-185.0 MeV; ⁵⁰ Ti(p, p), E=6.0-65.0 MeV; ⁵² Cr(p, p), E=10.77-39.9 MeV; ⁵⁴ Fe, ⁶⁴ Ni(p, p), E=9.69-65.0 MeV; ⁵⁸ Ni(p, p), E=7.0-192.0 MeV; ⁶⁰ Ni(p, p), E=7.0-178.0 MeV; ⁶² Ni(p, p), E=12.5-49.45 MeV; ¹¹⁴ Sn(p, p), |
|-------------------|----------|--|
| | | E=30.4 MeV; ¹¹⁶ Sn(p, p), E=16.0-61.4 MeV; ^{118,122,124} Sn(p, p), E=16.0-49.35 MeV; ¹²⁰ Sn(p, p), E=9.8-156.0 MeV; ²⁰⁸ Pb(p, p), E=9.0-200.0 MeV; analyzed total cross sections, $\sigma(E, \theta)$, single-particle levels, spectroscopic factors, occupation probabilities, mass dependence on cross section. Dispersal optical model (DOM) analysis. JOUR |
| | | PRVCA 83 064605 |
| | 2011RA24 | RADIOACTIVITY ¹¹⁶ Cd, ¹³⁰ Te($2\beta^{-}$); calculated nuclear matrix elements IOUR PVLBB 703 412 |
| | 2011WA15 | NUCLEAR MOMENTS 112,114,116,122,124 Sn; measured g factors of the first 2+, 4+ and 3- states by transient field technique in Coulomb excitation in inverse kinematics. Comparisons with shell-model and other theoretical calculations. JOUR PRVCA 84 014310 |
| | 2011WA15 | NUCLEAR REACTIONS ¹² C(¹¹² Sn, ¹¹² Sn'), (¹¹⁴ Sn, ¹¹⁴ Sn'), (¹¹⁶ Sn, ¹¹⁶ Sn'), E=4 MeV / nucleon; ¹² C(¹²² Sn, ¹²² Sn'), (¹²⁴ Sn, ¹²⁴ Sn'), E=3.8 MeV / nucleon; measured E γ , I γ , (¹² C) γ -coin, (¹² C) $\gamma\gamma(\theta)$, precession angles. ^{112,114,116,122,124} Sn; deduced g-factors, configurations. Comparison with RQRPA, QRPA, and shell-model calculations. |
| ¹¹⁶ Ba | 2011LI28 | ¹² C(¹²⁴ Sn, X) ¹³⁰ Xe / ¹²⁶ Te / ¹²⁸ Te, E=3.8 MeV / nucleon; measured $E\gamma$, $I\gamma$. JOUR PRVCA 84 014319 RADIOACTIVITY ¹¹⁷ La(p) [from ⁶⁴ Zn(⁵⁸ Ni, 4np), E=305 MeV]; measured reaction products, $E\gamma$, $I\gamma$; deduced ground-state proton decay, Q-value, $T_{1/2}$, prompt γ -rays, no evidence of isomeric state. |
| | | Comparison with theoretical predictions. JOUR PYLBB 702 24 $$ |

A = 117

¹¹⁷La **2011LI28** RADIOACTIVITY ¹¹⁷La(p) [from ⁶⁴Zn(⁵⁸Ni, 4np), E=305 MeV]; measured reaction products, $E\gamma$, $I\gamma$; deduced ground-state proton decay, Q-value, $T_{1/2}$, prompt γ -rays, no evidence of isomeric state. Comparison with theoretical predictions. JOUR PYLBB 702 24

A = 118

| $^{118}\mathrm{Sn}$ | 2010FUZR | NUCLEAR REACTIONS 112,114,116,118,120,122,124 Sn(α, α'), E=400 |
|---------------------|----------|---|
| | | MeV; measured reaction products; deduced GM resonance strength |
| | | distributions, GM resonance parameters, asymmetry term of nuclear |
| | | compressibility. CONF Kobe(Tours Nuc.Phys.and Astroph.VII) |
| | | Proc.P274,Fujiwara |
| | 2011MU10 | NUCLEAR REACTIONS 40,48 Ca(n, n), E=11.9, 16.9 MeV; measured |
| | | $E(n)$, $I(n)$, σ , $\sigma(E, \theta)$, time-of-flight spectra. ⁴⁰ Ca(n, n), E=9.9-85.0; |
| | | 48 Ca(n, n), E=7.97-16.9 MeV; 54 Ca(n, n), E=5.5-26.0 MeV; 58,60 Ni(n, |
| | | n), E=4.5-24.0 MeV; 92 Mo(n, n), E=7.0-30.4 MeV; 116,118 Sn(n, n), |
| | | $E=9.95-24.0 \text{ MeV}; {}^{120}Sn(n, n), E=9.94-16.91 \text{ MeV}; {}^{124}Sn(n, n),$ |
| | | $E=11.0-24.0 \text{ MeV}; {}^{208}Pb(n, n), E=4.0-185.0 \text{ MeV}; {}^{50}Ti(p, p),$ |
| | | $E=6.0-65.0 \text{ MeV}; {}^{52}Cr(p, p), E=10.77-39.9 \text{ MeV}; {}^{54}Fe, {}^{64}Ni(p, p),$ |
| | | $E=9.69-65.0 \text{ MeV}; {}^{58}\text{Ni}(p, p), E=7.0-192.0 \text{ MeV}; {}^{60}\text{Ni}(p, p),$ |
| | | $E=7.0-178.0 \text{ MeV}; {}^{62}\text{Ni}(p, p), E=8.02-156.0 \text{ MeV}; {}^{90}\text{Zr}(p, p),$ |
| | | $E=5.57-185.0 \text{ MeV}; {}^{92}Mo(p, p), E=12.5-49.45 \text{ MeV}; {}^{114}Sn(p, p),$ |
| | | $E=30.4 \text{ MeV}; {}^{116}Sn(p, p), E=16.0-61.4 \text{ MeV}; {}^{118,122,124}Sn(p, p),$ |
| | | $E=16.0-49.35 \text{ MeV}; {}^{120}Sn(p, p), E=9.8-156.0 \text{ MeV}; {}^{208}Pb(p, p),$ |
| | | E=9.0-200.0 MeV; analyzed total cross sections, $\sigma(E, \theta)$, single-particle |
| | | levels, spectroscopic factors, occupation probabilities, mass dependence |
| | | on cross section. Dispersal optical model (DOM) analysis. JOUR |
| | | PRVCA 83 064605 |
| $^{118}\mathrm{Te}$ | 2011FI06 | NUCLEAR REACTIONS ¹¹⁵ Sn(α , γ) ¹¹⁹ Te, ¹¹⁵ Sn(α , n) ¹¹⁸ Te, ¹¹⁶ Sn(α , |
| | | n) ¹¹⁹ Te, E(cm)=9.3-14.8 MeV; 48 Ti(α , n) ⁵¹ Cr, E not given; measured |
| | | $E\gamma$, $I\gamma$, cross sections. Comparison with previous data and predictions |
| | | of statistical model calculations. JOUR PRVCA 83 064609 |

A = 119

¹¹⁹Te **2011FI06** NUCLEAR REACTIONS ¹¹⁵Sn $(\alpha, \gamma)^{119}$ Te, ¹¹⁵Sn $(\alpha, n)^{118}$ Te, ¹¹⁶Sn $(\alpha, n)^{119}$ Te, ¹¹⁶Sn

A=120

¹²⁰Sn **2010FUZR** NUCLEAR REACTIONS ^{112,114,116,118,120,122,124}Sn(α , α '), E=400 MeV; measured reaction products; deduced GM resonance strength distributions, GM resonance parameters, asymmetry term of nuclear compressibility. CONF Kobe(Tours Nuc.Phys.and Astroph.VII) Proc.P274,Fujiwara

A=120 (continued)

2011MU10 NUCLEAR REACTIONS ^{40,48}Ca(n, n), E=11.9, 16.9 MeV; measured E(n), I(n), σ , $\sigma(E, \theta)$, time-of-flight spectra. ⁴⁰Ca(n, n), E=9.9-85.0; ⁴⁸Ca(n, n), E=7.97-16.9 MeV; ⁵⁴Ca(n, n), E=5.5-26.0 MeV; ^{58,60}Ni(n, n), E=4.5-24.0 MeV; ${}^{92}Mo(n, n)$, E=7.0-30.4 MeV; ${}^{116,118}Sn(n, n)$, $E=9.95-24.0 \text{ MeV}; {}^{120}Sn(n, n), E=9.94-16.91 \text{ MeV}; {}^{124}Sn(n, n),$ E=11.0-24.0 MeV; ²⁰⁸Pb(n, n), E=4.0-185.0 MeV; ⁵⁰Ti(p, p), $E=6.0-65.0 \text{ MeV}; {}^{52}Cr(p, p), E=10.77-39.9 \text{ MeV}; {}^{54}Fe, {}^{64}Ni(p, p),$ $E=9.69-65.0 \text{ MeV}; {}^{58}\text{Ni}(p, p), E=7.0-192.0 \text{ MeV}; {}^{60}\text{Ni}(p, p),$ $E=7.0-178.0 \text{ MeV}; {}^{62}\text{Ni}(p, p), E=8.02-156.0 \text{ MeV}; {}^{90}\text{Zr}(p, p),$ $E=5.57-185.0 \text{ MeV}; {}^{92}\text{Mo}(p, p), E=12.5-49.45 \text{ MeV}; {}^{114}\text{Sn}(p, p),$ $E=30.4 \text{ MeV}; {}^{116}Sn(p, p), E=16.0-61.4 \text{ MeV}; {}^{118,122,124}Sn(p, p),$ $E=16.0-49.35 \text{ MeV}; {}^{120}Sn(p, p), E=9.8-156.0 \text{ MeV}; {}^{208}Pb(p, p),$ E=9.0-200.0 MeV; analyzed total cross sections, $\sigma(E, \theta)$, single-particle levels, spectroscopic factors, occupation probabilities, mass dependence on cross section. Dispersal optical model (DOM) analysis. JOUR PRVCA 83 064605

A = 121

| $^{121}\mathrm{Sb}$ | 2010WAZX | NUCLEAR REACTIONS Yb, Lu, W, $Os(^{136}Xe, X)$, $E\approx 6.0-6.2 \text{ MeV} / $ |
|---------------------|----------|---|
| | | nucleon; measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin using GAMMASPHERE. ¹²⁰ Sn(⁷ Li, |
| | | $2n\alpha$), E=58 MeV; ¹²² Sn(⁷ Li, 2n α), E=54 MeV; measured E γ , I $\gamma(\theta)$, |
| | | $\gamma\gamma$ -coin using CAESAR and LEPS. ^{121,123} Sb deduced energy, J, π , |
| | | isomeric transition $T_{1/2}$. CONF Tsukuba(Nuclear Physics Trends) |
| | | Proc.P84,Watanabe |
| ¹²¹ I | 2011AL17 | NUCLEAR REACTIONS Te(p, xn) ¹²¹ I / 123 I / 124 I / 126 I / 130 I, |
| | | E=18 MeV; measured reaction products, $E\gamma$, $I\gamma$; deduced yields, |
| | | activities, method feasibility, JOUR JLCRD 54 S250 |

A = 122

¹²²Sn 2010FUZR NUCLEAR REACTIONS ^{112,114,116,118,120,122,124}Sn(α , α '), E=400 MeV; measured reaction products; deduced GM resonance strength distributions, GM resonance parameters, asymmetry term of nuclear compressibility. CONF Kobe(Tours Nuc.Phys.and Astroph.VII) Proc.P274,Fujiwara

$A{=}122$ (continued)

| 2011MU10 | NUCLEAR REACTIONS ^{40,48} Ca(n, n), E=11.9, 16.9 MeV; measured |
|-----------|---|
| | $E(n)$, $I(n)$, σ , $\sigma(E, \theta)$, time-of-flight spectra. ⁴⁰ Ca(n, n), E=9.9-85.0; |
| | 48 Ca(n, n), E=7.97-16.9 MeV; 54 Ca(n, n), E=5.5-26.0 MeV; 58,60 Ni(n, |
| | n), E=4.5-24.0 MeV: 92 Mo(n, n), E=7.0-30.4 MeV: 116,118 Sn(n, n), |
| | E=9.95-24.0 MeV; ¹²⁰ Sn(n, n), $E=9.94-16.91 MeV$; ¹²⁴ Sn(n, n), |
| | E=11.0-24.0 MeV; ²⁰⁸ Pb(n, n), $E=4.0-185.0 MeV$; ⁵⁰ Ti(p, p), |
| | $E = 6.0-65.0 \text{ MeV}$; ${}^{52}Cr(p, p)$, $E = 10.77-39.9 \text{ MeV}$; ${}^{54}Fe$, ${}^{64}Ni(p, p)$. |
| | $E = 9.69.65.0 \text{ MeV}; {}^{58}\text{Ni}(p, p), E = 7.0.192.0 \text{ MeV}; {}^{60}\text{Ni}(p, p),$ |
| | $E = 7.0-178.0 \text{ MeV} \cdot {}^{62}\text{Ni}(p, p), E = 8.02-156.0 \text{ MeV} \cdot {}^{90}\text{Zr}(p, p),$ |
| | $E = 5.57-185.0 \text{ MeV} \cdot {}^{92}\text{Mo(p, p)}, E = 12.5-49.45 \text{ MeV} \cdot {}^{114}\text{Sn(p, p)}, E = 12.5-49.45 \text{ MeV} \cdot {}^{114}\text{Sn(p, p)}$ |
| | $E = 30.4 \text{ MeV} \cdot \frac{116}{2} \text{Sn}(p, p), E = 16.0-61.4 \text{ MeV} \cdot \frac{118,122,124}{2} \text{Sn}(p, p), E = 16.0-61.4 \text{ MeV} \cdot \frac{118,122,124}{2} \text{Sn}(p, p)$ |
| | E=30.1 MeV, $Si(p, p), E=10.0 OI.1 MeV$, $Si(p, p), E=16.0 OI.1 MeV$, $Si(p, p), E=0.0 OI.1 MeV$, $Si(p, p)$ |
| | $E=0.0.2000 \text{ MeV}$; analyzed total cross sections $\sigma(E, \theta)$ single-particle |
| | levels spectroscopic factors occupation probabilities mass dependence |
| | on cross section Dispersal optical model (DOM) analysis IOUR |
| | PRVCA 83 064605 |
| 2011WA15 | NUCLEAR MOMENTS ^{112,114,116,122,124} Sn measured a factors of the |
| ZOIIWAID | first $2 \pm 4 \pm$ and $3 \pm$ states by transient field technique in Coulomb |
| | avaitation in inverse kinematics. Comparisons with shell model and |
| | other theoretical calculations IOUR PRVCA 84 014210 |
| 201111115 | NILCI EAD DEACTIONS $12C(112c_n) \cdot (114c_n) \cdot (114c_n)$ |
| 2011WA15 | $116\text{Sp}'$ $E=4 \text{ MeV} / \text{pueloon} \cdot 12C(122\text{Sp} \cdot 122\text{Sp}') (124\text{Sp} \cdot 124\text{Sp}') E=3.8$ |
| | $M_{0}V$ / nucleon, maggined Fe. In $(12C)$ as $(12C)$ as $(12C)$ as $(12C)$ |
| | 112.114.116.122.124 Sn deduced a feators configurations |
| | Comparison with DODDA ODDA and shall model coloulations. |
| | Comparison with RQRPA, QRPA, and shell-model calculations. 12 Comparison = 12 |
| | U($$ Sn, A) $$ Xe / $$ Ye / $$ Ye / $$ Ye = 3.8 MeV / nucleon; measured |
| | $E\gamma$, $I\gamma$. JOUR PRVUA 84 014319 |

A=123

| $^{123}\mathrm{Sb}$ | 2010WAZX | NUCLEAR REACTIONS Yb, Lu, W, Os(136 Xe, X), E \approx 6.0-6.2 MeV / |
|---------------------|----------|---|
| | | nucleon; measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin using GAMMASPHERE. ¹²⁰ Sn(⁷ Li, |
| | | $2n\alpha$), E=58 MeV; ¹²² Sn(⁷ Li, 2n α), E=54 MeV; measured E γ , I $\gamma(\theta)$, |
| | | $\gamma\gamma$ -coin using CAESAR and LEPS. ^{121,123} Sb deduced energy, J, π , |
| | | isomeric transition $T_{1/2}$. CONF Tsukuba(Nuclear Physics Trends) |
| | | Proc.P84,Watanabe |
| ^{123}I | 2011AL17 | NUCLEAR REACTIONS Te(p, xn) ¹²¹ I / 123 I / 124 I / 126 I / 130 I, |
| | | E=18 MeV; measured reaction products, $E\gamma$, $I\gamma$; deduced yields, |
| | | activities, method feasibility. JOUR JLCRD 54 S250 |

A = 124

¹²⁴Sn **2010FUZR** NUCLEAR REACTIONS ^{112,114,116,118,120,122,124}Sn(α , α '), E=400 MeV; measured reaction products; deduced GM resonance strength distributions, GM resonance parameters, asymmetry term of nuclear compressibility. CONF Kobe(Tours Nuc.Phys.and Astroph.VII) Proc.P274,Fujiwara

A=124 (continued)

| | 2011MU10 | NUCLEAR REACTIONS ^{40,48} Ca(n, n), E=11.9, 16.9 MeV; measured |
|-------------|----------|---|
| | | $E(n)$, $I(n)$, σ , $\sigma(E, \theta)$, time-of-flight spectra. ⁴⁰ Ca(n, n), E=9.9-85.0; |
| | | 48 Ca(n, n), E=7.97-16.9 MeV; 54 Ca(n, n), E=5.5-26.0 MeV; 58,60 Ni(n, |
| | | n), E=4.5-24.0 MeV; 92 Mo(n, n), E=7.0-30.4 MeV; 116,118 Sn(n, n), |
| | | $E=9.95-24.0 \text{ MeV}; {}^{120}Sn(n, n), E=9.94-16.91 \text{ MeV}; {}^{124}Sn(n, n),$ |
| | | $E=11.0-24.0 \text{ MeV}; {}^{208}Pb(n, n), E=4.0-185.0 \text{ MeV}; {}^{50}Ti(p, p),$ |
| | | $E=6.0-65.0 \text{ MeV}; {}^{52}Cr(p, p), E=10.77-39.9 \text{ MeV}; {}^{54}Fe, {}^{64}Ni(p, p),$ |
| | | $E=9.69-65.0 \text{ MeV}; {}^{58}\text{Ni}(p, p), E=7.0-192.0 \text{ MeV}; {}^{60}\text{Ni}(p, p),$ |
| | | $E=7.0-178.0 \text{ MeV}; {}^{62}\text{Ni}(p, p), E=8.02-156.0 \text{ MeV}; {}^{90}\text{Zr}(p, p),$ |
| | | $E=5.57-185.0 \text{ MeV}; {}^{92}Mo(p, p), E=12.5-49.45 \text{ MeV}; {}^{114}Sn(p, p),$ |
| | | $E=30.4 \text{ MeV}; {}^{116}Sn(p, p), E=16.0-61.4 \text{ MeV}; {}^{118,122,124}Sn(p, p),$ |
| | | $E=16.0-49.35 \text{ MeV}; {}^{120}Sn(p, p), E=9.8-156.0 \text{ MeV}; {}^{208}Pb(p, p),$ |
| | | E=9.0-200.0 MeV; analyzed total cross sections, $\sigma(E, \theta)$, single-particle |
| | | levels, spectroscopic factors, occupation probabilities, mass dependence |
| | | on cross section. Dispersal optical model (DOM) analysis. JOUR |
| | | PRVCA 83 064605 |
| | 2011WA15 | NUCLEAR MOMENTS ^{112,114,116,122,124} Sn; measured g factors of the |
| | | first 2+, 4+ and 3- states by transient field technique in Coulomb |
| | | excitation in inverse kinematics. Comparisons with shell-model and |
| | | other theoretical calculations. JOUR PRVCA 84 014319 |
| | 2011WA15 | NUCLEAR REACTIONS ${}^{12}C({}^{112}Sn, {}^{112}Sn')$, $({}^{114}Sn, {}^{114}Sn')$, $({}^{116}Sn, {}^{116}Sn, {}^{116}Sn')$ |
| | | ¹¹⁶ Sn'), E=4 MeV / nucleon; ${}^{12}C({}^{122}Sn, {}^{122}Sn'), ({}^{124}Sn, {}^{124}Sn'), E=3.8$ |
| | | MeV / nucleon; measured $E\gamma$, $I\gamma$, $(^{12}C)\gamma$ -coin, $(^{12}C)\gamma\gamma(\theta)$, precession |
| | | angles. ^{112,114,116,122,124} Sn; deduced g-factors, configurations. |
| | | Comparison with RQRPA, QRPA, and shell-model calculations. |
| | | ${}^{12}C({}^{124}Sn, X){}^{130}Xe / {}^{126}Te / {}^{128}Te, E=3.8 MeV / nucleon; measured$ |
| | | $E\gamma$, $I\gamma$. JOUR PRVCA 84 014319 |
| 124 I | 2011AL17 | NUCLEAR REACTIONS $Te(p, xn)^{121}I / {}^{123}I / {}^{124}I / {}^{126}I / {}^{130}I$, |
| | | E=18 MeV; measured reaction products, $E\gamma$, $I\gamma$; deduced yields, |
| | | activities, method feasibility. JOUR JLCRD 54 S250 |
| 124 Xe | 2011BR13 | RADIOACTIVITY ^{124,126} Cs(EC); measured $E\gamma$, $I\gamma$, X-rays, $E\beta$, $I\beta$; |
| | | deduced possibility of electron capture branching ratio measurement of |
| 101 | | ¹⁰⁰ Tc. Penning trap. JOUR HYIND 199 191 |
| ^{124}Cs | 2011BR13 | RADIOACTIVITY ^{124,126} Cs(EC); measured $E\gamma$, $I\gamma$, X-rays, $E\beta$, $I\beta$; |
| | | deduced possibility of electron capture branching ratio measurement of |
| | | ¹⁰⁰ Tc. Penning trap. JOUR HYIND 199 191 |

A = 125

No references found

A = 126

| $^{126}\mathrm{Te}$ | 2011WA15 | NUCLEAR REACTIONS ${}^{12}C({}^{112}Sn, {}^{112}Sn'), ({}^{114}Sn, {}^{114}Sn'), ({}^{116}Sn, {}^{116}Sn, {}^{116$ |
|---------------------|----------|--|
| | | ¹¹⁶ Sn'), $E=4$ MeV / nucleon; ¹² C(¹²² Sn, ¹²² Sn'), (¹²⁴ Sn, ¹²⁴ Sn'), $E=3.8$ |
| | | MeV / nucleon; measured $E\gamma$, $I\gamma$, $(^{12}C)\gamma$ -coin, $(^{12}C)\gamma\gamma(\theta)$, precession |
| | | angles. ^{112,114,116,122,124} Sn; deduced g-factors, configurations. |
| | | Comparison with RQRPA, QRPA, and shell-model calculations. |
| | | $^{12}C(^{124}Sn, X)^{130}Xe / ^{126}Te / ^{128}Te, E=3.8 MeV / nucleon; measured$ |
| | | $E\gamma$, $I\gamma$. JOUR PRVCA 84 014319 |
| ^{126}I | 2011AL17 | NUCLEAR REACTIONS Te(p, xn) ¹²¹ I / 123 I / 124 I / 126 I / 130 I, |
| | | E=18 MeV; measured reaction products, $E\gamma$, $I\gamma$; deduced yields, |
| | | activities, method feasibility. JOUR JLCRD 54 S250 |
| 126 Xe | 2011BR13 | RADIOACTIVITY ^{124,126} Cs(EC); measured $E\gamma$, $I\gamma$, X-rays, $E\beta$, $I\beta$; |
| | | deduced possibility of electron capture branching ratio measurement of |
| | | ¹⁰⁰ Tc. Penning trap. JOUR HYIND 199 191 |
| ^{126}Cs | 2011BR13 | RADIOACTIVITY ^{124,126} Cs(EC); measured $E\gamma$, $I\gamma$, X-rays, $E\beta$, $I\beta$; |
| | | deduced possibility of electron capture branching ratio measurement of |
| | | ¹⁰⁰ Tc. Penning trap. JOUR HYIND 199 191 |
| | 2011GR12 | NUCLEAR REACTIONS 120 Sn $(^{10}$ B, X $)^{126}$ Cs, E=55 MeV; measured |
| | | reaction products, $E\gamma$, $I\gamma$; deduced lifetimes of excited states, $B(M1)$, |
| | | $\mathrm{T}_{1/2}.$ Doppler Shift Attenuation method (DSM). JOUR PYLBB 703 46 |
| | | |

A=127

No references found

A=128

| $^{128}\mathrm{Te}$ | 2011WA15 | NUCLEAR REACTIONS ${}^{12}C({}^{112}Sn, {}^{112}Sn'), ({}^{114}Sn, {}^{114}Sn'), ({}^{116}Sn, {}^{116}Sn, {}^{116$ |
|---------------------|----------|--|
| | | 116 Sn'), E=4 MeV / nucleon; 12 C(122 Sn, 122 Sn'), (124 Sn, 124 Sn'), E=3.8 |
| | | MeV / nucleon; measured E γ , I γ , (¹² C) γ -coin, (¹² C) $\gamma\gamma(\theta)$, precession |
| | | angles. ^{112,114,116,122,124} Sn; deduced g-factors, configurations. |
| | | Comparison with RQRPA, QRPA, and shell-model calculations. |
| | | $^{12}C(^{124}Sn, X)^{130}Xe / ^{126}Te / ^{128}Te, E=3.8 MeV / nucleon; measured$ |
| | | $E\gamma$, $I\gamma$. JOUR PRVCA 84 014319 |

A = 129

No references found

A = 130

¹³⁰Te 2011AR09 RADIOACTIVITY ¹³⁰Te($2\beta^{-}$); measured decay products, E β , I β ; deduced T_{1/2}, nuclear matrix elements. JOUR PRLTA 107 062504 2011BU07 RADIOACTIVITY ¹³⁰Te($2\beta^{-}$); measured E γ , I γ , E β , I β ; deduced neutrinoless mode T_{1/2} limit. JOUR NPBSE 217 41

A=130 (continued)

| | 2011JA07 | RADIOACTIVITY ¹¹⁶ Cd, ¹³⁰ Te($2\beta^{-}$); measured E γ , I γ , E β , I β ; |
|---------------------|----------|--|
| | | deduced transitions to excited states ${\rm T}_{1/2}$ limits. JOUR NPBSE 217 47 |
| | 2011RA24 | ATOMIC MASSES ¹¹⁶ Cd, ¹³⁰ Te; measured cyclotron frequencies; |
| | | deduced double beta decay Q-values, mass differences. JOUR PYLBB |
| | | |
| | 2011RA24 | RADIOACTIVITY ¹¹⁰ Cd, ¹³⁰ Te($2\beta^-$); calculated nuclear matrix elements IOUR PYLBB 703 412 |
| ^{130}I | 2011AL17 | NUCLEAR REACTIONS Te(p, xn) ¹²¹ I / 123 I / 124 I / 126 I / 130 I, |
| | | E=18 MeV; measured reaction products, $E\gamma$, $I\gamma$; deduced yields, |
| | | activities, method feasibility. JOUR JLCRD 54 S250 |
| $^{130}\mathrm{Xe}$ | 2011AR09 | RADIOACTIVITY ¹³⁰ Te($2\beta^{-}$); measured decay products, E β , I β ; |
| | | deduced $T_{1/2}$, nuclear matrix elements. JOUR PRLTA 107 062504 |
| | 2011BU07 | RADIOACTIVITY ¹³⁰ Te($2\beta^{-}$); measured $E\gamma$, $I\gamma$, $E\beta$, $I\beta$; deduced |
| | | neutrinoless mode $T_{1/2}$ limit. JOUR NPBSE 217 41 |
| | 2011JA07 | RADIOACTIVITY ¹¹⁶ Cd, ¹³⁰ Te($2\beta^{-}$); measured E γ , I γ , E β , I β ; |
| | | deduced transitions to excited states $T_{1/2}$ limits. JOUR NPBSE 217 47 |
| | 2011RA24 | RADIOACTIVITY ¹¹⁶ Cd, ¹³⁰ Te $(2\beta^{-})$; calculated nuclear matrix |
| | | elements. JOUR PYLBB 703 412 |
| | 2011WA15 | NUCLEAR REACTIONS ${}^{12}C({}^{112}Sn, {}^{112}Sn'), ({}^{114}Sn, {}^{114}Sn'), ({}^{116}Sn, {}^{116}Sn, {}^{116}Sn')$ |
| | | $M_{\rm eV}$ / mucleon; C(Sn, Sn), (Sn, Sn), E=3.8 |
| | | $(-C)\gamma\gamma(\theta)$, precession angles. 112,114,116,122,124 Sn: deduced g-factors, configurations. |
| | | Comparison with RORPA, ORPA, and shell-model calculations. |
| | | $^{12}C(^{124}Sn, X)^{130}Xe / ^{126}Te / ^{128}Te, E=3.8 \text{ MeV} / \text{nucleon; measured}$ |
| | | $E\gamma$, $I\gamma$. JOUR PRVCA 84 014319 |
| ^{130}Cs | 2010ZHZR | NUCLEAR REACTIONS ¹⁰⁰ Mo(¹¹ B, 5n), E=60 MeV; measured $E\gamma$, |
| | | I γ , $\gamma\gamma$ -coin. ¹⁰⁶ Ag deduced levels, J, π , positive parity bands, |
| | | rotational band, yrast, yrare, $B(M1) / B(E2)$. ¹²⁴ Sn(¹¹ B, 5n), E=65 |
| | | MeV; measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin. ¹³⁰ Cs deduced levels, J, π , $T_{1/2}$, |
| | | yrast, B(E2), B(M1). 152 Sm(28 Si, 4n), E=140 MeV; measured E γ , I γ , |
| | | $\gamma\gamma$ -coin. ¹⁷⁶ Os deduced levels, J, π , T _{1/2} , quadrupole moment, |
| | | deformation, $B(E2)$; calculated quadrupole moment using $U(5)$, $X(5)$, |
| | | SU(3). CONF Tsukuba(Nuclear Physics Trends) Proc.P363,Zhu |

A = 131

| ^{131}I | 2011AD18 | NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), |
|-----------|----------|---|
| | | E=1.E-10-1.E3 MeV; measured reaction products, $E\gamma$, $I\gamma$. ^{85m} Kr, ⁹³ Y, |
| | | 97 Zr, 99 Mo, 103 Ru, 105 Rh, 132 Te, 131,133 I, 133,135 Xe, 140 Ba, 141,143 Ce, |
| | | 231 Th, 233 Pa, 237 U, 239 Np deduced reaction rates, T _{1/2} . 232 Th, U(n, |
| | | 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 |
| | | keV, 14, 25, 50, 100, 200 MeV; measured fission products, deduced |
| | | mass distribution; calculated mass distribution at two lowest energies |
| | | using TALYS. Neutron flux calculated using MCNPX with LA150 cross |
| | | section library. JOUR ZAANE 47 85 |

A = 132

| 132 Sn | 2011PE20 | NUCLEAR REACTIONS $Pb(^{238}U, X)^{132}Sn$, E=950 MeV / nucleon; |
|---------------------|----------|---|
| | | $Be(^{132}Sn, X)$, E not given; measured reaction products; deduced σ . |
| | | Comparison with code COFRA results. JOUR PYLBB 703 552 |
| $^{132}\mathrm{Te}$ | 2011AD18 | NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), |
| | | E=1.E-10-1.E3 MeV; measured reaction products, $E\gamma$, $I\gamma$. ^{85m} Kr, ⁹³ Y, |
| | | 97 Zr, 99 Mo, 103 Ru, 105 Rh, 132 Te, 131,133 I, 133,135 Xe, 140 Ba, 141,143 Ce, |
| | | 231 Th, 233 Pa, 237 U, 239 Np deduced reaction rates, T $_{1/2}$. 232 Th, U(n, |
| | | 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 |
| | | keV, 14, 25, 50, 100, 200 MeV; measured fission products, deduced |
| | | mass distribution; calculated mass distribution at two lowest energies |
| | | using TALYS. Neutron flux calculated using MCNPX with LA150 cross |
| | | section library. JOUR ZAANE 47 85 |
| | | |

A = 133

| ¹³³ I | 2011AD18 | NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), E=1.E-10-1.E3 MeV; measured reaction products, E γ , I γ . ^{85m} Kr, ⁹³ Y, ⁹⁷ Zr, ⁹⁹ Mo, ¹⁰³ Ru, ¹⁰⁵ Rh, ¹³² Te, ^{131,133} I, ^{133,135} Xe, ¹⁴⁰ Ba, ^{141,143} Ce, ²³¹ Th, ²³³ Pa, ²³⁷ U, ²³⁹ Np deduced reaction rates, T _{1/2} . ²³² Th, U(n, 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 keV, 14, 25, 50, 100, 200 MeV; measured fission products, deduced mass distribution; calculated mass distribution at two lowest energies using TALYS. Neutron flux calculated using MCNPX with LA150 cross |
|-------------------|----------|---|
| ¹³³ Xe | 2011AD18 | section horary. JOUR ZAANE 47.85 NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), E=1.E-10-1.E3 MeV; measured reaction products, $E\gamma$, $I\gamma$. ^{85m} Kr, ⁹³ Y, ⁹⁷ Zr, ⁹⁹ Mo, ¹⁰³ Ru, ¹⁰⁵ Rh, ¹³² Te, ^{131,133} I, ^{133,135} Xe, ¹⁴⁰ Ba, ^{141,143} Ce, ²³¹ Th, ²³³ Pa, ²³⁷ U, ²³⁹ Np deduced reaction rates, T _{1/2} . ²³² Th, U(n, 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 keV, 14, 25, 50, 100, 200 MeV; measured fission products, deduced mass distribution; calculated mass distribution at two lowest energies using TALYS. Neutron flux calculated using MCNPX with LA150 cross section library. JOUR ZAANE 47 85 |

A = 134

No references found

A = 135

¹³⁵Xe 2011AD18 NUCLEAR REACTIONS ²³²Th, U(n, f), (n, γ), (n, 2n), E=1.E-10-1.E3 MeV; measured reaction products, E γ , I γ . ^{85m}Kr, ⁹³Y, ⁹⁷Zr, ⁹⁹Mo, ¹⁰³Ru, ¹⁰⁵Rh, ¹³²Te, ^{131,133}I, ^{133,135}Xe, ¹⁴⁰Ba, ^{141,143}Ce, ²³¹Th, ²³³Pa, ²³⁷U, ²³⁹Np deduced reaction rates, T_{1/2}. ²³²Th, U(n, 2n), E=10-2000 MeV; calculated σ using TALYS. ²³²Th(n, f), E=400 keV, 14, 25, 50, 100, 200 MeV; measured fission products, deduced mass distribution; calculated mass distribution at two lowest energies using TALYS. Neutron flux calculated using MCNPX with LA150 cross section library. JOUR ZAANE 47 85

A=136

¹³⁶Cs **2011WI09** NUCLEAR REACTIONS U(p, X)^{136m}Cs, E=1.4 GeV; measured E γ , I γ , E(ce), I(ce), γ (ce)-coin, isomer half-life, conversion coefficients. ¹³⁶Cs; deduced levels, J, π , multipolarity, level scheme of isomer decay, B(E3), B(M4). Comparison with shell-model calculations. JOUR PRVCA 84 014329

A = 137

No references found

A=138

No references found

| ¹³⁹ La | 2010MAZD | NUCLEAR REACTIONS ¹³⁹ La(γ , γ '), E=0-11.5 MeV, |
|---------------------|----------|---|
| | | bremsstrahlung; measured $E\gamma$, $I\gamma$; deduced σ , dipole-strength |
| | | distribution. Compared with (γ, n) data from literature. CONF |
| | | Kobe(Tours Nuc.Phys.and Astroph.VII) Proc.P228,Makinaga |
| $^{139}\mathrm{Ce}$ | 2011ZH26 | NUCLEAR REACTIONS ^{85,87} Rb, ⁸⁹ Y, ^{140,142} Ce, ¹⁶⁹ Tm, ¹⁷⁵ Lu, ¹⁸¹ Ta, |
| | | ¹⁸⁵ Re, ²³⁸ U(n, 2n), E=14 MeV; measured reaction products, $E\gamma$, $I\gamma$; |
| | | deduced σ . Comparison with ENDF / B-VII.0 evaluated nuclear data |
| | | library. JOUR NSENA 169 188 |

KEYNUMBERS AND KEYWORDS

A = 140

| ^{140}Ba | 2011AD18 | NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), |
|---------------------|----------|---|
| | | E=1.E-10-1.E3 MeV; measured reaction products, $E\gamma$, $I\gamma$. ^{85m} Kr, ⁹³ Y, |
| | | ⁹⁷ Zr, ⁹⁹ Mo, ¹⁰³ Ru, ¹⁰⁵ Rh, ¹³² Te, ^{131,133} I, ^{133,135} Xe, ¹⁴⁰ Ba, ^{141,143} Ce, |
| | | 231 Th, 233 Pa, 237 U, 239 Np deduced reaction rates, T _{1/2} . 232 Th, U(n, |
| | | 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 |
| | | keV, 14, 25, 50, 100, 200 MeV; measured fission products, deduced |
| | | mass distribution; calculated mass distribution at two lowest energies |
| | | using TALYS. Neutron flux calculated using MCNPX with LA150 cross |
| | | section library. JOUR ZAANE 47 85 |
| $^{140}\mathrm{Ce}$ | 2010NIZR | RADIOACTIVITY ¹⁴⁰ Pr(EC)[from ¹⁴⁰ Ce(p, n)]; measured ¹⁴⁰ Ce |
| | | X-rays E(X), I(X, t). CONF Tsukuba(Nuclear Physics Trends) |
| | | Proc.P219,Nishimura |
| $^{140}\mathrm{Pr}$ | 2010NIZR | RADIOACTIVITY ¹⁴⁰ Pr(EC)[from ¹⁴⁰ Ce(p, n)]; measured ¹⁴⁰ Ce |
| | | X-rays E(X), I(X, t). CONF Tsukuba(Nuclear Physics Trends) |
| | | Proc.P219,Nishimura |

A = 141

| $^{141}\mathrm{Ce}$ | 2011AD18 | NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), |
|---------------------|----------|---|
| | | E=1.E-10-1.E3 MeV; measured reaction products, $E\gamma$, $I\gamma$. ^{85m} Kr, ⁹³ Y, |
| | | 97 Zr, 99 Mo, 103 Ru, 105 Rh, 132 Te, 131,133 I, 133,135 Xe, 140 Ba, 141,143 Ce, |
| | | 231 Th, 233 Pa, 237 U, 239 Np deduced reaction rates, T _{1/2} . 232 Th, U(n, |
| | | 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 |
| | | $\mathrm{keV},14,25,50,100,200$ MeV; measured fission products, deduced |
| | | mass distribution; calculated mass distribution at two lowest energies |
| | | using TALYS. Neutron flux calculated using MCNPX with LA150 cross |
| | | section library. JOUR ZAANE 47 85 |
| | 2011ZH26 | NUCLEAR REACTIONS ^{85,87} Rb, ⁸⁹ Y, ^{140,142} Ce, ¹⁶⁹ Tm, ¹⁷⁵ Lu, ¹⁸¹ Ta, |
| | | ¹⁸⁵ Re, ²³⁸ U(n, 2n), E=14 MeV; measured reaction products, $E\gamma$, $I\gamma$; |
| | | deduced σ . Comparison with ENDF / B-VII.0 evaluated nuclear data |
| | | library. JOUR NSENA 169 188 |
| $^{141}\mathrm{Pm}$ | 2011GU12 | NUCLEAR REACTIONS ¹²⁶ Te(¹⁹ F, 4n), E=90 MeV; measured $E\gamma$, |
| | | I γ , $\gamma\gamma$ -coin, DCO. ¹⁴¹ Pm; deduced levels, J, π , high-spin oblate bands, |
| | | moments of inertia, multipolarity. Comparison with MRPM (triaxial |
| | | n-particle-n-hole particle rotor model) calculations; and with |
| | | systematics of moments of inertia plots for ¹³² Ba, ^{131,136} La and |
| | | ^{134,136} Ce. JOUR PRVCA 83 064303 |

A = 142

| $^{142}\mathrm{Xe}$ | 2010SMZX | RADIOACTIVITY ¹⁴² Xe(β^{-}); measured I β (t); deduced T _{1/2} . No |
|---------------------|----------|---|
| | | numbers given, analysis in progress. CONF Heidelberg (NIC XI) |
| | | Proc,P283,Smith |
| ^{142}Cs | 2010SMZX | RADIOACTIVITY ¹⁴² Xe(β^{-}); measured I β (t); deduced T _{1/2} . No |
| | | numbers given, analysis in progress. CONF Heidelberg (NIC XI) |
| | | Proc,P283,Smith |
| $^{143}\mathrm{Xe}$ | 2011RZ01 | RADIOACTIVITY ²⁴⁸ Cm(SF); measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin, $\gamma\gamma(\theta)$, using |
|---------------------|----------|---|
| | | EUROGAM-2 array. ¹⁴³ Xe; deduced levels, J, π , conversion |
| | | coefficients, multipolarity, bands, configurations. Comparison with |
| | | quasiparticle-rotor model calculations with a reflection-symmetric |
| | | potential. Systematics of bandheads of N=89 nuclei. JOUR PRVCA 83 |
| | | 067301 |
| $^{143}\mathrm{Ce}$ | 2011AD18 | NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), |
| | | E=1.E-10-1.E3 MeV; measured reaction products, $E\gamma$, $I\gamma$. ^{85m} Kr, ⁹³ Y, |
| | | 97 Zr, 99 Mo, 103 Ru, 105 Rh, 132 Te, 131,133 I, 133,135 Xe, 140 Ba, 141,143 Ce, |
| | | 231 Th, 233 Pa, 237 U, 239 Np deduced reaction rates, T _{1/2} . 232 Th, U(n, |
| | | 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 |
| | | keV, 14, 25, 50, 100, 200 MeV; measured fission products, deduced |
| | | mass distribution; calculated mass distribution at two lowest energies |
| | | using TALYS. Neutron flux calculated using MCNPX with LA150 cross |
| | | section library. JOUR ZAANE 47 85 |

A = 144

No references found

A = 145

No references found

A = 146

No references found

A = 147

No references found

A = 148

No references found

A = 149

¹⁴⁹Pm 2011IN04 RADIOACTIVITY ¹⁴⁹Sm(EC)[from ¹⁴⁹Eu electron capture]; measured conversion electrons, X-rays from excited ¹⁴⁹Sm using Eu compounds as targets; deduced energy differences, relative intensities. JOUR ZAANE 47 84

A=149 (continued)

¹⁴⁹Sm 2011IN04 RADIOACTIVITY ¹⁴⁹Sm(EC)[from ¹⁴⁹Eu electron capture]; measured conversion electrons, X-rays from excited ¹⁴⁹Sm using Eu compounds as targets; deduced energy differences, relative intensities. JOUR ZAANE 47 84

A = 150

| $^{150}\mathrm{Nd}$ | 2011GU14 | RADIOACTIVITY ¹⁵⁰ Nd($2\beta^{-}$); calculated matrix elements for $0\nu\beta\beta$ |
|---------------------|----------|--|
| | | and $2\nu\beta\beta$ decay modes using QRPA calculations. Comparison with |
| | | experimental data. JOUR PRVCA 83 064318 |
| $^{150}\mathrm{Pm}$ | 2011GU14 | NUCLEAR REACTIONS 150 Nd(3 He, t), E=140 MeV / nucleon; |
| | | 150 Sm(t, 3 He), E=115 MeV / nucleon; measured triton and 3 He |
| | | spectra, excitation energy spectra, differential cross sections, $\sigma(\theta)$ |
| | | 150 Pm; deduced B(GT) strengths; isovector spin-flip giant monopole |
| | | resonance (IVSGMR). Grand Raiden Spectrometer for $({}^{3}\text{He}, t)$ and |
| | | S-800 spectrometer for (t, ³ He). Comparison with Quasi-Particle |
| | | Random Phase Approximation (QRPA) calculations. Application to |
| | | double β decay of ¹⁵⁰ Nd. JOUR PRVCA 83 064318 |
| $^{150}\mathrm{Sm}$ | 2011GU14 | RADIOACTIVITY ¹⁵⁰ Nd($2\beta^{-}$); calculated matrix elements for $0\nu\beta\beta$ |
| | | and $2\nu\beta\beta$ decay modes using QRPA calculations. Comparison with |
| | | experimental data. JOUR PRVCA 83 064318 |

A=151

No references found

| $^{152}\mathrm{Sm}$ | 2010ZHZU | NUCLEAR REACTIONS $^{184}W(^{32}S, X)$, E(cm)=118-148 MeV; |
|---------------------|----------|--|
| | | measured reaction products; deduced σ , quasifission σ , anisotropy, |
| | | reaction mechanism; calculated σ , fusion probability, anisotropy. |
| | | 90,96 Zr(32 S, X), E(cm)=70-95 MeV; measured reaction products; |
| | | deduced σ ; calculated σ . ^{152,154} Sm, ¹⁸⁴ W, ¹⁹⁶ Pt, ²⁰⁸ Pb(¹⁶ O, ¹⁶ O), |
| | | $E(cm)=35-70$ MeV; measured reaction products; deduced $\sigma(\theta=175^0)$; |
| | | calculated $\sigma(\theta=175^{\circ})$ using CCFULL. CONF Tsukuba(Nuclear Physics |
| | | Trends) Proc.P50,Zhang |
| $^{152}\mathrm{Gd}$ | 2011KE03 | ATOMIC MASSES 153 Eu, 152,154,155,156,157,158,160 Gd, 175,176 Lu, |
| | | ^{176,177,178,179,180} Hf; measured masses using TOF-ICR technique and |
| | | TRIGA-TRAP Penning-trap mass spectrometer; deduced δV_{pn} values; |
| | | evaluated mass excesses. JOUR PRVCA 84 014311 |
| $^{152}\mathrm{Yb}$ | 2011DA12 | RADIOACTIVITY ¹⁶⁰ Re(p), (α)[from ¹⁰⁶ Cd(⁵⁸ Ni, X), E=290, 300 |
| | | MeV]; ¹⁵⁶ Ta(p), (β^+) [from ¹⁶⁰ Re α decay]; ¹⁵⁹ W(α)[from ¹⁶⁰ Re p |
| | | decay]; ¹⁵⁶ Hf(α)[from ¹⁵⁶ Ta β^+ decay]; measured E(p), I(p), E α , I α , |
| | | $E\gamma$, half-lives using GREAT spectrometer; deduced branching ratios for |
| | | proton, α and β decay modes, spectroscopic factors. ¹⁵⁶ Ta, ¹⁶⁰ Re; |
| | | deduced J, π for ground states. JOUR PRVCA 83 064320 |

¹⁵³Eu 2011KE03 ATOMIC MASSES ¹⁵³Eu, ^{152,154,155,156,157,158,160}Gd, ^{175,176}Lu, ^{176,177,178,179,180}Hf; measured masses using TOF-ICR technique and TRIGA-TRAP Penning-trap mass spectrometer; deduced δV_{pn} values; evaluated mass excesses. JOUR PRVCA 84 014311

A = 154

 $^{154}\mathrm{Sm}$ NUCLEAR REACTIONS $^{184}W(^{32}S, X)$, E(cm)=118-148 MeV; 2010ZHZU measured reaction products; deduced σ , quasifission σ , anisotropy, reaction mechanism; calculated σ , fusion probability, anisotropy. 90,96 Zr(32 S, X), E(cm)=70-95 MeV; measured reaction products; deduced σ ; calculated σ . ^{152,154}Sm, ¹⁸⁴W, ¹⁹⁶Pt, ²⁰⁸Pb(¹⁶O, ¹⁶O), E(cm)=35-70 MeV; measured reaction products; deduced $\sigma(\theta=175^0)$; calculated $\sigma(\theta=175^{\circ})$ using CCFULL. CONF Tsukuba(Nuclear Physics Trends) Proc.P50,Zhang ATOMIC MASSES ¹⁵³Eu, ^{152,154,155,156,157,158,160}Gd, ^{175,176}Lu, $^{154}\mathrm{Gd}$ 2011KE03 ^{176,177,178,179,180}Hf; measured masses using TOF-ICR technique and TRIGA-TRAP Penning-trap mass spectrometer; deduced δV_{pn} values; evaluated mass excesses. JOUR PRVCA 84 014311

A = 155

| $^{155}\mathrm{Gd}$ | 2011KE03 | ATOMIC MASSES 153 Eu, 152,154,155,156,157,158,160 Gd, 175,176 Lu, |
|---------------------|----------|--|
| | | ^{176,177,178,179,180} Hf; measured masses using TOF-ICR technique and |
| | | TRIGA-TRAP Penning-trap mass spectrometer; deduced δV_{pn} values; |
| | | evaluated mass excesses. JOUR PRVCA 84 014311 |
| $^{155}\mathrm{Hf}$ | 2011DA12 | RADIOACTIVITY ¹⁶⁰ Re(p), (α) [from ¹⁰⁶ Cd(⁵⁸ Ni, X), E=290, 300 |
| | | MeV]; ¹⁵⁶ Ta(p), (β^+) [from ¹⁶⁰ Re α decay]; ¹⁵⁹ W(α)[from ¹⁶⁰ Re p |
| | | decay]; ¹⁵⁶ Hf(α)[from ¹⁵⁶ Ta β^+ decay]; measured E(p), I(p), E α , I α , |
| | | $E\gamma$, half-lives using GREAT spectrometer; deduced branching ratios for |
| | | proton, α and β decay modes, spectroscopic factors. ¹⁵⁶ Ta, ¹⁶⁰ Re; |
| | | deduced J, π for ground states. JOUR PRVCA 83 064320 |

| $^{156}\mathrm{Gd}$ | 2011EL05 | ATOMIC MASSES ¹⁵⁶ Dy, ¹⁵⁶ Gd; measured cyclotron frequency ratio, |
|---------------------|----------|---|
| | | TOF; deduced Q-value for double electron capture. SHIPTRAP |
| | | Penning-trap mass spectrometer. Comparison with AME-2003. JOUR |
| | | PRVCA 84 012501 |
| | 2011EL05 | RADIOACTIVITY ¹⁵⁶ Dy(2EC); calculated electron wave functions, |
| | | double-electron-hole binding energy; deduced resonant enhancement |
| | | factor for the probability of neutrinoless double-electron capture. |
| | | Estimated partial half-life. Dirac-Fock method, Fermi model. JOUR |
| | | PRVCA 84 012501 |

A=156 (continued)

| | 2011KE03 | ATOMIC MASSES ¹⁵³ Eu, ^{152,154,155,156,157,158,160} Gd, ^{175,176} Lu, ^{176,177,178,179,180} Hf. measured messes using TOF ICP technicus and |
|-----------------|----------|--|
| | | TRIGA-TRAP Penning-trap mass spectrometer; deduced δV_{pn} values; evaluated mass excesses JOUR PRVCA 84 014311 |
| | 2011SU15 | NUCLEAR REACTIONS ¹⁵⁶ Gd(³² S, ³² S'), E=118 MeV; ¹⁵⁶ Gd(⁵⁸ Ni, ⁵⁸ Ni'), E=225 MeV; measured scattered particle spectra, $E\gamma$, $I\gamma$, $\gamma\gamma$ -, |
| | | (particle) γ -, (particle) $\gamma\gamma$ -coin, (particle) $\gamma(\theta)$. ¹⁵⁶ Gd; deduced levels, J, π ground-state γ β and octupole bands γ -ray yields and branching |
| | | ratios, E2, E1 and E3 matrix elements from GOSIA analysis of |
| 156 D | | ATTOMIC MACCERC 156D 156C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| Dy | 2011EL05 | ATOMIC MASSES ¹⁵⁰ Dy, ¹⁵⁰ Gd; measured cyclotron frequency ratio, |
| | | 10F; deduced Q-value for double electron capture. SHIP1RAP |
| | | Penning-trap mass spectrometer. Comparison with AME-2003. JOUR |
| | | PRVUA 84 012001 DADIOACTIVITTY 156D-(0EC), coloraleted electrony much for etime |
| | 2011EL05 | RADIOACTIVITY ²⁵⁰ Dy(2EC); calculated electron wave functions, |
| | | double-electron-noie binding energy; deduced resonant ennancement |
| | | Estimated nextical helf if Direct Each mathed Estimated LOUP |
| | | PRVCA 84 012501 |
| $^{156}{ m Hf}$ | 2011DA12 | RADIOACTIVITY 160 Re(p), (α)[from 106 Cd(58 Ni, X), E=290, 300 |
| | | MeV]; ¹⁵⁶ Ta(p), (β^+) [from ¹⁶⁰ Re α decay]; ¹⁵⁹ W(α)[from ¹⁶⁰ Re p |
| | | decay]; ¹⁵⁶ Hf(α)[from ¹⁵⁶ Ta β^+ decay]; measured E(p), I(p), E α , I α , |
| | | $E\gamma$, half-lives using GREAT spectrometer; deduced branching ratios for |
| | | proton, α and β decay modes, spectroscopic factors. ¹⁵⁶ Ta, ¹⁶⁰ Re; |
| | | deduced J, π for ground states. JOUR PRVCA 83 064320 |
| 156 Ta | 2011DA12 | RADIOACTIVITY 160 Re(p), (α)[from 106 Cd(58 Ni, X), E=290, 300 |
| | | MeV]; ¹⁵⁶ Ta(p), (β^+) [from ¹⁶⁰ Re α decay]; ¹⁵⁹ W(α)[from ¹⁶⁰ Re p |
| | | decay]; ¹⁵⁶ Hf(α)[from ¹⁵⁶ Ta β^+ decay]; measured E(p), I(p), E α , I α , |
| | | $E\gamma$, half-lives using GREAT spectrometer; deduced branching ratios for |
| | | proton, α and β decay modes, spectroscopic factors. ¹⁵⁶ Ta, ¹⁶⁰ Re; |
| | | deduced J, π for ground states. JOUR PRVCA 83 064320 |
| | | |

| $^{157}\mathrm{Gd}$ | 2011KE03 | ATOMIC MASSES ¹⁵³ Eu, ^{152,154,155,156,157,158,160} Gd, ^{175,176} Lu, |
|---------------------|----------|--|
| | | 170,177,170,179,180 Hf; measured masses using TOF-ICR technique and |
| | | TRIGA-TRAP Penning-trap mass spectrometer; deduced δV_{pn} values; |
| | | evaluated mass excesses. JOUR PRVCA 84 014311 |
| $^{157}\mathrm{Er}$ | 2011WA14 | NUCLEAR REACTIONS $^{114}Cd(^{48}Ca, X)^{157}Er / ^{158}Er, E=215 MeV;$ |
| | | measured reaction products, $E\gamma$, $I\gamma$, γ - γ -coin.; deduced transition |
| | | quadrupole moments for weakly populated collective bands, large |
| | | deformations, stable triaxial shapes. Comparison with |
| | | Nilsson-Strutinsky calculations. JOUR PYLBB 702 127 |
| | | |

A=158

| ¹⁵⁸ Gd | 2011CH31 | NUCLEAR REACTIONS ¹⁵⁷ Gd(n, γ), E=<300 eV; measured E γ , I γ using DANCE γ calorimeter. ¹⁵⁸ Gd; deduced E1, M1 and E1 photon strength distributions, resonances, multiplicity, spin distribution, multistep cascade (MSC) spectra. Statistical model calculations using DICEBOX code. Scissors mode. JOUR PRVCA 84 014306 |
|---------------------|----------|---|
| | 2011KE03 | ATOMIC MASSES ¹⁵³ Eu, ^{152,154,155,156,157,158,160} Gd, ^{175,176} Lu, ^{176,177,178,179,180} Hf; measured masses using TOF-ICR technique and TRIGA-TRAP Penning-trap mass spectrometer: deduced δV_{rec} values: |
| | | evaluated mass excesses. JOUR PRVCA 84 014311 |
| ¹⁵⁸ Tb | 2011PR06 | NUCLEAR REACTIONS $^{159}\text{Tb}(^6\text{Li}, X)^{158}\text{Tb} / ^{159}\text{Dy} / ^{159}\text{Tb} / ^{159}\text{Dy} / ^{160}\text{Tb} / ^{160}\text{Dy} / ^{161}\text{Ho} / ^{160}\text{Er} / ^{161}\text{Er} / ^{162}\text{Er} / ^{163}\text{Er} / , E=23-39$ MeV; $^{159}\text{Tb}(^7\text{Li}, X)^{161}\text{Er} / ^{162}\text{Er} / ^{163}\text{Er} / ^{164}\text{Er} / , E=28, 34, 37;$ measured E γ , I γ , on-line and off-line γ spectra, complete fusion cross sections, incomplete fusion (ICF) and / or transfer cross sections; deduced ratios of cross sections for different reaction channels. Comparison with previous data for $^{159}\text{Tb}+^6\text{Li}, ^{159}\text{Tb}+^7\text{Li}, ^{159}\text{Tb}+^{10}\text{B}, ^{159}\text{Tb}+^{11}\text{B}, ^{144}\text{Sm}+^6\text{Li}, ^{208}\text{Pb}+^6\text{Li}, ^{209}\text{Bi}+^6\text{Li}$ systems, and with Coupled-channel (CC) calculations using the computer code CCFULL. |
| ¹⁵⁸ Dy | 2011PR06 | JOUR PRVCA 83 064606 NUCLEAR REACTIONS ¹⁵⁹ Tb(⁶ Li, X) ¹⁵⁸ Tb / ¹⁵⁸ Dy / ¹⁵⁹ Tb / ¹⁵⁹ Dy / ¹⁶⁰ Tb / ¹⁶⁰ Dy / ¹⁶¹ Ho / ¹⁶⁰ Er / ¹⁶¹ Er / ¹⁶² Er / ¹⁶³ Er / , E=23-39 MeV; ¹⁵⁹ Tb(⁷ Li, X) ¹⁶¹ Er / ¹⁶² Er / ¹⁶³ Er / ¹⁶⁴ Er / , E=28, 34, 37; measured E γ , I γ , on-line and off-line γ spectra, complete fusion cross sections, incomplete fusion (ICF) and / or transfer cross sections; deduced ratios of cross sections for different reaction channels. |
| $^{158}\mathrm{Er}$ | 2011WA14 | Comparison with previous data for ¹⁵⁹ Tb+ ⁶ Li, ¹⁵⁹ Tb+ ⁷ Li, ¹⁵⁹ Tb+ ¹⁰ B, ¹⁵⁹ Tb+ ¹¹ B, ¹⁴⁴ Sm+ ⁶ Li, ²⁰⁸ Pb+ ⁶ Li, ²⁰⁹ Bi+ ⁶ Li systems, and with Coupled-channel (CC) calculations using the computer code CCFULL. JOUR PRVCA 83 064606 NUCLEAR REACTIONS ¹¹⁴ Cd(⁴⁸ Ca, X) ¹⁵⁷ Er / ¹⁵⁸ Er, E=215 MeV; measured reaction products, $E\gamma$, $I\gamma$, γ - γ -coin.; deduced transition quadrupole moments for weakly populated collective bands, large deformations, stable triaxial shapes. Comparison with Nilsson-Strutinsky calculations. JOUR PYLBB 702 127 |

A = 159

¹⁵⁹Gd **2011BU08** NUCLEAR REACTIONS ¹⁵⁸Gd, ¹⁷⁹Hf(n, γ), E=thermal; measured reaction products, $E\gamma$, $I\gamma$; deduced resonance energies. Comparison with available values, Am-Be neutron source. JOUR ANEND 38 2550

A=159 (continued)

| $^{159}\mathrm{Tb}$ | 2011PR06 | NUCLEAR REACTIONS $^{159}\mathrm{Tb}(^{6}\mathrm{Li},\mathrm{X})^{158}\mathrm{Tb}$ / $^{158}\mathrm{Dy}$ / $^{159}\mathrm{Tb}$ / $^{159}\mathrm{Dy}$ | | |
|---------------------|----------|--|--|--|
| | | $/ \frac{160}{10}$ Tb $/ \frac{160}{10}$ Dy $/ \frac{161}{10}$ Ho $/ \frac{160}{10}$ Er $/ \frac{161}{10}$ Er $/ \frac{163}{10}$ Er $/ $ | | |
| | | MeV; 159 Tb(7 Li, X) 161 Er / 162 Er / 163 Er / 164 Er / , E=28, 34, 37; | | |
| | | measured $\mathrm{E}\gamma$, $\mathrm{I}\gamma$, on-line and off-line γ spectra, complete fusion cross | | |
| | | sections, incomplete fusion (ICF) and $/$ or transfer cross sections; | | |
| | | deduced ratios of cross sections for different reaction channels. | | |
| | | Comparison with previous data for ${}^{159}\text{Tb}+{}^{6}\text{Li}$, ${}^{159}\text{Tb}+{}^{7}\text{Li}$, ${}^{159}\text{Tb}+{}^{10}\text{B}$, ${}^{159}\text{Tb}+{}^{11}\text{B}$, ${}^{144}\text{Sm}+{}^{6}\text{Li}$, ${}^{208}\text{Pb}+{}^{6}\text{Li}$, ${}^{209}\text{Bi}+{}^{6}\text{Li}$ systems, and with | | |
| | | Coupled-channel (CC) calculations using the computer code CCFULL. | | |
| | | JOUR PRVCA 83 064606 | | |
| 159 Dy | 2011PR06 | NUCLEAR REACTIONS 159 Tb(6 Li, X) 158 Tb / 158 Dy / 159 Tb / 159 Dy | | |
| | | / $^{160}{\rm Tb}$ / $^{160}{\rm Dy}$ / $^{161}{\rm Ho}$ / $^{160}{\rm Er}$ / $^{161}{\rm Er}$ / $^{162}{\rm Er}$ / $^{163}{\rm Er}$ / , E=23-39 | | |
| | | MeV; 159 Tb(7 Li, X) 161 Er / 162 Er / 163 Er / 164 Er / , E=28, 34, 37; | | |
| | | measured E γ , I γ , on-line and off-line γ spectra, complete fusion cross | | |
| | | sections, incomplete fusion (ICF) and $/$ or transfer cross sections; | | |
| | | deduced ratios of cross sections for different reaction channels. | | |
| | | Comparison with previous data for ${}^{159}\text{Tb} + {}^{6}\text{Li}$, ${}^{159}\text{Tb} + {}^{7}\text{Li}$, ${}^{159}\text{Tb} + {}^{10}\text{B}$, | | |
| | | 139 Tb+ 11 B, 144 Sm+ 6 Li, 208 Pb+ 6 Li, 209 Bi+ 6 Li systems, and with | | |
| | | Coupled-channel (CC) calculations using the computer code CCFULL. | | |
| 150 | | JOUR PRVCA 83 064606 | | |
| ^{159}W | 2011DA12 | RADIOACTIVITY ¹⁶⁰ Re(p), (α) [from ¹⁶⁶ Cd(³⁸ Ni, X), E=290, 300 | | |
| | | MeV]; ¹⁵⁶ Ta(p), (β^+) [from ¹⁶⁰ Re α decay]; ¹⁵⁹ W(α)[from ¹⁶⁰ Re p | | |
| | | decay]; ¹³⁶ Hf(α)[from ¹³⁶ Ta β^+ decay]; measured E(p), I(p), E α , I α , | | |
| | | $E\gamma$, half-lives using GREAT spectrometer; deduced branching ratios for | | |
| | | proton, α and β decay modes, spectroscopic factors. ¹⁵⁰ Ta, ¹⁶⁰ Re; | | |
| | | deduced J, π for ground states. JOUR PRVCA 83 064320 | | |
| | | | | |
| | A=160 | | | |

| $^{160}\mathrm{Gd}$ | 2011KE03 | ATOMIC MASSES 153 Eu, 152,154,155,156,157,158,160 Gd, 175,176 Lu, |
|---------------------|----------|---|
| | | ^{176,177,178,179,180} Hf; measured masses using TOF-ICR technique and |
| | | TRIGA-TRAP Penning-trap mass spectrometer; deduced δV_{pn} values; |
| | | evaluated mass excesses. JOUR PRVCA 84 014311 |
| $^{160}\mathrm{Tb}$ | 2011PR06 | NUCLEAR REACTIONS 159 Tb(6 Li, X) 158 Tb / 158 Dy / 159 Tb / 159 Dy |
| | | $/ {\rm ^{160}Tb} / {\rm ^{160}Dy} / {\rm ^{161}Ho} / {\rm ^{160}Er} / {\rm ^{161}Er} / {\rm ^{162}Er} / {\rm ^{163}Er} / {\rm , E=23-39}$ |
| | | MeV; 159 Tb(7Li, X) 161 Er / 162 Er / 163 Er / 164 Er / , E=28, 34, 37; |
| | | measured $E\gamma$, $I\gamma$, on-line and off-line γ spectra, complete fusion cross |
| | | sections, incomplete fusion (ICF) and / or transfer cross sections; |
| | | deduced ratios of cross sections for different reaction channels. |
| | | Comparison with previous data for ¹⁵⁹ Tb+ ⁶ Li, ¹⁵⁹ Tb+ ⁷ Li, ¹⁵⁹ Tb+ ¹⁰ B, |
| | | 159 Tb $+^{11}$ B, 144 Sm $+^{6}$ Li, 208 Pb $+^{6}$ Li, 209 Bi $+^{6}$ Li systems, and with |
| | | Coupled-channel (CC) calculations using the computer code CCFULL. |
| | | JOUR PRVCA 83 064606 |
| | | |

A=160 (continued)

| ¹⁶⁰ Dy | 2011PR06 | NUCLEAR REACTIONS $^{159}\text{Tb}(^{6}\text{Li}, X)^{158}\text{Tb} / ^{159}\text{Dy} / ^{159}\text{Tb} / ^{159}\text{Dy} / ^{160}\text{Tb} / ^{160}\text{Dy} / ^{161}\text{Ho} / ^{160}\text{Er} / ^{161}\text{Er} / ^{162}\text{Er} / ^{163}\text{Er} / , E=23-39$ MeV; $^{159}\text{Tb}(^{7}\text{Li}, X)^{161}\text{Er} / ^{162}\text{Er} / ^{163}\text{Er} / ^{164}\text{Er} / , E=28, 34, 37;$ measured E γ , I γ , on-line and off-line γ spectra, complete fusion cross sections, incomplete fusion (ICF) and / or transfer cross sections; deduced ratios of cross sections for different reaction channels. Comparison with previous data for $^{159}\text{Tb}+^{6}\text{Li}, ^{159}\text{Tb}+^{7}\text{Li}, ^{159}\text{Tb}+^{10}\text{B}, ^{159}\text{Tb}+^{11}\text{B}, ^{144}\text{Sm}+^{6}\text{Li}, ^{208}\text{Pb}+^{6}\text{Li}, ^{209}\text{Bi}+^{6}\text{Li}$ systems, and with Coupled-channel (CC) calculations using the computer code CCFULL. |
|-------------------|----------|--|
| ¹⁶⁰ Er | 2011PR06 | JOUR PRVCA 83 064606 NUCLEAR REACTIONS ¹⁵⁹ Tb(⁶ Li, X) ¹⁵⁸ Tb / ¹⁵⁸ Dy / ¹⁵⁹ Tb / ¹⁵⁹ Dy / ¹⁶⁰ Tb / ¹⁶⁰ Dy / ¹⁶¹ Ho / ¹⁶⁰ Er / ¹⁶¹ Er / ¹⁶² Er / ¹⁶³ Er / , E=23-39 MeV; ¹⁵⁹ Tb(⁷ Li, X) ¹⁶¹ Er / ¹⁶² Er / ¹⁶³ Er / ¹⁶⁴ Er / , E=28, 34, 37; measured $E\gamma$, $I\gamma$, on-line and off-line γ spectra, complete fusion cross sections, incomplete fusion (ICF) and / or transfer cross sections; deduced ratios of cross sections for different reaction channels. Comparison with previous data for ¹⁵⁹ Tb+ ⁶ Li, ¹⁵⁹ Tb+ ⁷ Li, ¹⁵⁹ Tb+ ¹⁰ B, ¹⁵⁹ Tb+ ¹¹ B, ¹⁴⁴ Sm+ ⁶ Li, ²⁰⁸ Pb+ ⁶ Li, ²⁰⁹ Bi+ ⁶ Li systems, and with |
| ¹⁶⁰ Re | 2011DA12 | Coupled-channel (CC) calculations using the computer code CCFULL. JOUR PRVCA 83 064606 RADIOACTIVITY ¹⁶⁰ Re(p), (α)[from ¹⁰⁶ Cd(⁵⁸ Ni, X), E=290, 300 MeV]; ¹⁵⁶ Ta(p), (β^+)[from ¹⁶⁰ Re α decay]; ¹⁵⁹ W(α)[from ¹⁶⁰ Re p decay]; ¹⁵⁶ Hf(α)[from ¹⁵⁶ Ta β^+ decay]; measured E(p), I(p), E α , I α , E γ , half-lives using GREAT spectrometer; deduced branching ratios for proton, α and β decay modes, spectroscopic factors. ¹⁵⁶ Ta, ¹⁶⁰ Re; deduced J, π for ground states. JOUR PRVCA 83 064320 |

| $^{161}\mathrm{Ho}$ | 2011PR06 | NUCLEAR REACTIONS ¹⁵⁹ Tb(⁶ Li, X) ¹⁵⁸ Tb / ¹⁵⁸ Dy / ¹⁵⁹ Tb / ¹⁵⁹ Dy |
|---------------------|----------|---|
| | | $/ {}^{160}\text{Tb} / {}^{160}\text{Dy} / {}^{161}\text{Ho} / {}^{160}\text{Er} / {}^{161}\text{Er} / {}^{162}\text{Er} / {}^{163}\text{Er} / , E=23-39$ |
| | | MeV; 159 Tb(7Li, X) 161 Er / 162 Er / 163 Er / 164 Er / , E=28, 34, 37; |
| | | measured E γ , I γ , on-line and off-line γ spectra, complete fusion cross |
| | | sections, incomplete fusion (ICF) and / or transfer cross sections; |
| | | deduced ratios of cross sections for different reaction channels. |
| | | Comparison with previous data for ¹⁵⁹ Tb+ ⁶ Li, ¹⁵⁹ Tb+ ⁷ Li, ¹⁵⁹ Tb+ ¹⁰ B, |
| | | 159 Tb $+^{11}$ B, 144 Sm $+^{6}$ Li, 208 Pb $+^{6}$ Li, 209 Bi $+^{6}$ Li systems, and with |
| | | Coupled-channel (CC) calculations using the computer code CCFULL. |
| | | JOUR PRVCA 83 064606 |

A=161 (continued)

¹⁶¹Er 2011PR06 NUCLEAR REACTIONS ¹⁵⁹Tb(⁶Li, X)¹⁵⁸Tb / ¹⁵⁸Dy / ¹⁵⁹Tb / ¹⁵⁹Dy / ¹⁶⁰Tb / ¹⁶⁰Dy / ¹⁶¹Ho / ¹⁶⁰Er / ¹⁶¹Er / ¹⁶²Er / ¹⁶³Er / , E=23-39 MeV; ¹⁵⁹Tb(⁷Li, X)¹⁶¹Er / ¹⁶²Er / ¹⁶³Er / ¹⁶⁴Er / , E=28, 34, 37; measured $E\gamma$, I γ , on-line and off-line γ spectra, complete fusion cross sections, incomplete fusion (ICF) and / or transfer cross sections; deduced ratios of cross sections for different reaction channels. Comparison with previous data for ¹⁵⁹Tb+⁶Li, ¹⁵⁹Tb+⁷Li, ¹⁵⁹Tb+¹⁰B, ¹⁵⁹Tb+¹¹B, ¹⁴⁴Sm+⁶Li, ²⁰⁸Pb+⁶Li, ²⁰⁹Bi+⁶Li systems, and with Coupled-channel (CC) calculations using the computer code CCFULL. JOUR PRVCA 83 064606

A = 162

¹⁶²Er 2011PR06 NUCLEAR REACTIONS ¹⁵⁹Tb(⁶Li, X)¹⁵⁸Tb / ¹⁵⁸Dy / ¹⁵⁹Tb / ¹⁵⁹Dy / ¹⁶⁰Tb / ¹⁶⁰Dy / ¹⁶¹Ho / ¹⁶⁰Er / ¹⁶¹Er / ¹⁶²Er / ¹⁶³Er / , E=23-39 MeV; ¹⁵⁹Tb(⁷Li, X)¹⁶¹Er / ¹⁶²Er / ¹⁶³Er / ¹⁶⁴Er / , E=28, 34, 37; measured E γ , I γ , on-line and off-line γ spectra, complete fusion cross sections, incomplete fusion (ICF) and / or transfer cross sections; deduced ratios of cross sections for different reaction channels. Comparison with previous data for ¹⁵⁹Tb+⁶Li, ¹⁵⁹Tb+⁷Li, ¹⁵⁹Tb+¹⁰B, ¹⁵⁹Tb+¹¹B, ¹⁴⁴Sm+⁶Li, ²⁰⁸Pb+⁶Li, ²⁰⁹Bi+⁶Li systems, and with Coupled-channel (CC) calculations using the computer code CCFULL. JOUR PRVCA 83 064606

| ¹⁶³ Er | 2011PR06 | NUCLEAR REACTIONS ¹⁵⁹ Tb(⁶ Li, X) ¹⁵⁸ Tb / ¹⁵⁸ Dy / ¹⁵⁹ Tb / ¹⁵⁹ Dy / ¹⁶⁰ Tb / ¹⁶⁰ Dy / ¹⁶¹ Ho / ¹⁶⁰ Er / ¹⁶¹ Er / ¹⁶² Er / ¹⁶³ Er / , E=23-39 MeV; ¹⁵⁹ Tb(⁷ Li, X) ¹⁶¹ Er / ¹⁶² Er / ¹⁶³ Er / ¹⁶⁴ Er / , E=28, 34, 37; measured E γ , I γ , on-line and off-line γ spectra, complete fusion cross sections, incomplete fusion (ICF) and / or transfer cross sections; deduced ratios of cross sections for different reaction channels. Comparison with previous data for ¹⁵⁹ Tb+ ⁶ Li, ¹⁵⁹ Tb+ ⁷ Li, ¹⁵⁹ Tb+ ¹⁰ B, ¹⁵⁹ Tb+ ¹¹ B, ¹⁴⁴ Sm+ ⁶ Li, ²⁰⁸ Pb+ ⁶ Li, ²⁰⁹ Bi+ ⁶ Li systems, and with Coupled-channel (CC) calculations using the computer code CCFULL. |
|-------------------|----------|---|
| | | Coupled-channel (CC) calculations using the computer code CCFULL. JOUR PRVCA 83 064606 |

¹⁶⁴Er **2011PR06** NUCLEAR REACTIONS ¹⁵⁹Tb(⁶Li, X)¹⁵⁸Tb / ¹⁵⁸Dy / ¹⁵⁹Tb / ¹⁵⁹Dy / ¹⁶⁰Tb / ¹⁶⁰Dy / ¹⁶¹Ho / ¹⁶⁰Er / ¹⁶¹Er / ¹⁶²Er / ¹⁶³Er / , E=23-39 MeV; ¹⁵⁹Tb(⁷Li, X)¹⁶¹Er / ¹⁶²Er / ¹⁶³Er / ¹⁶⁴Er / , E=28, 34, 37; measured $E\gamma$, $I\gamma$, on-line and off-line γ spectra, complete fusion cross sections, incomplete fusion (ICF) and / or transfer cross sections; deduced ratios of cross sections for different reaction channels. Comparison with previous data for ¹⁵⁹Tb+⁶Li, ¹⁵⁹Tb+⁷Li, ¹⁵⁹Tb+¹⁰B, ¹⁵⁹Tb+¹¹B, ¹⁴⁴Sm+⁶Li, ²⁰⁸Pb+⁶Li, ²⁰⁹Bi+⁶Li systems, and with Coupled-channel (CC) calculations using the computer code CCFULL. JOUR PRVCA 83 064606

A = 165

¹⁶⁵Er **2011WA19** NUCLEAR REACTIONS ¹⁶⁰Gd(⁹Be, 4n), E=42, 45 MeV; measured E γ , I γ , $\gamma\gamma$ -coin. ¹⁶⁵Er; deduced levels, J, π , rotational bands, alignments, configurations; calculated quasineutron Routhians. Comparison of alignments in ^{161,163,165}Er, ¹⁶³Dy, ¹⁶⁷Yb, ¹⁶⁹Hf nuclei, and with predictions of cranked shell model. JOUR PRVCA 84 017303

A=166

No references found

A=167

¹⁶⁷Ta **2011HA25** NUCLEAR REACTIONS ¹²⁰Sn(⁵¹V, 4n), E=235 MeV; measured E γ , I γ , $\gamma\gamma$ -coin $\gamma\gamma(\theta)$ using Gammasphere array. ¹⁶⁷Ta; deduced levels, J, π , multipolarity, B(M1) / B(E2), rotational bands, alignments, band crossing frequencies, band configurations. Comparison with particle-rotor model calculations, and trends in the wobbling phonon energies in ^{161,163,165,167}Lu, and ¹⁶⁷Ta. JOUR PRVCA 83 064307

A=168

¹⁶⁸Tm **2011ZH26** NUCLEAR REACTIONS ^{85,87}Rb, ⁸⁹Y, ^{140,142}Ce, ¹⁶⁹Tm, ¹⁷⁵Lu, ¹⁸¹Ta, ¹⁸⁵Re, ²³⁸U(n, 2n), E=14 MeV; measured reaction products, E γ , I γ ; deduced σ . Comparison with ENDF / B-VII.0 evaluated nuclear data library. JOUR NSENA 169 188

¹⁶⁹Yb **2010GLZZ** NUCLEAR REACTIONS ¹⁷⁰Yb(γ , n), E=8.9-9.9 MeV; measured activation technique E γ , I γ at HIPS (High INtensity Photon Setup); ¹⁶⁹Tm(p, n), E=3.3-7 MeV;¹⁶⁶Er(α , n), E=11.75-15 MeV; measured activation technique E γ , I γ ; deduced σ ; calculated σ using TALYS, NON-SMOKER. CONF Heidelberg (NIC XI) Proc,P234,Glorius

A = 170

No references found

A = 171

No references found

A = 172

No references found

A = 173

No references found

A = 174

¹⁷⁴Lu **2011ZH26** NUCLEAR REACTIONS ^{85,87}Rb, ⁸⁹Y, ^{140,142}Ce, ¹⁶⁹Tm, ¹⁷⁵Lu, ¹⁸¹Ta, ¹⁸⁵Re, ²³⁸U(n, 2n), E=14 MeV; measured reaction products, E γ , I γ ; deduced σ . Comparison with ENDF / B-VII.0 evaluated nuclear data library. JOUR NSENA 169 188

A = 175

¹⁷⁵Lu 2011KE03 ATOMIC MASSES ¹⁵³Eu, ^{152,154,155,156,157,158,160}Gd, ^{175,176}Lu, ^{176,177,178,179,180}Hf; measured masses using TOF-ICR technique and TRIGA-TRAP Penning-trap mass spectrometer; deduced δV_{pn} values; evaluated mass excesses. JOUR PRVCA 84 014311

A = 176

¹⁷⁶Lu 2011KE03 ATOMIC MASSES ¹⁵³Eu, ^{152,154,155,156,157,158,160}Gd, ^{175,176}Lu, ^{176,177,178,179,180}Hf; measured masses using TOF-ICR technique and TRIGA-TRAP Penning-trap mass spectrometer; deduced δV_{pn} values; evaluated mass excesses. JOUR PRVCA 84 014311

A=176 (continued)

| $^{176}\mathrm{Hf}$ | 2011KE03 | ATOMIC MASSES 153 Eu, 152,154,155,156,157,158,160 Gd, 175,176 Lu, |
|---------------------|----------|--|
| | | ^{176,177,178,179,180} Hf; measured masses using TOF-ICR technique and |
| | | TRIGA-TRAP Penning-trap mass spectrometer; deduced δV_{pn} values; |
| | | evaluated mass excesses. JOUR PRVCA 84 014311 |
| ^{176}Os | 2010ZHZR | NUCLEAR REACTIONS ¹⁰⁰ Mo(¹¹ B, 5n), E=60 MeV; measured $E\gamma$, |
| | | I γ , $\gamma\gamma$ -coin. ¹⁰⁶ Ag deduced levels, J, π , positive parity bands, |
| | | rotational band, yrast, yrare, B(M1) / B(E2). 124 Sn(11 B, 5n), E=65 |
| | | MeV; measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin. ¹³⁰ Cs deduced levels, J, π , $T_{1/2}$, |
| | | yrast, B(E2), B(M1). 152 Sm(28 Si, 4n), E=140 MeV; measured E γ , I γ , |
| | | $\gamma\gamma$ -coin. ¹⁷⁶ Os deduced levels, J, π , T _{1/2} , quadrupole moment, |
| | | deformation, $B(E2)$; calculated quadrupole moment using $U(5)$, $X(5)$, |
| | | SU(3). CONF Tsukuba(Nuclear Physics Trends) Proc.P363,Zhu |

A = 177

| 177 Lu | 2011RO22 | NUCLEAR REACTIONS ${}^{177m}Lu(n, n')$, E=cold ; measured E(n), |
|---------------------|----------|---|
| | | $I(n), E\gamma, I\gamma$, cross section in the inelastic neutron acceleration (INNA) |
| | | process; deduced resonances parameters. Mechanism to induce an |
| | | isomer de-excitation. JOUR PRVCA 83 064617 |
| $^{177}\mathrm{Hf}$ | 2011KE03 | ATOMIC MASSES 153 Eu, 152,154,155,156,157,158,160 Gd, 175,176 Lu, |
| | | ^{176,177,178,179,180} Hf; measured masses using TOF-ICR technique and |
| | | TRIGA-TRAP Penning-trap mass spectrometer; deduced δV_{pn} values; |
| | | evaluated mass excesses. JOUR PRVCA 84 014311 |

A = 178

¹⁷⁸Hf **2011KE03** ATOMIC MASSES ¹⁵³Eu, ^{152,154,155,156,157,158,160}Gd, ^{175,176}Lu, ^{176,177,178,179,180}Hf; measured masses using TOF-ICR technique and TRIGA-TRAP Penning-trap mass spectrometer; deduced δV_{pn} values; evaluated mass excesses. JOUR PRVCA 84 014311

A=179

| $^{179}{ m Hf}$ | 2011KE03 | ATOMIC MASSES 153 Eu, 152,154,155,156,157,158,160 Gd, 175,176 Lu, |
|-----------------|----------|--|
| | | ^{176,177,178,179,180} Hf; measured masses using TOF-ICR technique and |
| | | TRIGA-TRAP Penning-trap mass spectrometer; deduced δV_{pn} values; |
| | | evaluated mass excesses. JOUR PRVCA 84 014311 |

A = 180

¹⁸⁰Hf **2011BU08** NUCLEAR REACTIONS ¹⁵⁸Gd, ¹⁷⁹Hf(n, γ), E=thermal; measured reaction products, E γ , I γ ; deduced resonance energies. Comparison with available values, Am-Be neutron source. JOUR ANEND 38 2550

A=180 (continued)

| | 2011KE03 | ATOMIC MASSES 153 Eu, 152,154,155,156,157,158,160 Gd, 175,176 Lu, 176,177,178,179,180 Hf; measured masses using TOF-ICR technique and |
|-------------------|----------|---|
| | | TRIGA-TRAP Penning-trap mass spectrometer; deduced δV_{pn} values; |
| | | evaluated mass excesses. JOUR PRVCA 84 014311 |
| ¹⁸⁰ Ta | 2011ZH26 | NUCLEAR REACTIONS ^{85,87} Rb, ⁸⁹ Y, ^{140,142} Ce, ¹⁶⁹ Tm, ¹⁷⁵ Lu, ¹⁸¹ Ta, |
| | | ¹⁸⁵ Re, ²³⁸ U(n, 2n), E=14 MeV; measured reaction products, $E\gamma$, $I\gamma$; |
| | | deduced σ . Comparison with ENDF / B-VII.0 evaluated nuclear data |
| | | library. JOUR NSENA 169 188 |
| ^{180}W | 2010BEZ0 | RADIOACTIVITY ^{64,70} Zn, ^{180,186} W(2 β); measured E γ , I γ ; deduced |
| | | $T_{1/2}$ limits. ZnWO ₄ samples, Gran Sasso. CONF Frascati(Nuclear |
| | | Physics in Astrophysics IV 2009), P012038 |
| ^{180}W | 2010BEZ0 | RADIOACTIVITY ^{64,70} Zn, ^{180,186} W(2 β); measured E γ , I γ ; deduced T _{1/2} limits. ZnWO ₄ samples, Gran Sasso. CONF Frascati(Nuclear Physics in Astrophysics IV 2009), P012038 |

A = 181

No references found

A = 182

No references found

A=183

No references found

| $^{184}\mathrm{W}$ | 2010ZHZU | NUCLEAR REACTIONS $^{184}W(^{32}S, X)$, E(cm)=118-148 MeV; |
|---------------------|----------|--|
| | | measured reaction products; deduced σ , quasifission σ , anisotropy, |
| | | reaction mechanism; calculated σ , fusion probability, anisotropy. |
| | | 90,96 Zr(32 S, X), E(cm)=70-95 MeV; measured reaction products; |
| | | deduced σ ; calculated σ . ^{152,154} Sm, ¹⁸⁴ W, ¹⁹⁶ Pt, ²⁰⁸ Pb(¹⁶ O, ¹⁶ O), |
| | | E(cm)=35-70 MeV; measured reaction products; deduced $\sigma(\theta=175^0)$; |
| | | calculated $\sigma(\theta=175^{\circ})$ using CCFULL. CONF Tsukuba(Nuclear Physics |
| | | Trends) Proc.P50,Zhang |
| $^{184}\mathrm{Re}$ | 2011ZH26 | NUCLEAR REACTIONS ^{85,87} Rb, ⁸⁹ Y, ^{140,142} Ce, ¹⁶⁹ Tm, ¹⁷⁵ Lu, ¹⁸¹ Ta, |
| | | ¹⁸⁵ Re, ²³⁸ U(n, 2n), E=14 MeV; measured reaction products, $E\gamma$, $I\gamma$; |
| | | deduced σ . Comparison with ENDF / B-VII.0 evaluated nuclear data |
| | | library. JOUR NSENA 169 188 |

¹⁸⁵Pt **2011LI35** NUCLEAR REACTIONS ¹⁷³Yb(¹⁶O, 4n), E=90 MeV; measured reaction products, $E\gamma$, $I\gamma$, γ - γ -coin.; deduced level scheme, J, π , intra-band B(M1) / B(E2) ratios. Comparison with theoretical values from the semi-classical Donau and Frauendorf approach. JOUR JPGPE 38 095105

A=186

¹⁸⁶W 2010BEZ0 RADIOACTIVITY ^{64,70}Zn, ^{180,186}W(2 β); measured E γ , I γ ; deduced T_{1/2} limits. ZnWO₄ samples, Gran Sasso. CONF Frascati(Nuclear Physics in Astrophysics IV 2009), P012038

A=187

No references found

A=188

No references found

A=189

¹⁸⁹Pt **2010HUZZ** NUCLEAR REACTIONS ¹⁷⁶Yb(¹⁸O, 5n), E=88, 95 MeV; measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin, (X-ray) γ -coin. ¹⁸⁹Pt deduced levels, E, J, π , rotational bands, deformation. CONF Tsukuba(Nuclear Physics Trends) Proc.P77,Hua

A=190

| $^{190}\mathrm{Os}$ | 2011BE32 | RADIOACTIVITY ^{190,198} Pt(2β), (2EC); measured E γ , I γ using |
|---------------------|----------|--|
| | | ultra-low background HPGe; deduced $T_{1/2}$ limit. Gran Sasso |
| | | laboratory. JOUR ZAANE 47 91 |
| $^{190}\mathrm{Pt}$ | 2011BE32 | RADIOACTIVITY ^{190,198} Pt(2β), (2EC); measured E γ , I γ using |
| | | ultra-low background HPGe; deduced $T_{1/2}$ limit. Gran Sasso |
| | | laboratory. JOUR ZAANE 47 91 |

A = 191

No references found

No references found

A = 193

No references found

A=194

| $^{194}\mathrm{Re}$ | 2010BEZM | RADIOACTIVITY 194,195,196 Re, 199,200 Os, 198,199,201,202 Ir, 203,204 Pt, |
|---------------------|----------|---|
| | | $20^{\circ} \text{Au}(\beta)$ [from 200 Pb and 200 U fragmentation on "Be target at 1 GeV |
| | | / nucleon]; measured decay products position, time; deduced $T_{1/2}$. |
| | | Comparison with calculations. CONF Heidelberg (NIC XI) |
| | | Proc,P84,Benlliure |
| $^{194}\mathrm{Os}$ | 2010BEZM | RADIOACTIVITY 194,195,196 Re, 199,200 Os, 198,199,201,202 Ir, 203,204 Pt, |
| | | 204 Au(β^{-})[from ²⁰⁸ Pb and ²³⁸ U fragmentation on ⁹ Be target at 1 GeV |
| | | / nucleon]; measured decay products position, time; deduced $T_{1/2}$. |
| | | Comparison with calculations. CONF Heidelberg (NIC XI) |
| | | Proc,P84,Benlliure |

A=195

| $^{195}\mathrm{Re}$ | 2010BEZM | RADIOACTIVITY ^{194,195,196} Re, ^{199,200} Os, ^{198,199,201,202} Ir, ^{203,204} Pt, |
|---------------------|----------|--|
| | | 204 Au(β^{-})[from ²⁰⁸ Pb and ²³⁸ U fragmentation on ⁹ Be target at 1 GeV |
| | | / nucleon]; measured decay products position, time; deduced $T_{1/2}$. |
| | | Comparison with calculations. CONF Heidelberg (NIC XI) |
| | | Proc,P84,Benlliure |
| $^{195}\mathrm{Os}$ | 2010BEZM | RADIOACTIVITY ^{194,195,196} Re, ^{199,200} Os, ^{198,199,201,202} Ir, ^{203,204} Pt, |
| | | 204 Au(β^{-})[from ²⁰⁸ Pb and ²³⁸ U fragmentation on ⁹ Be target at 1 GeV |
| | | / nucleon]; measured decay products position, time; deduced $T_{1/2}$. |
| | | Comparison with calculations. CONF Heidelberg (NIC XI) |
| | | Proc,P84,Benlliure |
| $^{195}\mathrm{Pt}$ | 2011FA08 | NUCLEAR REACTIONS ¹⁹² Os(⁷ Li, 3np), (⁷ Li, 2nd), (⁷ Li, nt), E=44 |
| | | MeV; measured $E\gamma$, $I\gamma$, $\gamma\gamma(\theta)$, $(x ray)\gamma$ -, $\gamma\gamma$ -coin. ¹⁹⁵ Pt; deduced |
| | | levels, J, π , bands, multipolarity. Systematics of level energies in |
| | | 191,193,195 Pt with reference to yrast g.s. members in 192,194,196 Pt. |
| | | JOUR PRVCA 84 017301 |

A = 196

| $^{196}\mathrm{Re}$ | 2010BEZM | RADIOACTIVITY ^{194,195,196} Re, ^{199,200} Os, ^{198,199,201,202} Ir, ^{203,204} Pt, |
|---------------------|----------|---|
| | | 204 Au(β^{-})[from 208 Pb and 238 U fragmentation on 9 Be target at 1 GeV |
| | | / nucleon]; measured decay products position, time; deduced $T_{1/2}$. |
| | | Comparison with calculations. CONF Heidelberg (NIC XI) |
| | | Proc,P84,Benlliure |

Page 86

A=196 (continued)

| $^{196}\mathrm{Os}$ | 2010BEZM | RADIOACTIVITY ^{194,195,196} Re, ^{199,200} Os, ^{198,199,201,202} Ir, ^{203,204} Pt, |
|---------------------|----------|--|
| | | 204 Au(β^{-})[from ²⁰⁸ Pb and ²³⁸ U fragmentation on ⁹ Be target at 1 GeV |
| | | / nucleon]; measured decay products position, time; deduced $T_{1/2}$. |
| | | Comparison with calculations. CONF Heidelberg (NIC XI) |
| | | Proc,P84,Benlliure |
| $^{196}\mathrm{Pt}$ | 2010ZHZU | NUCLEAR REACTIONS $^{184}W(^{32}S, X)$, E(cm)=118-148 MeV; |
| | | measured reaction products; deduced σ , quasifission σ , anisotropy, |
| | | reaction mechanism; calculated σ , fusion probability, anisotropy. |
| | | ^{90,96} Zr(³² S, X), E(cm)=70-95 MeV; measured reaction products; |
| | | deduced σ ; calculated σ . ^{152,154} Sm, ¹⁸⁴ W, ¹⁹⁶ Pt, ²⁰⁸ Pb(¹⁶ O, ¹⁶ O), |
| | | E(cm)=35-70 MeV; measured reaction products; deduced $\sigma(\theta=175^0)$; |
| | | calculated $\sigma(\theta=175^{\circ})$ using CCFULL. CONF Tsukuba(Nuclear Physics |
| | | Trends) Proc.P50,Zhang |
| $^{196}\mathrm{Au}$ | 2010ITZX | NUCLEAR REACTIONS 197 Au(γ , n), E=8-13.4 MeV; measured LCS |
| | | (Laser Inverse Compton Scattering) $E\gamma$, $I\gamma$, En, In; deduced σ , |
| | | resonance parameters. Cross sections compared with other data. |
| | | CONF Kobe(Tours Nuc.Phys.and Astroph.VII) Proc.P237,Itoh |
| | 2011EJ01 | NUCLEAR REACTIONS ¹⁰⁰ Mo, ¹⁹⁷ Au(γ , n), ¹⁰⁰ Mo(γ , p), E=12-16 |
| | | MeV; measured reaction products, $E\gamma$, $I\gamma$; deduced relative yields, |
| | | effective σ . JOUR JUPSA 80 094202 |

A=197

| $^{197}\mathrm{Au}$ | 2011COZZ | NUCLEAR REACTIONS ³ He(⁷ Be, α), E=53.4 MeV; measured reaction products; deduced σ (E). ¹⁹⁷ Au(⁷ Be, ⁷ Be), E=53.4 MeV; |
|---------------------|----------|---|
| | | measured reaction products; deduced $\sigma(\theta)$. REPT |
| | | CNS-REP-86,P19,Condori |
| | 2011PI08 | NUCLEAR REACTIONS ⁹ Be, ¹⁹⁷ Au(⁶ He, ⁶ He), E=16.2, 21.3 MeV, |
| | | ^{[6} He secondary beam from ⁹ Be(⁷ Li, ⁶ He), E=22.18, 26.10 MeV primary |
| | | beam]; measured ⁶ He spectra, cross sections, $\sigma(\theta)$, biparametric |
| | | spectrum. Effect of the collective couplings to the excited states. |
| | | Coupled channels calculations, using a double-folding potential, and |
| | | three- and four-body continuum-discretized coupled-channels (CDCC) |
| | | calculations. JOUR PRVCA 83 064603 |
| | | |

| $^{198}\mathrm{Os}$ | 2011BE32 | RADIOACTIVITY ^{190,198} Pt(2 β), (2EC); measured E γ , I γ using |
|---------------------|----------|---|
| | | ultra-low background HPGe; deduced $T_{1/2}$ limit. Gran Sasso |
| | | laboratory. JOUR ZAANE 47 91 |
| 198 Ir | 2010BEZM | RADIOACTIVITY 194,195,196 Re, 199,200 Os, 198,199,201,202 Ir, 203,204 Pt, |
| | | 204 Au(β^{-})[from 208 Pb and 238 U fragmentation on 9 Be target at 1 GeV |
| | | / nucleon]; measured decay products position, time; deduced $T_{1/2}$. |
| | | Comparison with calculations. CONF Heidelberg (NIC XI) |
| | | Proc,P84,Benlliure |

A=198 (continued)

| ¹⁹⁸ Pt | 2010BEZM | RADIOACTIVITY ^{194,195,196} Re, ^{199,200} Os, ^{198,199,201,202} Ir, ^{203,204} Pt, ²⁰⁴ Au(β^-)[from ²⁰⁸ Pb and ²³⁸ U fragmentation on ⁹ Be target at 1 GeV / nucleon]; measured decay products position, time; deduced T _{1/2} . Comparison with calculations. CONE Heidelberg (NIC XI) |
|-------------------|----------|---|
| | 2011BE32 | Proc,P84,Benlliure RADIOACTIVITY ^{190,198} Pt(2β), (2EC); measured E γ , I γ using ultra-low background HPGe; deduced T _{1/2} limit. Gran Sasso laboratory. JOUR ZAANE 47 91 |

A=199

| ^{199}Os | 2010BEZM | RADIOACTIVITY ^{194,195,196} Re, ^{199,200} Os, ^{198,199,201,202} Ir, ^{203,204} Pt, |
|---------------------|----------|---|
| | | $^{204}{\rm Au}(\beta^-)[{\rm from}~^{208}{\rm Pb}~{\rm and}~^{238}{\rm U}$ fragmentation on $^9{\rm Be}$ target at 1 GeV |
| | | / nucleon]; measured decay products position, time; deduced $T_{1/2}$. |
| | | Comparison with calculations. CONF Heidelberg (NIC XI) |
| | | Proc,P84,Benlliure |
| 199 Ir | 2010BEZM | RADIOACTIVITY 194,195,196 Re, 199,200 Os, 198,199,201,202 Ir, 203,204 Pt, |
| | | 204 Au(β^{-})[from 208 Pb and 238 U fragmentation on 9 Be target at 1 GeV |
| | | / nucleon]; measured decay products position, time; deduced $T_{1/2}$. |
| | | Comparison with calculations. CONF Heidelberg (NIC XI) |
| | | Proc,P84,Benlliure |
| $^{199}\mathrm{Pt}$ | 2010BEZM | RADIOACTIVITY 194,195,196 Re, 199,200 Os, 198,199,201,202 Ir, 203,204 Pt, |
| | | 204 Au(β^{-})[from 208 Pb and 238 U fragmentation on 9 Be target at 1 GeV |
| | | / nucleon]; measured decay products position, time; deduced $T_{1/2}$. |
| | | Comparison with calculations. CONF Heidelberg (NIC XI) |
| | | Proc,P84,Benlliure |

| $^{200}\mathrm{Os}$ | 2010BEZM | RADIOACTIVITY 194,195,196 Re, 199,200 Os, 198,199,201,202 Ir, 203,204 Pt, |
|---------------------|----------|---|
| | | 204 Au(β^{-})[from 208 Pb and 238 U fragmentation on 9 Be target at 1 GeV |
| | | / nucleon]; measured decay products position, time; deduced $T_{1/2}$. |
| | | Comparison with calculations. CONF Heidelberg (NIC XI) |
| | | Proc,P84,Benlliure |
| 200 Ir | 2010BEZM | RADIOACTIVITY 194,195,196 Re, 199,200 Os, 198,199,201,202 Ir, 203,204 Pt, |
| | | 204 Au(β^{-})[from 208 Pb and 238 U fragmentation on 9 Be target at 1 GeV |
| | | / nucleon]; measured decay products position, time; deduced $T_{1/2}$. |
| | | Comparison with calculations. CONF Heidelberg (NIC XI) |
| | | Proc,P84,Benlliure |

| ²⁰¹ Ir | 2010BEZM | RADIOACTIVITY ^{194,195,196} Re, ^{199,200} Os, ^{198,199,201,202} Ir, ^{203,204} Pt, ²⁰⁴ Au(β^-)[from ²⁰⁸ Pb and ²³⁸ U fragmentation on ⁹ Be target at 1 GeV / nucleon]; measured decay products position, time; deduced T _{1/2} . Comparison with calculations. CONF Heidelberg (NIC XI) |
|-------------------|----------|--|
| ²⁰¹ Pt | 2010BEZM | Proc,P84,Benlliure RADIOACTIVITY ^{194,195,196} Re, ^{199,200} Os, ^{198,199,201,202} Ir, ^{203,204} Pt, ²⁰⁴ Au(β^-)[from ²⁰⁸ Pb and ²³⁸ U fragmentation on ⁹ Be target at 1 GeV / nucleon]; measured decay products position, time; deduced T _{1/2} . Comparison with calculations. CONF Heidelberg (NIC XI) Proc,P84,Benlliure |

A = 202

| ²⁰² Ir | 2010BEZM | RADIOACTIVITY $^{194,195,196}\text{Re},~^{199,200}\text{Os},~^{198,199,201,202}\text{Ir},~^{203,204}\text{Pt},~^{204}\text{Au}(\beta^-)[\text{from}~^{208}\text{Pb}$ and ^{238}U fragmentation on ^{9}Be target at 1 GeV / nucleon]; measured decay products position, time; deduced $T_{1/2}.$ Comparison with calculations. CONF Heidelberg (NIC XI) |
|-------------------|----------|--|
| ²⁰² Pt | 2010BEZM | Proc,P84,Benlliure RADIOACTIVITY ^{194,195,196} Re, ^{199,200} Os, ^{198,199,201,202} Ir, ^{203,204} Pt, ²⁰⁴ Au(β^{-})[from ²⁰⁸ Pb and ²³⁸ U fragmentation on ⁹ Be target at 1 GeV / nucleon]; measured decay products position, time; deduced T _{1/2} . Comparison with calculations. CONF Heidelberg (NIC XI) Proc,P84,Benlliure |

| ²⁰³ Pt | 2010BEZM | RADIOACTIVITY ^{194,195,196} Re, ^{199,200} Os, ^{198,199,201,202} Ir, ^{203,204} Pt, ²⁰⁴ Au(β^-)[from ²⁰⁸ Pb and ²³⁸ U fragmentation on ⁹ Be target at 1 GeV / nucleon]; measured decay products position, time; deduced T _{1/2} . Comparison with calculations. CONF Heidelberg (NIC XI) Proc P84 Benlliure |
|-------------------|----------|---|
| ²⁰³ Au | 2010BEZM | RADIOACTIVITY ^{194,195,196} Re, ^{199,200} Os, ^{198,199,201,202} Ir, ^{203,204} Pt, ²⁰⁴ Au(β^{-})[from ²⁰⁸ Pb and ²³⁸ U fragmentation on ⁹ Be target at 1 GeV |
| | | / nucleon]; measured decay products position, time; deduced $T_{1/2}$. Comparison with calculations. CONF Heidelberg (NIC XI) Proc,P84,Benlliure |
| ²⁰³ Hg | 2011SZ01 | NUCLEAR REACTIONS ²⁰⁸ Pb, ²³⁸ U(⁴⁰ Ca, X), E=305, 330 MeV; measured E γ , I γ , $\gamma\gamma$ -coin, prompt and delayed γ spectra, isomer half-lives by $\gamma(t)$ using Gammasphere array. ²⁰³ Hg; deduced high-spin levels, isomers, J, π , total conversion coefficients, multipolarities, configurations. Comparison with shell model calculations. JOUR PRVCA 83 064315 |

A=204

| ²⁰⁴ Ir | 2011M018 | NUCLEAR REACTIONS $Be(^{208}Pb, X)^{207}Hg / ^{206}Au / ^{205}Pt / ^{204}Ir$, E=1 GeV / nucleon; measured yields of the reaction products, (p, n) charge exchange cross sections, production cross sections, longitudinal, velocity distributions. Comparison with simulated fragmentation yields for ²³⁸ U projectile. Relevance to r-process nuclei in elemental |
|-------------------|----------|---|
| ²⁰⁴ Pt | 2010BEZM | abundances. JOUR PRVCA 84 011601 RADIOACTIVITY ^{194,195,196} Re, ^{199,200} Os, ^{198,199,201,202} Ir, ^{203,204} Pt, ²⁰⁴ Au(β^-)[from ²⁰⁸ Pb and ²³⁸ U fragmentation on ⁹ Be target at 1 GeV / nucleon]; measured decay products position, time; deduced T _{1/2} . Comparison with calculations. CONF Heidelberg (NIC XI) Proc P84 Benlliure |
| ²⁰⁴ Au | 2010BEZM | RADIOACTIVITY ^{194,195,196} Re, ^{199,200} Os, ^{198,199,201,202} Ir, ^{203,204} Pt, ²⁰⁴ Au(β^-)[from ²⁰⁸ Pb and ²³⁸ U fragmentation on ⁹ Be target at 1 GeV / nucleon]; measured decay products position, time; deduced T _{1/2} . Comparison with calculations. CONF Heidelberg (NIC XI) Proc.P84.Benlliure |
| ²⁰⁴ Hg | 2010BEZM | RADIOACTIVITY ^{194,195,196} Re, ^{199,200} Os, ^{198,199,201,202} Ir, ^{203,204} Pt, ²⁰⁴ Au(β^-)[from ²⁰⁸ Pb and ²³⁸ U fragmentation on ⁹ Be target at 1 GeV / nucleon]; measured decay products position, time; deduced T _{1/2} . Comparison with calculations. CONF Heidelberg (NIC XI) Proc.P84.Benlliure |
| ²⁰⁴ Tl | 2011BR12 | NUCLEAR REACTIONS ²⁰⁸ Pb(⁴⁸ Ca, X), E=305; ²³⁸ U(⁴⁸ Ca, X), E=330 MeV; measured E γ , in-beam and off-beam I γ , $\gamma\gamma$ -coin, $\gamma\gamma$ (t), isomer half-lives using Gammasphere array. ²⁰⁴ Tl; deduced levels, J, π , conversion coefficients, multipolarity, B(M2), B(E3), configurations, octupole excitations. Comparison with shell-model calculations. JOUR PRVCA 84 014330 |

| 205 Pt | 2011M018 | NUCLEAR REACTIONS $Be(^{208}Pb, X)^{207}Hg / ^{206}Au / ^{205}Pt / ^{204}Ir$, |
|-------------|----------|--|
| | | E=1 GeV / nucleon; measured yields of the reaction products, (p, n) |
| | | charge exchange cross sections, production cross sections, longitudinal, |
| | | velocity distributions. Comparison with simulated fragmentation yields |
| | | for ²³⁸ U projectile. Relevance to r-process nuclei in elemental |
| | | abundances. JOUR PRVCA 84 011601 |
| 205 Pb | 2010KOZX | NUCLEAR REACTIONS 206,207,208 Pb(γ , n), E=7.00-13.50 MeV; |
| | | measured In; deduced σ using Taylor expansion method. Comparison |
| | | with other data. CONF Kobe(Tours Nuc.Phys.and Astroph.VII) |
| | | Proc.P231,Kondo |

A=206

| $^{206}\mathrm{Au}$ | 2011MO18 | NUCLEAR REACTIONS Be(208 Pb, X) 207 Hg / 206 Au / 205 Pt / 204 Ir, |
|---------------------|----------|--|
| | | E=1 GeV / nucleon; measured yields of the reaction products, (p, n) |
| | | charge exchange cross sections, production cross sections, longitudinal, |
| | | velocity distributions. Comparison with simulated fragmentation yields |
| | | for ²³⁸ U projectile. Relevance to r-process nuclei in elemental |
| | | abundances. JOUR PRVCA 84 011601 |
| $^{206}\mathrm{Pb}$ | 2010KOZX | NUCLEAR REACTIONS 206,207,208 Pb(γ , n), E=7.00-13.50 MeV; |
| | | measured In; deduced σ using Taylor expansion method. Comparison |
| | | with other data. CONF Kobe(Tours Nuc.Phys.and Astroph.VII) |
| | | Proc.P231,Kondo |

A=207

| $^{207}\mathrm{Hg}$ | 2011M018 | NUCLEAR REACTIONS Be($^{208}\mathrm{Pb},\mathrm{X})^{207}\mathrm{Hg}$ / $^{206}\mathrm{Au}$ / $^{205}\mathrm{Pt}$ / $^{204}\mathrm{Ir},$ |
|---------------------|----------|---|
| | | E=1 GeV / nucleon; measured yields of the reaction products, (p, n) |
| | | charge exchange cross sections, production cross sections, longitudinal, |
| | | velocity distributions. Comparison with simulated fragmentation yields |
| | | for ²³⁸ U projectile. Relevance to r-process nuclei in elemental |
| | | abundances. JOUR PRVCA 84 011601 |
| $^{207}\mathrm{Pb}$ | 2010KOZX | NUCLEAR REACTIONS 206,207,208 Pb(γ , n), E=7.00-13.50 MeV; |
| | | measured In; deduced σ using Taylor expansion method. Comparison |
| | | with other data. CONF Kobe(Tours Nuc.Phys.and Astroph.VII) |
| | | Proc.P231,Kondo |

| ²⁰⁸ Pb | 2010BEZJ | NUCLEAR REACTIONS ²⁰⁸ Pb(²⁷ P, p ²⁶ Si), E≈450 MeV / nucleon; measured Coulomb excitation products using ALADIN-LAND setup; deduced preliminary σ . CONF Heidelberg (NIC XI) Proc,P227,Beceiro Novo |
|-------------------|----------|--|
| | 2010ERZV | NUCLEAR REACTIONS ²⁰⁸ Pb(⁹² Mo, n ⁹¹ Mo), (¹⁰⁰ Mo, 2n ⁹⁸ Mo), (¹⁰⁰ Mo, n ⁹⁹ Mo), E \approx 500 MeV / nucleon; measured Coulomb excitation products using SIS / FRS / LAND; deduced mass yields, σ . |
| | | Comparison with Beil et al. Measured also ^{93,94} Mo Coulomb dissociation, analysis is underway. CONF Heidelberg (NIC XI) Proc,P232,Ershova |
| | 2010LAZU | NUCLEAR REACTIONS ²⁰⁸ Pb(³² Ar, p ³¹ Cl), (³¹ Cl, p ³⁰ S), (³⁴ Ar, p ³³ Cl), E=590 MeV / nucleon; measured Coulomb excitation products using ALADIN-LAND setup; deduced Q-value. Analysis still under way to determine $\sigma(E)$, B(E1). CONF Heidelberg (NIC XI) |
| | 2010MAZF | Proc,P224,Langer NUCLEAR REACTIONS ²⁰⁸ Pb(¹⁷ Ne, 2p ¹⁵ O), E=500 MeV / nucleon; measured Coulomb excitation products. Analysis in progress. CONF Heidelberg (NIC XI) Proc,P225.Marganiec |
| | 2010TOZW | NUCLEAR REACTIONS ²⁰⁸ Pb(³¹ Cl, p ³⁰ S), E=58 MeV / nucleon; measured Coulomb excitation products; deduced ³¹ Cl 1st excited state resonance. CONF Heidelberg (NIC XI) Proc,P228,Togano |

A=208 (continued)

| 2010ZHZU | NUCLEAR REACTIONS ¹⁸⁴ W(³² S, X), E(cm)=118-148 MeV; measured reaction products; deduced σ , quasifission σ , anisotropy, |
|----------|--|
| | reaction mechanism; calculated σ , fusion probability, anisotropy. |
| | 90,96 Zr(32 S, X), E(cm)=70-95 MeV; measured reaction products; |
| | E(cm)=35-70 MeV: measured reaction products: deduced $\sigma(\theta=175^{\circ})$: |
| | calculated $\sigma(\theta - 175^0)$ using CCFULL CONE Tsukuba(Nuclear Physics |
| | Trends) Proc P50 Zhang |
| 2011HE13 | NUCLEAR REACTIONS 208 Pb(p, p'), 207 Pb(d, p), E<14 MeV; |
| | measured proton spectra; deduced excitation energies, J, π , σ . JOUR |
| | JPGPE 38 105102 |
| 2011MU10 | NUCLEAR REACTIONS 40,48 Ca(n, n), E=11.9, 16.9 MeV; measured |
| | $E(n)$, $I(n)$, σ , $\sigma(E, \theta)$, time-of-flight spectra. ⁴⁰ Ca(n, n), E=9.9-85.0; |
| | ${}^{48}Ca(n, n), E=7.97-16.9 \text{ MeV}; {}^{54}Ca(n, n), E=5.5-26.0 \text{ MeV}; {}^{58,60}Ni(n, n), E=5.5-26.0 \text{ MeV}; {}^{58,60$ |
| | n), E=4.5-24.0 MeV; ${}^{92}Mo(n, n)$, E=7.0-30.4 MeV; ${}^{116,118}Sn(n, n)$, |
| | $E=9.95-24.0 \text{ MeV}; {}^{120}Sn(n, n), E=9.94-16.91 \text{ MeV}; {}^{124}Sn(n, n),$ |
| | $E=11.0-24.0 \text{ MeV}; {}^{208}Pb(n, n), E=4.0-185.0 \text{ MeV}; {}^{50}Ti(p, p),$ |
| | $E=6.0-65.0 \text{ MeV}; {}^{52}Cr(p, p), E=10.77-39.9 \text{ MeV}; {}^{54}Fe, {}^{64}Ni(p, p),$ |
| | $E=9.69-65.0 \text{ MeV}; {}^{58}\text{Ni}(p, p), E=7.0-192.0 \text{ MeV}; {}^{60}\text{Ni}(p, p),$ |
| | $E=7.0-178.0 \text{ MeV}; {}^{62}\text{Ni}(p, p), E=8.02-156.0 \text{ MeV}; {}^{90}\text{Zr}(p, p),$ |
| | $E=5.57-185.0 \text{ MeV}; {}^{92}Mo(p, p), E=12.5-49.45 \text{ MeV}; {}^{114}Sn(p, p),$ |
| | $E=30.4 \text{ MeV}; {}^{116}Sn(p, p), E=16.0-61.4 \text{ MeV}; {}^{118,122,124}Sn(p, p),$ |
| | $E=16.0-49.35 \text{ MeV}; {}^{120}Sn(p, p), E=9.8-156.0 \text{ MeV}; {}^{208}Pb(p, p),$ |
| | E=9.0-200.0 MeV; analyzed total cross sections, $\sigma(E, \theta)$, single-particle |
| | levels, spectroscopic factors, occupation probabilities, mass dependence on cross section. Dispersal optical model (DOM) analysis. JOUR |
| | PRVCA 83 064605 |
| 2011TA18 | NUCLEAR REACTIONS ²⁰⁸ Pb(p, p'), E<20 MeV; measured reaction |
| | products, proton spectra; deduced electric dipole (E1) and spin |
| | magnetic dipole (M1) modes, E1 strength distribution, neutron skin |
| | thickness. Comparison with experimental data. JOUR PRLTA 107 |
| | 062502 |
| | |

A=209

No references found

A = 210

No references found

²¹¹Rn **2011KA23** NUCLEAR REACTIONS ²⁰⁸Pb(¹²C, X)²²⁰Ra, ²⁰⁷Pb(¹³C, X)²²⁰Ra, ²⁰⁸Pb(¹²C, 2n), (¹²C, 3n), (¹²C, 4n), (¹²C, 5n), (¹²C, 6n), (¹²C, n\alpha), (¹²C, 3n\alpha), (¹²C, 4n\alpha), (¹²C, 5n\alpha), ²⁰⁷Pb(¹³C, 3n), (¹³C, 4n), (¹³C, 5n), (¹³C, 6n), (¹³C, 3n\alpha), (¹³C, 4n\alpha), ²⁰⁷Pb(¹³C, F), (¹³C, xn), ²⁰⁸Pb(¹²C, F), (¹²C, xn), E=58-94 MeV; measured reaction products; deduced fusion σ . deduced incomplete fusion. Comparison with with the single-barrier penetration model calculations. JOUR JPGPE 38 095104

A = 212

²¹²Rn 2011KA23 NUCLEAR REACTIONS ²⁰⁸Pb(¹²C, X)²²⁰Ra, ²⁰⁷Pb(¹³C, X)²²⁰Ra, ²⁰⁸Pb(¹²C, 2n), (¹²C, 3n), (¹²C, 4n), (¹²C, 5n), (¹²C, 6n), (¹²C, n\alpha), (¹²C, 3n\alpha), (¹²C, 4n\alpha), (¹²C, 5n\alpha), ²⁰⁷Pb(¹³C, 3n), (¹³C, 4n), (¹³C, 5n), (¹³C, 6n), (¹³C, 3n\alpha), (¹³C, 4n\alpha), ²⁰⁷Pb(¹³C, F), (¹³C, xn), ²⁰⁸Pb(¹²C, F), (¹²C, xn), E=58-94 MeV; measured reaction products; deduced fusion σ . deduced incomplete fusion. Comparison with with the single-barrier penetration model calculations. JOUR JPGPE 38 095104

A = 213

²¹³Rn **2011KA23** NUCLEAR REACTIONS ²⁰⁸Pb(¹²C, X)²²⁰Ra, ²⁰⁷Pb(¹³C, X)²²⁰Ra, ²⁰⁸Pb(¹²C, 2n), (¹²C, 3n), (¹²C, 4n), (¹²C, 5n), (¹²C, 6n), (¹²C, n\alpha), (¹²C, 3n\alpha), (¹²C, 3n\alpha), (¹²C, 4n\alpha), (¹²C, 5n\alpha), ²⁰⁷Pb(¹³C, 3n), (¹³C, 4n), (¹³C, 5n), (¹³C, 6n), (¹³C, 3n\alpha), (¹³C, 4n\alpha), ²⁰⁷Pb(¹³C, F), (¹³C, xn), ²⁰⁸Pb(¹²C, F), (¹²C, xn), E=58-94 MeV; measured reaction products; deduced fusion σ . deduced incomplete fusion. Comparison with with the single-barrier penetration model calculations. JOUR JPGPE 38 095104

| ²¹⁴ Ra 2011KA23 | NUCLEAR REACTIONS ²⁰⁸ Pb(¹² C, X) ²²⁰ Ra, ²⁰⁷ Pb(¹³ C, X) ²²⁰ Ra, ²⁰⁸ Pb(¹² C, 2n), (¹² C, 3n), (¹² C, 4n), (¹² C, 5n), (¹² C, 6n), (¹² C, n\alpha), (¹² C, 3n\alpha), (¹² C, 4n\alpha), (¹² C, 5n\alpha), ²⁰⁷ Pb(¹³ C, 3n), (¹³ C, 4n), (¹³ C, 5n), (¹³ C, 6n), (¹³ C, 3n\alpha), (¹³ C, 4n\alpha), ²⁰⁷ Pb(¹³ C, F), (¹³ C, xn), ²⁰⁸ Pb(¹² C, F), (¹² C, xn), E=58-94 MeV; measured reaction products; deduced fusion σ . deduced incomplete fusion. Comparison with with the single-barrier penetration model calculations. JOUR JPGPE 38 095104 |
|----------------------------|---|
|----------------------------|---|

| ²¹⁵ Rn | 2011KA23 | NUCLEAR REACTIONS ²⁰⁸ Pb(¹² C, X) ²²⁰ Ra, ²⁰⁷ Pb(¹³ C, X) ²²⁰ Ra, ²⁰⁸ Pb(¹² C, 2n), (¹² C, 3n), (¹² C, 4n), (¹² C, 5n), (¹² C, 6n), (¹² C, n\alpha), (¹² C, 3n\alpha), (¹² C, 4n\alpha), (¹² C, 5n\alpha), ²⁰⁷ Pb(¹³ C, 3n), (¹³ C, 4n), (¹³ C, 5n), (¹³ C, 6n), (¹³ C, 3n\alpha), (¹³ C, 4n\alpha), ²⁰⁷ Pb(¹³ C, F), (¹³ C, xn), ²⁰⁸ Pb(¹² C, F), (¹² C, xn), E=58-94 MeV; measured reaction products; deduced fusion σ . deduced incomplete fusion. Comparison with with the single-barrier penetration model calculations. JOUR JPGPE 38 095104 |
|-------------------|----------|---|
| ²¹⁵ Ra | 2011KA23 | NUCLEAR REACTIONS ²⁰⁸ Pb(¹² C, X) ²²⁰ Ra, ²⁰⁷ Pb(¹³ C, X) ²²⁰ Ra, ²⁰⁸ Pb(¹² C, 2n), (¹² C, 3n), (¹² C, 4n), (¹² C, 5n), (¹² C, 6n), (¹² C, n\alpha), (¹² C, 3n\alpha), (¹² C, 4n\alpha), (¹² C, 5n\alpha), ²⁰⁷ Pb(¹³ C, 3n), (¹³ C, 4n), (¹³ C, 5n), (¹³ C, 6n), (¹³ C, 3n\alpha), (¹³ C, 4n\alpha), ²⁰⁷ Pb(¹³ C, F), (¹³ C, xn), ²⁰⁸ Pb(¹² C, F), (¹² C, xn), E=58-94 MeV; measured reaction products; deduced fusion σ . deduced incomplete fusion. Comparison with with the single-barrier penetration model calculations. JOUR JPGPE 38 095104 |

A = 216

| ²¹⁶ Ra | 2011KA23 | NUCLEAR REACTIONS ²⁰⁸ Pb(¹² C, X) ²²⁰ Ra, ²⁰⁷ Pb(¹³ C, X) ²²⁰ Ra, ²⁰⁸ Pb(¹² C, 2n), (¹² C, 3n), (¹² C, 4n), (¹² C, 5n), (¹² C, 6n), (¹² C, n\alpha), (¹² C, 3n\alpha), (¹² C, 4n\alpha), (¹² C, 5n\alpha), ²⁰⁷ Pb(¹³ C, 3n), (¹³ C, 4n), (¹³ C, 5n), (¹³ C, 6n), (¹³ C, 3n\alpha), (¹³ C, 4n\alpha), ²⁰⁷ Pb(¹³ C, F), (¹³ C, xn), ²⁰⁸ Pb(¹² C, F), (¹² C, xn), E=58-94 MeV; measured reaction products; deduced fusion σ . deduced incomplete fusion. Comparison with with the single-barrier penetration model calculations. JOUR JPGPE 38 |
|-------------------|----------|--|
| ²¹⁶ Th | 2011R020 | 095104 NUCLEAR REACTIONS ²⁰⁸ Pb(⁵⁰ Ti, 2n), E=240 MeV; measured E γ , I γ , ce, $\gamma\gamma$ -, γ (ce)-coin, γ (t), half-life. ²⁵⁶ Rf; deduced levels, J, π , isomers, configurations; calculated energies of two-quasiparticle high-K isomers with the universal Woods-Saxon energies. ¹⁷⁰ Er(⁵⁰ Ti, 4n) ²¹⁶ Th, E=222 MeV; measured E γ , ce, γ (ce)-coin from isomer, half-life, isomer ratio; used as a test case. JOUR PRVCA 83 064311 |

| 217 Ra | 2011KA23 | NUCLEAR REACTIONS 208 Pb $(^{12}$ C, X $)^{220}$ Ra, 207 Pb $(^{13}$ C, X $)^{220}$ Ra, |
|-------------|----------|---|
| | | 208 Pb(12 C, 2n), (12 C, 3n), (12 C, 4n), (12 C, 5n), (12 C, 6n), (12 C, n α), |
| | | $(^{12}C, 3n\alpha), (^{12}C, 4n\alpha), (^{12}C, 5n\alpha), ^{207}Pb(^{13}C, 3n), (^{13}C, 4n), (^{$ |
| | | 5n), $({}^{13}C, 6n)$, $({}^{13}C, 3n\alpha)$, $({}^{13}C, 4n\alpha)$, ${}^{207}Pb({}^{13}C, F)$, $({}^{13}C, xn)$, |
| | | 208 Pb(12 C, F), (12 C, xn), E=58-94 MeV; measured reaction products; |
| | | deduced fusion σ . deduced incomplete fusion. Comparison with with |
| | | the single-barrier penetration model calculations. JOUR JPGPE 38 |
| | | 095104 |

²¹⁸Ra **2011KA23** NUCLEAR REACTIONS ²⁰⁸Pb(¹²C, X)²²⁰Ra, ²⁰⁷Pb(¹³C, X)²²⁰Ra, ²⁰⁸Pb(¹²C, 2n), (¹²C, 3n), (¹²C, 4n), (¹²C, 5n), (¹²C, 6n), (¹²C, n\alpha), (¹²C, 3n\alpha), (¹²C, 4n\alpha), (¹²C, 5n\alpha), ²⁰⁷Pb(¹³C, 3n), (¹³C, 4n), (¹³C, 5n), (¹³C, 6n), (¹³C, 3n\alpha), (¹³C, 4n\alpha), ²⁰⁷Pb(¹³C, F), (¹³C, xn), ²⁰⁸Pb(¹²C, F), (¹²C, xn), E=58-94 MeV; measured reaction products; deduced fusion σ . deduced incomplete fusion. Comparison with with the single-barrier penetration model calculations. JOUR JPGPE 38 095104

A = 219

No references found

A = 220

| 220 Rn | 2011KI16 | RADIOACTIVITY 232,233 U(α); 228,229 Th(α)[from 232,233 U α decay]; |
|-------------|----------|---|
| | | measured $\mathbf{E}\alpha$, $\mathbf{I}\alpha$. ²²⁹ Th; deduced half-life of ground state by the |
| | | method of activity ratios and growth times. Comparison with previous |
| | | measurements. ²²⁴ Ra, ²²⁵ Ac(α); measured E α , I α . JOUR PRVCA 84 |
| | | 014316 |
| 220 Ra | 2011KA23 | NUCLEAR REACTIONS ²⁰⁸ Pb(¹² C, X) ²²⁰ Ra, ²⁰⁷ Pb(¹³ C, X) ²²⁰ Ra, |
| | | 208 Pb(12 C, 2n), (12 C, 3n), (12 C, 4n), (12 C, 5n), (12 C, 6n), (12 C, n α), |
| | | $(^{12}C, 3n\alpha), (^{12}C, 4n\alpha), (^{12}C, 5n\alpha), ^{207}Pb(^{13}C, 3n), (^{13}C, 4n), (^{$ |
| | | 5n), $({}^{13}C, 6n)$, $({}^{13}C, 3n\alpha)$, $({}^{13}C, 4n\alpha)$, ${}^{207}Pb({}^{13}C, F)$, $({}^{13}C, xn)$, |
| | | 208 Pb(12 C, F), (12 C, xn), E=58-94 MeV; measured reaction products; |
| | | deduced fusion σ . deduced incomplete fusion. Comparison with with |
| | | the single-barrier penetration model calculations. JOUR JPGPE 38 |
| | | 095104 |

A = 221

²²¹Fr **2011KI16** RADIOACTIVITY ^{232,233}U(α); ^{228,229}Th(α)[from ^{232,233}U α decay]; measured E α , I α . ²²⁹Th; deduced half-life of ground state by the method of activity ratios and growth times. Comparison with previous measurements. ²²⁴Ra, ²²⁵Ac(α); measured E α , I α . JOUR PRVCA 84 014316

A = 222

No references found

A = 223

No references found

²²⁴Ra **2011KI16** RADIOACTIVITY ^{232,233}U(α); ^{228,229}Th(α)[from ^{232,233}U α decay]; measured E α , I α . ²²⁹Th; deduced half-life of ground state by the method of activity ratios and growth times. Comparison with previous measurements. ²²⁴Ra, ²²⁵Ac(α); measured E α , I α . JOUR PRVCA 84 014316

A = 225

| ²²⁵ Ra | 2011KI16 | RADIOACTIVITY ^{232,233} U(α); ^{228,229} Th(α)[from ^{232,233} U α decay]; measured E α , I α . ²²⁹ Th; deduced half-life of ground state by the method of activity ratios and growth times. Comparison with previous measurements. ²²⁴ Ra, ²²⁵ Ac(α); measured E α , I α . JOUR PRVCA 84 |
|-------------------|----------|--|
| ²²⁵ Ac | 2011KI16 | 014316 RADIOACTIVITY ^{232,233} U(α); ^{228,229} Th(α)[from ^{232,233} U α decay]; measured E α , I α . ²²⁹ Th; deduced half-life of ground state by the method of activity ratios and growth times. Comparison with previous measurements. ²²⁴ Ra, ²²⁵ Ac(α); measured E α , I α . JOUR PRVCA 84 014316 |

A=226

No references found

A = 227

No references found

A = 228

²²⁸Th **2011KI16** RADIOACTIVITY ^{232,233}U(α); ^{228,229}Th(α)[from ^{232,233}U α decay]; measured E α , I α . ²²⁹Th; deduced half-life of ground state by the method of activity ratios and growth times. Comparison with previous measurements. ²²⁴Ra, ²²⁵Ac(α); measured E α , I α . JOUR PRVCA 84 014316

A = 229

²²⁹Th **2011KI16** RADIOACTIVITY ^{232,233}U(α); ^{228,229}Th(α)[from ^{232,233}U α decay]; measured E α , I α . ²²⁹Th; deduced half-life of ground state by the method of activity ratios and growth times. Comparison with previous measurements. ²²⁴Ra, ²²⁵Ac(α); measured E α , I α . JOUR PRVCA 84 014316

A=230

No references found

A = 231

| 2011AD18 | NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), |
|----------|---|
| | E=1.E-10-1.E3 MeV; measured reaction products, $E\gamma$, $I\gamma$. ^{85m} Kr, ⁹³ Y, |
| | ⁹⁷ Zr, ⁹⁹ Mo, ¹⁰³ Ru, ¹⁰⁵ Rh, ¹³² Te, ^{131,133} I, ^{133,135} Xe, ¹⁴⁰ Ba, ^{141,143} Ce, |
| | 231 Th, 233 Pa, 237 U, 239 Np deduced reaction rates, T _{1/2} . 232 Th, U(n, |
| | 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 |
| | keV, 14, 25, 50, 100, 200 MeV; measured fission products, deduced |
| | mass distribution; calculated mass distribution at two lowest energies |
| | using TALYS. Neutron flux calculated using MCNPX with LA150 cross |
| | section library. JOUR ZAANE 47 85 |
| 2011RE13 | NUCLEAR REACTIONS ²³² Th(n, 2n), E=13.57-14.83 MeV; measured |
| | reaction products, $E\gamma$, $I\gamma$; deduced σ . Comparison with nuclear model |
| | calculations and ENDF / B-VII, ENDF / B-VI, ROSFOND-2010, |
| | JENDL-4.0, JENDL-3.3 and JEFF-3.1 evaluated nuclear libraries. |
| | JOUR ANEND 38 2359 |
| | 2011AD18 2011RE13 |

A = 232

| $^{232}\mathrm{Th}$ | 2011R026 | NUCLEAR REACTIONS ²³² Th(α , α '), E=16-30 MeV; measured E α , |
|---------------------|----------|--|
| | | I α , quasi-elastic-scattering $\sigma(E)$; deduced fusion-barrier distribution |
| | | and width. 232 Th(12 C, 12 C'), E(cm)=52-77 MeV; 232 Th(16 O, 16 O'), |
| | | $E(cm) = 70-97 \text{ MeV}; {}^{232}Th({}^{19}F, {}^{19}F'), E(cm) = 77-102 \text{ MeV}; analyzed$ |
| | | fusion-barrier distributions and widths. Comparison with |
| | | coupled-channel fusion model calculations. JOUR PRVCA 84 011602 |
| $^{232}\mathrm{U}$ | 2011KI16 | RADIOACTIVITY 232,233 U(α); 228,229 Th(α)[from 232,233 U α decay]; |
| | | measured $\mathbf{E}\alpha$, $\mathbf{I}\alpha$. ²²⁹ Th; deduced half-life of ground state by the |
| | | method of activity ratios and growth times. Comparison with previous |
| | | measurements. ²²⁴ Ra, ²²⁵ Ac(α); measured E α , I α . JOUR PRVCA 84 |
| | | 014316 |

| 233 Th | 2011AD18 | NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), |
|-------------|----------|---|
| | | E=1.E-10-1.E3 MeV; measured reaction products, $E\gamma$, $I\gamma$. ^{85m} Kr, ⁹³ Y, |
| | | 97 Zr, 99 Mo, 103 Ru, 105 Rh, 132 Te, 131,133 I, 133,135 Xe, 140 Ba, 141,143 Ce, |
| | | 231 Th, 233 Pa, 237 U, 239 Np deduced reaction rates, $T_{1/2}$. 232 Th, U(n, |
| | | 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 |
| | | keV, 14, 25, 50, 100, 200 MeV; measured fission products, deduced |
| | | mass distribution; calculated mass distribution at two lowest energies |
| | | using TALYS. Neutron flux calculated using MCNPX with LA150 cross |
| | | section library. JOUR ZAANE 47 85 |
| | | |

A=233 (continued)

| 233 Pa | 2011AD18 | NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), |
|-------------|----------|---|
| | | E=1.E-10-1.E3 MeV; measured reaction products, $E\gamma$, $I\gamma$. ^{85m} Kr, ⁹³ Y, |
| | | ⁹⁷ Zr, ⁹⁹ Mo, ¹⁰³ Ru, ¹⁰⁵ Rh, ¹³² Te, ^{131,133} I, ^{133,135} Xe, ¹⁴⁰ Ba, ^{141,143} Ce, |
| | | 231 Th, 233 Pa, 237 U, 239 Np deduced reaction rates, $T_{1/2}$. 232 Th, U(n, |
| | | 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 |
| | | keV, 14, 25, 50, 100, 200 MeV; measured fission products, deduced |
| | | mass distribution; calculated mass distribution at two lowest energies |
| | | using TALYS. Neutron flux calculated using MCNPX with LA150 cross |
| | | section library. JOUR ZAANE 47 85 |
| | 2011KO32 | RADIOACTIVITY ²³³ Pa(β^{-}) [from ²³⁷ Nb(α)]; measured decay |
| | | products, $E\gamma$, $I\gamma$, $E\alpha$, $I\alpha$; deduced γ -emission probabilities. |
| | | Comparison with experimental data. JOUR NIMAE 652 654 |
| ^{233}U | 2011KI16 | RADIOACTIVITY ^{232,233} U(α); ^{228,229} Th(α)[from ^{232,233} U α decay]; |
| | | measured $\mathbf{E}\alpha$, $\mathbf{I}\alpha$. ²²⁹ Th; deduced half-life of ground state by the |
| | | method of activity ratios and growth times. Comparison with previous |
| | | measurements. ²²⁴ Ra, ²²⁵ Ac(α); measured E α , I α . JOUR PRVCA 84 |
| | | 014316 |
| | 2011KO30 | NUCLEAR REACTIONS 234 U(polarized d, t), E=22 MeV; measured |
| | | $E(t)$, $I(t)$, $\sigma(\theta)$, analyzing powers using Q3D spectrometer. ²³³ U; |
| | | deduced levels, J, π , rotational bands, spectroscopic strengths and |
| | | fingerprints for bands, Nilsson configurations. DWBA analysis. |
| | | Comparison with previous data. JOUR PRVCA 84 014334 |
| | 2011KO32 | RADIOACTIVITY ²³³ Pa(β^{-}) [from ²³⁷ Nb(α)]; measured decay |
| | | products, $E\gamma$, $I\gamma$, $E\alpha$, $I\alpha$; deduced γ -emission probabilities. |
| | | Comparison with experimental data. JOUR NIMAE 652 654 |

A = 234

No references found

A=235

No references found

A=236

²³⁶U 2010JIZZ NUCLEAR REACTIONS ⁹³Nb(n, 2n), ²³⁸U(n, 3n), E=14 MeV; measured σ using AMS (Accelerator Mass Spectrometry). CONF Tsukuba(Nuclear Physics Trends) Proc.P144,Jiang

| ^{237}U | 2011AD18 | NUCLEAR REACTIONS ²³² Th, U(n, f), (n, γ), (n, 2n), |
|-----------|----------|---|
| | | E=1.E-10-1.E3 MeV; measured reaction products, $E\gamma$, $I\gamma$. ^{85m} Kr, ⁹³ Y, |
| | | ⁹⁷ Zr, ⁹⁹ Mo, ¹⁰³ Ru, ¹⁰⁵ Rh, ¹³² Te, ^{131,133} I, ^{133,135} Xe, ¹⁴⁰ Ba, ^{141,143} Ce, |
| | | 231 Th, 233 Pa, 237 U, 239 Np deduced reaction rates, T _{1/2} . 232 Th, U(n, |
| | | 2n), E=10-2000 MeV; calculated σ using TALYS. ²³² Th(n, f), E=400 |
| | | keV, 14, 25, 50, 100, 200 MeV; measured fission products, deduced |
| | | mass distribution; calculated mass distribution at two lowest energies |
| | | using TALYS. Neutron flux calculated using MCNPX with LA150 cross |
| | | section library. JOUR ZAANE 47 85 |
| | 2011ZH26 | NUCLEAR REACTIONS ^{85,87} Rb, ⁸⁹ Y, ^{140,142} Ce, ¹⁶⁹ Tm, ¹⁷⁵ Lu, ¹⁸¹ Ta, |
| | | ¹⁸⁵ Re, ²³⁸ U(n, 2n), E=14 MeV; measured reaction products, $E\gamma$, $I\gamma$; |
| | | deduced σ . Comparison with ENDF / B-VII.0 evaluated nuclear data |
| | | library. JOUR NSENA 169 188 |

A = 238

No references found

A = 239

²³⁹Np **2011AD18** NUCLEAR REACTIONS ²³²Th, U(n, f), (n, γ), (n, 2n), E=1.E-10-1.E3 MeV; measured reaction products, E γ , I γ . ^{85m}Kr, ⁹³Y, ⁹⁷Zr, ⁹⁹Mo, ¹⁰³Ru, ¹⁰⁵Rh, ¹³²Te, ^{131,133}I, ^{133,135}Xe, ¹⁴⁰Ba, ^{141,143}Ce, ²³¹Th, ²³³Pa, ²³⁷U, ²³⁹Np deduced reaction rates, T_{1/2}. ²³²Th, U(n, 2n), E=10-2000 MeV; calculated σ using TALYS. ²³²Th(n, f), E=400 keV, 14, 25, 50, 100, 200 MeV; measured fission products, deduced mass distribution; calculated mass distribution at two lowest energies using TALYS. Neutron flux calculated using MCNPX with LA150 cross section library. JOUR ZAANE 47 85

A = 240

No references found

| 241 Pu | 2009WE08 | RADIOACTIVITY ²⁴¹ Pu(β^{-}); measured half-life by ratios of ²⁴¹ Pu / |
|---------------------|----------|---|
| | | $^{240}\mathrm{Pu}$ and $^{240}\mathrm{Pu}$ / $^{239}\mathrm{Pu}$ activities over 30-year year interval. JOUR |
| | | JASPE 24 801 |
| $^{241}\mathrm{Am}$ | 2009WE08 | RADIOACTIVITY ²⁴¹ Pu(β^{-}); measured half-life by ratios of ²⁴¹ Pu / |
| | | 240 Pu and 240 Pu / 239 Pu activities over 30-year year interval. JOUR |
| | | JASPE 24 801 |

No references found

A = 243

No references found

A = 244

No references found

A = 245

No references found

A=246

No references found

A = 247

No references found

A = 248

²⁴⁸Cm **2011RZ01** RADIOACTIVITY ²⁴⁸Cm(SF); measured E γ , I γ , $\gamma\gamma$ -coin, $\gamma\gamma(\theta)$, using EUROGAM-2 array. ¹⁴³Xe; deduced levels, J, π , conversion coefficients, multipolarity, bands, configurations. Comparison with quasiparticle-rotor model calculations with a reflection-symmetric potential. Systematics of bandheads of N=89 nuclei. JOUR PRVCA 83 067301

A = 249

No references found

A=250

No references found

A=251

No references found

A = 252

| ²⁵² Cf | 2010ZHZT | RADIOACTIVITY ²⁵² Cf(SF); measured E γ , I γ , $\gamma\gamma$ -coin. ¹⁰³ Nb, ^{105,106} Mo, ^{107,108} Tc, ^{110,112} Ru deduced levels, J, π , collective vibrational, rotational bands. CONF Tsukuba(Nuclear Physics Trends) Proc.P253.Zhu |
|-------------------|----------|--|
| | 2011KAZY | RADIOACTIVITY ²⁵² Cf(SF); measured fission fragment mass, (fragment)(fragment)-coin, n(fragment)-coin. CONF Dubna(ISINN-18).P102.Kamanin |
| | 2011LI25 | RADIOACTIVITY ²⁵² Cf(SF); measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin, fission yields ratios using the Gammasphere array. ¹¹⁴ Rh; deduced levels, J, π , rotational bands, signature inversion, configurations. Comparison with Triaxial Projected Shell Model calculations. Systematics of negative-parity yrast bands of odd-odd Rh nuclei with A=104-114. JOUR PRVCA 83 064310 |
| | 2011LI29 | RADIOACTIVITY ²⁵² Cf(SF); measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin using Gammasphere array. ¹¹⁵ Rh; deduced levels, J, π , bands, moment of inertia, signature splitting, fission yield ratios. Comparison with Rotor plus particle model calculations. Systematics of level energies, signature splittings and moments of inertia plots of ^{107,109,111,113,115} Rh nuclei. JOUR PRVCA 84 014304 |
| | 2011LI34 | RADIOACTIVITY ²⁵² Cf(SF); measured decay products, $E\gamma$, $I\gamma$, γ - γ - γ -coin. ^{88,90,92} Kr, ⁸⁶ Se; deduced level schemes, energies, J, π . Comparison with nuclear systematics and angular correlation measurements. JOUR IMPEE 20 1825 |

A = 253

²⁵³No 2010HAZN NUCLEAR REACTIONS ²⁰⁷Pb(⁴⁸Ca, 2n), E=220 MeV; measured reaction products, (ER) α -correlations, E γ , I γ , (DSSD) γ -coin, X-rays. ²⁵³No deduced decay partial scheme. DSDD (Double-Sided Si-Strip Detector), analysis in progress. CONF Kobe(Tours Nuc.Phys.and Astroph.VII) Proc.P337,Hauschild

A = 254

No references found

A=255

No references found

 256 Rf 2011R020 NUCLEAR REACTIONS ²⁰⁸Pb(⁵⁰Ti, 2n), E=240 MeV; measured $E\gamma$, I γ , ce, $\gamma\gamma$ -, γ (ce)-coin, γ (t), half-life. ²⁵⁶Rf; deduced levels, J, π . isomers, configurations; calculated energies of two-quasiparticle high-K isomers with the universal Woods-Saxon energies. ¹⁷⁰Er(⁵⁰Ti, $(4n)^{216}$ Th, E=222 MeV; measured E γ , ce, γ (ce)-coin from isomer, half-life, isomer ratio; used as a test case. JOUR PRVCA 83 064311 A = 257No references found A = 258 $^{258}\mathrm{Lr}$ RADIOACTIVITY ²⁶⁶Bh(α)[from ²⁴⁸Cm(²³Na, 5n)];²⁶²Db(α)[from 2010MOZV ²⁶⁶Bh]; measured evaporation residues, $E\alpha$, $I\alpha$, $\alpha\alpha$ -coin, (SF) α -coin, $\alpha\alpha$ -correlations, (SF) α -correlations; deduced T_{1/2}, Q-values. CONF Kobe(Tours Nuc.Phys.and Astroph.VII) Proc.P331,Morita A = 259No references found A = 260 ^{260}Sg RADIOACTIVITY 264,265 Hs(α), (SF) [from 208 Pb(58 Fe, 2n), 2011SA41 207,208 Pb(58 Fe, n), E(cm)=200-227 MeV]; measured E α , I α ; deduced α -particle energies, α and spontaneous fission branches, Q-values, T_{1/2}. JOUR JUPSA 80 094201 A = 261 $^{261}\mathrm{Sg}$ RADIOACTIVITY 264,265 Hs(α), (SF) [from 208 Pb(58 Fe, 2n), 2011SA41 207,208 Pb(58 Fe, n), E(cm)=200-227 MeV]; measured E α , I α ; deduced α -particle energies, α and spontaneous fission branches, Q-values, T_{1/2}. JOUR JUPSA 80 094201 A = 262 262 Db RADIOACTIVITY ²⁶⁶Bh(α)[from ²⁴⁸Cm(²³Na, 5n)];²⁶²Db(α)[from 2010MOZV ²⁶⁶Bh]; measured evaporation residues, $E\alpha$, $I\alpha$, $\alpha\alpha$ -coin, $(SF)\alpha$ -coin, $\alpha\alpha$ -correlations, (SF) α -correlations; deduced T_{1/2}, Q-values. CONF Kobe(Tours Nuc.Phys.and Astroph.VII) Proc.P331,Morita

A=263

No references found

A=264

| 264 Hs | 2011SA41 | NUCLEAR REACTIONS 208 Pb(58 Fe, 2n), 207,208 Pb(58 Fe, n), |
|-------------|----------|--|
| | | $E(cm)=200-227$ MeV; measured reaction products; deduced σ . JOUR |
| | | JUPSA 80 094201 |
| | 2011SA41 | RADIOACTIVITY 264,265 Hs(α), (SF) [from 208 Pb(58 Fe, 2n), |
| | | 207,208 Pb(58 Fe, n), E(cm)=200-227 MeV]; measured E α , I α ; deduced |
| | | α -particle energies, α and spontaneous fission branches, Q-values, T _{1/2} |
| | | JOUR JUPSA 80 094201 |

A=265

| 2011SA41 | NUCLEAR REACTIONS 208 Pb(58 Fe, 2n), 207,208 Pb(58 Fe, n), |
|----------|---|
| | $E(cm)=200-227$ MeV; measured reaction products; deduced σ . JOUR |
| | JUPSA 80 094201 |
| 2011SA41 | RADIOACTIVITY 264,265 Hs(α), (SF) [from 208 Pb(58 Fe, 2n), |
| | 207,208 Pb(58 Fe, n), E(cm)=200-227 MeV]; measured E α , I α ; deduced |
| | α -particle energies, α and spontaneous fission branches, Q-values, $T_{1/2}$. |
| | JOUR JUPSA 80 094201 |
| | 2011SA41 2011SA41 |

| ²⁶⁶ Rf | 20110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), ²⁶⁶ Sg(SF), ²⁷¹ Sg(α), (SF), ^{270,272,274} Bh(α), ^{270,275} Hs(α), ^{274,275,276,278} Mt(α), ²⁷⁹ Ds(SF), (α), ²⁸¹ Ds(SF), ^{278,279,280,282} Rg(α), ²⁸¹ Rg(SF), ^{282,284} Cn(SF), ²⁸⁵ Cn(α), ²⁸³ Cn(α), (SF), ^{282,283,284,285,286112, ²⁸⁶114(α), (SF), ^{287,288,289114, ^{287,288,289,290115}}} |
|-------------------|----------|--|
| | | 290,291,292,293 116, 293,294 117, 294 118(α); measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |
| 266 Db | 20110G07 | RADIOACTIVITY 267 Rf(SF), 266,268,270 Db(SF), (EC), 269 Db(SF), |
| | | ²⁶⁶ Sg(SF), ²⁷¹ Sg(α), (SF), ^{270,272,274} Bh(α), ^{270,275} Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | 282,283,284,285,286 113, 286 114(α), (SF), 287,288,289 114, 287,288,289,290 115, |
| | | 290,291,292,293 116, 293,294 117, 294 118(α); measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |

A=266 (continued)

| ²⁶⁶ Sg | 20110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), ²⁶⁶ Sg(SF), ²⁷¹ Sg(α), (SF), ^{270,272,274} Bh(α), ^{270,275} Hs(α), ^{274,275,276,278} Mt(α), ²⁷⁹ Ds(SF), (α), ²⁸¹ Ds(SF), ^{278,279,280,282} Rg(α), ²⁸¹ Rg(SF), ^{282,284} Cn(SF), ²⁸⁵ Cn(α), ²⁸³ Cn(α), (SF), ^{282,283,284,285,286} 113, ²⁸⁶ 114(α), (SF), ^{287,288,289} 114, ^{287,288,289,290} 115, ^{290,291,292,293} 116, ^{293,294} 117, ²⁹⁴ 118(α); measured decay and fission |
|-------------------|----------|--|
| | | products, E α , I α ; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| ^{266}Bh | 2010M0ZV | RADIOACTIVITY ²⁶⁶ Bh(α)[from ²⁴⁸ Cm(²³ Na, 5n)]; ²⁶² Db(α)[from ²⁶⁶ Bh]: measured evaporation residues. E α , I α , $\alpha\alpha$ -coin, (SF) α -coin. |
| | | $\alpha\alpha$ -correlations, (SF) α -correlations; deduced T _{1/2} , Q-values. CONF |
| 200 | | Kobe(Tours Nuc.Phys.and Astroph.VII) Proc.P331,Morita |
| ²⁶⁶ Hs | 2011IT06 | NUCLEAR REACTIONS ${}^{249}Cf({}^{22}Ne, X){}^{271}Hs^*, E=102, 127 MeV;$ ${}^{248}Cm({}^{26}Mg, X){}^{274}Hs^*, E=129, 143, 160 MeV; {}^{238}U({}^{36}S, X){}^{274}Hs^*,$ |
| | | $E=173, 179, 186, 198 \text{ MeV}; {}^{208}\text{Pb}({}^{58}\text{Fe}, X){}^{266}\text{Hs}^*, E=289, 305, 315,$ |
| | | 324 MeV; measured binary reaction product spectra in coincidence |
| | | mode using TOF; deduced yields, mass-energy and TKE distributions |
| | | of binary products. Comparison of measured fragment mass-energy |
| | | distributions with those expected for fission processes of excited |
| | | compound nucleus in the framework of the liquid drop model and |
| | | empirical systematics. JOUR PRVCA 83 064613 |

A = 267

| 267 Rf | 20110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), |
|-------------|----------|---|
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | 282,283,284,285,286 113, 286 114(α), (SF), 287,288,289 114, 287,288,289,290 115, |
| | | $^{290,291,292,293}116$, $^{293,294}117$, $^{294}118(\alpha)$; measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |

| ²⁶⁶ Sg(SF), ²⁷¹ Sg(α), (SF), ^{270,272,274} Bh(α), ^{270,275} Hs(α), ^{274,275,276,278} Mt(α), ²⁷⁹ Ds(SF), (α), ²⁸¹ Ds(SF), ^{278,279,280,282} Rg(α), ²⁸¹ Rg(SF), ^{282,284} Cn(SF), ²⁸⁵ Cn(α), ²⁸³ Cn(α), (SF), ^{282,283,284,285,286} 113, ²⁸⁶ 114(α), (SF), ^{287,288,289} 114, ^{287,288,289,290} 12, ^{290,291,292,293} 116, ^{293,294} 117, ²⁹⁴ 118(α); measured decay and fission products, E α , I α ; deduced decay mode, T _{1/2} , energy, Q-value. Comparison with theoretical calculations. JOUR RAACA 99 429 | 268 Rf | 20110G07 | RADIOACTIVITY 267 Rf(SF), 266,268,270 Db(SF), (EC), 269 Db(SF), |
|---|-------------|----------|---|
| $ \begin{array}{l} & 274,275,276,278\mathrm{Mt}(\alpha),\ 2^{79}\mathrm{Ds}(\mathrm{SF}),\ (\alpha),\ ^{281}\mathrm{Ds}(\mathrm{SF}),\ ^{278,279,280,282}\mathrm{Rg}(\alpha) \\ & 2^{81}\mathrm{Rg}(\mathrm{SF}),\ ^{282,284}\mathrm{Cn}(\mathrm{SF}),\ ^{285}\mathrm{Cn}(\alpha),\ ^{283}\mathrm{Cn}(\alpha),\ (\mathrm{SF}),\ ^{282,283,284,285,286}\mathrm{113},\ ^{286}\mathrm{114}(\alpha),\ (\mathrm{SF}),\ ^{287,288,289}\mathrm{114},\ ^{287,288,289,290}\mathrm{11},\ ^{290,291,292,293}\mathrm{116},\ ^{293,294}\mathrm{117},\ ^{294}\mathrm{118}(\alpha);\ \mathrm{measured\ decay\ and\ fission\ products,\ E\alpha,\ I\alpha;\ deduced\ decay\ mode,\ T_{1/2},\ \mathrm{energy},\ Q-value.\ Comparison\ with\ theoretical\ calculations.\ JOUR\ RAACA\ 99\ 429 \end{array} $ | | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| ²⁸¹ Rg(SF), ^{282,284} Cn(SF), ²⁸⁵ Cn(α), ²⁸³ Cn(α), (SF), ^{282,283,284,285,286} 113, ²⁸⁶ 114(α), (SF), ^{287,288,289} 114, ^{287,288,289,290} 1 ^{290,291,292,293} 116, ^{293,294} 117, ²⁹⁴ 118(α); measured decay and fission products, E α , I α ; deduced decay mode, T _{1/2} , energy, Q-value. Comparison with theoretical calculations. JOUR RAACA 99 429 | | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| ^{282,283,284,285,286} 113, ²⁸⁶ 114(α), (SF), ^{287,288,289} 114, ^{287,288,289,290} 1 ^{290,291,292,293} 116, ^{293,294} 117, ²⁹⁴ 118(α); measured decay and fission products, E α , I α ; deduced decay mode, T _{1/2} , energy, Q-value. Comparison with theoretical calculations. JOUR RAACA 99 429 | | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| ^{290,291,292,293} 116, ^{293,294} 117, ²⁹⁴ 118(α); measured decay and fission products, E α , I α ; deduced decay mode, T _{1/2} , energy, Q-value. Comparison with theoretical calculations. JOUR RAACA 99 429 | | | $282,283,284,285,286$ 113, 286 114(α), (SF), $287,288,289$ 114, $287,288,289,290$ 115, |
| products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. Comparison with theoretical calculations. JOUR RAACA 99 429 | | | 290,291,292,293 116, 293,294 117, 294 118(α); measured decay and fission |
| Comparison with theoretical calculations. JOUR RAACA 99 429 | | | products, $\mathbf{E}\alpha$, $\mathbf{I}\alpha$; deduced decay mode, $\mathbf{T}_{1/2}$, energy, Q-value. |
| | | | Comparison with theoretical calculations. JOUR RAACA 99 429 $$ |

A=268 (continued)

A=269

A = 270

| 110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), |
|--------|---|
| | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF). |
| | 282,283,284,285,286 113, 286 114(α), (SF), 287,288,289 114, 287,288,289,290 115, |
| | 290,291,292,293 116, 293,294 117, 294 118(α); measured decay and fission |
| | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | Comparison with theoretical calculations. JOUR RAACA 99 429 |
| 110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), |
| | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | $^{282,283,284,285,286}_{285,286}_{113}$, $^{286}_{114}(\alpha)$, (SF), $^{287,288,289}_{287,288,289}_{114}$, $^{287,288,289,290}_{287,288,289}_{115}$, |
| | $290,291,292,293$ 116, $293,294$ 117, 294 118(α); measured decay and fission |
| | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | Comparison with theoretical calculations. JOUR RAACA 99 429 |
| 110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), |
| | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | $^{282,283,284,285,286}_{282,283,284,285,286}_{113}$, $^{286}_{281}_{114}(\alpha)$, (SF), $^{287,288,289}_{281,285,286}_{114}$, $^{287,288,289,290}_{281,285,286}_{115}$, |
| | 200, 201, 202, 202, 4, 6, 202, 204, 4, 7, 204, 4, 6, (1) |
| | $^{290,291,292,293}116, ^{293,294}117, ^{294}118(\alpha)$; measured decay and fission |
| | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | 110G07 110G07 110G07 |

Page 105

A=270 (continued)

²⁷⁰Hs **20110G07** RADIOACTIVITY ²⁶⁷Rf(SF), ^{266,268,270}Db(SF), (EC), ²⁶⁹Db(SF), ²⁶⁶Sg(SF), ²⁷¹Sg(α), (SF), ^{270,272,274}Bh(α), ^{270,275}Hs(α), ^{274,275,276,278}Mt(α), ²⁷⁹Ds(SF), (α), ²⁸¹Ds(SF), ^{278,279,280,282}Rg(α), ²⁸¹Rg(SF), ^{282,284}Cn(SF), ²⁸⁵Cn(α), ²⁸³Cn(α), (SF), ^{282,283,284,285,286}113, ²⁸⁶114(α), (SF), ^{287,288,289}114, ^{287,288,289,290}115, ^{290,291,292,293}116, ^{293,294}117, ²⁹⁴118(α); measured decay and fission products, E α , I α ; deduced decay mode, T_{1/2}, energy, Q-value. Comparison with theoretical calculations. JOUR RAACA 99 429

A = 271

| ²⁷¹ Sg | 20110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), ²⁶⁶ Sg(SF), ²⁷¹ Sg(α), (SF), ^{270,272,274} Bh(α), ^{270,275} Hs(α), ^{274,275,276,278} Mt(α), ²⁷⁹ Ds(SF), (α), ²⁸¹ Ds(SF), ^{278,279,280,282} Rg(α), ²⁸¹ Rg(SF), ^{282,284} Cn(SF), ²⁸⁵ Cn(α), ²⁸³ Cn(α), (SF), ^{282,283,284,285,286} 113, ²⁸⁶ 114(α), (SF), ^{287,288,289} 114, ^{287,288,289,290} 115, |
|---------------------|----------|--|
| | | $^{290,291,292,293}116$, $^{293,294}117$, $^{294}118(\alpha)$; measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| $^{271}\mathrm{Bh}$ | 20110G07 | Comparison with theoretical calculations. JOUR RAACA 99 429 RADIOACTIVITY 267 Rf(SF), 266,268,270 Db(SF), (EC), 269 Db(SF), 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), 282,283,284,285,286112, 286114(α), (SF), 287,288,289114, 287,288,289,290115 |
| | | $^{290,291,292,293}_{116}$ $^{293,294}_{117}_{117}_{294}_{118}(\alpha)$; measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |
| 271 Hs | 2011IT06 | NUCLEAR REACTIONS ${}^{249}Cf({}^{22}Ne, X){}^{271}Hs^*, E=102, 127 MeV;$ ${}^{248}Cm({}^{26}Mg, X){}^{274}Hs^*, E=129, 143, 160 MeV; {}^{238}U({}^{36}S, X){}^{274}Hs^*,$ |
| | | $E=173, 179, 186, 198 MeV; {}^{208}Pb({}^{58}Fe, X){}^{266}Hs^*, E=289, 305, 315,$ |
| | | 324 MeV; measured binary reaction product spectra in coincidence |
| | | mode using TOF; deduced yields, mass-energy and TKE distributions |
| | | of binary products. Comparison of measured fragment mass-energy |
| | | distributions with those expected for fission processes of excited |
| | | compound nucleus in the framework of the liquid drop model and |
| | | empirical systematics. JOUR PRVCA 83 064613 |

| ^{272}Bh | 20110G07 | RADIOACTIVITY 267 Rf(SF), 266,268,270 Db(SF), (EC), 269 Db(SF), |
|------------|----------|---|
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | $282,283,284,285,286113, 286114(\alpha), (SF), 287,288,289114, 287,288,289,290115,$ |
| | | $^{290,291,292,293}116$, $^{293,294}117$, $^{294}118(\alpha)$; measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |
| | | |

No references found

A = 274

| ^{274}Bh | 20110G07 | RADIOACTIVITY 267 Rf(SF), 266,268,270 Db(SF), (EC), 269 Db(SF), |
|---------------------|----------|---|
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | $^{282,283,284,285,286}_{282,283,284,285,286}_{113}$, $^{286}_{281,14}(\alpha)$, (SF), $^{287,288,289}_{282,114}, ^{287,288,289,290}_{282,283,284,285,286}_{113}$ |
| | | 290,291,292,293 116, 293,294 117, 294 118(α); measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |
| ^{274}Hs | 2011IT06 | NUCLEAR REACTIONS 249 Cf $(^{22}$ Ne, X $)^{271}$ Hs [*] , E=102, 127 MeV: |
| | | 248 Cm(26 Mg, X) 274 Hs*, E=129, 143, 160 MeV; 238 U(36 S, X) 274 Hs*, |
| | | $E=173, 179, 186, 198 \text{ MeV}; {}^{208}\text{Pb}({}^{58}\text{Fe}, X){}^{266}\text{Hs}^*, E=289, 305, 315,$ |
| | | 324 MeV; measured binary reaction product spectra in coincidence |
| | | mode using TOF; deduced yields, mass-energy and TKE distributions |
| | | of binary products. Comparison of measured fragment mass-energy |
| | | distributions with those expected for fission processes of excited |
| | | compound nucleus in the framework of the liquid drop model and |
| | | empirical systematics. JOUR PRVCA 83 064613 |
| $^{274}\mathrm{Mt}$ | 20110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), |
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | $282,283,284,285,286113$, $286114(\alpha)$, (SF), $287,288,289114$, $287,288,289,290115$, |
| | | 290,291,292,293 116, 293,294 117, 294 118(α); measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |

| 275 Hs | 20110G07 | RADIOACTIVITY 267 Rf(SF), 266,268,270 Db(SF), (EC), 269 Db(SF), |
|-------------|----------|---|
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | 282,283,284,285,286 113, 286 114(α), (SF), 287,288,289 114, 287,288,289,290 115, |
| | | $^{290,291,292,293}116$, $^{293,294}117$, $^{294}118(\alpha)$; measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |

A=275 (continued)

²⁷⁵Mt **20110G07** RADIOACTIVITY ²⁶⁷Rf(SF), ^{266,268,270}Db(SF), (EC), ²⁶⁹Db(SF), ²⁶⁶Sg(SF), ²⁷¹Sg(α), (SF), ^{270,272,274}Bh(α), ^{270,275}Hs(α), ^{274,275,276,278}Mt(α), ²⁷⁹Ds(SF), (α), ²⁸¹Ds(SF), ^{278,279,280,282}Rg(α), ²⁸¹Rg(SF), ^{282,284}Cn(SF), ²⁸⁵Cn(α), ²⁸³Cn(α), (SF), ^{282,283,284,285,286}113, ²⁸⁶114(α), (SF), ^{287,288,289}114, ^{287,288,289,290}115, ^{290,291,292,293}116, ^{293,294}117, ²⁹⁴118(α); measured decay and fission products, E α , I α ; deduced decay mode, T_{1/2}, energy, Q-value. Comparison with theoretical calculations. JOUR RAACA 99 429

A = 276

A = 277

No references found

| $^{278}\mathrm{Mt}$ | 20110G07 | RADIOACTIVITY 267 Rf(SF), 266,268,270 Db(SF), (EC), 269 Db(SF), |
|---------------------|----------|---|
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | 282,283,284,285,286 113, 286 114(α), (SF), 287,288,289 114, 287,288,289,290 115, |
| | | 290,291,292,293 116, 293,294 117, 294 118(α); measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |
| $^{278}\mathrm{Rg}$ | 20110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), |
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | $282,283,284,285,286$ 113, 286 114(α), (SF), $287,288,289$ 114, $287,288,289,290$ 115, |
| | | 290,291,292,293 116, 293,294 117, 294 118(α); measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |
| | | |
A=279

| 279 Ds | 20110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), |
|-------------|----------|---|
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | $282,283,284,285,286$ 113, 286 114(α), (SF), $287,288,289$ 114, $287,288,289,290$ 115, |
| | | $^{290,291,292,293}116$, $^{293,294}117$, $^{294}118(\alpha)$; measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |
| 279 Rg | 20110G07 | RADIOACTIVITY 267 Rf(SF), 266,268,270 Db(SF), (EC), 269 Db(SF), |
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | $282,283,284,285,286$ 113, 286 114(α), (SF), $287,288,289$ 114, $287,288,289,290$ 115, |
| | | $^{290,291,292,293}116$, $^{293,294}117$, $^{294}118(\alpha)$; measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 $$ |

A=280

| ²⁸⁰ Rg | 20110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), ²⁶⁶ Sg(SF), ²⁷¹ Sg(α), (SF), ^{270,272,274} Bh(α), ^{270,275} Hs(α), ^{274,275,276,278} Mt(α), ²⁷⁹ Ds(SF), (α), ²⁸¹ Ds(SF), ^{278,279,280,282} Rg(α), ²⁸¹ Rg(SF), ^{282,284} Cn(SF), ²⁸⁵ Cn(α), ²⁸³ Cn(α), (SF), ^{282,283,284,285,286} 113, ²⁸⁶ 114(α), (SF), ^{287,288,289} 114, ^{287,288,289,290} 115, ^{290,291,292,293} 116, ^{293,294} 117, ²⁹⁴ 118(α); measured decay and fission products, Eα, Iα; deduced decay mode, T _{1/2} , energy, Q-value. Comparison with theoretical calculations, JOUR RAACA 99 429 |
|-------------------|----------|---|
| | | comparison with theoretical calculations. So off thirten 55 425 |

A = 281

| 281 Ds | 20110G07 | RADIOACTIVITY 267 Rf(SF), 266,268,270 Db(SF), (EC), 269 Db(SF), |
|-------------|----------|---|
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | $282,283,284,285,286113$, $286114(\alpha)$, (SF), $287,288,289114$, $287,288,289,290115$, |
| | | $^{290,291,292,293}116$, $^{293,294}117$, $^{294}118(\alpha)$; measured decay and fission |
| | | products, $\mathbf{E}\alpha$, $\mathbf{I}\alpha$; deduced decay mode, $\mathbf{T}_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |
| 281 Rg | 20110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), |
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | $282,283,284,285,286113, 286114(\alpha), (SF), 287,288,289114, 287,288,289,290115,$ |
| | | 290,291,292,293 116, 293,294 117, 294 118(α); measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |

A = 282

| 282 Rg | 20110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), |
|-------------|----------|---|
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | 282,283,284,285,286 113, 286 114(α), (SF), 287,288,289 114, 287,288,289,290 115, |
| | | $^{290,291,292,293}116$, $^{293,294}117$, $^{294}118(\alpha)$; measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |
| $^{282}113$ | 20110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), |
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | 282,283,284,285,286 113, 286 114(α), (SF), 287,288,289 114, 287,288,289,290 115, |
| | | $^{290,291,292,293}116$, $^{293,294}117$, $^{294}118(\alpha)$; measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |

A = 283

A=284

A = 285

²⁸⁵113 **20110G07** RADIOACTIVITY ²⁶⁷Rf(SF), ^{266,268,270}Db(SF), (EC), ²⁶⁹Db(SF), ²⁶⁶Sg(SF), ²⁷¹Sg(α), (SF), ^{270,272,274}Bh(α), ^{270,275}Hs(α), ^{274,275,276,278}Mt(α), ²⁷⁹Ds(SF), (α), ²⁸¹Ds(SF), ^{278,279,280,282}Rg(α), ²⁸¹Rg(SF), ^{282,284}Cn(SF), ²⁸⁵Cn(α), ²⁸³Cn(α), (SF), ^{282,283,284,285,286}113, ²⁸⁶114(α), (SF), ^{287,288,289}114, ^{287,288,289,290}115, ^{290,291,292,293}116, ^{293,294}117, ²⁹⁴118(α); measured decay and fission products, E α , I α ; deduced decay mode, T_{1/2}, energy, Q-value. Comparison with theoretical calculations. JOUR RAACA 99 429

A=286

| 286113 | 20110G07 | RADIOACTIVITY 267 Rf(SF), 266,268,270 Db(SF), (EC), 269 Db(SF), |
|--------|----------|---|
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | 282,283,284,285,286 113, 286 114(α), (SF), 287,288,289 114, 287,288,289,290 115, |
| | | $^{290,291,292,293}116$, $^{293,294}117$, $^{294}118(\alpha)$; measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |
| 286114 | 20110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), |
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | $282,283,284,285,286113, 286114(\alpha), (SF), 287,288,289114, 287,288,289,290115,$ |
| | | 290,291,292,293 116, 293,294 117, 294 118(α); measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |

| 287114 | 20110G07 | RADIOACTIVITY 267 Rf(SF), 266,268,270 Db(SF), (EC), 269 Db(SF), |
|--------|----------|---|
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | 282,283,284,285,286 113, 286 114(α), (SF), 287,288,289 114, 287,288,289,290 115, |
| | | $^{290,291,292,293}116$, $^{293,294}117$, $^{294}118(\alpha)$; measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |
| 287115 | 20110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), |
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | $282,283,284,285,286$ 113, 286 114(α), (SF), $287,288,289$ 114, $287,288,289,290$ 115, |
| | | 290,291,292,293 116, 293,294 117, 294 118(α); measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |

A=288

| $^{288}\mathrm{Ds}$ | 2011DE21 | ATOMIC MASSES ^{288,289,290,291,292,293,294,295} Ds, |
|---------------------|----------|---|
| | | 292,293,294,295,296,297,298,299 114, $293,294,295,296,297,298,299,300$ 115; measured |
| | | abundance in natural platinum, lead, and bismuth samples using |
| | | accelerator mass spectrometry (AMS) technique. Comparison with |
| | | previous data. Ultrasensitive search for SHE in natural Pt. Pb and Bi |
| | | samples proved negative with upper limits established. JOUR PRVCA |
| | | 83 065806 |
| ²⁸⁸ 114 | 20110G07 | RADIOACTIVITY 267 Rf(SF), 266,268,270 Db(SF), (EC), 269 Db(SF), |
| | | ²⁶⁶ Sg(SF), ²⁷¹ Sg(α), (SF), ^{270,272,274} Bh(α), ^{270,275} Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | 282,283,284,285,286 113, 286 114(α), (SF), 287,288,289 114, 287,288,289,290 115, |
| | | 290,291,292,293 116, 293,294 117, 294 118(α); measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |
| 288115 | 20110G07 | RADIOACTIVITY 267 Rf(SF), 266,268,270 Db(SF), (EC), 269 Db(SF), |
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | $^{282,283,284,285,286}113, ^{286}114(\alpha), (SF), ^{287,288,289}114, ^{287,288,289,290}115,$ |
| | | 290,291,292,293 116, 293,294 117, 294 118(α); measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |

A=289

| $^{289}\mathrm{Ds}$ | 2011DE21 | ATOMIC MASSES ^{288,289,290,291,292,293,294,295} Ds, ^{292,293,294,295,296,297,298,299} 114, ^{293,294,295,296,297,298,299,300} 115; measured |
|---------------------|----------|---|
| | | abundance in natural platinum, lead, and bismuth samples using |
| | | accelerator mass spectrometry (AMS) technique. Comparison with |
| | | previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi |
| | | samples proved negative with upper limits established. JOUR PRVCA |
| | | 83 065806 |
| $2^{289}114$ | 20110G07 | RADIOACTIVITY 267 Rf(SF), 266,268,270 Db(SF), (EC), 269 Db(SF), |
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | $^{282,283,284,285,286}113,^{286}114(\alpha),$ (SF), $^{287,288,289}114,^{287,288,289,290}115,$ |
| | | 290,291,292,293 116, 293,294 117, 294 118(α); measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 $$ |

A=289 (continued)

²⁸⁹115 **20110G07** RADIOACTIVITY ²⁶⁷Rf(SF), ^{266,268,270}Db(SF), (EC), ²⁶⁹Db(SF), ²⁶⁶Sg(SF), ²⁷¹Sg(α), (SF), ^{270,272,274}Bh(α), ^{270,275}Hs(α), ^{274,275,276,278}Mt(α), ²⁷⁹Ds(SF), (α), ²⁸¹Ds(SF), ^{278,279,280,282}Rg(α), ²⁸¹Rg(SF), ^{282,284}Cn(SF), ²⁸⁵Cn(α), ²⁸³Cn(α), (SF), ^{282,283,284,285,286}113, ²⁸⁶114(α), (SF), ^{287,288,289}114, ^{287,288,289,290}115, ^{290,291,292,293}116, ^{293,294}117, ²⁹⁴118(α); measured decay and fission products, E α , I α ; deduced decay mode, T_{1/2}, energy, Q-value. Comparison with theoretical calculations. JOUR RAACA 99 429

A=290

| $^{290}\mathrm{Ds}$ | 2011DE21 | ATOMIC MASSES ^{288,289,290,291,292,293,294,295} Ds, |
|---------------------|----------|---|
| | | 292,293,294,295,296,297,298,299114, $293,294,295,296,297,298,299,300$ 115; measured |
| | | abundance in natural platinum, lead, and bismuth samples using |
| | | accelerator mass spectrometry (AMS) technique. Comparison with |
| | | previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi |
| | | samples proved negative with upper limits established. JOUR PRVCA |
| | | 83 065806 |
| 290115 | 20110G07 | RADIOACTIVITY 267 Rf(SF), 266,268,270 Db(SF), (EC), 269 Db(SF), |
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | 282,283,284,285,286 113, 286 114(α), (SF), 287,288,289 114, 287,288,289,290 115, |
| | | 290,291,292,293 116, 293,294 117, 294 118(α); measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |
| 290116 | 20110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), |
| | | 266 Sg(SF), 271 Sg(α), (SF), 270,272,274 Bh(α), 270,275 Hs(α), |
| | | 274,275,276,278 Mt(α), 279 Ds(SF), (α), 281 Ds(SF), 278,279,280,282 Rg(α), |
| | | 281 Rg(SF), 282,284 Cn(SF), 285 Cn(α), 283 Cn(α), (SF), |
| | | $282,283,284,285,286113$, $286114(\alpha)$, (SF), $287,288,289114$, $287,288,289,290115$, |
| | | 290,291,292,293 116, 293,294 117, 294 118(α); measured decay and fission |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |

A = 291

| 291 Ds | 2011DE21 | ATOMIC MASSES 288,289,290,291,292,293,294,295 Ds, |
|-------------|----------|--|
| | | 292,293,294,295,296,297,298,299 114, $293,294,295,296,297,298,299,300$ 115; measured |
| | | abundance in natural platinum, lead, and bismuth samples using |
| | | accelerator mass spectrometry (AMS) technique. Comparison with |
| | | previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi |
| | | samples proved negative with upper limits established. JOUR PRVCA |
| | | 83 065806 |

A=291 (continued)

²⁹¹116 **20110G07** RADIOACTIVITY ²⁶⁷Rf(SF), ^{266,268,270}Db(SF), (EC), ²⁶⁹Db(SF), ²⁶⁶Sg(SF), ²⁷¹Sg(α), (SF), ^{270,272,274}Bh(α), ^{270,275}Hs(α), ^{274,275,276,278}Mt(α), ²⁷⁹Ds(SF), (α), ²⁸¹Ds(SF), ^{278,279,280,282}Rg(α), ²⁸¹Rg(SF), ^{282,284}Cn(SF), ²⁸⁵Cn(α), ²⁸³Cn(α), (SF), ^{282,283,284,285,286}113, ²⁸⁶114(α), (SF), ^{287,288,289}114, ^{287,288,289,290}115, ^{290,291,292,293}116, ^{293,294}117, ²⁹⁴118(α); measured decay and fission products, E α , I α ; deduced decay mode, T_{1/2}, energy, Q-value. Comparison with theoretical calculations. JOUR RAACA 99 429

A = 292

| $^{292}\mathrm{Ds}$ | 2011DE21 | ATOMIC MASSES ^{288,289,290,291,292,293,294,295} Ds, |
|---------------------|----------|--|
| | | abundance in natural platinum, lead, and bismuth samples using accelerator mass spectrometry (AMS) technique. Comparison with previous data. Ultrasensitive search for SHE in natural Pt. Pb and Bi |
| | | samples proved negative with upper limits established. JOUR PRVCA 83.065806 |
| ²⁹² 114 | 2011DE21 | ATOMIC MASSES ^{288,289,290,291,292,293,294,295} Ds, ^{292,293,294,295,296,297,298,299,114} , ^{293,294,295,296,297,298,299,300} 115; measured |
| | | abundance in natural platinum, lead, and bismuth samples using accelerator mass spectrometry (AMS) technique. Comparison with previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi samples proved negative with upper limits established. JOUR PRVCA 83 065806 |
| ²⁹² 116 | 20110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), ²⁶⁶ Sg(SF), ²⁷¹ Sg(α), (SF), ^{270,272,274} Bh(α), ^{270,275} Hs(α), ^{274,275,276,278} Mt(α), ²⁷⁹ Ds(SF), (α), ²⁸¹ Ds(SF), ^{278,279,280,282} Rg(α), ²⁸¹ Rg(SF), ^{282,284} Cn(SF), ²⁸⁵ Cn(α), ²⁸³ Cn(α), (SF), ^{282,283,284,285,286} 113, ²⁸⁶ 114(α), (SF), ^{287,288,289} 114, ^{287,288,289,290} 115, ^{290,291,292,293} 116, ^{293,294} 117, ²⁹⁴ 118(α); measured decay and fission products, Eα, Iα; deduced decay mode, $T_{1/2}$, energy, Q-value. Comparison with theoretical calculations. JOUR RAACA 99 429 |

A=293

²⁹³Ds 2011DE21 ATOMIC MASSES ^{288,289,290,291,292,293,294,295}Ds, ^{292,293,294,295,296,297,298,299}114, ^{293,294,295,296,297,298,299,300}115; measured abundance in natural platinum, lead, and bismuth samples using accelerator mass spectrometry (AMS) technique. Comparison with previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi samples proved negative with upper limits established. JOUR PRVCA 83 065806

A=293 (continued)

| ²⁹³ 114 | 2011DE21 | ATOMIC MASSES ^{288,289,290,291,292,293,294,295} Ds, ^{292,293,294,295,296,297,298,299,114} , ^{293,294,295,296,297,298,299,300} 115: measured |
|--------------------|----------|---|
| 202445 | | abundance in natural platinum, lead, and bismuth samples using accelerator mass spectrometry (AMS) technique. Comparison with previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi samples proved negative with upper limits established. JOUR PRVCA 83 065806 |
| ²⁹³ 115 | 2011DE21 | ATOMIC MASSES 260,297,293,294,295,293,293,293,293,293,293 Ds, 292,293,294,295,296,297,298,299,114 , 293,294,295,296,297,298,299,300 115; measured |
| | | abundance in natural platinum, lead, and bismuth samples using accelerator mass spectrometry (AMS) technique. Comparison with previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi samples proved negative with upper limits established. JOUR PRVCA 83 065806 |
| ²⁹³ 116 | 20110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), ²⁶⁶ Sg(SF), ²⁷¹ Sg(α), (SF), ^{270,272,274} Bh(α), ^{270,275} Hs(α), ^{274,275,276,278} Mt(α), ²⁷⁹ Ds(SF), (α), ²⁸¹ Ds(SF), ^{278,279,280,282} Rg(α), ²⁸¹ Rg(SF), ^{282,284} Cn(SF), ²⁸⁵ Cn(α), ²⁸³ Cn(α), (SF), ^{282,283,284,285,286} 113, ²⁸⁶ 114(α), (SF), ^{287,288,289} 114, ^{287,288,289,290} 115, ^{290,291,292,293} 116, ^{293,294} 117, ²⁹⁴ 118(α); measured decay and fission products, E α , I α ; deduced decay mode, T _{1/2} , energy, Q-value. Comparison with theoretical calculations. IOUR B A ACA 00, 420 |
| ²⁹³ 117 | 20110G07 | Comparison with theoretical calculations. JOUR RAACA 99 429 RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), ²⁶⁶ Sg(SF), ²⁷¹ Sg(α), (SF), ^{270,272,274} Bh(α), ^{270,275} Hs(α), ^{274,275,276,278} Mt(α), ²⁷⁹ Ds(SF), (α), ²⁸¹ Ds(SF), ^{278,279,280,282} Rg(α), ²⁸¹ Rg(SF), ^{282,284} Cn(SF), ²⁸⁵ Cn(α), ²⁸³ Cn(α), (SF), ^{282,283,284,285,286} 113, ²⁸⁶ 114(α), (SF), ^{287,288,289} 114, ^{287,288,289,290} 115, ^{290,291,292,293} 116, ^{293,294} 117, ²⁹⁴ 118(α); measured decay and fission products, E α , I α ; deduced decay mode, T _{1/2} , energy, Q-value. Comparison with theoretical calculations. JOUR RAACA 99 429 |

| 294 Ds | 2011DE21 | ATOMIC MASSES ^{288,289,290,291,292,293,294,295} Ds, ^{292,293,294,295,296,297,298,299} 114, ^{293,294,295,296,297,298,299,300} 115; measured |
|--------------------|----------|---|
| | | abundance in natural platinum, lead, and bismuth samples using accelerator mass spectrometry (AMS) technique. Comparison with previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi |
| | | samples proved negative with upper limits established. JOUR PRVCA 83 065806 |
| ²⁹⁴ 114 | 2011DE21 | ATOMIC MASSES ^{288,289,290,291,292,293,294,295} Ds, ^{292,293,294,295,296,297,298,299} 114, ^{293,294,295,296,297,298,299,300} 115; measured |
| | | abundance in natural platinum, lead, and bismuth samples using accelerator mass spectrometry (AMS) technique. Comparison with previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi samples proved negative with upper limits established. JOUR PRVCA 83 065806 |

A=294 (continued)

| $^{294}115$ | 2011DE21 | ATOMIC MASSES ^{288,289,290,291,292,293,294,295} Ds, ^{292,293,294,295,296,297,298,299,114} ^{293,294,295,296,297,298,299,300} 115, monsured |
|--------------------|----------|--|
| | | abundance in natural platinum, lead, and bismuth samples using accelerator mass spectrometry (AMS) technique. Comparison with previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi samples proved negative with upper limits established. JOUR PRVCA 82.065806 |
| ²⁹⁴ 117 | 20110G07 | RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), ²⁶⁶ Sg(SF), ²⁷¹ Sg(α), (SF), ^{270,272,274} Bh(α), ^{270,275} Hs(α), |
| | | $ \begin{array}{l} 274,275,276,278 \operatorname{Mt}(\alpha), \ 279 \operatorname{Ds}(\mathrm{SF}), \ (\alpha), \ ^{281} \operatorname{Ds}(\mathrm{SF}), \ ^{278,279,280,282} \operatorname{Rg}(\alpha), \\ 2^{81} \operatorname{Rg}(\mathrm{SF}), \ ^{282,284} \operatorname{Cn}(\mathrm{SF}), \ ^{285} \operatorname{Cn}(\alpha), \ ^{283} \operatorname{Cn}(\alpha), \ (\mathrm{SF}), \\ 2^{82,283,284,285,286} 113, \ ^{286} 114(\alpha), \ (\mathrm{SF}), \ ^{287,288,289} 114, \ ^{287,288,289,290} 115, \\ 2^{90,291,292,293,116}, \ ^{293,294,117}, \ ^{294,118}(\alpha), \ (\mathrm{SF}), \ ^{287,288,289} 114, \ ^{287,288,289,290} 115, \\ \end{array} $ |
| | | products, $E\alpha$, $I\alpha$; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| ²⁹⁴ 118 | 20110G07 | Comparison with theoretical calculations. JOUR RAACA 99 429 RADIOACTIVITY ²⁶⁷ Rf(SF), ^{266,268,270} Db(SF), (EC), ²⁶⁹ Db(SF), |
| | | ²⁶⁶ Sg(SF), ²⁷¹ Sg(α), (SF), ²⁷⁰ S ^{272,274} Bh(α), ²⁷⁰ S ²⁷³ Hs(α), ^{274,275,276,278} Mt(α), ²⁷⁹ Ds(SF), (α), ²⁸¹ Ds(SF), ^{278,279,280,282} Rg(α), |
| | | $ \sum_{\substack{281 \text{Rg}(\text{SF}), \\ 282, 283, 284, 285, 286 \\ 113, \\ 282, 283, 284, 285, 286 \\ 113, \\ 28114(\alpha), \\ (\text{SF}), \\ 287, 288, 289 \\ 114, \\ 287, 288, 289, 290 \\ 115, \\ 287, 288, 289, 290 \\ 115, \\ 287, 288, 289, 290 \\ 115, \\ 287, 288, 289, 290 \\ 115, \\ 287, 288, 289, 290 \\ 115, \\ 287, 288, 289, 290 \\ 115, \\ 287, 288, 289, 290 \\ 115, \\ 287, 288, 289, 290 \\ 115, \\ 287, 288, 289, 290 \\ 115, \\ 287, 288, 289, 290 \\ 115, \\ 287, 288, 289, 290 \\ 115, \\ 287, 288, 289, 290 \\ 115, \\ 287, 288, 289, 290 \\ 115, \\ 287, 288, 289, 290 \\ 115, \\ 287, 288, 289, 290 \\ 115, \\ 287, 288, 289, 290 \\ 115, \\ 287, 288, 289, 290 \\ 115, \\ 287, 288, 289, 290 \\ 115, \\ 287, 288, 289 \\ 114, 287, 288, 289, 290 \\ 115, \\ 287, 288, 289 \\ 114, 287, 288, 289, 290 \\ 115, \\ 287, 288, 289 \\ 114, 287, 288, 289, 290 \\ 115, \\ 287, 287, 280 \\ 115, 287, 280 \\ 115, 287, 280 \\ 115, 287, 280 \\ 115, 287, 280 \\ 115, 287, 280 \\ 115, 287, 280 \\ 115, 287, 280 \\ 115, 287, 280 \\ 115, 287, 280 \\ 115, 287, 280 \\ 115, 287, 280 \\ 115, $ |
| | | 290,291,292,293 116, 293,294 117, 294 118(α); measured decay and fission |
| | | products, E α , I α ; deduced decay mode, $T_{1/2}$, energy, Q-value. |
| | | Comparison with theoretical calculations. JOUR RAACA 99 429 |

| 295 Ds | 2011DE21 | ATOMIC MASSES ^{288,289,290,291,292,293,294,295} Ds, |
|-------------|----------|--|
| | | ^{292,293,294,295,296,297,298,299} 114, ^{293,294,295,296,297,298,299,300} 115; measured |
| | | abundance in natural platinum, lead, and bismuth samples using |
| | | accelerator mass spectrometry (AMS) technique. Comparison with |
| | | previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi |
| | | samples proved negative with upper limits established. JOUR PRVCA |
| | | 83 065806 |
| $^{295}114$ | 2011DE21 | ATOMIC MASSES ^{288,289,290,291,292,293,294,295} Ds, |
| | | 292,293,294,295,296,297,298,299114, $293,294,295,296,297,298,299,300$ 115; measured |
| | | abundance in natural platinum, lead, and bismuth samples using |
| | | accelerator mass spectrometry (AMS) technique. Comparison with |
| | | previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi |
| | | samples proved negative with upper limits established. JOUR PRVCA |
| | | 83 065806 |
| $^{295}115$ | 2011DE21 | ATOMIC MASSES 288,289,290,291,292,293,294,295 Ds. |
| | | ^{292,293,294,295,296,297,298,299} 114, ^{293,294,295,296,297,298,299,300} 115; measured |
| | | abundance in natural platinum, lead, and bismuth samples using |
| | | accelerator mass spectrometry (AMS) technique. Comparison with |
| | | previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi |
| | | samples proved negative with upper limits established. JOUR PRVCA |
| | | 83 065806 |

A=296

| ²⁹⁶ 114 | 2011DE21 | ATOMIC MASSES ^{288,289,290,291,292,293,294,295} Ds, ^{292,293,294,295,296,297,298,299} 114, ^{293,294,295,296,297,298,299,300} 115; measured |
|--------------------|----------|---|
| | | abundance in natural platinum, lead, and bismuth samples using accelerator mass spectrometry (AMS) technique. Comparison with previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi samples proved negative with upper limits established. JOUR PRVCA 83 065806 |
| ²⁹⁶ 115 | 2011DE21 | ATOMIC MASSES ^{288,289,290,291,292,293,294,295} Ds, ^{292,293,294,295,296,297,298,299} 114, ^{293,294,295,296,297,298,299,300} 115; measured |
| | | abundance in natural platinum, lead, and bismuth samples using accelerator mass spectrometry (AMS) technique. Comparison with previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi samples proved negative with upper limits established. JOUR PRVCA 83 065806 |

A=297

| ²⁹⁷ 114 | 2011DE21 | ATOMIC MASSES ^{288,289,290,291,292,293,294,295} Ds, ^{292,293,294,295,296,297,298,299} 114, ^{293,294,295,296,297,298,299,300} 115; measured |
|--------------------|----------|--|
| ²⁹⁷ 115 | 2011DE21 | abundance in natural platinum, lead, and bismuth samples using accelerator mass spectrometry (AMS) technique. Comparison with previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi samples proved negative with upper limits established. JOUR PRVCA 83 065806 ATOMIC MASSES ^{288,289,290,291,292,293,294,295} Ds. |
| - | | ^{292,293,294,295,296,297,298,299} 114, ^{293,294,295,296,297,298,299,300} 115; measured abundance in natural platinum, lead, and bismuth samples using accelerator mass spectrometry (AMS) technique. Comparison with previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi samples proved negative with upper limits established. JOUR PRVCA 83 065806 |

A = 298

| 292,293,294,295,296,297,298,299114,293,294,295,296,297,298 | 3,299,300115; measured |
|--|------------------------|
| abundance in natural platinum, lead, and bismut | h samples using |
| accelerator mass spectrometry (AMS) technique. | Comparison with |
| previous data. Ultrasensitive search for SHE in n | atural Pt, Pb and Bi |
| samples proved negative with upper limits establi | ished. JOUR PRVCA |
| $83\ 065806$ | |

A=298 (continued)

²⁹⁸115 **2011DE21** ATOMIC MASSES ^{288,289,290,291,292,293,294,295}Ds, ^{292,293,294,295,296,297,298,299}114, ^{293,294,295,296,297,298,299,300}115; measured abundance in natural platinum, lead, and bismuth samples using accelerator mass spectrometry (AMS) technique. Comparison with previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi samples proved negative with upper limits established. JOUR PRVCA 83 065806

| ²⁹⁹ 114 | 2011DE21 | ATOMIC MASSES ^{288,289,290,291,292,293,294,295} Ds, ^{292,293,294,295,296,297,298,299} 114, ^{293,294,295,296,297,298,299,300} 115; measured |
|--------------------|----------|---|
| | | abundance in natural platinum, lead, and bismuth samples using accelerator mass spectrometry (AMS) technique. Comparison with previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi |
| | | samples proved negative with upper limits established. JOUR PRVCA 83 065806 |
| ²⁹⁹ 115 | 2011DE21 | ATOMIC MASSES ^{288,289,290,291,292,293,294,295} Ds, ^{292,293,294,295,296,297,298,299} 114, ^{293,294,295,296,297,298,299,300} 115; measured |
| | | abundance in natural platinum, lead, and bismuth samples using accelerator mass spectrometry (AMS) technique. Comparison with previous data. Ultrasensitive search for SHE in natural Pt, Pb and Bi samples proved negative with upper limits established. JOUR PRVCA 83 065806 |

References

R.Wellum, A.Verbruggen, R.Kessel - J.anal.at.spectrom. 24, 801 (2009) 2009WE08 A new evaluation of the half-life of 241 Pu 2010AC02 P.Achenbach, C.Ayerbe Gayoso, J.C.Bernauer, S.Bianchin, R.Bohm, O.Borodina, D.Bosnar, V.Bozkurt, L.Debenjak, A.Denig, M.O.Distler, A.Esser, H.Fonvieille, I.Friscic, B.Gokuzum, K.Griessinger, E.Kim, F.E.Maas, M.Makek, H.Merkel, S.Minami, U.Muller, D.Nakajima, L.Nungesser, B.Ozel-Tashenov, J.Pochodzalla, M.Potokar, C.Rappold, T.R.Saito, S.Sanchez Majos, B.S.Schlimme, S.Sirca, M.Weinriefer - Nucl.Phys. A835, 313c (2010) First measurements of Λ and Σ^0 hyperons in elementary electroproduction at MAMI M.Agnello, L.Benussi, M.Bertani, H.C.Bhang, G.Bonomi, E.Botta, M.Bregant, 2010AG13 T.Bressani, S.Bufalino, L.Busso, D.Calvo, P.Camerini, B.Dalena, F.De Mori, G.D'Erasmo, F.L.Fabbri, A.Feliciello, A.Filippi, E.M.Fiore, A.Fontana, H.Fujioka, P.Genova, P.Gianotti, N.Grion, B.Kang, V.Lucherini, S.Marcello, F.Moia, T.Maruta, N.Mirfakhrai, P.Montagna, O.Morra, T.Nagae, D.Nakajima, H.Outa, A.Pantaleo, V.Paticchio, S.Piano, R.Rui, G.simonetti, A.Toyoda, R.Wheadon, A.Zenoni - Nucl.Phys. A835, 414c (2010) FINUDA hypernuclear spectroscopy M.Agnello, for the FINUDA collaboration - Nucl. Phys. A835, 439c (2010) 2010AG14 Study of two-body non-mesonic decays of light hypernuclei with FINUDA 2010AH04 J.K.Ahn, and the LEPS Collaboration - Nucl. Phys. A835, 329c (2010) The Nature of the $\Lambda(1405)$ from Photoproduction at SPring-8 / LEPS S.Almaraz-Calderon, W.Tan, A.Aprahamian, B.Bucher, J.Gorres, A.Roberts, 2010ALZZ A.Villano, M.Wiescher, C.Brune, Z.Heinen, T.Massey, N.Ozkan, R.T.Guray, H.Mach - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.215 (2010) The level structure of 18 Ne D.Bardayan, K.A.Chipps, R.P.Fitzgerald, J.C.Blackmon, K.Y.Chae, 2010BAZV A.E.Champagne, U.Greife, R.Hatarik, R.L.Kozub, C.Matei, B.H.Moazen, C.D.Nesaraja, S.D.Pain, W.A.Peters, S.T.Pittman, J.F.Shriner, Jr., M.S.Smith -Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.202 (2010) Direct Measurements of (p, γ) cross sections at astrophysical energies using radioactive beams and the Daresbury Recoil Separator

2010BEZI P.Belli, R.Bernabei, R.S.Boiko, V.B.Brudanin, F.Cappella, V.Caracciolo, R.Cerulli, D.M.Chernyak, F.A.Danevich, S.d'Angelo, A.E.Dossovitskiy, E.N.Galashov, A.Incicchitti, V.V.Kobychev, S.S.Nagorny, F.Nozzoli, B.N.Kropivyansky, V.M.Kudovbenko, A.L.Mikhlin, A.S.Nikolaiko, D.V.Poda, R.B.Podviyanuk, O.G.Polischuk, D.Prosperi, V.N.Shlegel, Yu.G.Stenin, J.Suhonen, V.I.Tretyak, Ya.V.Vasiliev - Proc.Exotic Nuclei and Nuclear Particle Astrophysics III: From Nuclei to Stars, Sinaia, Romania, 20 June-3 July, 2010, L.Trache, A.Smirnov, S.Stoica, Eds. p.354 (2010); AIP Conf.Proc. 1304 (2010) First Results of the Experiment to Search for 2β Decay of ¹⁰⁶Cd with the Help of ¹⁰⁶CdWO₄ Crystal Scintillators S.Beceiro Novo, K.Summerer, D.Cortina-Gil, C.Wimmer, R.Plag, H.Alvarez-Pol, 2010BEZJ T.Aumann, K.Behr, K.Boretzky, E.Casarejos, A.Chatillon, U.Datta-Pramanik, Z.Elekes, Z.Fulop, D.Galaviz, H.Geissel, S.Giron, U.Greife, F.Hammache, M.Heil, J.Hoffman, H.Johansson, C.Karagiannis, O.Kiselev, N.Kurz, K.Larsson, T.Le Bleis, Y.Litvinov, K.Mahata, C.Muntz, C.Nociforo, W.Ott, S.Paschalis, W.Prokopowicz, C.Rodriguez-Tajes, D.Rossi, H.Simon, M.Stanoiu, J.Stroth, S.Typel, A.Wagner, F.Wamers, H.Weick - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.227 (2010) Coulomb dissociation of ²⁷P: a reaction of astrophysical interest 2010BEZK A.Best, J.Gorres, M.Wiescher, S.Falahat, K.-L.Kratz - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.183 (2010) Determination of the Stellar Reaction Rates of ${}^{17}O(\alpha, n)^{20}Ne$ and ${}^{17}O(\alpha, \gamma)^{21}Ne$ 2010BEZM J.Benlliure, H.Alvarez, T.Kurtukian-Nieto, A.I.Morales, E.Casarejos, D.Cortina-Gil, J.Pereira, F.Becker, I.Borzov, T.Engvist, D.Henzlova, K.Langanke, G.Martinez-Pinedo, K.-H.Schmidt, O.Yordanov, B.Blank, J.Giovinazzo, B.Jurado, L.Audouin, P.Napolitani, B.Fernandez, F.Rejmund, for the RISING Collaboration -Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.84 (2010) Production and β half-lives of heavy neutron-rich nuclei approaching the r-process path at N=126 2010BEZ0 R.Bernabei, P.Belli, F.Cappella, R.Cerulli, F.A.Danevich, B.V.Grinyov, A.Incicchitti, V.V.Kobychev, V.M.Mokina, S.S.Nagorny, L.L.Nagornaya, S.Nisi, F.Nozzoli, D.V.Poda, D.Prosperi, V.I.Tretyak, S.S.Yurchenko - Proc.22nd Int.Nuc.Phy.Div.Con.of the European Phys.Soc., Nuclear Physics in Astrophysics IV, Frascati, Italy, June 8-12, 2009 p.012038 (2010) Search for double beta decay of zinc and tungsten with low background ZnWO₄ crystal scintillators 2010CAZL A.Caciolli, for the LUNA Collaboration - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.117 (2010) LUNA: The ¹⁵N(p, γ)¹⁶O reaction study at low energies with the BGO detector 2010CAZM A.Caciolli, for the LUNA collaboration - Proc.22nd Int.Nuc.Phy.Div.Con.of the European Phys.Soc., Nuclear Physics in Astrophysics IV, Frascati, Italy, June 8-12, 2009 p.012036 (2010) Study of the ${}^{15}N(p, \gamma){}^{16}O$ reaction at the LUNA accelerator with a BGO detector

| 2010CHZT | K.Y.Chae, D.W.Bardayan, C.D.Nesaraja, M.S.Smith, S.H.Ahn, A.Ayres, A.Bey, K.L.Jones, S.T.Pittman, M.E.Howard, P.D.O'Malley, R.L.Kozub, M.Matos, B.H.Moazen, W.A.Peters - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.217 (2010) A new technique for measuring astrophysically important (α, p) reactions |
|----------|---|
| 2010CHZU | K.A.Chipps, D.W.Bardayan, J.F.Liang, C.D.Nesaraja, S.D.Pain, M.S.Smith, K.Y.Chae, B.H.Moazen, S.T.Pittman, K.T.Schmitt, J.A.Cizewski, P.D.O'Malley, W.A.Peters, R.L.Kozub, C.Matei - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.205 (2010) Proton decay of ²⁶ Si via the ²⁸ Si(p, t) ²⁶ Si Reaction and Implications for ²⁵ Al(p, γ) ²⁶ Si |
| 2010DEZU | N.de Sereville, M.Assie, I.Bahrini, D.Beaumel, M.Chabot, M.Ferraton, S.Fortier, S.Franchoo, S.Giron, F.Hammache, M.Lebois, F.Marechal, A.Matta, B.Mouginot, C.Petrache, P.Roussel, JA.Scarpaci, I.Stefan, D.Verney, A.Coc, I.Deloncle, J.Duprat, C.Hamadache, J.Kiener, A.Lefebvre-Schuhl, F.de Oliveira, F.de Grancey, JC.Thomas, M.Fallot, L.Giot, L.Lamia, R.G.Pizzone, S.Romano - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.212 (2010) Spectroscopic study of ²⁶ Si for application to nova gamma-ray emission |
| 2010DEZV | C.Deibel, M.Alcorta, P.F.Bertone, J.A.Clark, J.Greene, C.R.Hoffman, C.L.Jiang, B.P.Kay, H.Y.Lee, R.C.Pardo, K.E.Rehm, A.Rogers, C.Ugalde, G.Zinkann, S.Bedoor, D.V.Shetty, A.H.Wuosmaa, J.C.Lighthall, S.T.Marley, N.R.Patel, J.M.Figueira, M.Paul - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.56 (2010) Studying the (α, p)-process in X-ray Bursts using Radioactive Ion Beams |
| 2010DIZW | I.Dillmann, T.Faestermann, G.Korschinek, J.Lachner, M.Maiti, M.poutivtsev, G.Rugel, S.Walter, F.Kappeler, M.Erhard, A.R.Junghans, C.Nair, R.Schwengner, A.Wagner, M.Pignatari, T.Rauscher, A.Mengoni - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.49 (2010) First measurement of the 64 Ni(γ , n) 63 Ni cross section |
| 2010ERZV | O.Ershova, P.Adrich, H.Alvarez-Pol, F.Aksouh, T.Aumann, M.Babilon, K.H.Behr, J.Benlliure, T.Berg, M.Bohmer, K.Boretzky, A.Brunle, R.Beyer, E.Casarejos, M.Chartier, D.Cortina-Gil, A.Chatillon, U.Datta Pramanik, L.Deveaux, M.Elvers, T.Elze, H.Emling, M.Erhard, B.Fernandez-Dominguez, H.Geissel, M.Gorska, M.Heil, M.Hellstrom, G.Ickert, H.Johansson, A.Junghans, F.Kappeler, O.Kiselev, A.Klimkiewicz, J.V.Kratz, R.Kulessa, N.Kurz, M.Labiche, T.Le Bleis, R.Lemmon, K.Lindenberg, Y.Litvinov, P.Maierbeck, A.Movsesyan, S.Muller, T.Nilsson, C.Nociforo, N.Paar, R.Palit, S.Paschalis, R.Plag, W.Prokopowicz, R.Reifarth, D.Rossi, L.Schnorrenberger, H.Simon, K.Summerer, G.Surowka, D.Vretenar, A.Wagner, S.Walter, W.Walus, H.Weick, N.Winckler, M.Winkler, A.Zilges - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.232 (2010) Coulomb dissociation reactions on Mo isotopes for astrophysics applications |

| 2010ESZY | A.Estrade, M.Matos, H.Schatz, M.Amthor, D.Bazin, M.Beard, E.Brown, A.Becerril, T.Elliot, A.Gade, D.Galaviz, S.Gupta, W.R.Hix, R.Lau, G.Lorusso, P.Moller, J.Pereira, M.Portillo, A.M.Rogers, D.Shapira, E.Smith, A.Stolz, M.Wallace, M.Wiescher - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.221 (2010) Mass measurements of neutron rich isotopes in the Fe region and electron capture processes in neutron star crusts |
|----------|---|
| 2010FUZQ | Y.Fujita, T.Adachi, B.Blank, P.von Brentano, G.P.A.Berg, H.Fujita, K.Fujita, K.Hatanaka, K.Nakanishi, A.Negret, L.Popescu, B.Rubio, Y.Shimbara, Y.Shimizu, Y.Tameshige, A.Tamii, M.Yosoi, K.O.Zell - Proc.Tours Symposium on Nuclear Physics and Astrophysics - VII, Kobe (Japan), 16-20 Nov.2009, H.Susa, M.Arnould, S.Gales, T.Motobayashi, C.Scheidenberger, H.Utsunomiya, Eds. p.297 (2010) AIP Conf.Proc.1238 Gamow-Teller Transitions and β -decay Half-life in Proton Rich pf-shell Nuclei |
| 2010FUZR | M.Fujiwara - Proc.Tours Symposium on Nuclear Physics and Astrophysics - VII, Kobe (Japan), 16-20 Nov.2009, H.Susa, M.Arnould, S.Gales, T.Motobayashi, C.Scheidenberger, H.Utsunomiya, Eds. p.274 (2010) AIP Conf.Proc.1238 Nuclear Incompressibility and the Asymmetry Term: Implications for Astrophysics and Physics with Exotic Nuclei |
| 2010FUZS | M.Fukuda, for the NIRS and RIBF Collaboration - Proc.Tours Symposium on Nuclear Physics and Astrophysics - VII, Kobe (Japan), 16-20 Nov.2009, H.Susa, M.Arnould, S.Gales, T.Motobayashi, C.Scheidenberger, H.Utsunomiya, Eds. p.270 (2010) AIP Conf.Proc.1238 Reaction cross section studies at NIRS and RIBF |
| 2010GIZY | S.Giron, F.Hammache, N.de Sereville, D.Beaumel, G.Burgunder, L.Caceres, G.Duchene, E.Clement, B.Fernandez, F.Flavigny, G.De France, S.Franchoo, D.Galaviz-Redondo, L.Gasques, J.Gibelin, A.Gillibert, S.Grevy, J.Guillot, M.Heil, J.Kiener, V.Lapoux, F.Marechal, A.Matta, I.Matea, M.Moukaddam, L.Nalpas, L.Perrot, A.Obertelli, R.Raabe, P.Roussel, J.A.Scarpaci, O.Sorlin, I.Stephan, C.Stoedel, M.Takechi, J.C.Thomas, Y.Togano - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.190 (2010) Indirect study of $^{60}\rm{Fe}(n,\gamma)^{61}\rm{Fe}$ via the transfer reaction $d(^{60}\rm{Fe},p\gamma)^{61}\rm{Fe}$ |
| 2010GLZZ | J.Glorius, M.Knorzer, S.Muller, N.Pietralla, A.Sauerwein, K.Sonnabend, C.Walzlein, M.Wiescher - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.234 (2010) Probing Hauser-Feshbach cross sections for the astrophysical p process |
| 2010HAZN | K.Hauschild, A.Lopez-Martens, O.Dorvaux, J.Piot, D.Curien, B.Gall, A.V.Yeremin, M.L.Chelnokov, V.I.Chepigin, A.V.Isaev, I.N.Izosimov, A.P.Kabachenko, D.E.Katrasev, A.N.Kuznetsov, O.N.Malyshev, A.G.Popeko, E.A.Sokol, A.I.Svirikhin, T.Wiborg-Hagen, H.T.Nyhus, S.Siem, G.Drafta, D.Pantelica, N.Scintee, A.Gorgen, T.Kutsarova, S.Mullins, S.Saro - Proc.Tours Symposium on Nuclear Physics and Astrophysics - VII, Kobe (Japan), 16-20 Nov.2009, H.Susa, M.Arnould, S.Gales, T.Motobayashi, C.Scheidenberger, H.Utsunomiya, Eds. p.337 (2010) AIP Conf.Proc.1238 |

| | Spectroscopy of transfermium nuclei using the GABRIELA set up at the focal plane of the VASSILISSA recoil separator |
|----------|---|
| 2010HAZO | T.Hayakawa, T.Shizuma, S.Chiba, T.Kajino, Y.Hatsukawa, N.Iwamoto, N.Shinohara, H.Harada - Proc.Tours Symposium on Nuclear Physics and Astrophysics - VII, Kobe (Japan), 16-20 Nov.2009, H.Susa, M.Arnould, S.Gales, T.Motobayashi, C.Scheidenberger, H.Utsunomiya, Eds. p.225 (2010) AIP Conf.Proc.1238 Thermal neutron capture cross-section to ¹¹³ Cd isomer for the study of s-process origin of ¹¹⁵ Sn |
| 2010HAZQ | R.Hannaske, D.Bemmerer, R.Beyer, E.Birgersson, E.Grosse, A.Hartmann, A.R.Junghans, M.Kempe, T.Kogler, K.Kosev, M.Marta, R.Massarczyk, A.Matic, K.D.Schilling, R.Schwengner, M.Sobiella, D.Stach, A.Wagner, D.Yakorev - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.90 (2010) Towards a precision measurement of the photodissociation of the deuteron at energies relevant to Big Bang nucleosynthesis |
| 2010HAZR | S.Hayakawa, S.Kubono, T.Hashimoto, H.Yamaguchi, D.N.Binh, D.Kahl, Y.Wakabayashi, N.Iwasa, N.Kume, I.Miura, T.Teranishi, J.J.He, Y.K.Kwon, T.Komatsubara, S.Kato, S.Wanajo - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.62 (2010) Direct determination of the ¹¹ C(α , p) ¹⁴ N reaction rate with CRIB: an alternative synthesis path to the CNO elements |
| 2010HUZZ | W.Hua, X.H.Zhou, Y.H.Zhang, Y.Zheng, M.L.Liu, F.Ma, S.Guo, L.Ma, S.T.Wang, N.T.Zhang, Y.D.Fang, X.G.Lei, Y.X.Guo, M.Oshima, Y.Toh, M.Koizumi, Y.Hatsukawa, B.Qi, S.Q.Zhang, J.Meng, M.Sugawara - Proc.7th Japan-China Joint Nucl.Phys.Symp.on Nuclear Physics Trends, Tsukuba (Japan), 9-13 Nov.2009, A.Ozawa, W.Lu, Eds. p.77 (2010); AIP Conf.Proc.1235 (2009) Band properties of the transitional nucleus ¹⁸⁹ Pt |
| 2010ICZX | Y.Ichikawa, T.K.Onishi, D.Suzuki, H.Iwasaki, T.Kubo, V.Naik, A.Chakrabarti, N.Aoi, B.A.Brown, N.Fukuda, S.Kubono, T.Motobayashi, T.Nakabayashi, T.Nakamura, T.Nakao, T.Okumura, H.J.Ong, H.Suzuki, M.K.Suzuki, T.Teranishi, K.N.Yamada, H.Yamaguchi, H.Sakurai - Proc.Tours Symposium on Nuclear Physics and Astrophysics - VII, Kobe (Japan), 16-20 Nov.2009, H.Susa, M.Arnould, S.Gales, T.Motobayashi, C.Scheidenberger, H.Utsunomiya, Eds. p.290 (2010) AIP Conf.Proc.1238 Mirror asymmetry for B(GT) of ²⁴ Si induced by Thomas-Ehrman shift |
| 2010ICZY | Y.Ichikawa, T.K.Onishi, D.Suzuki, H.Iwasaki, T.Kubo, V.Naik, A.Chakrabarti, N.Aoi, B.A.Brown, N.Fukuda, S.Kubono, T.Motobayashi, T.Nakabayashi, T.Nakamura, T.Nakao, T.Okumura, H.J.Ong, H.Suzuki, M.K.Suzuki, T.Teranishi, K.N.Yamada, H.Yamaguchi, H.Sakurai - Proc.7th Japan-China Joint Nucl.Phys.Symp.on Nuclear Physics Trends, Tsukuba (Japan), 9-13 Nov.2009, A.Ozawa, W.Lu, Eds. p.265 (2010); AIP Conf.Proc.1235 (2009) Gamow-Teller transition of the proton-rich nucleus ²⁴ Si |

| 2010ITZX | O.Itoh, H.Utsunomiya, H.Akimune, T.Yamagata, M.Kamata, T.Kondo, H.Toyokawa, YW.Lui, F.Kitatani, H.Harada, S.Goko, C.Nair - Proc.Tours Symposium on Nuclear Physics and Astrophysics - VII, Kobe (Japan), 16-20 Nov.2009, H.Susa, M.Arnould, S.Gales, T.Motobayashi, C.Scheidenberger, H.Utsunomiya, Eds. p.237 (2010) AIP Conf.Proc.1238 Determination of photoneutron cross sections for ¹⁹⁷ Au by using laser inverse-Compton scattering gamma-rays |
|----------|--|
| 2010IWZX | C.Iwamoto, H.Akimune, H.Utsunomiya, T.Yamagata, T.Kondo, M.Kamata, H.Toyokawa, H.Harano, T.Matsumoto, YW.Lui - Proc.Tours Symposium on Nuclear Physics and Astrophysics - VII, Kobe (Japan), 16-20 Nov.2009, H.Susa, M.Arnould, S.Gales, T.Motobayashi, C.Scheidenberger, H.Utsunomiya, Eds. p.301 (2010) AIP Conf.Proc.1238 M1 and E1 transition cross sections in $D((\gamma-pol), n)$ reactions near reaction threshold |
| 2010JIZZ | S.Jiang, H.Shen, M.He, X.Ruan, W.Wu, K.Dong, G.He, X.Wang, J.Yuan, W.Wang, S.Wu - Proc.7th Japan-China Joint Nucl.Phys.Symp.on Nuclear Physics Trends, Tsukuba (Japan), 9-13 Nov.2009, A.Ozawa, W.Lu, Eds. p.144 (2010); AIP Conf.Proc.1235 (2009) The AMS Measurements and Its Applications in Nuclear Physics at China Institute of Atomic Energy (CIAE) |
| 2010KA38 | H.Kanda, B.Beckford, T.Fujii, Y.Fujii, K.Futatsukawa, Y.C.Han, O.Hashimoto, K.Hirose, T.Ishikawa, M.Kaneta, S.Kiyokawa, C.Kimura, T.Koike, K.Maeda, T.Maruta, K.Miwa, S.N.Nakamura, A.Okuyama, H.Shimizu, K.Suzuki, T.Tamae, H.Tamura, T.S.Wang, H.Yamazaki, and the NKS / NKS2 collaborations - Nucl.Phys. A835, 317c (2010) Strangeness photoproduction experiments at SENDAI |
| 2010KAZJ | M.Kamata, H.Utsunomiya, H.Akimune, T.Yamagata, O.Itoh, C.Iwamoto, T.Kondo, H.Toyokawa, YW.Lui, S.Goriely - Proc.Tours Symposium on Nuclear Physics and Astrophysics - VII, Kobe (Japan), 16-20 Nov.2009, H.Susa, M.Arnould, S.Gales, T.Motobayashi, C.Scheidenberger, H.Utsunomiya, Eds. p.234 (2010) AIP Conf.Proc.1238 Extra γ -ray strength for ^{116,117} Sn arising from pygmy dipole resonance |
| 2010KAZL | J.Kasagi, Y.Toriyabe, E.Yoshida, K.H.Fang, H.Yonemura - Proc.Tours Symposium on Nuclear Physics and Astrophysics - VII, Kobe (Japan), 16-20 Nov.2009, H.Susa, M.Arnould, S.Gales, T.Motobayashi, C.Scheidenberger, H.Utsunomiya, Eds. p.151 (2010) AIP Conf.Proc.1238 Low-Energy Nuclear Reactions In Low-Temperature Dense Plasmas |
| 2010KAZO | T.Kawabata - Proc.7th Japan-China Joint Nucl.Phys.Symp.on Nuclear Physics Trends, Tsukuba (Japan), 9-13 Nov.2009, A.Ozawa, W.Lu, Eds. p.207 (2010); AIP Conf.Proc.1235 (2009) Alpha inelastic scattering and cluster structures in light nuclei |

| 2010KI15 | M.Kim, S.Ajimura, K.Aoki, A.Banu, H.Bhang, T.Fukuda, O.Hashimoto, J.I.Hwang, S.Kameoka, B.H.Kang, E.Kim, J.H.Kim, T.Maruta, Y.Miura, Y.Miyake, T.Nagae, M.Nakamura, S.N.Nakamura, H.Noumi, S.Okada, Y.Okayasu, H.Outa, H.Park, P.K.Saha, Y.Sato, M.Sekimoto, T.Takahashi, H.Tamura, K.Tanida, A.Toyoda, K.Tshoo, K.Tsukada, T.Watanabe, H.J.Yim - Nucl.Phys. A835, 434c (2010) Coincidence measurement of the weak decay of $^{12}_{\Lambda}\mathrm{C}$ and the three-body weak decay process (J-PARC 50GeV PS E18) |
|----------|--|
| 2010KIZU | O.S.Kirsebom, M.Alcorta, M.J.G.Borge, J.Buscher, S.Fox, B.Fulton, H.O.U.Fynbo, H.Hultgren, A.Jokinen, B.Jonson, H.Knudsen, A.Laird, M.Madurga, I.Moore, G.Nyman, R.Raabe, K.Riisager, A.Saastamoinen, O.Tengblad, J.Aysto - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.16 (2010) The ⁸ B neutrino spectrum |
| 2010KOZX | T.Kondo, H.Utsunomiya, H.Akimune, T.Yamagata, C.Iwamoto, M.Kamata, O.Itoh, H.Toyokawa, YW.Lui - Proc.Tours Symposium on Nuclear Physics and Astrophysics - VII, Kobe (Japan), 16-20 Nov.2009, H.Susa, M.Arnould, S.Gales, T.Motobayashi, C.Scheidenberger, H.Utsunomiya, Eds. p.231 (2010) AIP Conf.Proc.1238 Threshold photoneutron cross sections for ^{208,207,206} Pb isotopes |
| 2010KUZS | S.Kumar, S.K.Mandal, A.K.Jain, L.Chaturvedi, R.K.Sinha, D.Negi, A.Dhal, R.Kumar, R.P.Singh, S.Muralithar, R.K.Bhowmik, S.C.Pancholi - Proc.Exotic Nuclei and Nuclear Particle Astrophysics III: From Nuclei to Stars, Sinaia, Romania, 20 June-3 July, 2010, L.Trache, A.Smirnov, S.Stoica, Eds. p.374 (2010); AIP Conf.Proc. 1304 (2010) Band Structure of ⁸⁵ Sr |
| 2010LAZU | C.Langer, O.Lepyoshkina, Y.Aksyutina, T.Aumann, S.Beceiro, J.Benlliure, K.Boretzky, M.Chartier, D.Cortina, U.Datta-Pramanik, O.Ershova, H.Geissel, R.Gernhaeuser, M.Heil, G.Ickert, H.Johansson, B.Jonson, A.Kelic, A.Klimkiewicz, J.V.Kratz, R.Kruecken, R.Kulessa, K.Larsson, T.Le Bleis, R.Lemmon, K.Mahata, T.Nilsson, V.Panin, R.Plag, W.Prokopowicz, R.Reifarth, V.Ricciardi, D.Rossi, S.Schwertel, H.Simon, K.Summerer, B.Streicher, J.Taylor, J.R.Vignote, F.Wamers, C.Wimmer, P.Z.Wu - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.224 (2010) Coulomb dissociation reactions on proton-rich Ar isotopes |
| 2010LEZW | C.Lederer, for the n-TOF Collaboration - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.48 (2010) New measurement of the astrophysically important reaction $^{62}\mathrm{Ni}(\mathrm{n},\gamma)$ at n-TOF |
| 2010LI49 | C.J.Lister, E.A.McCutchan, R.B.Wiringa, S.C.Pieper, D.Seweryniak, J.P.Greene, P.F.Bertone, M.P.Carpenter, C.R.Hoffman, G.Henning, R.V.F.Janssens, T.L.Khoo, T.Lauritsen, S.Shu, G.Gurdal, C.J.Chiara - Bull.Am.Phys.Soc. 55, MG5 (2010) A precise determination of the ¹⁰ C excited state lifetime |

| 2010LIZW | W.P.Liu, Z.H.Li, X.X.Bai, Y.B.Wang, B.Guo, G.Lian, J.Su, S.Zeng, B.X.Wang, S.Q.Yan, Y.J.Li, E.T.Li, S.J.Jin - Proc.7th Japan-China Joint Nucl.Phys.Symp.on Nuclear Physics Trends, Tsukuba (Japan), 9-13 Nov.2009, A.Ozawa, W.Lu, Eds. p.322 (2010); AIP Conf.Proc.1235 (2009) Indirect measurement of nuclear reactions of astrophysical interest |
|----------|--|
| 2010MA72 | Y.Ma, S.Ajimura, K.Aoki, M.Dairaku, Y.Y.Fu, H.Fujioka, T.Fukuda, K.Futatsukawa, K.Hosomi, W.Imoto, M.Kawai, Y.Kakiguchi, S.Kinoshita, T.Koike, N.Maruyama, M.Mimori, S.Minami, Y.Miura, K.Miwa, Y.Miyagi, T.Nagae, D.Nakajima, H.Noumi, K.Shirotori, T.Suzuki, T.Takahashi, T.N.Takahashi, H.Tamura, K.Tanida, N.Terada, A.Toyoda, K.Tsukada, M.Ukai, S.H.Zhou - Nucl.Phys. A835, 422c (2010) Updated results on the $^{11}_{\Lambda}\mathrm{B}$ and $^{12}_{\Lambda}\mathrm{C}$ $\gamma\text{-ray}$ spectroscopy study |
| 2010MAZD | A.Makinaga, G.Rusev, R.Schwengner, F.Donau, R.Beyer, D.Bemmerer, P.Crespo, M.Erhard, A.R.Junghans, J.Klug, C.Nair, K.D.Schilling, A.Wagner - Proc.Tours Symposium on Nuclear Physics and Astrophysics - VII, Kobe (Japan), 16-20 Nov.2009, H.Susa, M.Arnould, S.Gales, T.Motobayashi, C.Scheidenberger, H.Utsunomiya, Eds. p.228 (2010) AIP Conf.Proc.1238 Cross section measurement on ¹³⁹ La (γ , γ ') below neutron separation energy |
| 2010MAZF | J.Marganiec, T.Aumann, M.Heil, R.Plag, F.Wamers - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.225 (2010) Study of the ${}^{15}O(2p, \gamma){}^{17}Ne$ reaction by the Coulomb Dissociation method |
| 2010MAZG | C.Massimi, for the n_TOF Collaboration - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.194 (2010) Measurement of the $^{24,25,26}\mathrm{Mg}(\mathrm{n},\gamma)$ reaction cross-section at n_TOF |
| 2010MAZH | M.Matos, J.C.Blackmon, L.E.Linhardt, D.W.Bardayan, C.D.Nesaraja, J.A.Clark, C.M.Deibel, P.D.O'Malley P.D.Parker, K.T.Schmitt - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.53 (2010) Unbound States of ³² Cl Relevant for Novae |
| 2010MAZI | Y.G.Ma, D.Q.Fang, P.Zhou, X.Z.Cai, J.G.Chen, W.Guo, X.Y.Sun, W.D.Tian, H.W.Wang, G.Q.Zhang, X.G.Cao, Y.Fu, Z.G.Hu, J.S.Wang, M.Wang, Y.Togano, N.Aoi, H.Baba, T.Honda, K.Okada, Y.Hara, K.Ieki, Y.Ishibashi, Y.Itou, N.Iwasa, S.Kanno, T.Kawabata, H.Kimura, Y.Konda, K.Kurita, M.Kurokawa, T.Moriguchi, H.Murakami, H.Oishi, S.Ota, A.Ozawa, H.Sakurai, S.Shimoura, R.Shioda, E.Takeshita, S.Takeuchi, K.Yamada, Y.Yamada, Y.Yasuda, K.Yoneda, T.Motobayashi - Proc.7th Japan-China Joint Nucl.Phys.Symp.on Nuclear Physics Trends, Tsukuba (Japan), 9-13 Nov.2009, A.Ozawa, W.Lu, Eds. p.377 (2010); AIP Conf.Proc.1235 (2009) Measurement on proton-proton correlation of the excited ²³ Al |

| 2010MAZJ | K.Matsuta, S.Zhu, M.Mihara, D.Zhou, D.Nishimura, Y.Zheng, M.Fukuda, D.Yuan, R.Matsumiya, Y.Zuo, J.Komurasaki, P.Fan, X.Zhang, D.Ishikawa, T.Suzuki, T.Nagatomo, T.Izumikawa, T.Ohtsubo, S.Takahashi, H.Hirano, Y.Shimbara, T.Kubo, R.Yamada, Y.Namiki, M.Nagashima, S.Momota, K.Ooi, Y.Nojiri, D.Kameda, A.Kitagawa, M.Kanazaw, M.Torikoshi, S.Sato, T.Minamisono, T.Sumikama, M.Ogura, H.Akai, J.R.Alonso, T.J.M.Symons, G.F.Krebs - Proc.7th Japan-China Joint Nucl.Phys.Symp.on Nuclear Physics Trends, Tsukuba (Japan), 9-13 Nov.2009, A.Ozawa, W.Lu, Eds. p.260 (2010); AIP Conf.Proc.1235 (2009) Electromagnetic Moments of Proton-Rich ²⁸P and Decomposition of Its Spin |
|----------|--|
| 2010MOZV | K.Morita, K.Morimoto, D.Kaji, H.Haba, K.Ozeki, Y.Kudou, N.Sato, T.Sumita, A.Yoneda, T.Ichikawa, Y.Fujimori, S.Goto, E.Ideguchi, Y.Kasamatsu, K.Katori, Y.Komori, H.Koura, H.Kudo, K.Ooe, A.Ozawa, F.Tokanai, K.Tsukada, T.Yamaguchi, A.Yoshida - Proc.Tours Symposium on Nuclear Physics and Astrophysics - VII, Kobe (Japan), 16-20 Nov.2009, H.Susa, M.Arnould, S.Gales, T.Motobayashi, C.Scheidenberger, H.Utsunomiya, Eds. p.331 (2010) AIP Conf.Proc.1238 Decay Properties of ²⁶⁶ Bh and ²⁶² Db Produced in the ²⁴⁸ Cm+ ²³ Na Reaction -Further Confirmation of the ²⁷⁸ 113 Decay Chain- |
| 2010NAZW | S.Nakayama, E.Matsumoto, T.Suzuki, T.Yamagata, H.Akimune, M.Fujiwara, K.Fushimi, M.B.Greenfield, H.Hashimoto, R.Hayami, H.Ikemizu, K.Kawase, T.Kudoh, K.Nakanishi, T.Oota, K.Sagara, M.Tanaka, M.Yosoi - Proc.Tours Symposium on Nuclear Physics and Astrophysics - VII, Kobe (Japan), 16-20 Nov.2009, H.Susa, M.Arnould, S.Gales, T.Motobayashi, C.Scheidenberger, H.Utsunomiya, Eds. p.280 (2010) AIP Conf.Proc.1238 Isovector dipole resonances in ⁴ He and neutrino-heating in supernova |
| 2010NIZR | D.Nishimura, M.Fukuda, T.Izumikawa, K.Kisamori, Y.Kuwada, K.Makisaka, R.Matsumiya, K.Matsuta, M.Mihara, T.Ohtsubo, T.Suzuki, A.Takagi, T.Yamaguchi, R.Yokoyama - Proc.7th Japan-China Joint Nucl.Phys.Symp.on Nuclear Physics Trends, Tsukuba (Japan), 9-13 Nov.2009, A.Ozawa, W.Lu, Eds. p.219 (2010); AIP Conf.Proc.1235 (2009) Decay curve study in a standard electron capture decay |
| 20100UZZ | N.Oulebsir, F.Hammache, P.Roussel, M.G.Pellegriti, L.Audouin, D.Beaumel, A.Bouda, P.Descouvemont, S.Fortier, L.Gaudefroy, J.Kiener, A.Lefebvre-Schuhl, V.Tatischeff - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.129 (2010) Study of ${}^{12}C(\alpha, \gamma){}^{16}O$ reaction via the transfer reaction ${}^{12}C({}^{7}\text{Li}, t){}^{16}O$ |
| 2010PAZT | A.Parikh, T.Faestermann, R.Krucken, V.Bildstein, S.Bishop, K.Eppinger, C.Herlitzius, O.Lepyoshkina, P.Maierbeck, D.Seiler, K.Wimmer, R.Hertenberger, H.F.Wirth, J.Fallis, U.Hager, D.A.Hutcheon, C.Ruiz, L.Buchmann, D.Ottewell, B.Freeman, C.Wrede, A.Garcia, B.Delbridge, A.Knecht, A.Sallaska, A.Chen, J.A.Clark, C.Deibel, B.R.Fulton, A.Laird, U.Greife, B.Guo, ET.Li, Z.Li, G.Lian, Y.Wang, W.Liu, P.Parker, K.Setoodehnia - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.52 (2010) The ${}^{33}S(p, \gamma)^{34}Cl$ reaction in classical nova explosions |

| 2010PIZW | R.G.Pizzone, C.Spitaleri, L.Lamia, V.Burjan, S.Cherubini, Z.Hons, G.G.Kiss, V.Kroha, M.La Cognata, C.Li, J.Mrazek, S.Piskor, S.M.R.Puglia, G.G.Rapisarda, S.Romano, M.L.Sergi, A.Tumino - Proc.Exotic Nuclei and Nuclear Particle Astrophysics III: From Nuclei to Stars, Sinaia, Romania, 20 June-3 July, 2010, L.Trache, A.Smirnov, S.Stoica, Eds. p.202 (2010); AIP Conf.Proc. 1304 (2010) Pole approximation validation in the study of the ⁶ Li(d, α) ⁴ He reaction |
|----------|--|
| 2010SAZK | A.Saastamoinen, L.Trache, A.Banu, M.A.Bentley, T.Davinson, J.C.Hardy, V.E.Iacob, D.G.Jenkins, A.Jokinen, M.McCleskey, B.Roeder, E.Simmons, G.Tabacaru, R.E.Tribble, P.J.Woods, J.Aysto - Proc.Exotic Nuclei and Nuclear Particle Astrophysics III: From Nuclei to Stars, Sinaia, Romania, 20 June-3 July, 2010, L.Trache, A.Smirnov, S.Stoica, Eds. p.411 (2010); AIP Conf.Proc. 1304 (2010) β -decay of ²³ Al and nova nucleosynthesis |
| 2010SAZM | A.Sauerwein, M.Elvers, J.Endres, J.Hasper, A.Hennig, L.Netterdon, A.Zilges - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.244 (2010) In-beam experiments for the astrophysical p process |
| 2010SAZN | A.Saastamoinen, L.Trache, A.Banu, M.A.Bentley, T.Davinson, J.C.Hardy, V.E.Iacob, M.McCleskey, B.Roeder, E.Simmons, G.Tabacaru, R.E.Tribble, P.J.Woods, J.Aysto - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.211 (2010) β -delayed proton decay of ²³ Al and nova nucleosynthesis |
| 2010SAZO | A.Sallaska, C.Wrede, A.Garcia, D.W.Storm, T.A.D.Brown, K.Snover, C.Ruiz, D.F.Ottewell, L.Buchmann, C.Vokenhuber, D.A.Hutcheon, J.A.Caggiano - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.51 (2010) Destruction of ²² Na in Novae: Surprising Results from an Absolute Measurement of ²² Na(p, γ) Resonance Strengths |
| 2010SEZU | K.Setoodehnia, A.Chen, T.Komatsubara, S.Kubono, D.N.Binh, T.Hashimoto, T.Hayakawa, Y.Ishibashi, Y.Ito, D.Kahl, T.Moriguchi, H.Ooishi, A.Ozawa, Y.Sugiyama, T.Shizuma, H.Yamaguchi - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.213 (2010) Study of Astrophysically Important Resonant States of ³⁰ S using the ²⁸ Si(³ He, $n\gamma$) ³⁰ S Reaction |
| 2010SEZV | K.Setoodehnia, A.A.Chen, J.Chen, J.A.Clark, C.Deibel, D.Kahl, W.N.Lennard, P.D.Parker, C.Wrede - Proc.22nd Int.Nuc.Phy.Div.Con.of the European Phys.Soc., Nuclear Physics in Astrophysics IV, Frascati, Italy, June 8-12, 2009 p.012042 (2010) Study of astrophysically important resonant states in ³⁰ S using the ³² S(p, t) ³⁰ S reaction |
| 2010SHZW | T.Shima, Y.Nagai, S.Miyamoto, S.Amano, K.Horikawa, T.Mochizuki, H.Utsunomiya, H.Akimune - Proc.7th Japan-China Joint Nucl.Phys.Symp.on Nuclear Physics Trends, Tsukuba (Japan), 9-13 Nov.2009, A.Ozawa, W.Lu, Eds. p.315 (2010); AIP Conf.Proc.1235 (2009) Experimental Study of Nuclear Astrophysics with Photon Beams |

| 2010SIZW | E.Simmons, L.Trache, A.Banu, M.McCleskey, B.Roeder, A.Spiridon, R.E.Tribble, A.Saastamoinen, J.Aysto, T.Davinson, P.J.Woods, G.J.Lotay, J.Wallace - Proc.Exotic Nuclei and Nuclear Particle Astrophysics III: From Nuclei to Stars, Sinaia, Romania, 20 June-3 July, 2010, L.Trache, A.Smirnov, S.Stoica, Eds. p.415 (2010); AIP Conf.Proc. 1304 (2010) Very Low Energy Protons From The Beta Decay Of Proton Rich Nuclei For Nuclear Astrophysics |
|----------|--|
| 2010SMZX | K.Smith, F.Attallah, T.Faestermann, U.Giesen, H.Geissel, M.Hannawald, M.Hausmann, M.Hellstrom, R.Kessler, K.L.Kratz, H.Mahmud, Y.Litvinov, M.N.Mineva, F.Montes, G.Munzenberg, B.Pfeiffer, J.Pereira Conca, P.Santi, H.Schatz, C.Scheidenberger, K.Schmidt, R.Schneider, A.Stolz, K.Summerer, J.Stadlmann, E.Wefers, P.J.Woods - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.283 (2010) β -decay and neutron emission studies of r-process nuclei near ¹³⁷ Sb |
| 2010SPZY | R.Sparta, R.G.Pizzone, C.Spitaleri, M.Aliotta, V.Burjan, S.Cherubini, V.Crucilla, M.Gulino, Z.Hons, G.Kiss, V.Kroha, M.La Cognata, L.Lamia, M.McCleskey, J.Mrazek, S.M.R.Puglia, G.G.Rapisarda, S.Romano, M.L.Sergi, L.Trache, A.Tumino - Proc.Exotic Nuclei and Nuclear Particle Astrophysics III: From Nuclei to Stars, Sinaia, Romania, 20 June-3 July, 2010, L.Trache, A.Smirnov, S.Stoica, Eds. p.420 (2010); AIP Conf.Proc. 1304 (2010) Indirect Approach To The ² H(d, p) ³ H Reaction Study |
| 2010TAZU | M.Taggart, U.Hager, A.Laird, C.Ruiz, D.Hutcheon, D.F.Ottewell, J.Fallis, L.Erikson, M.Bentley, J.Brown, L.Buchmann, A.A.Chen, J.Chen, K.Chipps, J.D'Auria, B.Davids, C.Davis, C.A.Diget, S.P.Fox, B.Fulton, N.Galinski, U.Greife, F.Herwig, R.Hirschi, D.Howell, L.Martin, D.Mountford, A.Murphy, M.Pignatari, S.Reeve, G.Ruprecht, S.Sjue, L.Veloce - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.45 (2010) The first direct measurement of ${}^{17}O(\alpha, \gamma){}^{21}Ne$ and its impact upon s-process abundances |
| 2010TOZW | Y.Togano, T.Motobayashi, N.Aoi, H.Baba, S.Bishop, X.Cai, P.Doornenbal, D.Fang, T.Furukawa, K.Ieki, N.Iwasa, T.Kawabata, S.Kanno, N.Kobayashi, Y.Kondo, T.Kuboki, N.Kume, K.Kurita, M.Kurokawa, Y.G.Ma, Y.Matsuo, H.Murakami, M.Matsushita, T.Nakamura, K.Okada, S.Ota, Y.Satou, S.Shimoura, R.Shioda, K.Tanaka, S.Takeuchi, W.Tian, H.Wang, J.Wang, K.Yamada, Y.Yamada, K.Yoneda - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.228 (2010) Astrophysical reaction rate of ${}^{30}S(p, \gamma){}^{31}Cl$ studied by Coulomb dissociation |
| 2010WAZV | C.Wagemans, S.Vermote, J.Van Gils - Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.199 (2010) The $^{41}\text{Ca}(n,\alpha)^{38}\text{Ar}$ reaction cross section up to 100 keV neutron energy |
| 2010WAZX | H.Watanabe - Proc.7th Japan-China Joint Nucl.Phys.Symp.on Nuclear Physics Trends, Tsukuba (Japan), 9-13 Nov.2009, A.Ozawa, W.Lu, Eds. p.84 (2010); AIP Conf.Proc.1235 (2009) |

Multi-quasiparticle isomers in the vicinity of 132 Sn

- 2010WEZZ M.Weigand, S.Walter, F.Kappeler, R.Plag, R.Reifarth Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.248 (2010) Cross section measurements of 103 Rh(p, γ)¹⁰⁴Pd with the Karlsruhe 4π BaF₂ detector
- 2010WRZZ C.Wrede, J.A.Clark, C.M.Deibel, T.Faestermann, R.Hertenberger, A.Parikh,
 H.F.Wirth, S.Bishop, A.Chen, K.Eppinger, B.M.Freeman, A.Garcia, R.Kruecken,
 O.Lepyoshkina, G.Rugel, K.Setoodehnia Proc.Intern.Symposium on Nuclei in the
 Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.55 (2010)
 Precision measurements of ²⁰Na, ²⁴Al, ²⁸P, ³²Cl, and ³⁶K for the rp-process
- 2010YAZX H.Yamaguchi, T.Hashimoto, S.Hayakawa, D.N.Binh, D.Kahl, S.Kubono -Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.214 (2010)
 Alpha-induced astrophysical reactions studied at CRIB
- 2010YAZY H.Yamaguchi, T.Hashimoto, S.Hayakawa, D.N.Binh, D.Kahl, S.Kubono Proc.7th Japan-China Joint Nucl.Phys.Symp.on Nuclear Physics Trends, Tsukuba (Japan), 9-13 Nov.2009, A.Ozawa, W.Lu, Eds. p.247 (2010); AIP Conf.Proc.1235 (2009) Nuclear Astrophysics and Structure Studies Using Low-energy RI Beams at CRIB
- 2010ZHZR L.H.Zhu, X.G.Wu, C.Y.He, X.Hao, L.L.Wang, Y.Zheng, G.S.Li Proc.7th Japan-China Joint Nucl.Phys.Symp.on Nuclear Physics Trends, Tsukuba (Japan),
 9-13 Nov.2009, A.Ozawa, W.Lu, Eds. p.363 (2010); AIP Conf.Proc.1235 (2009) Magnetic Rotation and Chirality and X(5) Critical Symmetry in Nucleus
- 2010ZHZT S.J.Zhu, J.H.Hamilton, J.G.Wang, H.B.Ding, L.Gu, A.V.Ramayya, J.K.Hwang,
 S.H.Liu, K.Li, Y.X.Luo, J.O.Rasmussen, I.Y.Lee, Q.Xu, E.Y.Yeoh, Z.G.Xiao, B.Qi,
 J.Meng Proc.7th Japan-China Joint Nucl.Phys.Symp.on Nuclear Physics Trends,
 Tsukuba (Japan), 9-13 Nov.2009, A.Ozawa, W.Lu, Eds. p.253 (2010); AIP
 Conf.Proc.1235 (2009)
 New Band Structures in A ~ 110 Neutron-Rich Nuclei
- 2010ZHZU H.Q.Zhang, C.L.Zhang, H.M.Jia, C.J.Lin, F.Yang, Z.H.Liu, Z.D.Wu, F.Jia, X.X.Xu, A.Richard, A.K.Nasirov, G.Mandaglio, M.Manganaro, G.Giardina, K.Hagino Proc.7th Japan-China Joint Nucl.Phys.Symp.on Nuclear Physics Trends, Tsukuba (Japan), 9-13 Nov.2009, A.Ozawa, W.Lu, Eds. p.50 (2010); AIP Conf.Proc.1235 (2009)
 - Studies of heavy ion reactions around Coulomb barrier
- 2010ZIZZ J.Zickefoose, J.Schweitzer, T.Spillane, F.Strieder, H.-W.Becker, C.Rolfs, A.Di Leva, M.De Cesare, N.De Cesare, F.Terrasi, L.Gialanella, D.Schurmann, Y.Guan, G.Imbriani, B.Limata Proc.Intern.Symposium on Nuclei in the Cosmos XI, July 19-23 2010, Heidelberg, Germany, p.19 (2010)
 Low energy beam induced background studies for a ¹²C(¹²C, p)²³Na reaction cross section measurement

| 2011AB05 | D.Abriola, A.F.Gurbich, M.Kokkoris, A.Lagoyannis, V.Paneta - Nucl.Instrum.Methods Phys.Res. B269, 2011 (2011) Proton elastic scattering differential cross-sections for ¹² C |
|----------|--|
| 2011AD14 | Zh.I.Adymov, N.Burtebayev, S.B.Sakuta - Bull.Rus.Acad.Sci.Phys. 75, 914 (2011) Lifetimes of $^{48}\mathrm{Ti},^{52}\mathrm{Cr}$ and $^{80}\mathrm{Se}$ excited states |
| 2011AD18 | J.Adam, C.Bhatia, K.Katovsky, V.Kumar, M.Majerle, V.S.Pronskikh, A.M.Khilmanovich, B.A.Martsynkevich, I.V.Zhuk, V.M.Golovatiouk, W.Westmeier, A.A.Solnyshkin, V.M.Tsoupko-Sitnikov, A.S.Potapenko - Eur.Phys.J. A 47, 85 (2011) A study of reaction rates of (n, f), (n, γ) and (n, 2n) reactions in ^{nat} U and ²³² Th by the neutron fluence produced in the graphite set-up (GAMMA-3) irradiated by 2.33 GeV deuteron beam |
| 2011AG15 | E.F.Aguilera, P.Amador-Valenzuela, E.Martinez-Quiroz, D.Lizcano, P.Rosales, H.Garcia-Martinez, A.Gomez-Camacho, J.J.Kolata, A.Roberts, L.O.Lamm, G.Rogachev, V.Guimaraes, F.D.Becchetti, A.Villano, M.Ojaruega, M.Febbraro, Y.Chen, H.Jiang, P.A.DeYoung, G.F.Peaslee, C.Guess, U.Khadka, J.Brown, J.D.Hinnefeld, L.Acosta, E.S.Rossi, Jr., J.F.P.Huiza, T.L.Belyaeva - Phys.Rev.Lett. 107, 092701 (2011) Near-Barrier Fusion of the ⁸ B+ ⁵⁸ Ni Proton-Halo System |
| 2011AL17 | F.Alrumayan, S.Al-Yanbawi, J.Schneider, I.Al-Jammaz - J.Labelled Compd.Radiopharm. Supp.1., 54, S250 (2011) Development of dual beam targets for producing I-124 |
| 2011AR09 | R.Arnold, for the NEMO-3 Collaboration - Phys.Rev.Lett. 107, 062504 (2011) Measurement of the $\beta\beta$ Decay Half-Life of ¹³⁰ Te with the NEMO-3 Detector |
| 2011AR10 | S.V.Artemov, M.K.Baktybayev, N.Burtebaev, D.T.Burtebaeva, A.A.Karakhodzhaev, M.A.Kayumov, S.B.Kuranov, G.K.Nie, G.A.Radyuk, E.A.Zaparov - Bull.Rus.Acad.Sci.Phys. 75, 920 (2011) Comparison of asymptotic normalization coefficients for ${}^{10}B \rightarrow {}^{9}B + n$ and ${}^{10}B \rightarrow {}^{9}Be + p$ configurations obtained from ${}^{10}B(d, t){}^{9}B$ and ${}^{10}B(d, {}^{3}He){}^{9}Be$ reactions |
| 2011ARZZ | S.Arzumanov, L.Bondarenko, P.Geltenbort, V.Morozov, V.V.Nesvizhevsky, Yu.Panin, S.Chernyavsky, A.Strepetov - Proc.18th Intern.Seminar on Int.of Neutrons with Nuclei, Dubna, Russia, May 26-29, 2010 p.11 (2011) Measurement of the Neutron Lifetime by Storing Ultracold Neutrons and Monitoring the Losses by Counting Inelastically Scattered Neutrons (Phase 2) |
| 2011AS08 | P.Ascher, L.Audirac, N.Adimi, B.Blank, C.Borcea, B.A.Brown, I.Companis, F.Delalee, C.E.Demonchy, F.de Oliveira Santos, J.Giovinazzo, S.Grevy, L.V.Grigorenko, T.Kurtukian-Nieto, S.Leblanc, JL.Pedroza, L.Perrot, J.Pibernat, L.Serani, P.C.Srivastava, JC.Thomas - Phys.Rev.Lett. 107, 102502 (2011) Direct Observation of Two Protons in the Decay of ⁵⁴Zn |

| 2011AT02 | F.Atchison, B.Blau, K.Bodek, B.van den Brandt, T.Brys, M.Daum, P.Fierlinger, P.Geltenbort, P.Hautle, R.Henneck, S.Heule, A.Holley, M.Kasprzak, K.Kirch, A.Knecht, J.A.Konter, M.Kuzniak, CY.Liu, A.Pichlmaier, C.Plonka, Y.Pokotilovski, A.Saunders, D.Tortorella, M.Wohlmuther, A.R.Young, J.Zejma, G.Zsigmond - Europhys.Lett. 95, 12001 (2011) Production of ultracold neutrons from cryogenic ²H₂, O₂, and C²H₄ converters |
|----------|--|
| 2011BA25 | A.Barioni, J.C.Zamora, V.Guimaraes, B.Paes, J.Lubian, E.F.Aguilera, J.J.Kolata, A.L.Roberts, F.D.Becchetti, A.Villano, M.Ojaruega, H.Jiang - Phys.Rev. C 84, 014603 (2011) Elastic scattering and total reaction cross sections for the ⁸ B, ⁷ Be, and ⁶ Li + ¹² C systems |
| 2011BA27 | A.Banu, L.Trache, F.Carstoiu, N.L.Achouri, A.Bonaccorso, W.N.Catford, M.Chartier, M.Dimmock, B.Fernandez-Dominguez, M.Freer, L.Gaudefroy, M.Horoi, M.Labiche, B.Laurent, R.C.Lemmon, F.Negoita, N.A.Orr, S.Paschalis, N.Patterson, E.S.Paul, M.Petri, B.Pietras, B.T.Roeder, F.Rotaru, P.Roussel-Chomaz, E.Simmons, J.S.Thomas, R.E.Tribble - Phys.Rev. C 84, 015803 (2011) Structure of ²³ Al from the one-proton breakup reaction and astrophysical implications |
| 2011BA30 | V.V.Baluev, L.N.Bogdanova, V.R.Bom, D.L.Demin, C.W.E.van Eijk, V.V.Filchenkov, N.N.Grafov, S.K.Grishechkin, K.I.Gritsaj, A.D.Konin, K.L.Mikhailyukov, A.I.Rudenko, Yu.I.Vinogradov, V.P.Volnykh, A.A.Yukhimchuk, S.A.Yukhimchuk - J.Exper.Theo.Phys. 113, 68 (2011) Experimental search for the radiative capture reaction d + d \rightarrow ⁴ He + γ from the dd μ muonic molecule state J = 1 |
| 2011BE27 | O.O.Belyuskina, V.I.Grantsev, V.V.Davidovsky, K.K.Kisurin, S.E.Omelchuk, G.P.Palkin, Yu.S.Roznyuk, B.A.Rudenko, V.S.Semenov, L.I.Slyusarenko, B.G.Struzhko, V.K.Tartakovsky - Bull.Rus.Acad.Sci.Phys. 75, 925 (2011) Quasi-free inclusive processes in the two-particle splitting of tritons by deuterons with an energy of 37 MeV |
| 2011BE28 | O.A.Bezshyyko, A.N.Vodin, L.A.Golinka-Bezshyyko, A.N.Dovbnya, I.N.Kadenko, O.A.Kivernyk, A.A.Kovalenko, V.A.Kushnir, V.V.Mitrochenko, S.N.Olejnik, G.E.Tuller - Bull.Rus.Acad.Sci.Phys. 75, 937 (2011) Isomeric ratios of the products of $(\gamma, \text{ xnp})$ reactions on 90,91 Zr nuclei for a maximum bremsstrahlung energy of 84 MeV |
| 2011BE29 | O.A.Bezshyyko, A.N.Vodin, L.O.Golinka-Bezshyyko, A.M.Dovbnya, I.N.Kadenko, O.A.Kivernyk, A.A.Kovalenko, V.A.Kushnir, A.I.Levon, V.V.Mitrochenko, S.N.Olejnik, G.E.Tuller - Bull.Rus.Acad.Sci.Phys. 75, 941 (2011) Isomer ratios for products of photonuclear reactions with middle-weight nuclei |
| 2011BE31 | G.Bendiscioli, T.Bressani, S.Costanza, P.Salvini - Eur.Phys.J. A 47, 82 (2011) Features of charged-pion energy spectra in antiproton- ⁴ He annihilation at rest and formation of excited hadronic blobs |

| 2011BE32 | P.Belli, R.Bernabei, F.Cappella, R.Cerulli, F.A.Danevich, A.Di Marco, A.Incicchitti, M.Laubenstein, S.S.Nagorny, S.Nisi, O.G.Polischuk, V.I.Tretyak - Eur.Phys.J. A 47, 91 (2011) First search for double- β decay of platinum by ultra-low background HP Ge γ spectrometry |
|----------|---|
| 2011BIZZ | D.N.Binh, L.H.Khiem, N.T.Tho, S.Kubono, H.Yamaguchi, Y.Wakabayashi, S.Hayakawa, D.Kahl, T.Hashimoto, T.Teranishi, S.Kato, K.Iwasa - CNS-REP-86, Ann.Report 2009, p.5 (2011) Multichannel R-matrix analysis for an alpha scattering in inverse kinematics using a ²¹ Na radioisotope beam |
| 2011BR12 | R.Broda, K.H.Maier, B.Fornal, J.Wrzesinski, B.Szpak, M.P.Carpenter, R.V.F.Janssens, W.Krolas, T.Pawlat, S.Zhu - Phys.Rev. C 84, 014330 (2011) High-spin states and isomers in the one-proton-hole and three-neutron-hole ²⁰⁴ Tl isotope |
| 2011BR13 | T.Brunner, M.Brodeur, P.Delheij, S.Ettenauer, D.Frekers, A.T.Gallant, R.Krucken, A.Lapierre, D.Lunney, R.Ringle, V.V.Simon, J.Dilling - Hyperfine Interactions 199, 191 (2011) In-trap decay spectroscopy for $2\nu\beta\beta$ decay experiments |
| 2011BU07 | C.Bucci, and the CUORE Collaboration - Nucl.Phys. B(Proc.Supp.) S217, 41 (2011) Final results of Cuoricino and status of CUORE |
| 2011BU08 | M.G.Budak, M.Karadag, H.Yucel - Ann.Nucl.Energy 38, 2550 (2011) Experimental determination of effective resonance energies for $^{158}Gd(n, \gamma)^{159}Gd$ and $^{179}Hf(n, \gamma)^{180m}Hf$ reactions |
| 2011CA20 | M.Cavallaro, F.Cappuzzello, D.Carbone, A.Cunsolo, A.Foti, R.Linares, D.Pereira, J.R.B.Oliveira, P.R.S.Gomes, J.Lubian, R.Chen - Nucl.Instrum.Methods Phys.Res. A648, 46 (2011) Challenging measurement of the ¹⁶ O+ ²⁷ Al elastic and inelastic angular distributions up to large angles |
| 2011CH31 | A.Chyzh, B.Baramsai, J.A.Becker, F.Becvar, T.A.Bredeweg, A.Couture, D.Dashdorj, R.C.Haight, M.Jandel, J.Kroll, M.Krticka, G.E.Mitchell, J.M.O'Donnell, W.Parker, R.S.Rundberg, J.L.Ullmann, D.J.Vieira, C.L.Walker, J.B.Wilhelmy, J.M.Wouters, C.Y.Wu - Phys.Rev. C 84, 014306 (2011) Measurement of the ¹⁵⁷ Gd(n, γ) reaction with the DANCE γ calorimeter array |
| 2011CH32 | R.J.Charity, J.M.Elson, J.Manfredi, R.Shane, L.G.Sobotka, B.A.Brown, Z.Chajecki, D.Coupland, H.Iwasaki, M.Kilburn, J.Lee, W.G.Lynch, A.Sanetullaev, M.B.Tsang, J.Winkelbauer, M.Youngs, S.T.Marley, D.V.Shetty, A.H.Wuosmaa, T.K.Ghosh, M.E.Howard - Phys.Rev. C 84, 014320 (2011) Investigations of three-, four-, and five-particle decay channels of levels in light nuclei created using a ⁹ C beam |

| 2011CH33 | P.Chodash, C.T.Angell, J.Benitez, E.B.Norman, M.Pedretti, H.Shugart, E.Swanberg, R.Yee - Appl.Radiat.Isot. 69, 1447 (2011) Measurement of excitation functions for the $^{nat}Mo(d,x)^{99}Mo$ and $^{nat}Mo(p,x)^{99}Mo$ reactions |
|----------|--|
| 2011CI05 | A.Ciarmatori, G.Cicoria, D.Pancaldi, A.Infantino, S.Boschi, S.Fanti, M.Marengo - Radiochim.Acta 99, 631 (2011) Some experimental studies on ⁸⁹ Zr production |
| 2011COZZ | R.P.Condori, R.Lichtenthaler, V.Guimaraes, S.Kubono, H.Yamaguchi, A.Lepine-Szily, Y.Wakabayashi, S.Hayakawa, Y.Kurihara, J.S.Yoo, N.Iwasa, S.Kato - CNS-REP-86, Ann.Report 2009, p.19 (2011) Spectroscopy of ⁶ Be by the ³ He(⁷ Be, α) ⁶ Be reaction |
| 2011DA12 | I.G.Darby, R.D.Page, D.T.Joss, L.Bianco, T.Grahn, D.S.Judson, J.Simpson, S.Eeckhaudt, P.T.Greenlees, P.M.Jones, R.Julin, S.Juutinen, S.Ketelhut, M.Leino, AP.Leppanen, M.Nyman, P.Rahkila, J.Saren, C.Scholey, A.N.Steer, J.Uusitalo, M.Venhart, S.Erturk, B.Gall, B.Hadinia - Phys.Rev. C 83, 064320 (2011) Precision measurements of proton emission from the ground states of 156 Ta and $^{160}\mathrm{Re}$ |
| 2011DE20 | A.N.Deacon, D.Steppenbeck, S.Zhu, S.J.Freeman, R.V.F.Janssens, M.P.Carpenter, B.Fornal, M.Honma, B.P.Kay, F.G.Kondev, J.Kozemczak, A.Larabee, T.Lauritsen, C.J.Lister, A.P.Robinson, D.Seweryniak, J.F.Smith, Y.Sun, X.Wang, F.R.Xu, YC.Yang - Phys.Rev. C 83, 064305 (2011) Single-particle and collective structures in ⁵⁵ Cr and ⁵⁵ V |
| 2011DE21 | F.Dellinger, O.Forstner, R.Golser, A.Priller, P.Steier, A.Wallner, G.Winkler, W.Kutschera - Phys.Rev. C 83, 065806 (2011) Ultrasensitive search for long-lived superheavy nuclides in the mass range A=288 to A=300 in natural Pt, Pb, and Bi |
| 2011DE25 | T.R.DeGrado, J.P.Byrne, A.B.Packard, A.P.Belanger, S.Rangarajan, M.K.Pandey - J.Labelled Compd.Radiopharm. Supp.1., 54, S248 (2011) A solution target approach for cyclotron production of ⁸⁹ Zr: Understanding and coping with in-target electrolysis |
| 2011DI08 | A.Dijon, E.Clement, G.de France, P.Van Isacker, J.Ljungvall, A.Gorgen, A.Obertelli, W.Korten, A.Dewald, A.Gadea, L.Gaudefroy, M.Hackstein, D.Mengoni, Th.Pissulla, F.Recchia, M.Rejmund, W.Rother, E.Sahin, C.Schmitt, A.Shrivastava, J.J.Valiente-Dobon, K.O.Zell, M.Zielinska - Phys.Rev. C 83, 064321 (2011) Lifetime measurements in $^{63}\mathrm{Co}$ and $^{65}\mathrm{Co}$ |
| 2011DI09 | F.Ditroi, F.Tarkanyi, S.Takacs, A.Hermanne, H.Yamazaki, M.Baba, A.Mohammadi, A.V.Ignatyuk - Nucl.Instrum.Methods Phys.Res. B269, 1878 (2011) Activation cross-sections of deuteron induced nuclear reactions on manganese up to 40 MeV |
| 2011DI10 | F.Ditroi, F.Tarkanyi, S.Takacs, A.Hermanne, H.Yamazaki, M.Baba, A.Mohammadi, A.V.Ignatyuk - Nucl.Instrum.Methods Phys.Res. B269, 1963 (2011) |

Study of activation cross-sections of deuteron induced reactions on rhodium up to 40 MeV2011DI11 I.Dillmann, L.Coquard, C.Domingo-Pardo, F.Kappeler, J.Marganiec, E.Uberseder, U.Giesen, A.Heiske, G.Feinberg, D.Hentschel, S.Hilpp, H.Leiste, T.Rauscher, F.-K.Thielemann - Phys.Rev. C 84, 015802 (2011) Cross sections for proton-induced reactions on Pd isotopes at energies relevant for the γ process 2011DU19 S.B.Dubovichenko, N.Burtebaev, D.M.Zazulin, Zh.K.Kerimkulov, A.S.A.Amar -Phys.Atomic Nuclei 74, 984 (2011) Astrophysical S factor for the radiative-capture reaction $p^6Li \rightarrow {}^7Be\gamma$ H.Ejiri, T.Shima, S.Miyamoto, K.Horikawa, Y.Kitagawa, Y.Asano, S.Date, 2011EJ01 Y.Ohashi - J.Phys.Soc.Jpn. 80, 094202 (2011) Resonant Photonuclear Reactions for Isotope Transmutation 2011EL05 S.Eliseev, M.Goncharov, K.Blaum, M.Block, C.Droese, F.Herfurth, E.Minaya-Ramirez, Yu.N.Novikov, L.Schweikhard, V.M.Shabaev, I.I.Tupitsyn, K.Zuber, N.A.Zubova - Phys.Rev. C 84, 012501 (2011) Multiple-resonance phenomenon in neutrinoless double-electron capture 2011EL06 V.-V.Elomaa, J.Jurttila, J.Rajander, O.Solin - J.Labelled Compd.Radiopharm. Supp.1., 54, S244 (2011) Automation of the ⁶⁴Cu production at the Turku PET Centre Y.D.Fang, Y.H.Zhang, X.H.Zhou, M.L.Liu, J.G.Wang, Y.X.Guo, X.G.Lei, W.Hua, 2011FA08 F.Ma, S.C.Wang, B.S.Gao, S.C.Li, X.L.Yan, L.He, Z.G.Wang, F.Fang, X.G.Wu, C.Y.He, Y.Zheng, Z.M.Wang, Y.Shi, F.R.Xu - Phys.Rev. C 84, 017301 (2011) Identification of high-spin states in the stable nucleus ¹⁹⁵Pt 2011FE06 B.Fernandez-Dominguez, J.S.Thomas, W.N.Catford, F.Delaunay, S.M.Brown, N.A.Orr, M.Rejmund, M.Labiche, M.Chartier, N.L.Achouri, H.Al Falou, N.I.Ashwood, D.Beaumel, Y.Blumenfeld, B.A.Brown, R.Chapman, N.Curtis, C.Force, G.de France, S.Franchoo, J.Guillot, P.Haigh, F.Hammache, V.Lapoux, R.C.Lemmon, F.Marechal, A.M.Moro, X.Mougeot, B.Mouginot, L.Nalpas, A.Navin, N.Patterson, B.Pietras, E.C.Pollacco, A.Leprince, A.Ramus, J.A.Scarpaci, N.de Sereville, I.Stephan, O.Sorlin, G.L.Wilson - Phys.Rev. C 84, 011301 (2011); Pub.Note JOUR PRVCA 84 029902 (2011) Emergence of the N = 16 shell gap in ²¹O 2011FI06 D.Filipescu, V.Avrigeanu, T.Glodariu, C.Mihai, D.Bucurescu, M.Ivascu, I.Cata-Danil, L.Stroe, O.Sima, G.Cata-Danil, D.Deleanu, D.G.Ghita, N.Marginean, R.Marginean, A.Negret, S.Pascu, T.Sava, G.Suliman, N.V.Zamfir - Phys.Rev. C 83, 064609 (2011) Cross sections for α -particle induced reactions on ^{115,116}Sn around the Coulomb barrier

| 2011FL05 | A.Flores-Moreno, M.Valle-Gonzalez, A.Zarate-Morales, G.Ferro-Flores, M.Pedraza-Lopez, C.Arteaga de Murphy, M.A.Avila-Rodriguez - J.Labelled Compd.Radiopharm. Supp.1., 54, S249 (2011) Production of ⁶⁸ Ga for preclinical applications by irradiation of a natural Zn foil with 7 MeV protons |
|----------|---|
| 2011FL06 | R.L.Flack, and the NEMO-3 Collaboration - Nucl.Phys. B(Proc.Supp.) S217, 53 (2011) NEMO-3 and SuperNEMO: A search for zero neutrino double beta decay |
| 2011F008 | A.S.Fomichev, I.G.Mukha, S.V.Stepantsov, L.V.Grigorenko, E.V.Litvinova, V.Chudoba, I.A.Egorova, M.S.Golovkov, A.V.Gorshkov, V.A.Gorshkov, G.Kaminski, S.A.Krupko, Yu.L.Parfenova, S.I.Sidorchuk, R.S.Slepnev, G.M.Ter-Akopian, R.Wolski, M.V.Zhukov - Int.J.Mod.Phys. E20, 1491 (2011) Lifetime of ²⁶ S and a limit for its 2p decay energy |
| 2011FR10 | S.Friedreich, D.Barna, A.Dax, R.Hayano, D.Horvath, M.Hori, B.Juhasz, O.Massiczek, A.Soter, T.Pask, E.Widmann - Hyperfine Interactions 199, 337 (2011) Spectroscopy of the hyperfine structure of antiprotonic ⁴ He and ³ He |
| 2011FR11 | J.A.Frenje, C.K.Li, F.H.Seguin, D.T.Casey, R.D.Petrasso, D.P.McNabb, P.Navratil, S.Quaglioni, T.C.Sangster, V.Yu.Glebov, D.D.Meyerhofer - Phys.Rev.Lett. 107, 122502 (2011) Measurements of the Differential Cross Sections for the Elastic n-³H and n-²H Scattering at 14.1 MeV by Using an Inertial Confinement Fusion Facility |
| 2011GI03 | J.Gibelin, M.Wiedeking, L.Phair, P.Fallon, S.Basunia, L.A.Bernstein, J.T.Burke, D.L.Bleuel, R.M.Clark, M.Cromaz, MA.Deleplanque, B.F.Goldblum, S.Gros, H.B.Jeppesen, P.T.Lake, IY.Lee, S.R.Lesher, A.O.Macchiavelli, M.A.McMahan, J.Pavan, E.Rodriguez-Vieitez, N.D.Scielzo, L.G.Moretto - Nucl.Instrum.Methods Phys.Res. A648, 109 (2011) Channel selection of neutron-rich nuclei following fusion-evaporation reactions of light systems |
| 2011GI05 | D.B.Gin, V.G.Kiptily, A.A.Pasternak, I.N.Chugunov, A.E.Shevelev - Bull.Rus.Acad.Sci.Phys. 75, 931 (2011) Doppler shapes of the γ line in the ⁹ Be $(\alpha, n\gamma)^{12}$ C reaction in plasma at temperatures $T_{\alpha} < 0.6$ MeV |
| 2011GLZZ | Yu.M.Gledenov, M.V.Sedysheva, G.Zhang, J.Zhang, H.Wu, J.Liu, J.Chen, G.Khuukhenkhuu, P.J.Szalanski - Proc.18th Intern.Seminar on Int.of Neutrons with Nuclei, Dubna, Russia, May 26-29, 2010 p.143 (2011) Measurements of the 64 Zn and 67 Zn(n, α) Reactions Cross Sections in the MeV Neutron Energy Region |
| 2011GR11 | K.A.Gridnev, N.Burtebayev, N.A.Maltsev, N.Amangeldi, Sh.Hamada - Bull.Rus.Acad.Sci.Phys. 75, 961 (2011) Investigating the ${}^{16}O + {}^{12}C$ reaction over a wide range of energies |

| 2011GR12 | E.Grodner, I.Sankowska, T.Morek, S.G.Rohozinski, Ch.Droste, J.Srebrny, A.A.Pasternak, M.Kisielinski, M.Kowalczyk, J.Kownacki, J.Mierzejewski, A.Krol, K.Wrzosek - Phys.Lett. B 703, 46 (2011) Partner bands of ¹²⁶ Cs - first observation of chiral electromagnetic selection rules |
|----------|---|
| 2011GU12 | L.Gu, S.J.Zhu, J.G.Wang, E.Y.Yeoh, Z.G.Xiao, S.Q.Zhang, J.Meng, M.Zhang, Y.Lou, H.B.Ding, Q.Xu, L.H.Zhu, X.G.Wu, C.Y.He, G.S.Li, L.L.Wang, Y.Zheng, B.Zhang - Phys.Rev. C 83, 064303 (2011) Observation of high-spin oblate band structures in ¹⁴¹ Pm |
| 2011GU14 | C.J.Guess, T.Adachi, H.Akimune, A.Algora, S.M.Austin, D.Bazin, B.A.Brown, C.Caesar, J.M.Deaven, H.Ejiri, E.Estevez, D.Fang, A.Faessler, D.Frekers, H.Fujita, Y.Fujita, M.Fujiwara, G.F.Grinyer, M.N.Harakeh, K.Hatanaka, C.Herlitzius, K.Hirota, G.W.Hitt, D.Ishikawa, H.Matsubara, R.Meharchand, F.Molina, H.Okamura, H.J.Ong, G.Perdikakis, V.Rodin, B.Rubio, Y.Shimbara, G.Susoy, T.Suzuki, A.Tamii, J.H.Thies, C.Tur, N.Verhanovitz, M.Yosoi, J.Yurkon, R.G.T.Zegers, J.Zenihiro - Phys.Rev. C 83, 064318 (2011) The ¹⁵⁰ Nd(³ He, t) and ¹⁵⁰ Sm(t, ³ He) reactions with applications to $\beta\beta$ decay of ¹⁵⁰ Nd |
| 2011HA25 | D.J.Hartley, R.V.F.Janssens, L.L.Riedinger, M.A.Riley, X.Wang, A.Aguilar, M.P.Carpenter, C.J.Chiara, P.Chowdhury, I.G.Darby, U.Garg, Q.A.Ijaz, F.G.Kondev, S.Lakshmi, T.Lauritsen, A.Ludington, W.C.Ma, E.A.McCutchan, S.Mukhopadhyay, R.Pifer, E.P.Seyfried, U.Shirwadkar, I.Stefanescu, S.K.Tandel, J.R.Vanhoy, S.Zhu, S.Frauendorf - Phys.Rev. C 83, 064307 (2011) Rotational structures and the wobbling mode in ¹⁶⁷ Ta |
| 2011HAZY | S.Hayakawa, S.Kubono, T.Hashimoto, H.Yamaguchi, D.N.Binh, D.Kahl, Y.Wakabayashi, N.Iwasa, K.Kume, Y.Miura, T.Teranishi, J.J.He, Y.K.Kwon, T.Komatsubara, S.Kato, S.Wanajo - CNS-REP-86, Ann.Report 2009, p.7 (2011) First direct measurement of the ${}^{11}C(\alpha, p){}^{14}N$ stellar reaction |
| 2011HE13 | A.Heusler, T.Faestermann, R.Hertenberger, R.Krucken, HF.Wirth, P.von Brentano - J.Phys.(London) G38, 105102 (2011) Structure of states in ^{208}Pb with major components of the neutron particle-hole configuration $\nu(\mathrm{d}_{5/2}^{+1}\mathrm{p}_{3/2}^{-1})$ |
| 2011IDZZ | E.Ideguchi, S.Ota, T.Morikawa, M.Oshima, M.Koizumi, Y.Toh, A.Kimura, H.harada, K.Furutaka, S.Nakamura, F.Kitatani, Y.Hatsukawa, T.Shizuma, M.Sugawara, Y.X.Watanabe, Y.Hirayama, M.Oi - CNS-REP-86, Ann.Report 2009, p.23 (2011) Study of High-Spin States in ³⁵ S |
| 2011IN04 | A.Kh.Inoyatov, L.L.Perevoshchikov, A.Kovalik, O.Dragoun, D.V.Filosofov - Eur.Phys.J. A 47, 84 (2011) Experimental investigation of ligand effects on the conversion electron spectrum of the 22.5 keV M1 + E2 nuclear transition in ¹⁴⁹ Sm |

| 2011IT06 | I.M.Itkis, E.M.Kozulin, M.G.Itkis, G.N.Knyazheva, A.A.Bogachev, E.V.Chernysheva, L.Krupa, Yu.Ts.Oganessian, V.I.Zagrebaev, A.Ya.Rusanov, F.Goennenwein, O.Dorvaux, L.Stuttge, F.Hanappe, E.Vardaci, E.de Goes Brennand - Phys.Rev. C 83, 064613 (2011) Fission and quasifission modes in heavy-ion-induced reactions leading to the formation of Hs [*] |
|----------|--|
| 2011JA07 | B.Janutta, and the COBRA Collaboration - Nucl.Phys. B(Proc.Supp.) S217, 47 (2011) Status of the COBRA double beta decay experiment |
| 2011KA23 | K.Kalita - J.Phys.(London) G38, 095104 (2011) Evidence for incomplete fusion on the $^{12}C + ^{208}Pb$ and $^{13}C + ^{207}Pb$ reactions in above-barrier energies |
| 2011KA24 | A.S.Kachan, I.V.Kurguz, I.S.Kovtunenko, V.M.Mishchenko, S.N.Utenkov - Bull.Rus.Acad.Sci.Phys. 75, 917 (2011) The resonance-like structure observed in the 40 Ar(p γ) 41 K reaction |
| 2011KAZU | T.Kawabata, T.Adachi, M.Fujiwara, K.Hatanaka, Y.Ishiguro, M.Itoh, Y.Maeda, H.Matsubara, H.Miyasako, Y.Nozawa, T.Saito, S.Sakaguchi, Y.Sasamoto, Y.Shimizu, T.Takahashi, A.Tamii, S.Terashima, H.Tokieda, N.Tomida, T.Uesaka, M.Uchida, Y.Yasuda, N.Yokota, H.P.Yoshida, J.Zenihiro - Proc.Int.Symp.on New Faces of Atomic Nuclei, Okinawa (Japan), 15-17 Nov.2010, W.Bentz, M.Oka, T.Otsuka, N.Yoshinaga, Eds. p.194 (2010); AIP Conf.Proc.1355 (2011) Alpha inelastic scattering and cluster structures in ²⁴ Mg |
| 2011KAZY | D.V.Kamanin, Yu.V.Pyatkov, A.A.Alexandrov, I.A.Alexandrova, S.B.Borzakov, N.Jacobs, N.A.Kondratiev, E.A.Kuznetsova, V.Malaza, S.Mullins, Ts.Panteleev, D.Pham Minh, V.E.Zhuchko - Proc.18th Intern.Seminar on Int.of Neutrons with Nuclei, Dubna, Russia, May 26-29, 2010 p.102 (2011) Collinear Cluster Tri-Partition of ²⁵² Cf(sf) - Evidences in Neutron Gated Data |
| 2011KE03 | J.Ketelaer, G.Audi, T.Beyer, K.Blaum, M.Block, R.B.Cakirli, R.F.Casten, C.Droese, M.Dworschak, K.Eberhardt, M.Eibach, F.Herfurth, E.Minaya-Ramirez, Sz.Nagy, D.Neidherr, W.Nortershauser, C.Smorra, M.Wang - Phys.Rev. C 84, 014311 (2011) Mass measurements on stable nuclides in the rare-earth region with the Penning-trap mass spectrometer TRIGA-TRAP |
| 2011KHZW | V.A.Khryachkov, I.P.Bondarenko, B.D.Kuzminov, N.N.Semenova, A.I.Sergachev - Proc.18th Intern.Seminar on Int.of Neutrons with Nuclei, Dubna, Russia, May 26-29, 2010 p.153 (2011) Study of (n, α) Reaction Cross Section on a Set of Light Nuclei |
| 2011KHZY | R.U.Khafizov, I.A.Kolesnikov, M.V.Nikolenko, S.A.Tarnovitskiy, S.V.Tolokonnikov, V.D.Torokhov, V.A.Solovei, M.R.Kolhidashvili, I.A.Konorov - Proc.18th Intern.Seminar on Int.of Neutrons with Nuclei, Dubna, Russia, May 26-29, 2010 p.73 (2011) Optimal Conditions for Conducting the Neutron Radiative Decay Experiment |

| 2011KI14 | O.S.Kirsebom, S.Hyldegaard, M.Alcorta, M.J.G.Borge, J.Buscher, T.Eronen, S.Fox, B.R.Fulton, H.O.U.Fynbo, H.Hultgren, A.Jokinen, B.Jonson, A.Kankainen, P.Karvonen, T.Kessler, A.Laird, M.Madurga, I.Moore, G.Nyman, H.Penttila, S.Rahaman, M.Reponen, K.Riisager, T.Roger, J.Ronkainen, A.Saastamoinen, O.Tengblad, J.Aysto - Phys.Rev. C 83, 065802 (2011) Precise and accurate determination of the ⁸ B decay spectrum |
|----------|---|
| 2011KI15 | G.G.Kiss, P.Mohr, Zs.Fulop, Gy.Gyurky, Z.Elekes, J.Farkas, E.Somorjai, C.Yalcin, D.Galaviz, R.T.Guray, N.Ozkan, J.Gorres - Phys.Rev. C 83, 065807 (2011) 110,116 Cd($\alpha, \alpha)^{110,116}$ Cd elastic scattering and systematic investigation of elastic α scattering cross sections along the Z=48 isotopic and N=62 isotonic chains |
| 2011KI16 | H.Kikunaga, T.Suzuki, M.Nomura, T.Mitsugashira, A.Shinohara - Phys.Rev. C 84, 014316 (2011) Determination of the half-life of the ground state of 229 Th by using 232 U and 233 U decay series |
| 2011KI17 | S.Kisyov, S.Lalkovski, N.Marginean, D.Bucurescu, L.Atanasova, D.L.Balabanski, Gh.Cata-Danil, I.Cata-Danil, JM.Daugas, D.Deleanu, P.Detistov, D.Filipescu, G.Georgiev, D.Ghita, T.Glodariu, J.Jolie, D.S.Judson, R.Lozeva, R.Marginean, C.Mihai, A.Negret, S.Pascu, D.Radulov, JM.Regis, M.Rudigier, T.Sava, L.Stroe, G.Suliman, N.V.Zamfir, K.O.Zell, M.Zhekova - Phys.Rev. C 84, 014324 (2011) In-beam fast-timing measurements in ^{103,105,107} Cd |
| 2011KIZY | G.N.Kim, M.W.Lee, K.S.Kim, K.Kim, S.C.Yang, T.I.Ro, Y.R.Kang, H.S.Kang, M.H.Cho, I.S.Ko, W.Namkung - Proc.18th Intern.Seminar on Int.of Neutrons with Nuclei, Dubna, Russia, May 26-29, 2010 p.257 (2011) Recent Activities at Laboratory of Experimental Nuclear and Particle Physics |
| 2011K029 | K.Kondo, I.Murata, K.Ochiai, N.Kubota, H.Miyamaru, C.Konno, T.Nishitani - J.Nucl.Sci.Technol.(Tokyo) 48, 1146 (2011) Measurement of Charged-Particle Emission Double-Differential Cross Section of Fluorine for 14.2 MeV Neutrons |
| 2011KO30 | T.Kotthaus, P.Reiter, H.Hess, M.Kalkuhler, A.Wendt, A.Wiens, R.Hertenberger, T.Morgan, P.G.Thirolf, HF.Wirth, T.Faestermann - Phys.Rev. C 84, 014334 (2011) Probing Nilsson states in ²³³ U |
| 2011KO32 | F.G.Kondev, I.Ahmad, J.P.Greene, A.L.Nichols, M.A.Kellett - Nucl.Instrum.Methods Phys.Res. A652, 654 (2011) Measurements of absolute gamma-ray emission probabilities in the decay of ²³³ Pa |
| 2011LA13 | M.La Cognata, A.M.Mukhamedzhanov, C.Spitaleri, I.Indelicato, M.Aliotta, V.Burjan, S.Cherubini, A.Coc, M.Gulino, Z.Hons, G.G.Kiss, V.Kroha, L.Lamia, J.Mrazek, S.Palmerini, S.Piskor, R.G.Pizzone, S.M.R.Puglia, G.G.Rapisarda, S.Romano, M.L.Sergi, A.Tumino - Astrophys.J. 739, L54 (2011) The Fluorine Destruction in Stars: First Experimental Study of the ¹⁹ F(p, α_0) ¹⁶ O Reaction at Astrophysical Energies |

| 2011LE22 | O.Lebeda, E.J.van Lier, J.Stursa, J.Ralis, A.Zyuzin - J.Labelled Compd.Radiopharm. Supp.1., 54, S243 (2011) Cyclotron Production of ^{99m} Tc: Experimental Evaluation of Radionuclidic Impurities |
|----------|--|
| 2011LE23 | J.I.Lee, H.C.Bhang, J.H.Choi, E.J.Jeon, W.G.Kang, H.J.Kim, S.C.Kim, S.K.Kim, Y.D.Kim, J.H.Lee, M.J.Lee, S.J.Lee, K.J.Ma, S.S.Myung, S.Ryu, J.H.So - Nucl.Instrum.Methods Phys.Res. A654, 157 (2011) Experimental study on neutrinoless double beta decay of ⁹²Mo |
| 2011LI25 | S.H.Liu, J.H.Hamilton, A.V.Ramayya, Y.S.Chen, Z.C.Gao, S.J.Zhu, L.Gu, E.Y.Yeoh, N.T.Brewer, J.K.Hwang, Y.X.Luo, J.O.Rasmussen, W.C.Ma, J.C.Batchelder, A.V.Daniel, G.M.Ter-Akopian, Yu.Ts.Oganessian, A.Gelberg - Phys.Rev. C 83, 064310 (2011) Signature inversion in odd-odd ¹¹⁴ Rh: First identification of high-spin states in very neutron-rich ¹¹⁴ Rh and application of the triaxial projected shell model |
| 2011LI28 | Z.Liu, D.Seweryniak, P.J.Woods, C.N.Davids, M.P.Carpenter, T.Davinson, R.V.F.Janssens, R.D.Page, A.P.Robinson, J.Shergur, S.Sinha, X.D.Tang, F.R.Xu, S.Zhu - Phys.Lett. B 702, 24 (2011) Structure of the proton emitter ¹¹⁷ La studied by proton and γ -ray spectroscopy |
| 2011LI29 | S.H.Liu, J.H.Hamilton, A.V.Ramayya, A.Gelberg, L.Gu, E.Y.Yeoh, S.J.Zhu, N.T.Brewer, J.K.Hwang, Y.X.Luo, J.O.Rasmussen, W.C.Ma, A.V.Daniel, Yu.Ts.Oganessian, G.M.Ter-Akopian - Phys.Rev. C 84, 014304 (2011) High-spin level structure of ¹¹⁵ Rh: Evolution of triaxiality in odd-even Rh isotopes |
| 2011LI34 | K.Li, H.Hamilton, A.V.Ramayya, S.H.Liu, X.Q.Zhang, N.T.Brewer, J.K.Hwang, C.Goodin, S.J.Zhu, Y.X.Luo, J.O.Rasmussen, I.Y.Lee, S.C.Wu, R.Donangelo, A.V.Daniel, G.M.Ter-Akopian, Yu.Ts.Oganessian, A.Unzhakova, J.D.Cole, W.C.Ma, M.A.Stoyer - Int.J.Mod.Phys. E20, 1825 (2011) Identification of high-spin states in neutron-rich ^{89,90,92} Kr and ⁸⁶ Se |
| 2011LI35 | G.S.Li, X.H.Zhou, Y.H.Zhang, Y.Zheng, M.L.Liu, W.Hua, H.B.Zhou, B.Ding, H.X.Wang, X.G.Lei, S.Q.Zhang, Y.Shi, J.Meng, F.R.Xu, M.Oshima, Y.Toh, M.Koizumi, A.Osa, Y.Hatsukawa, M.Sugawara - J.Phys.(London) G38, 095105 (2011) Signature inversion in the 7 / 2 ⁻ [503] band of ¹⁸⁵ Pt |
| 2011LIZZ | W.P.Liu, B.Guo, J.Su, ZH.Li, D.N.Binh, Y.L.Han, H.Hashimoto, S.Hayakawa, J.J.He, J.Hu, N.Iwasa, D.M.Kahl, S.Kubono, N.Kume, Y.J.Li, ZH.Li, Y.B.Wang, S.W.Xu, H.Yamaguchi, S.Q.Yan, X.X.Bai, G.Lian, B.X.Wang, S.Zeng - CNS-REP-86, Ann.Report 2009, p.15 (2011) Indirect measurement of astrophysical $^{12}\mathrm{N}(\mathrm{p},\gamma)^{13}\mathrm{O}$ reaction rate |
| 2011ME10 | D.G.Medvedev, L.F.Mausner, S.O.Kurczak, S.Srivastava - J.Labelled Compd.Radiopharm. Supp.1., 54, S236 (2011) Overview of the development of large scale production of ⁸⁶ Y at Brookhaven Linac Isotope Producer |

| 2011MO18 | A.I.Morales, J.Benlliure, J.Agramunt, A.Algora, N.Alkhomashi, H.Alvarez-Pol, P.Boutachkov, A.M.Bruce, L.S.Caceres, E.Casarejos, A.M.D.Bacelar, P.Doornenbal, D.Dragosavac, G.Farrelly, A.Gadea, W.Gelletly, J.Gerl, M.Gorska, J.Grebosz, I.Kojouharov, F.Molina, D.Perez-Loureiro, S.Pietri, Z.Podolyak, P.H.Regan, B.Rubio, H.Shaffner, S.J.Steer, S.Tashenov, S.Verma, H.J.Wollersheim - Phys.Rev. C 84, 011601 (2011) Synthesis of N = 127 isotones through (p, n) charge-exchange reactions induced by relativistic ²⁰⁸Pb projectiles |
|----------|---|
| 2011M021 | T.J.Morley, C.Hoehr, K.Buckley, P.Schaffer, F.Benard, T.J.Ruth - J.Labelled Compd.Radiopharm. Supp.1., 54, S245 (2011) Rapid and Efficient Production of Tc-94m |
| 2011MU10 | J.M.Mueller, R.J.Charity, R.Shane, L.G.Sobotka, S.J.Waldecker, W.H.Dickhoff, A.S.Crowell, J.H.Esterline, B.Fallin, C.R.Howell, C.Westerfeldt, M.Youngs, B.J.Crowe, III, R.S.Pedroni - Phys.Rev. C 83, 064605 (2011) Asymmetry dependence of nucleon correlations in spherical nuclei extracted from a dispersive-optical-model analysis |
| 2011N012 | M.Norrby, T.Lonnroth, V.Z.Goldberg, G.V.Rogachev, M.S.Golovkov, KM.Kallman, M.Lattuada, S.V.Perov, S.Romano, B.B.Skorodumov, G.P.Tiourin, W.H.Trzaska, A.Tumino, A.N.Vorontsov - Eur.Phys.J. A 47, 96 (2011) Elastic alpha-particle resonances as evidence of clustering at high excitation in ⁴⁰ Ca |
| 20110G07 | Yu.Ts.Oganessian - Radiochim.Acta 99, 429 (2011) Synthesis of the heaviest elements in $^{48}\mathrm{Ca\text{-induced}}$ reactions |
| 2011PE20 | D.Perez-Loureiro, J.Benlliure, H.Alvarez-Pol, B.Blank, E.Casarejos, D.Dragosavac, V.Fohr, M.Gascon, W.Gawlikowicz, A.Heinz, K.Helariutta, A.Kelic-Heil, S.Lukic, F.Montes, L.Pienkowski, KH.Schmidt, M.Staniou, K.Subotic, K.Summerer, J.Taieb, A.Trzcinska - Phys.Lett. B 703, 552 (2011) Production of neutron-rich nuclei in fragmentation reactions of ¹³² Sn projectiles at relativistic energies |
| 2011PE21 | M.Petri, P.Fallon, A.O.Macchiavelli, S.Paschalis, K.Starosta, T.Baugher, D.Bazin, L.Cartegni, R.M.Clark, H.L.Crawford, M.Cromaz, A.Dewald, A.Gade, G.F.Grinyer, S.Gros, M.Hackstein, H.B.Jeppesen, I.Y.Lee, S.McDaniel, D.Miller, M.M.Rajabali, A.Ratkiewicz, W.Rother, P.Voss, K.A.Walsh, D.Weisshaar, M.Wiedeking, B.A.Brown - Phys.Rev.Lett. 107, 102501 (2011) Lifetime Measurement of the 2 ⁺ ₁ State in ²⁰ C |
| 2011PI08 | K.C.C.Pires, R.Lichtenthaler, A.Lepine-Szily, V.Guimaraes, P.N.de Faria, A.Barioni, D.R.Mendes, Jr., V.Morcelle, R.P.Condori, M.C.Morais, J.C.Zamora, E.Crema, A.M.Moro, M.Rodriguez-Gallardo, M.Assuncao, J.M.B.Shorto, S.Mukherjee - Phys.Rev. C 83, 064603 (2011) Experimental study of ⁶ He+ ⁹ Be elastic scattering at low energies |

| 2011P009 | M.Pomorski, M.Pfutzner, W.Dominik, R.Grzywacz, T.Baumann, J.S.Berryman, H.Czyrkowski, R.Dabrowski, T.Ginter, J.Johnson, G.Kaminski, A.Kuzniak, N.Larson, S.N.Liddick, M.Madurga, C.Mazzocchi, S.Mianowski, K.Miernik, D.Miller, S.Paulauskas, J.Pereira, K.P.Rykaczewski, A.Stolz, S.Suchyta - Phys.Rev. C 83, 061303 (2011) First observation of two-proton radioactivity in ⁴⁸ Ni |
|----------|--|
| 2011P010 | O.Povoroznyk, O.K.Gorpinich, O.O.Jachmenjov, H.V.Mokhnach, O.Ponkratenko, G.Mandaglio, F.Curciarello, V.De Leo, G.Fazio, G.Giardina - J.Phys.Soc.Jpn. 80, 094204 (2011) High-Lying ⁶ Li Levels at Excitation Energy of around 21 MeV |
| 2011PR06 | M.K.Pradhan, A.Mukherjee, P.Basu, A.Goswami, R.Kshetri, S.Roy, P.Roy Chowdhury, M.Saha-Sarkar, R.Palit, V.V.Parkar, S.Santra, M.Ray - Phys.Rev. C 83, 064606 (2011) Fusion of ⁶ Li with ¹⁵⁹ Tb at near-barrier energies |
| 2011PR12 | M.G.Procter, D.M.Cullen, C.Scholey, P.Ruotsalainen, L.Angus, T.Back, B.Cederwall, A.Dewald, C.Fransen, T.Grahn, P.T.Greenlees, M.Hackstein, U.Jakobsson, P.M.Jones, R.Julin, S.Juutinen, S.Ketelhut, M.Leino, R.Liotta, N.M.Lumley, P.J.R.Mason, P.Nieminen, M.Nyman, J.Pakarinen, T.Pissulla, P.Peura, P.Rahkila, J.Revill, S.V.Rigby, W.Rother, M.Sandzelius, J.Saren, J.Sorri, M.J.Taylor, J.Uusitalo, P.Wady, C.Qi, F.R.Xu - Phys.Lett. B 704, 118 (2011) Anomalous transition strength in the proton-unbound nucleus ${}^{109}_{53}I_{56}$ |
| 2011RA24 | S.Rahaman, VV.Elomaa, T.Eronen, J.Hakala, A.Jokinen, A.Kankainen, J.Rissanen, J.Suhonen, C.Weber, J.Aysto - Phys.Lett. B 703, 412 (2011) Double-beta decay Q values of 116 Cd and 130 Te |
| 2011RE13 | I.A.Reyhancan - Ann.Nucl.Energy 38, 2359 (2011) Measurements and model calculations of activation cross sections for 232 Th(n, 2n)231Th reaction between 13.57 and 14.83 MeV neutrons |
| 2011RI07 | J.Rissanen, J.Kurpeta, A.Plochocki, VV.Elomaa, T.Eronen, J.Hakala, A.Jokinen, A.Kankainen, P.Karvonen, I.D.Moore, H.Penttila, S.Rahaman, A.Saastamoinen, W.Urban, C.Weber, J.Aysto - Eur.Phys.J. A 47, 97 (2011) Penning-trap-assisted study of ¹¹⁵ Ru beta decay |
| 2011R020 | A.P.Robinson, T.L.Khoo, D.Seweryniak, I.Ahmad, M.Asai, B.B.Back, M.P.Carpenter, P.Chowdhury, C.N.Davids, J.Greene, P.T.Greenlees, K.Hauschild, A.Heinz, RD.Herzberg, R.V.F.Janssens, D.G.Jenkins, G.D.Jones, S.Ketelhut, F.G.Kondev, T.Lauritsen, C.J.Lister, A.Lopez-Martens, P.Marley, E.McCutchan, P.Papadakis, D.Peterson, J.Qian, D.Rostron, U.Shirwadkar, I.Stefanescu, S.K.Tandel, X.Wang, S.Zhu - Phys.Rev. C 83, 064311 (2011) Search for a 2-quasiparticle high-K isomer in ²⁵⁶Rf |
| 2011RO22 | O.Roig, V.Meot, B.Rosse, G.Belier, JM.Daugas, A.Letourneau, A.Menelle, P.Morel - Phys.Rev. C 83, 064617 (2011) Direct evidence for inelastic neutron "acceleration" by ¹⁷⁷ Lu ^m |

| 2011RD26 | P.Roy, A.Saxena, B.K.Nayak, E.T.Mirgule, B.John, Y.K.Gupta, L.S.Danu, R.P.Vind, A.Kumar, R.K.Choudhury - Phys.Rev. C 84, 011602 (2011) Systematic study of projectile-structure effect on the fusion-barrier distribution |
|----------|--|
| 2011ROZZ | A.M.Rogers, J.Giovinazzo, C.J.Lister, B.Blank, G.Canchel, J.A.Clark, S.M.Fischer, G.de France, S.Grevy, S.Gros, E.A.McCutchan, F.de Oliveira Santos, G.Savard, D.Seweryniak, I.Stefan, JC.Thomas - Priv.Comm. (2011) ⁶⁹ Kr β -delayed proton emission: A Trojan horse for studying states in proton-unbound ⁶⁹ Br |
| 2011RU10 | N.I.Rukhadze, Ch.Briancon, V.B.Brudanin, V.G.Egorov, A.A.Klimenko, A.Kovalik, V.V.Timkin, P.Chermak, Yu.A.Shitov, F.Simkovic, I.Stekl - Bull.Rus.Acad.Sci.Phys. 75, 879 (2011) Search for double beta decay of ¹⁰⁶ Cd |
| 2011RZ01 | T.Rzaca-Urban, W.Urban, J.A.Pinston, A.G.Smith, I.Ahmad - Phys.Rev. C 83, 067301 (2011) Near-yrast, medium-spin structure of $^{143}\rm{Xe}$ |
| 2011SA25 | D.Santiago-Gonzalez, I.Wiedenhover, V.Abramkina, M.L.Avila, T.Baugher, D.Bazin, B.A.Brown, P.D.Cottle, A.Gade, T.Glasmacher, K.W.Kemper, S.McDaniel, A.Rojas, A.Ratkiewicz, R.Meharchand, E.C.Simpson, J.A.Tostevin, A.Volya, D.Weisshaar - Phys.Rev. C 83, 061305 (2011) Triple configuration coexistence in ⁴⁴ S |
| 2011SA41 | N.Sato, H.Haba, T.Ichikawa, D.Kaji, Y.Kudou, K.Morimoto, K.Morita, K.Ozeki, T.Sumita, A.Yoneda, E.Ideguchi, H.Koura, A.Ozawa, T.Shinozuka, T.Yamaguchi, A.Yoshida - J.Phys.Soc.Jpn. 80, 094201 (2011) Production and Decay Properties of ²⁶⁴ Hs and ²⁶⁵ Hs |
| 2011SC18 | C.Scholl, Y.Fujita, T.Adachi, P.von Brentano, H.Fujita, M.Gorska, H.Hashimoto, K.Hatanaka, H.Matsubara, K.Nakanishi, T.Ohta, Y.Sakemi, Y.Shimbara, Y.Shimizu, Y.Tameshige, A.Tamii, M.Yosoi, R.G.T.Zegers - Phys.Rev. C 84, 014308 (2011) High-resolution study of the ⁹ Be(³ He, t) ⁹ B reaction up to the ⁹ B triton threshold |
| 2011SC21 | P.Schaffer, T.J.Morley, K.Gagnon, E.Asselin, K.R.Buckley, J.Klug, V.Hanemaayer, S.Zeisler, M.Dodd, S.A.McQuarrie, M.S.Kovacs, F.S.Prato, J.Valliant, F.Benard, T.J.Ruth - J.Labelled Compd.Radiopharm. Supp.1., 54, S247 (2011) Assessing the potential of using the ¹⁰⁰ Mo(p, 2n) ^{99m} Tc transformation as a means of producing Curie-quantities of ⁹⁹ mTc on existing cyclotron infrastructure |
| 2011SC23 | D.Schurmann, A.Di Leva, L.Gialanella, R.Kunz, F.Strieder, N.De Cesare, M.De Cesare, A.D'Onofrio, K.Fortak, G.Imbriani, D.Rogalla, M.Romano, F.Terrasi - Phys.Lett. B 703, 557 (2011) Study of the 6.05 MeV cascade transition in $^{12}\mathrm{C}(\alpha,\gamma)^{16}\mathrm{O}$ |
| 2011SE06 | K.Sekiguchi, H.Okamura, N.Sakamoto, H.Suzuki, M.Dozono, Y.Maeda, T.Saito, S.Sakaguchi, H.Sakai, M.Sasano, Y.Shimizu, T.Wakasa, K.Yako, H.Witala, W.Glockle, J.Golak, H.Kamada, A.Nogga - Phys.Rev. C 83, 061001 (2011) |

Three nucleon force effects in intermediate-energy deuteron analyzing powers for dp elastic scattering

2011SI17 E.Simeckova, P.Bem, M.Honusek, M.Stefanik, U.Fischer, S.P.Simakov, R.A.Forrest, A.J.Koning, J.-C.Sublet, M.Avrigeanu, F.L.Roman, V.Avrigeanu - Phys.Rev. C 84, 014605 (2011)

| Low and medium energy deuteron-induced reactions on γ . Ou nuc | Low and | medium | energy | deuteron | -induced | reactions | on | $^{63,65}Cu$ | nuc | lei |
|---|---------|--------|--------|----------|----------|-----------|----|--------------|-----|-----|
|---|---------|--------|--------|----------|----------|-----------|----|--------------|-----|-----|

- 2011S022 D.Sohler, S.Grevy, Zs.Dombradi, O.Sorlin, L.Gaudefroy, B.Bastin, N.L.Achouri, J.C.Angelique, F.Azaiez, D.Baiborodin, R.Borcea, C.Bourgeois, A.Buta, A.Burger, L.Caceres, R.Chapman, J.C.Dalouzy, Z.Dlouhy, A.Drouard, Z.Elekes, S.Franchoo, S.Iacob, I.Kuti, B.Laurent, M.Lazar, X.Liang, E.Lienard, S.M.Lukyanov, J.Mrazek, L.Nalpas, F.Negoita, F.Nowacki, N.A.Orr, Yu.E.Penionzkhevitch, Zs.Podolyak, F.Pougheon, A.Poves, P.Roussel-Chomaz, M.Stanoiu, I.Stefan, M.G.St-Laurent Phys.Lett. B 703, 417 (2011)
 Spectroscopy of ^{39,41}Si and the border of the N=28 island of inversion
- 2011SU15 M.Sugawara, H.Kusakari, Y.Yoshizawa, H.Inoue, T.Morikawa, T.Shizuma, J.Srebrny
 Phys.Rev. C 83, 064308 (2011) Coulomb excitation of ¹⁵⁶Gd
- 2011SU16 T.Sumikama, K.Matsuta, T.Nagatomo, M.Ogura, T.Iwakoshi, Y.Nakashima, H.Fujiwara, M.Fukuda, M.Mihara, K.Minamisono, T.Yamaguchi, T.Minamisono Phys.Rev. C 83, 065501 (2011) Test of the conserved vector current hypothesis by a β -ray angular distribution measurement in the mass-8 system
- 2011SZ01 B.Szpak, K.H.Maier, A.S.Smolkowska, B.Fornal, R.Broda, M.P.Carpenter, N.Cieplicka, R.V.F.Janssens, W.Krolas, T.Pawlat, J.Wrzesinski, S.Zhu - Phys.Rev. C 83, 064315 (2011)
 Yrast structure of the two-proton- and three-neutron-hole nucleus ²⁰³Hg from the decay of a 53 / 2⁺ isomer
- 2011SZ02 S.Szilner, L.Corradi, F.Haas, D.Lebhertz, G.Pollarolo, C.A.Ur, L.Angus, S.Beghini, M.Bouhelal, R.Chapman, E.Caurier, S.Courtin, E.Farnea, E.Fioretto, A.Gadea, A.Goasduff, D.Jelavic-Malenica, V.Kumar, S.Lunardi, N.Marginean, P.Mason, D.Mengoni, G.Montagnoli, F.Nowacki, F.Recchia, E.Sahin, M.-D.Salsac, F.Scarlassara, R.Silvestri, J.F.Smith, N.Soic, A.M.Stefanini, J.J.Valiente-Dobon -Phys.Rev. C 84, 014325 (2011) Interplay between single-particle and collective excitations in argon isotopes populated by transfer reactions
| 2011TA17 | G.Tagliente, P.M.Milazzo, K.Fujii, U.Abbondanno, G.Aerts, H.Alvarez, F.Alvarez-Velarde, S.Andriamonje, J.Andrzejewski, L.Audouin, G.Badurek, P.Baumann, F.Becvar, F.Belloni, E.Berthoumieux, S.Bisterzo, F.Calvino, M.Calviani, D.Cano-Ott, R.Capote, C.Carrapico, P.Cennini, V.Chepel, E.Chiaveri, N.Colonna, G.Cortes, A.Couture, J.Cox, M.Dahlfors, S.David, I.Dillmann, C.Domingo-Pardo, W.Dridi, I.Duran, C.Eleftheriadis, M.Embid-Segura, A.Ferrari, R.Ferreira-Marques, W.Furman, R.Gallino, I.Goncalves, E.Gonzalez-Romero, F.Gramegna, C.Guerrero, F.Gunsing, B.Haas, R.Haight, M.Heil, A.Herrera-Martinez, E.Jericha, F.Kappeler, Y.Kadi, D.Karadimos, D.Karamanis, M.Kerveno, E.Kossionides, M.Krticka, C.Lamboudis, H.Leeb, A.Lindote, I.Lopes, M.Lozano, S.Lukic, J.Marganiec, S.Marrone, T.Martnez, C.Massimi, P.Mastinu, A.Mengoni, C.Moreau, M.Mosconi, F.Neves, H.Oberhummer, S.O'Brien, J.Pancin, C.Papachristodoulou, C.Papadopoulos, C.Paradela, N.Patronis, A.Pavlik, P.Pavlopoulos, L.Perrot, M.T.Pigni, R.Plag, A.Plompen, A.Plukis, A.Poch, J.Praena, C.Pretel, J.Quesada, T.Rauscher, R.Reifarth, M.Rosetti, C.Rubbia, G.Rudolf, P.Rullhusen, J.Salgado, C.Santos, L.Sarchiapone, I.Savvidis, C.Stephan, J.L.Tain, L.Tassan-Got, L.Tavora, R.Terlizzi, G.Vannini, P.Vaz, A.Ventura, D.Villamarin, M.C.Vincente, V.Vlachoudis, R.Vlastou, F.Voss, S.Walter, M.Wiescher, K.Wisshak - Phys.Rev. C 84, 015801 (2011) Neutron capture on ⁹⁴Zr: Resonance parameters and Maxwellian-averaged cross sections |
|----------|--|
| 2011TA18 | A.Tamii, I.Poltoratska, P.von Neumann-Cosel, Y.Fujita, T.Adachi, C.A.Bertulani, J.Carter, M.Dozono, H.Fujita, K.Fujita, K.Hatanaka, D.Ishikawa, M.Itoh, T.Kawabata, Y.Kalmykov, A.M.Krumbholz, E.Litvinova, H.Matsubara, K.Nakanishi, R.Neveling, H.Okamura, H.J.Ong, B.Ozel-Tashenov, B.Rubio, H.Sakaguchi, Y.Sakemi, Y.Sasamoto, Y.Shimbara, Y.Shimizu, V.Yu.Ponomarev, A.Richter, F.D.Smit, T.Suzuki, Y.Tameshige, J.Wambach, R.Yamada, M.Yosoi, J.Zenihiro - Phys.Rev.Lett. 107, 062502 (2011) Complete Electric Dipole Response and the Neutron Skin in ²⁰⁸Pb |
| 2011TEZZ | T.Teranishi, S.Kubono, H.Yamaguchi, T.Hashimoto, S.Hayakawa, Y.Kurihara, D.N.Binh, D.Kahl, Y.Wakabayashi, L.H.Khiem, P.V.Cuong, S.Watanabe, A.Goto - CNS-REP-86, Ann.Report 2009, p.17 (2011) Test Measurement of ¹⁷ Ne+p resonance elastic scattering |
| 2011TH03 | S.Thieme, M.Walther, J.Rajander, HJ.Pietzsch, O.Solin, J.Steinbach - J.Labelled Compd.Radiopharm. Supp.1., 54, S237 (2011) Production of ⁶¹ Cu via the ⁶⁴ Zn(p, α) ⁶¹ Cu reaction with high specific activity |
| 2011TO06 | W.Tornow, H.J.Karwowski, J.H.Kelley, R.Raut, G.Rusev, S.C.Stave, A.P.Tonchev, A.Deltuva, A.C.Fonseca, L.E.Marcucci, M.Viviani, A.Kievsky, J.Golak, R.Skibinski, H.Witala, R.Schiavilla - Phys.Lett. B 702, 121 (2011) Two-body photodisintegration of ³ He between 7 and 16 MeV |
| 2011TO07 | S.Yu.Torilov, K.A.Gridnev, V.I.Zherebchevsky, M.Brenner, L.I.Vinogradov, V.Z.Goldberg, T.V.Korovitskaya, T.Lonnroth, N.A.Maltsev, M.Mutterer, B.G.Novatskii, M.Norrby, J.M.K.Slotte, Yu.G.Sobolev, W.H.Trzaska, G.P.Tyurin, S.V.Khlebnikov - JETP Lett. 94, 6 (2011) Cluster states in the neutron excess nucleus ²² Ne |

Page 146

| 2011UN01 | V.R.Sharma, A.Yadav, P.P.Singh, M.K.Sharma, D.P.Singh, Unnati, R.Kumar, K.S.Golda, B.P.Singh, A.K.Sinha, R.Prasad - Phys.Rev. C 84, 014612 (2011) Identification of fission-like events in the ¹⁶ O + ¹⁸¹ Ta system: Mass and isotopic yield distribution |
|----------|---|
| 2011VE07 | Ph.Velten, G.Ban, D.Durand, X.Flechard, E.Lienard, F.Mauger, A.Mery, O.Naviliat-Cuncic, D.Rodriguez, J.C.Thomas - Hyperfine Interactions 199, 29 (2011) The LPCTrap experiment: measurement of the β - ν angular correlation in ⁶ He ⁺ decay using a transparent Paul trap |
| 2011VEZY | V.A.Vesna, Yu.M.Gledenov, V.V.Nesvizhevsky, P.V.Sedyshev, E.V.Shulgina - Proc.18th Intern.Seminar on Int.of Neutrons with Nuclei, Dubna, Russia, May 26-29, 2010 p.235 (2011) Result on Measurements of the P-Odd Asymmetry of Emitted γ -Quanta in the ¹⁰ B(n, α) ⁷ Li [*] \rightarrow ⁷ Li(g.st.) Reaction with Slow Polarized Neutrons |
| 2011VI03 | P.Vingerhoets, K.T.Flanagan, J.Billowes, M.L.Bissell, K.Blaum, B.Cheal, M.De Rydt, D.H.Forest, Ch.Geppert, M.Honma, M.Kowalska, J.Kramer, K.Kreim, A.Krieger, R.Neugart, G.Neyens, W.Nortershauser, J.Papuga, T.J.Procter, M.M.Rajabali, R.Sanchez, H.H.Stroke, D.T.Yordanov - Phys.Lett. B 703, 34 (2011) Magnetic and quadrupole moments of neutron deficient ⁵⁸⁻⁶²Cu isotopes |
| 2011WA13 | Z.M.Wang, R.Chapman, F.Haas, X.Liang, F.Azaiez, B.R.Behera, M.Burns, L.Corradi, D.Curien, A.N.Deacon, Zs.Dombradi, E.Farnea, E.Fioretto, A.Gadea, A.Hodsdon, F.Ibrahim, A.Jungclaus, K.Keyes, V.Kumar, A.Latina, N.Marginean, G.Montagnoli, D.R.Napoli, J.Ollier, D.O'Donnell, A.Papenberg, G.Pollarolo, MD.Salsac, F.Scarlassara, J.F.Smith, K.M.Spohr, M.Stanoiu, A.M.Stefanini, S.Szilner, M.Trotta, D.Verney - Phys.Rev. C 83, 061304 (2011) Collectivity in ⁴¹ S |
| 2011WA14 | X.Wang, M.A.Riley, J.Simpson, E.S.Paul, J.Ollier, R.V.F.Janssens, A.D.Ayangeakaa, H.C.Boston, M.P.Carpenter, C.J.Chiara, U.Garg, D.J.Hartley, D.S.Judson, F.G.Kondev, T.Lauritsen, N.M.Lumley, J.Matta, P.J.Nolan, M.Petri, J.P.Revill, L.L.Riedinger, S.V.Rigby, C.Unsworth, S.Zhu, I.Ragnarsson - Phys.Lett. B 702, 127 (2011) Quadrupole moments of collective structures up to spin ~ 65h in ¹⁵⁷ Er and ¹⁵⁸ Er: A challenge for understanding triaxiality in nuclei |
| 2011WA15 | J.Walker, A.Jungclaus, J.Leske, KH.Speidel, A.Ekstrom, P.Boutachkov, J.Cederkall, P.Doornenbal, J.Gerl, R.Gernhauser, N.Goel, M.Gorska, I.Kojouharov, P.Maier-Komor, V.Modamio, F.Naqvi, N.Pietralla, S.Pietri, W.Prokopowicz, H.Schaffner, R.Schwengner, HJ.Wollersheim - Phys.Rev. C 84, 014319 (2011) Magnetic moments of the first excited 2 ⁺ states in the semi-magic ^{112,114,116,122,124} Sn isotopes |
| 2011WA17 | T.Wakasa, M.Okamoto, M.Takaki, M.Dozono, K.Hatanaka, M.Ichimura, T.Noro, H.Okamura, Y.Sakemi - Phys.Rev. C 84, 014614 (2011) Complete set of polarization transfer observables for the ${}^{16}O($ p, n) ${}^{16}F$ reaction at 296 MeV and 0 degrees |

| 2011WA19 | S.T.Wang, X.H.Zhou, Y.H.Zhang, Y.Zheng, M.L.Liu, L.Chen, N.T.Zhang, W.Hua, S.Guo, Y.H.Qiang, G.S.Li, B.Ding, Y.Shi, F.R.Xu - Phys.Rev. C 84, 017303 (2011) Rotational band properties in ¹⁶⁵ Er |
|----------|--|
| 2011WA20 | M.Wada, A.Takamine, T.Sonoda, K.Okada, P.Schury - Hyperfine Interactions 199, 269 (2011) Developments at the SLOWRI facility at RIKEN: precision optical spectroscopy of 7,9,10,11 Be ⁺ ions |
| 2011WA21 | S.Y.Wang, B.Qi, L.Liu, S.Q.Zhang, H.Hua, X.Q.Li, Y.Y.Chen, L.H.Zhu, J.Meng, S.M.Wyngaardt, P.Papka, T.T.Ibrahim, R.A.Bark, P.Datta, E.A.Lawrie, J.J.Lawrie, S.N.T.Majola, P.L.Masiteng, S.M.Mullins, J.Gal, G.Kalinka, J.Molnar, B.M.Nyako, J.Timar, K.Juhasz, R.Schwengner - Phys.Lett. B 703, 40 (2011) The first candidate for chiral nuclei in the A ~ 80 mass region: $^{80}{\rm Br}$ |
| 2011WAZY | Y.Wakabayashi, H.Yamaguchi, T.Hashimoto, S.Hayakawa, Y.Kurihara, D.N.Binh, D.Kahl, S.Nishimura, Y.Gono, Y.Fujita, S.Kubono - CNS-REP-86, Ann.Report 2009, p.13 (2011) Beta-decay measurement of ⁴⁶ Cr |
| 2011WAZZ | A.Wagner, D.Bemmerer, R.Beyer, E.Birgersson, A.Ferrari, E.Grosse, R.Hannaske, A.R.Junghans, M.Kempe, T.Kogler, M.Marta, A.Matic, R.Nolte, K.D.Schilling, G.Schramm, R.Schwengner, FP.Weiss, D.Yakorev - Proc.18th Intern.Seminar on Int.of Neutrons with Nuclei, Dubna, Russia, May 26-29, 2010 p.127 (2011) Fast Neutron Cross Section Measurements with the NELBE Neutron Time- of- Flight Facility |
| 2011WH01 | C.Wheldon, N.I.Ashwood, M.Barr, N.Curtis, M.Freer, Tz.Kokalova, J.D.Malcolm, S.J.Spencer, V.A.Ziman, Th.Faestermann, R.Krucken, HF.Wirth, R.Hertenberger, R.Lutter, A.Bergmaier - Phys.Rev. C 83, 064324 (2011) High-resolution measurement of absolute α -decay widths in ¹⁶ O |
| 2011WI09 | K.Wimmer, U.Koster, P.Hoff, Th.Kroll, R.Krucken, R.Lutter, H.Mach, Th.Morgan, S.Sarkar, M.Saha-Sarkar, W.Schwerdtfeger, P.C.Srivastava, P.G.Thirolf, P.Van Isacker - Phys.Rev. C 84, 014329 (2011); Pub.Note JOUR PRVCA 84 029903 (2011) Identification of the slow E3 transition $^{136}Cs^m \rightarrow ^{136}Cs$ with conversion electrons |
| 2011YA13 | T.Yamaguchi, K.Tanaka, T.Suzuki, A.Ozawa, T.Ohtsubo, T.Aiba, N.Aoi, H.Baba, M.Fukuda, Y.Hashizume, K.Inafuku, N.Iwasa, T.Izumikawa, K.Kobayashi, M.Komuro, Y.Kondo, T.Kubo, M.Kurokawa, T.Matsuyama, S.Michimasa, T.Motobayashi, T.Nakabayashi, S.Nakajima, T.Nakamura, H.Sakurai, R.Shinoda, M.Shinohara, H.Suzuki, M.Takechi, E.Takeshita, S.Takeuchi, Y.Togano, K.Yamada, T.Yasuno, M.Yoshitake - Nucl.Phys. A864, 1 (2011) Nuclear reactions of ^{19,20} C on a liquid hydrogen target measured with the superconducting TOF spectrometer |
| 2011YAZZ | H.Yamaguchi, T.Hashimoto, S.Hayakawa, D.N.Binh, D.Kahl, S.Kubono, T.Kawabata, Y.Wakabayashi, N.Iwasa, Y.Miura, Y.KJ.Kwon, L.H.Khiem, N.N.Duy, T.Teranishi - CNS-REP-86, Ann.Report 2009, p.1 (2011) |

| | Measurement of alpha resonance scattering on $^{7}\mathrm{Be}$ |
|----------|--|
| 2011ZH22 | HY.Zhou, FG.Deng, W.Cheng, FS.Zhang, Q.Zhao, J.Su, L.M.Dong, Q.Zhu, GY.Fan - Nucl.Instrum.Methods Phys.Res. A648, 192 (2011) Associated gamma radiation in interaction of 14.9 MeV neutrons with natural silicon |
| 2011ZH26 | C.Zhu, Y.Chen, Y.Mou, P.Zheng, T.He, X.Wang, L.An, H.Guo - Nucl.Sci.Eng. 169, 188 (2011) Measurements of (n, 2n) Reaction Cross Sections at 14 MeV for Several Nuclei |
| 2011ZH27 | GH.Zhang, S.Liu, JM.Liu, ZH.Xue, H.Wu, JX.Chen - Chin.Phys.Lett. 28, 082801 (2011) Measurement of Cross Sections for the ${}^{10}B(n, \alpha)^{7}Li$ Reaction at 4.0 and 5.0 MeV Using an Asymmetrical Twin Gridded Ionization Chamber |
| 2011ZHZY | G.L.Zhang, H.Q.Zhang, C.J.Lin, C.L.Zhang, G.P.An, Z.D.Wu, H.M.Jia, X.X.Xu, F.Yang, Z.H.Liu, S.Kubono, H.Yamaguchi, S.Hayakawa, D.N.Binh, Y.K.Kwon, N.Iwasa - CNS-REP-86, Ann.Report 2009, p.21 (2011) Elastic scattering for 60MeV ¹⁷ F on ¹² C target |
| 2011ZHZZ | B.V.Zhuravlev, A.A.Lychagin, N.N.Titarenko, V.G.Demenkov, V.I.Trykova - Proc.18th Intern.Seminar on Int.of Neutrons with Nuclei, Dubna, Russia, May 26-29, 2010 p.225 (2011) Nuclear Level Densities of ⁴⁷ V, ⁴⁸ V, ⁴⁹ V, ⁵³ Mn, ⁵⁴ Mn from Neutron Evaporation Spectra |