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33 reference(s) found :

Keynumber: [1999VO02](#)

Reference: Phys.Rev. C59, 1154 (1999)

Authors: F.Voss, K.Wisshak, C.Arlandini, F.Kappeler, L.Kazakov, T.Rauscher

Title: Stellar Neutron Capture Cross Sections of Pr and Dy Isotopes

Keyword abstract: NUCLEAR REACTIONS ^{141}Pr , 160 , 161 , 162 , 163 , $^{164}\text{Dy}(n,\gamma)$, E=3-225 keV;

measured total,capture σ ; deduced Maxwellian averaged neutron capture σ at stellar energies.

Astrophysical implications discussed.

Keynumber: 1999SU03

Reference: Yad.Fiz. 62, No 1, 24 (1999); Phys.Atomic Nuclei 62, 19 (1999)

Authors: A.M.Sukhovoi, V.A.Khitrov

Title: Experimental Estimate of the Density of Levels in a Heavy Nucleus That Are Excited in (n,γ) Reactions at Excitation Energies of 3 to 4 MeV

Keyword abstract: NUCLEAR REACTIONS ^{113}Cd , ^{123}Te , ^{145}Nd , ^{149}Sm , 155 , ^{157}Gd , 162 , 163 , ^{164}Dy , ^{167}Er , 173 , ^{174}Yb , 177 , 178 , ^{180}Hf , 187 , ^{189}Os , ^{195}Pt , ^{199}Hg , ^{127}I , ^{159}Tb , ^{165}Ho , ^{169}Tm , ^{175}Lu , ^{181}Ta , ^{191}Ir , ^{197}Au , ^{124}Te , 182 , $^{185}\text{W}(n,\gamma)$, E=thermal; analyzed I γ ; deduced non-exponential level densities.

Keynumber: 1999MI27

Reference: J.Nucl.Sci.Technol.(Tokyo) 36, 493 (1999)

Authors: S.Mizuno, M.Igashira, K.Masuda

Title: Measurements of keV-Neutron Capture Cross Sections and Capture Gamma-Ray Spectra of $^{161,162,163}\text{Dy}$

Keyword abstract: NUCLEAR REACTIONS 161 , 162 , $^{163}\text{Dy}(n,\gamma)$, E=10-90,550 keV; measured E γ , I γ , capture σ . Comparison with evaluated data, previous measurements.

Keynumber: 1999BO14

Reference: Yad.Fiz. 62, No 5, 892 (1999); Phys.Atomic Nuclei 62, 832 (1999)

Authors: S.T.Boneva, E.V.Vasilieva, L.I.Simonova, V.A.Bondarenko, A.M.Sukhovoi, V.A.Khitrov

Title: (n,γ) Reactions in Heavy Nuclei: Manifestations of nuclear structure at excitation energies up to the neutron binding energy

Keyword abstract: NUCLEAR REACTIONS ^{113}Cd , 123 , ^{124}Te , ^{127}I , 134 , 136 , 137 , ^{138}Ba , ^{139}La , 142 , 143 , ^{145}Nd , ^{149}Sm , 155 , ^{157}Gd , ^{159}Tb , 162 , 163 , ^{164}Dy , ^{165}Ho , ^{167}Er , ^{169}Tm , 173 , 174 , ^{176}Yb , 175 , ^{176}Lu , 177 , 178 , 179 , ^{180}Hf , ^{181}Ta , 182 , ^{186}W , 187 , ^{189}Os , ^{191}Ir , ^{195}Pt , ^{197}Au , $^{199}\text{Hg}(n,\gamma)$, E not given; analyzed two-photon γ cascade data; deduced structure effects.

Keynumber: 1998WIZW

Reference: Proc.Intern.Symposium on Nuclear Astrophysics, Nuclei in the Cosmos V, Volos, Greece, July 6-11, 1998, N.Prantzos, S.Harissopoulos, Eds., Editions Frontieres, Paris, p.212 (1998)

Authors: K.Wisshak, F.Voss, C.Arlandini, F.Kappeler, T.Rauscher

Title: Neutron Capture in Dy and Yb Isotopes: Implications for the s-process

Keyword abstract: NUCLEAR REACTIONS ^{141}Pr , 160 , 161 , 162 , 163 , ^{164}Dy , 170 , 171 , 172 , 173 , 174 , $^{176}\text{Yb}(n,\gamma)$, E=3-225 keV; measured capture σ ; deduced stellar capture σ , s-process implications.

Keynumber: 1997SU29

Reference: Bull.Rus.Acad.Sci.Phys. 61, 1611 (1997)

Authors: A.M.Sukhovoi, V.A.Khitrov

Title: Cascade Gamma Decay of the Compound State of Heavy Nucleus as Seen Experimentally

Keyword abstract: NUCLEAR REACTIONS ^{113}Cd , ^{127}I , ^{123}Te , 134 , 136 , 137 , ^{138}Ba , 142 , 143 , ^{145}Nd , ^{149}Sm , 155 , ^{157}Gd , ^{159}Tb , ^{165}Ho , 162 , 163 , ^{164}Dy , ^{167}Er , ^{169}Tm , 173 , 174 , ^{176}Yb , 175 , ^{176}Lu , 177 , 178 , 179 , ^{180}Hf , ^{195}Pt , ^{199}Hg , ^{181}Ta , 182 , ^{186}W , ^{191}Ir , $^{197}\text{Au}(\text{n},\gamma)$, E=thermal; analyzed γ spectra, $\gamma\gamma$ -coin. ^{114}Cd , ^{124}Te , 137 , 138 , ^{139}Ba , ^{146}Nd , ^{150}Sm , 156 , ^{158}Gd , ^{160}Tb , ^{164}Dy , ^{168}Er , ^{170}Tm , ^{174}Yb , ^{181}Hf , ^{196}Pt , ^{200}Hg , ^{182}Ta , ^{183}W , ^{192}Ir , ^{198}Au deduced two-quantum cascade intensities vs excitation energy, level density parameters, pairing features.

Keynumber: 1997MIZZ

Reference: Proc.9th Intern.Symposium on Capture Gamma-Ray Spectroscopy and Related Topics, Budapest, Hungary, October 1996, G.L.Molnar, T.Belgya, Zs.Revay, Eds., Vol.1, p.434 (1997)

Authors: S.Mizuno, M.Igashira, H.Kitazawa

Title: Measurements of keV-Neutron Capture Gamma Rays of 161 , 162 , ^{163}Dy

Keyword abstract: NUCLEAR REACTIONS 161 , 162 , $^{163}\text{Dy}(\text{n},\gamma)$, E \approx 60 keV; measured $E\gamma$, $I\gamma$.

Keynumber: 1997KAZR

Reference: Proc.Intern.on Nuclear Data for Science and Technology, Trieste, Italy, 19-24 May, 1997, G.Reffo, A.Ventura, C.Grandi, Eds., Editrice Compositori, Italy, Pt.2, p.1576 (1997)

Authors: F.Kappeler, K.Wisshak, F.Voss, G.Reffo

Title: Improved (n,γ) Cross Sections in the Rare Earth Region: Implications for s- and r-Process Nucleosynthesis

Keyword abstract: NUCLEAR REACTIONS ^{141}Pr , 142 , 143 , 144 , 145 , 146 , ^{148}Nd , 160 , 161 , 162 , 163 , ^{164}Dy , 164 , $^{170}\text{Er}(\text{n},\gamma)$, E not given; measured Maxwellian averaged σ at $kT=30$ keV. Activation technique.

Keynumber: 1995BE37

Reference: Phys.Rev. C52, 1278 (1995)

Authors: F.Becvar, P.Cejnar, J.Honzatko, K.Konecny, I.Tomandl, R.E.Chrien

Title: E1 and M1 Strengths Studied from Two-Step γ Cascades following Capture of Thermal Neutrons in ^{162}Dy

Keyword abstract: NUCLEAR REACTIONS $^{162}\text{Dy}(\text{n},\gamma)$, E=thermal; measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin. ^{163}Dy deduced two-step cascades E1,M1 transition strengths,GDR. Nuclear temperature,Brink hypothesis,scissors mode M1 resonance discussed.

Keynumber: 1989SC31

Reference: Nucl.Phys. A504, 1 (1989)

Authors: H.H.Schmidt, P.Hungerford, T.von Egidy, H.J.Scheerer, H.G.Borner, S.A.Kerr, K.Schreckenbach, F.Hoyer, G.G.Colvin, A.M.Bruce, R.F.Casten, D.D.Warner, I.L.Kugava, V.A.Bondarenko, N.D.Kramer, P.T.Prokofjev, A.Chalupka

Title: Nuclear Structure of ^{163}Dy Studied with (n,γ) , $(\text{n},\text{n}'\gamma)$, (d,p) and (d,t) Reactions

Keyword abstract: NUCLEAR REACTIONS $^{162}\text{Dy}(\text{n},\gamma)$, E=thermal, 2 keV, 24 keV; measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin; $^{162}\text{Dy}(\text{n},\text{e}^-)$, E=thermal; measured $I(\text{ce})$; $^{163}\text{Dy}(\text{n},\text{n}'\gamma)$, E=fast; measured $E\gamma$, $I\gamma$; $^{162}\text{Dy}(\text{d},\text{p})$, ^{164}Dy (d,t), E=14 MeV; measured $\sigma(\text{Ep})$, $\sigma(\text{Et})$. ^{163}Dy deduced levels, J , π , rotational bands, Nilsson assignments, branching ratios, neutron binding energy.

Keynumber: 1988KUZO

Reference: Program and Theses, Proc.38th Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Baku, p.111 (1988)

Authors: I.L.Kuvaga, V.A.Bondarenko, P.T.Prokofev

Title: On the ^{163}Dy Level Scheme

Keyword abstract: NUCLEAR REACTIONS $^{162}\text{Dy}(n,\gamma)$, E=thermal; measured $\gamma\gamma$ -coin. ^{163}Dy deduced levels, J, π . Amplitude summation method. Hyperpure Ge detectors.

Keynumber: 1988BO19

Reference: Z.Phys. A330, 153 (1988)

Authors: S.T.Boneva, V.A.Khitrov, Yu.P.Popov, A.M.Sukhovoij, E.V.Vasileva, Yu.S.Yazvitsky

Title: Cascade γ -Decay of Compound-State of the Nuclei ^{163}Dy , ^{167}Er and ^{179}Hf

Keyword abstract: NUCLEAR REACTIONS ^{162}Dy , ^{166}Er , $^{178}\text{Hf}(n,\gamma)$, E=thermal; measured two-quanta cascade $E\gamma, I\gamma$. ^{163}Dy , ^{167}Er , ^{179}Hf deduced transition characteristics.

Keynumber: 1987BOZG

Reference: JINR-P3-87-513 (1987)

Authors: S.T.Boneva, Eh.V.Vasileva, Yu.P.Popov, A.M.Sukhovoij, V.A.Khitrov, Yu.S.Yazvitsky

Title: Cascade Gamma-Decay of Compound States of ^{163}Dy , ^{167}Er and ^{179}Hf Nuclei

Keyword abstract: NUCLEAR REACTIONS ^{162}Dy , ^{166}Er , $^{178}\text{Hf}(n,\gamma)$, E=thermal; measured $\gamma\gamma$ -coin, $I\gamma$. ^{163}Dy , ^{167}Er , ^{179}Hf deduced levels, J, π , two-quanta cascade intensities, γ -multipolarity. Amplitude summation method.

Keynumber: 1986BOZP

Reference: Program and Theses, Proc.36th,Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Kharkov, p.123 (1986)

Authors: S.T.Boneva, E.V.Vasileva, Yu.P.Popov, A.M.Sukhovoij, V.A.Khitrov, Yu.S.Yazvitsky

Title:

Keyword abstract: NUCLEAR REACTIONS $^{162}\text{Dy}(n,\gamma)$, E=thermal; measured γ -spectra, $\gamma\gamma$ -coin. ^{163}Dy deduced levels. Amplitude summation method.

Keynumber: 1985VOZV

Reference: Proc.AIP Conf.Capture Gamma-Ray Spectroscopy and Related Topics, Knoxville, Tenn., (1984), S.Raman, Ed., AIP, New York, p.305 (1985)

Authors: T.von Egidy, P.Hungerford, H.H.Schmidt, H.J.Scheerer, A.N.Behkami, G.Hlawatsch, B.Krusche, K.P.Lieb, H.G.Borner, S.A.Kerr, K.Schreckenbach

Title: Structural and Statistical Aspects of Extensive Level Schemes from (n,γ) and Transfer Reactions

Keyword abstract: NUCLEAR REACTIONS ^{19}F , ^{23}Na , ^{27}Al , ^{35}Cl , $^{39,40,41}\text{K}$, ^{113}Cd , ^{133}Cs , ^{154}Sm , ^{153}Eu , ^{154}Gd , $^{160,162}\text{Dy}(n,\gamma)$, (n,e) , E not given; measured not given. ^{20}F , ^{24}Na , ^{28}Al , ^{36}Cl , $^{40,41,42}\text{K}$, ^{114}Cd , ^{134}Cs , ^{155}Sm , ^{154}Eu , ^{155}Gd , $^{161,163}\text{Dy}$ deduced levels, γ -transition multipolarity, strength distribution.

Keynumber: 1985SCZS

Reference: Proc.AIP Conf.Capture Gamma-Ray Spectroscopy and Related Topics, Knoxville, Tenn., (1984), S.Raman, Ed., AIP, New York, p.406 (1985)

Authors: H.H.Schmidt, P.Hungerford, T.v.Egidy, H.J.Scheerer, H.G.Borner, S.A.Kerr, K.Schreckenbach, F.Hoyer, G.Colvin, R.F.Casten, D.D.Warner, W.Kane

Title: Single Particle and Vibrational Bands in ^{155}Gd , ^{161}Dy , and ^{163}Dy

Keyword abstract: NUCLEAR REACTIONS ^{154}Gd , $^{160,162}\text{Dy}(n,\gamma)$, (n,e) , E=thermal, 2, 24 keV;

measured E γ ,I γ ,electron spectra. ^{154}Gd , ^{160}Nd , $^{162}\text{Dy(d,p)}$, ^{155}Gd , $^{162}\text{Dy(d,t)}$,E=14,20 MeV; measured $\sigma(\text{Ep})$, $\sigma(\text{Et})$. ^{155}Gd , ^{161}Dy deduced levels,J, π ,rotational bands,band structure,configuration.

Keynumber: 1984PR03

Reference: Z.Phys. A315, 103 (1984)

Authors: W.V.Prestwich, M.A.Islam, T.J.Kennett

Title: Primary E2 Transitions Observed following Neutron Capture for the Mass Region $144 \leq A \leq 180$

Keyword abstract: NUCLEAR REACTIONS ^{143}Nd , ^{162}Dy , ^{165}Ho , ^{167}Er , ^{173}Yb , ^{179}Hf

(n, γ),E=thermal; measured E γ ,I γ . ^{144}Nd , ^{163}Dy , ^{166}Ho , ^{168}Er , ^{174}Yb , ^{180}Hf deduced E2 transition $\Gamma\gamma$ upper limits. Axel-Brink hypothesis based analysis.

Keynumber: 1983IS05

Reference: Z.Phys. A311, 195 (1983)

Authors: M.A.Islam, T.J.Kennett, W.V.Prestwich

Title: A Probabilistic Model for Spectral Assignment in the (n, γ) Reaction

Keyword abstract: NUCLEAR REACTIONS ^{45}Sc , ^{35}Cl , ^{162}Dy , ^{165}Ho (n, γ),E not given; analyzed capture data; deduced γ -transition spectral assignment. Probabilistic model.

Keynumber: 1982IS05

Reference: Phys.Rev. C25, 3184 (1982)

Authors: M.A.Islam, T.J.Kennett, W.V.Prestwich

Title: Neutron Separation Energies of Some Heavy Nuclides

Keyword abstract: NUCLEAR REACTIONS ^{142}Nd , ^{143}Nd , ^{145}Nd , ^{155}Gd , ^{161}Gd , ^{162}Gd , ^{164}Dy , ^{165}Ho , ^{174}Yb (n, γ),E=thermal; measured E γ . ^{143}Nd , ^{144}Nd , ^{146}Nd , ^{156}Gd , ^{162}Gd , ^{163}Gd , ^{164}Dy , ^{165}Ho , ^{175}Yb deduced neutron separation energy.

Keynumber: 1975LI02

Reference: Phys.Rev. C11, 462 (1975)

Authors: H.I.Liou, G.Hacken, J.Rainwater, U.N.Singh

Title: Neutron Resonance Spectroscopy: The Separated Isotopes of Dy

Keyword abstract: NUCLEAR REACTIONS ^{160}Dy , ^{161}Dy , ^{162}Dy , ^{163}Dy , ^{164}Dy (n,n), (n, γ),E=1-2.5 keV; measured total $\sigma(E)$. ^{161}Dy , ^{162}Dy , ^{163}Dy , ^{164}Dy , ^{165}Dy deduced resonances,n-width, γ -width.

Keynumber: 1975CHZT

Coden: REPT ERDA/NDC-2, p31, Chrien

Keyword abstract: NUCLEAR REACTIONS ^{162}Dy , ^{164}Dy , ^{152}Sm , ^{156}Gd , ^{170}Yb , ^{158}Gd , ^{160}Gd , ^{164}Gd , ^{166}Gd , ^{168}Er (n, γ), E=0.0253 eV; measured $\sigma(E\gamma)$. ^{163}Dy , ^{165}Dy , ^{153}Sm , ^{151}Gd , ^{171}Yb resonances deduced J, π .

Keynumber: 1974COZX

Coden: JOUR BAPSA 19 111 KI13

Keyword abstract: NUCLEAR REACTIONS ^{152}Sm , ^{162}Dy , ^{164}Dy , ^{170}Yb , ^{186}W (n, γ); measured $\sigma(E)$. ^{153}Sm , ^{163}Dy , ^{171}Yb , ^{187}W levels deduced level-width.

Keynumber: 1974COYX

Coden: CONF Petten(Neutron Capture Gamma Ray Spectroscopy),P31

Keyword abstract: NUCLEAR REACTIONS ^{152}Sm , ^{170}Yb , ^{162}Dy , ^{164}Dy , ^{186}W (n, γ),E=0.025

eV,thermal; measured σ .

Keynumber: 1974COYK

Coden: REPT BNL-18976,mf

Keyword abstract: NUCLEAR REACTIONS 162 , 164 Dy, 152 Sm, 170 Yb, 186 W(n, γ),E=epithermal;
measured $\sigma(E\gamma)$. 163 , 165 Dy, 153 Sm resonances deduced J.

Keynumber: 1974CHYN

Coden: REPT BNL-19191,R E Chrien

Keyword abstract: NUCLEAR REACTIONS 149 Sm, 162 , 164 Dy, 92 , 94 , 96 , 98 Mo(n, γ); measured
nothing; calculated $\sigma(E,E\gamma)$.

Keynumber: 1974CHXL

Coden: REPT BNL-19191,mf

Keyword abstract: NUCLEAR REACTIONS 162 , 164 Dy(n, γ); calculated σ . 163 , 165 Dy deduced
resonant state configurations.

Keynumber: 1973COYC

Coden: CONF Asilomar(Photonuclear Reactions),Vol1 P309

Keyword abstract: NUCLEAR REACTIONS 162 Dy(n, γ); measured n γ -coin. 163 Dy deduced
transitions.

Keynumber: 1973COXB

Coden: REPT USNDC-7 P22

Keyword abstract: NUCLEAR REACTIONS 162 Dy(n, γ); measured $\sigma(E\gamma)$.

Keynumber: 1972COYV

Coden: CONF Budapest,Contributions,P226,G Cole,10/13/72

Keyword abstract: NUCLEAR REACTIONS 162 Dy(n, γ),E < 70.7 eV; measured I γ ; analyzed reaction
mechanism.

Keynumber: 1971DO19

Reference: Int.J.Mass Spectrom.Ion Phys. 6, 435 (1971)

Authors: R.Dobrozemsky, F.Pichlmayer, F.P.Viehbock

Title: Massenspektrometrische Bestimmung der Neutronen-Einfangsquerschnitte von Isotopen der
Seltenen Erden

Keyword abstract: NUCLEAR REACTIONS 147 , 148 Sm, 154 , 158 Gd, 160 , 161 , 162 , 163 Dy, 166 Er, 170 ,
 171 , 172 , 173 Yb(n, γ),E=pile,thermal; measured σ ; deduced effective resonance integral.

Keynumber: 1970VEZZ

Coden: REPT BNL-tr-495,V P Vertebnyi,1/3/73

Keyword abstract: NUCLEAR REACTIONS 161 , 162 , 163 , 164 Dy(n,X), (n, γ),E < 1 eV; measured $\sigma(nT)$
(E). 11 B,C,V,Cu, 63 , 65 Cu,Ge, 70 , 72 , 73 , 74 Ge,Cd, 110 , 111 , 112 , 114 , 116 Cd,Ce, 140 , 142 Ce, 153 Eu,Dy, 161 ,
 162 , 163 , 164 Dy,Ho,Er, 162 , 164 , 166 , 167 , 168 , 170 Er,Yb,Lu,Pb(n,n),E < 10 eV; measured $\sigma(E)$.

Keynumber: 1968NA21

Reference: Thesis, Physikinstitut, Reaktorzentrum Seibersdorf, Austria (1968); SGAE-PH-78/1968

Authors: H.Nabielek

Title: Untersuchung von Obergangsraten Elektromagnetischer Übergange durch Messung der Lebensdauer Angeregter Kernniveaus nach Neutroneneinfang

Keyword abstract: NUCLEAR REACTIONS ^{55}Mn , ^{197}Au , ^{152}Sm , 162 , ^{164}Dy , ^{166}Er , ^{168}Yb (n, γ),E not given; measured $\gamma\gamma$ -delay. ^{56}Mn , ^{153}Sm , 163 , ^{165}Dy , ^{198}Au , ^{167}Er , ^{169}Yb levels deduced $T_{1/2}$.

Keynumber: 1967BO48

Reference: Latvijas PSR Zinatnu Akad.Vestis, Fiz.un Tehn.Zinatnu Ser. No.4, 11 (1967)

Authors: V.Bondarenko, P.Prokofyev

Title: The Coriolis Interaction Effect in Dy 163

Keyword abstract: NUCLEAR REACTIONS ^{162}Dy (n, γ),E=thermal; measured E(ce),I(ce). ^{163}Dy transitions deduced γ -multipolarity.
