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60 reference(s) found :

Keynumber: 2001VA11

Reference: Yad.Fiz. 64, No 2, 195 (2001); Phys.Atomic Nuclei 64, 153 (2001)

Authors: E.V.Vasilieva, A.M.Sukhovej, V.A.Khitrov

Title: Direct Experimental Estimate of Parameters That Determine the Cascade Gamma Decay of Compound States of Heavy Nuclei

Keyword abstract: NUCLEAR REACTIONS ^{113}Cd , ^{123}Te , ^{127}I , ^{149}Sm , ^{155}Gd , ^{159}Tb , ^{169}Tm , ^{180}Hf , ^{189}Os , ^{191}Ir , ^{195}Pt , $^{199}\text{Hg}(n,\gamma)$, $E=\text{thermal}$; measured $E\gamma$, 2-step photon cascades. ^{114}Cd , ^{124}Te , ^{128}I , ^{150}Sm , ^{156}Gd , ^{160}Tb , ^{170}Tm , ^{181}Hf , ^{190}Os , ^{192}Ir , ^{196}Pt , ^{200}Hg deduced level densities vs excitation energy, sum of radiative strengths for E1 and M1 transitions. Comparison with Statistical Model calculations.

Keynumber: 2001GRZZ

Reference: Priv.Comm. (2001)

Authors: E.P.Grigoriev, A.V.Murzin

Title: Levels of ^{156}Gd from the Averaged Resonance Neutron Capture Measurements

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}(n,\gamma)$, $E=1.9,58\text{ keV}$; measured $E\gamma, I\gamma$. ^{156}Gd deduced levels, J, π .

Keynumber: 2000VA13

Reference: Fiz.Elem.Chastits At.Yadra 31, 350 (2000); Phys.Part.Nucl. 31, 170 (2000)

Authors: E.V.Vasileva, A.M.Sukhovej, V.A.Khitrov

Title: Influence of the Structure of Excited States in Heavy Ions on the Process of Cascade γ -Decay at Energies below the Neutron Binding Energy

Keyword abstract: NUCLEAR REACTIONS ^{127}I , 155 , ^{157}Gd , ^{173}Yb , ^{180}Hf , ^{182}W , ^{189}Os , ^{197}Au (n,γ), E not given; analyzed level densities, dipole strength distributions, two-step cascade intensities following neutron capture; deduced structure effects.

Keynumber: 2000OHZZ

Reference: BNL-NCS-67469 (2000)

Authors: S.-Y.Oh, J.Chang, S.Mughabghab

Title: Neutron Cross Section Evaluations of Fission Products Below the Fast Energy Region

Keyword abstract: NUCLEAR REACTIONS ^{95}Mo , ^{99}Tc , ^{101}Ru , ^{103}Rh , ^{105}Pd , ^{109}Ag , ^{131}Xe , ^{133}Cs , ^{141}Pr , 143 , ^{145}Nd , 147 , 149 , 150 , 151 , ^{152}Sm , ^{153}Eu , 155 , $^{157}\text{Gd}(n,\gamma)$, $E < 250\text{ keV}$; compiled, analyzed capture σ , resonance parameters, related features. Comparison with data, previous evaluations.

Keynumber: 2000BEZQ

Reference: Proc.10th Intern.Symposium on Capture Gamma-Ray Spectroscopy and Related Topics, Santa Fe, New Mexico, 30 August-3 September 1999, S.Wender, Ed., p.657 (2000); AIP Conf.Proc. 529 (2000)

Authors: F.Becvar, M.Krticka, I.Tomandl, J.Honzatko, F.Voss, K.Wisshak, F.Kappeler

Title: Neutron Capture in $^{155,157,158}\text{Gd}$ and ^{149}Sm : A search for scissors M1 resonances build on excited states

Keyword abstract: NUCLEAR REACTIONS ^{149}Sm , 155 , 157 , $^{158}\text{Gd}(n,\gamma)$, $E=\text{low}$; measured $E\gamma, I\gamma$. ^{150}Sm , 156 , 158 , ^{159}Gd deduced scissors resonance features.

Keynumber: 2000APZZ

Reference: Proc.10th Intern.Symposium on Capture Gamma-Ray Spectroscopy and Related Topics, Santa Fe, New Mexico, 30 August-3 September 1999, S.Wender, Ed., p.51 (2000); AIP Conf.Proc. 529 (2000)

Authors: A.Aprahamian, R.C.de Haan, H.Borner, H.Lehmann, M.Jentschel

Title: The Nature of $K^\pi = 0^+$ Excitations in Deformed Nuclei

Keyword abstract: NUCLEAR REACTIONS ^{177}Hf , $^{155}\text{Gd}(n,\gamma)$, E=thermal; measured E_γ, I_γ . ^{178}Hf , ^{156}Gd deduced levels $T_{1/2}$, B(E2), collective bands. Gamma-ray-induced Doppler broadening technique.

Keynumber: 2000AK03

Reference: Physica B276-278, 809 (2000)

Authors: V.L.Aksenov, L.Cser, N.A.Gundorin, Yu.V.Nikitenko, Yu.P.Popov

Title: Observation of Neutron Standing Waves at Total Reflection of Polarized Neutrons by Precision Gamma-Spectroscopy

Keyword abstract: NUCLEAR REACTIONS 155 , $^{157}\text{Gd}(\text{polarized } n,\gamma)$, E=thermal; measured E_γ, I_γ vs neutron wavelength, polarization; deduced neutron standing waves in layered glass/Fe/Gd structure.

Keynumber: 1999SU03

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

Authors: A.M.Sukhovi, 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: 1999HO33

Reference: Pure Appl.Chem. 71, 2309 (1999)

Authors: N.E.Holden

Title: Temperature Dependence of the Westcott g-Factor for Neutron Reactions in Activation Analysis (Technical Report)

Keyword abstract: NUCLEAR REACTIONS ^{103}Rh , ^{113}Cd , ^{115}In , ^{135}Xe , ^{148}Pm , 149 , ^{151}Sm , 151 , 152 , 153 , 154 , ^{155}Eu , 155 , ^{157}Gd , ^{164}Dy , 175 , ^{176}Lu , ^{177}Hf , ^{182}Ta , 185 , ^{187}Re , ^{197}Au , 231 , ^{233}Pa , 235 , ^{238}U (n, γ), E=low; calculated Westcott g-factors vs temperature.

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.Sukhovi, 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: 1997VOZY

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.384 (1997)

Authors: A.V.Voinov

Title: Test of E1-Radiative Strength Function and Level Density Models by $^{155}\text{Gd}(n,2\gamma)^{156}\text{Gd}$ Reaction

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}(n,\gamma)$,E=thermal; analyzed $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin. ^{156}Gd deduced level density features, pairing correlations role.

Keynumber: 1997VOZX

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.475 (1997)

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

Title: Spectroscopy of Capture γ -Ray Cascades with the Karlsruhe $4\pi\text{BaF}_2$ Detector

Keyword abstract: NUCLEAR REACTIONS ^{155}Gd , $^{120}\text{Sn}(n,\gamma)$,E not given; analyzed $E\gamma$, $I\gamma$,multiplicity distributions. 114 , 115 , 116 , 117 , 118 , ^{120}Sn , 152 , 154 , 155 , 156 , 157 , $^{158}\text{Gd}(n,\gamma)$,E not given; analyzed average multiplicities. Statistical model calculations.

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 , $^{197}\text{Au}(n,\gamma)$,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: 1997MUZZ

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.392 (1997)

Authors: A.V.Murzin, A.M.Shkarupa, Ye.P.Kadkin, I.Ye.Kravchenko

Title: Radiative and Neutron Strength Functions Investigations in ARC Measurements

Keyword abstract: NUCLEAR REACTIONS ^{79}Br , ^{155}Gd , $^{187}\text{Os}(n,\gamma)$,E=2-132 keV; analyzed data. ^{80}Br , ^{156}Gd , ^{188}Os deduced E1 radiative strength functions energy dependence. Average resonance capture technique.

Keynumber: 1997BOZV

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.483 (1997)

Authors: S.T.Boneva, V.A.Khitrov, Yu.P.Popov, A.M.Sukhovoj

Title: Nuclear Phase Transition - The Discovery and Experimental Study Possibilities

Keyword abstract: NUCLEAR REACTIONS ^{155}Gd , ^{167}Er , ^{169}Tm , $^{197}\text{Au}(n,\gamma)$,E not given; analyzed two-step cascade intensity distributions; deduced pairing role,temperature effects.

Keynumber: 1996KUZW

Reference: Proc.11th Seminar on Precise Measurements in Nucl.Spectrosc., Sarov, p.15 (1996)

Authors: V.T.Kupryashkin, A.I.Feoktistov, I.P.Shapovalova, H.Borner, U.Meierhofer

Title: Precise Determination of Energy Difference for Some Transitions in $^{155}\text{Gd}(n,\gamma)^{156}\text{Gd}$

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}(n,\gamma)$,E=thermal; measured $E(\text{ce})$, $I(\text{ce})$; deduced

precise K-line energy differences. Beta-spectrometer BILL.

Keynumber: [1995WI25](#)

Reference: Phys.Rev. C52, 2762 (1995)

Authors: K.Wisshak, F.Voss, F.Kappeler, K.Guber, L.Kazakov, N.Kornilov, M.Uhl, G.Reffo

Title: Stellar Neutron Capture Cross Sections of the Gd Isotopes

Keyword abstract: NUCLEAR REACTIONS $^{152}, ^{154}, ^{155}, ^{156}, ^{157}, ^{158}\text{Gd}(n,\gamma), E=3-225$ KeV; measured $\sigma(E)$; deduced Maxwellian averaged cross section for $kT=10$ to 100 keV.

Keynumber: 1995LI47

Reference: Yad.Fiz. 58, No 8, 1347 (1995); Phys.Atomic Nuclei 58, 1265 (1995)

Authors: L.L.Litvinsky, A.P.Krotenkov, V.A.Libman, A.V.Murzin, G.M.Novoselov, A.M.Shkarupa, O.G.Yablonovskaya

Title: Spectra of γ Rays from the Reaction $^{155}\text{Gd}(n,\gamma)$ and Spin Splitting of the s-Neutron Strength Function

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}(n,\gamma), E=1.9-134$ keV; measured $E\gamma, I\gamma$. ^{156}Gd deduced p-,d-wave neutron, M1, E2 radiative strength functions, spin-splitting features.

Keynumber: 1994MA66

Reference: Nucl.Instrum.Methods Phys.Res. B94, 203 (1994)

Authors: A.A.Makletsov, A.E.Petrov, V.V.Gann

Title: Evaluation of the Displacement Energy of Gd Atoms in $\text{GdBa}_2\text{Cu}_3\text{O}(7-\delta)$ from Experimental Data

Keyword abstract: NUCLEAR REACTIONS $^{155}, ^{157}\text{Gd}(n,\gamma), E=\text{thermal}$; analyzed γ spectra; deduced Gd atoms displacement energy in $\text{GdBa}_2\text{Cu}_3\text{O}(7-\delta)$. Monte Carlo technique.

Keynumber: 1993VA16

Reference: Bull.Rus.Acad.Sci.Phys. 57, 1749 (1993)

Authors: E.V.Vasilieva, A.V.Voinov, O.D.Kestiarova, V.D.Kulik, A.M.Sukhovoy, V.A.Khitrov, Yu.V.Kholnov, V.N.Shilin

Title: Cascade γ -Decay of a Compound State of ^{156}Gd

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}(n,\gamma), E=\text{thermal}$; measured $E\gamma, I\gamma, \gamma\gamma$ -coin double quantum cascades. ^{156}Gd deduced resonances, weakly pronounced quasiparticle nature.

Keynumber: 1993KL03

Reference: Nucl.Phys. A561, 1 (1993)

Authors: J.Klora, H.G.Borner, T.von Egidy, R.Georgii, J.Jolie, S.Judge, V.A.Khitrov, B.Krusche, V.A.Libman, H.Lindner, L.L.Litvinsky, U.Mayerhofer, A.V.Murzin, S.J.Robinson, A.M.Sukhovoi, H.Trieb

Title: Nuclear Structure of ^{156}Gd Studied with (n,γ) , (n,e^-) , (d,p) , (d,t) Reactions and Lifetime Measurements

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}(n,\gamma)$, $(n,e^-), E=\text{thermal}$; measured $E\gamma, I\gamma, \gamma\gamma$ -coin, DSA. $^{155}\text{Gd}(d,p)$, $(d,t), E=22$ MeV; measured particle spectra. ^{156}Gd deduced levels, J, π , band structure, $T_{1/2}$. Interacting spdf-boson model comparison.

Keynumber: 1993GRZU

Reference: Program and Thesis, Proc.43rd Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Dubna, p.85 (1993)

Authors: E.P.Grigorev, J.Klora, L.L.Litvinsky, A.V.Murzin, K.Nam, T.von Egidy

Title: The 1952.42-keV, 0^- Level in ^{156}Gd

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}(n,\gamma), E=1.9, 59$ keV; measured σ . ^{156}Gd levels deduced J, π , configuration.

Keynumber: 1993GRZT

Reference: Program and Thesis, Proc.43rd Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Dubna, p.86 (1993)

Authors: E.P.Grigorev, J.Klora, L.L.Litvinsky, A.V.Murzin, K.Nam, T.von Egidy

Title: Rotational Band Parameters of ^{156}Gd

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}(n,\gamma), E=1.9, 59$ keV; measured γ -spectra. ^{156}Gd deduced levels, bands.

Keynumber: 1990BE51

Reference: Yad.Fiz. 52, 625 (1990); Sov.J.Nucl.Phys. 52, 401 (1990)

Authors: F.N.Belyaev, V.P.Bolotsky, B.V.Efimov, G.V.Muradyan

Title: Study of $^{155}, ^{157}\text{Gd}$ Resonances by γ Ray Multiplicity

Keyword abstract: NUCLEAR REACTIONS $^{155}, ^{157}\text{Gd}(n,\gamma), E \leq 800$ eV; measured γ -multiplicity. $^{156}, ^{158}\text{Gd}$ deduced resonances, J, π , strength functions, giant resonances.

Keynumber: 1989NA21

Reference: Ann.Nucl.Energy 16, 589 (1989)

Authors: Y.Nakajima, I.Tsubone, M.Mizumoto, Y.Furuta, M.Ohkubo, M.Sugimoto, Y.Kawarasaki

Title: Neutron Capture Cross Section Measurements of ^{155}Gd and ^{157}Gd from 1.1 to 235 keV

Keyword abstract: NUCLEAR REACTIONS $^{155}, ^{157}\text{Gd}(n,\gamma), E=1.1-235$ keV; measured average capture $\sigma(E)$. $^{156}, ^{158}\text{Gd}$ deduced average resonance parameters. Enriched target.

Keynumber: 1988BE32

Reference: Astrophys.J. 331, 1047 (1988)

Authors: H.Beer, R.L.Macklin

Title: The ^{151}Sm Branching; A probe for the irradiation time scale of the s-process

Keyword abstract: NUCLEAR REACTIONS $^{152}, ^{154}, ^{155}, ^{157}\text{Gd}(n,\gamma), E=3-500$ keV; measured $\sigma(E)$; deduced σ , Maxwellian averaged $\langle s \rangle$ -process time scale.

Keynumber: 1986VO03

Reference: Nucl.Sci.Eng. 93, 43 (1986); Corrigendum Nucl.Sci.Eng. 96 343 (1987)

Authors: J.Voignier, S.Joly, G.Grenier

Title: Capture Cross Sections and Gamma-Ray Spectra from the Interaction of 0.5- to 3.0-MeV Neutrons with Nuclei in the Mass Range $A = 63$ to 209

Keyword abstract: NUCLEAR REACTIONS Cu, $^{89}\text{Y}, \text{Zr}, ^{93}\text{Nb}, \text{La}, \text{Gd}, ^{159}\text{Tb}, ^{181}\text{Ta}, \text{Re}, \text{Pt}, \text{Tl}, ^{209}\text{Bi}, ^{63}, ^{65}\text{Cu}, ^{155}, ^{156}, ^{157}, ^{158}, ^{160}\text{Gd}, ^{182}, ^{183}, ^{184}, ^{186}\text{W}, ^{203}, ^{205}\text{Tl}(n,\gamma), E=0.5-3$ MeV; measured absolute $\sigma(E)$; deduced capture γ -multiplicity.

Keynumber: 1985HOZL

Reference: Proc.AIP Conf.Capture Gamma-Ray Spectroscopy and Related Topics, Knoxville, Tenn. (1984), S.Raman, Ed., AIP, New York, p.410 (1985)

Authors: F.Hoyler, K.Schreckenbach, H.G.Borner, G.Colvin

Title: Investigation of Inter- and Intradband Transitions of the $0^+_{2,2^+_{1,0^+_{3}}$ Bands in ^{156}Gd

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}(n,\gamma),E=\text{reactor}$; measured $I(\text{ce}),I\gamma$. ^{156}Gd deduced levels, $B(\lambda),I\gamma$ ratios,band structure.

Keynumber: 1985DA26

Reference: At.Energ. 58, 178 (1985); Sov.At.Energy 58, 209 (1985)

Authors: B.V.Danilin, B.V.Efimov, G.V.Muradyan, F.N.Belyaev, V.P.Bolotsky

Title: Method of Investigation of γ -Ray Cascades from the Multiplicity Spectrum and Low-Energy γ -Transitions

Keyword abstract: NUCLEAR REACTIONS $^{155},^{157}\text{Gd}(n,\gamma),E$ not given; measured $E\gamma,I\gamma$. $^{156},^{158}\text{Gd}$ deduced rotational band γ -cascades.

Keynumber: 1984DAZL

Reference: Proc.Conf.Neutron Physics, Kiev, Vol.3, p.25 (1984)

Authors: B.V.Danilin, B.V.Efimov, G.B.Muradyan, L.Yu.Prokofeva, V.P.Bolotsky, F.N.Belyaev

Title:

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}(n,\gamma),E=\text{resonance}$; measured $\gamma\gamma$ -coin. ^{156}Gd deduced γ -ray multiplicity spectra. Tof. γ -Cascade 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 $^{142},^{143},^{145}\text{Nd},^{155},^{157}\text{Gd},^{161},^{162},^{164}\text{Dy},^{165}\text{Ho},^{174},^{173}\text{Yb}(n,\gamma),E=\text{thermal}$; measured $E\gamma$. $^{143},^{144},^{146}\text{Nd},^{156},^{158}\text{Gd},^{162},^{163},^{164},^{165}\text{Dy},^{166}\text{Ho},^{175},^{174}\text{Yb}$ deduced neutron separation energy.

Keynumber: 1982BA28

Reference: Nucl.Phys. A380, 189 (1982)

Authors: A.Backlin, G.Hedin, B.Fogelberg, M.Saraceno, R.C.Greenwood, C.W.Reich, H.R.Koch, H.A.Baader, H.D.Breitig, O.W.B.Schult, K.Schreckenbach, T.Von Egidy, W.Mampe

Title: Levels in ^{156}Gd Studied in the (n,γ) Reaction

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}(n,\gamma),E=\text{thermal,resonance}$; measured $E\gamma,I\gamma,I(\text{ce})$. ^{156}Gd deduced levels, $J,\pi,ICC,B(\lambda)$,neutron binding energy. Ge(Li) detectors,curved-crystal spectrometer,magnetic electron-spectrometers,enriched targets.

Keynumber: 1981VOZW

Reference: CEA-R-5089 (1981)

Authors: J.Voignier, S.Joly, G.Grenier

Title: Neutron Capture Cross Section Measurements of Rubidium,Yttrium,Niobium,Gadolinium,Tungsten,Platinum and Thallium between 0.5 and 3.0 MeV

Keyword abstract: NUCLEAR REACTIONS Rb,Y,Nb,Gd,W,Pt,Tl, $^{155},^{156},^{157},^{158},^{160}\text{Gd},^{182},^{183},^{184},^{186}\text{W},^{203},^{205}\text{Tl}(n,\gamma),E=0.5-3$ MeV; measured absolute σ . Integrated spectrum method.

Keynumber: 1981VOZU

Coden: REPT NEANDC(E)-210-L,Voignier

Keyword abstract: NUCLEAR REACTIONS Rb,Y,Nb,Gd,W,Pt,Tl, $^{155},^{156},^{157},^{158},^{160}\text{Gd},^{182},^{183},$

$^{184}, ^{186}\text{W}, ^{203}, ^{205}\text{Tl}(n,\gamma), E=0.5-3 \text{ MeV}$; measured absolute $\sigma(\text{capture})$ vs E. Integrated spectrum method.

Keynumber: 1981GRZY

Reference: CEA-N-2195 (1981)

Authors: G.Grenier, J.Voignier, S.Joly

Title: Capture Cross-Section Measurements for Different Elements at Neutron Energies between 0.5 and 3.0 MeV

Keyword abstract: NUCLEAR REACTIONS Rb, $^{89}\text{Y}, ^{93}\text{Nb}, \text{Gd}, \text{W}, \text{Pt}, \text{Tl}, ^{155}, ^{156}, ^{157}, ^{158}, ^{160}\text{Gd}, ^{182}, ^{183}, ^{184}, ^{186}\text{W}, ^{203}, ^{205}\text{Tl}(n,\gamma), E=0.5-3 \text{ MeV}$; measured $\sigma(E)$. NaI scintillator, γ -detection. Statistical model.

Keynumber: 1979GRZO

Reference: Bull.Am.Phys.Soc. 24, No.7, 871, CC5 (1979)

Authors: G.Grenier, J.P.Delaroche, S.Joly, Ch.Lagrange, J.Voignier

Title: Neutron Capture Cross Sections of Y,Nb,Gd,W and Au between 0.5 MeV and 3.0 MeV

Keyword abstract: NUCLEAR REACTIONS Y,Nb,Gd,W, $^{155}, ^{156}, ^{157}, ^{158}, ^{160}\text{Gd}, ^{182}, ^{183}, ^{184}, ^{186}\text{W}, \text{Au}(n,\gamma), E=0.5 \text{ MeV}-3.0 \text{ MeV}$; measured σ . Statistical model calculations.

Keynumber: 1978CIZY

Coden: CONF BNL(Neutron Capt γ -Ray Spectr),Contrib,No18,Cizewski

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}, ^{189}\text{Os}, ^{195}\text{Pt}(n,\gamma), E=2 \text{ keV}$; measured average $\sigma(E\gamma)$. $^{156}\text{Gd}, ^{190}\text{Os}, ^{196}\text{Pt}$ deduced energy gap.

Keynumber: 1978CIZP

Coden: CONF Brookhaven(Neutron Capt γ -Ray Spectr),Proc,P582,Cizewski

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}, ^{189}\text{Os}, ^{195}\text{Pt}(n,\gamma), E=\text{resonance}$; measured $E\gamma, I\gamma$. $^{156}\text{Gd}, ^{190}\text{Os}, ^{196}\text{Pt}$ deduced energy gap. Average resonance capture technique.

Keynumber: 1977SE03

Reference: Z.Phys. A280, 239 (1977)

Authors: H.Seyfarth, N.Wust, O.W.B.Schult

Title: On the Intensities of K X Rays Following Thermal Neutron Capture

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}, ^{176}\text{Lu}, ^{199}\text{Hg}(n,\gamma), E=\text{slow}$; measured absolute I (K X-ray).

Keynumber: 1976GRZN

Coden: PREPRINT R C Greenwood,8/4/76

Keyword abstract: NUCLEAR REACTIONS Mn, $^{155}, ^{156}, ^{157}\text{Gd}(n,\gamma), E=2 \text{ keV}$; $^{232}\text{Th}(n,\gamma), E=2,24 \text{ keV}$; measured $\sigma(E\gamma)$. $^{156}, ^{157}, ^{158}\text{Gd}, ^{233}\text{Th}$ deduced transitions.

Keynumber: 1974SH03

Reference: Yad.Fiz. 19, 5 (1974); Sov.J.Nucl.Phys. 19, 2 (1974)

Authors: V.S.Shorin, V.N.Kononov, E.D.Poletaev

Title: Neutron Radiative-Capture Cross Sections in the Energy Region 5-70 keV For Gd and Er Isotopes

Keyword abstract: NUCLEAR REACTIONS $^{154}, ^{155}, ^{156}, ^{157}, ^{158}, ^{160}\text{Gd}(n,\gamma), ^{166}, ^{167}, ^{168}, ^{170}\text{Er}(n,\gamma), E=5-70 \text{ keV}$; measured $\sigma(E)$.

Keynumber: 1974SC03

Reference: Z.Naturforsch. 29a, 17 (1974)

Authors: K.Schreckenbach

Title: Konversionselektronen von ^{156}Gd nach Neutroneneinfang

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}(n,\gamma)$; measured $E\gamma, I(\text{ce})$. Deduced ICC. ^{156}Gd deduced levels, γ -multipolarity.

Keynumber: 1974RIZB

Coden: REPT USNDC-11 P47

Keyword abstract: NUCLEAR REACTIONS Ta, Mo, Nb, $^{140}, ^{142}\text{Ce}, ^{154}, ^{155}, ^{156}, ^{157}\text{Gd}, \text{Ho}(n,\gamma), E=24$ keV; measured $\sigma. ^{93}, ^{95}, ^{97}, ^{99}\text{Mo}$ deduced resonances, J, π .

Keynumber: 1974EF01

Reference: Yad.Fiz. 19, 712 (1974); Sov.J.Nucl.Phys. 19, 361 (1974)

Authors: B.V.Efimov, L.L.Sokolovskii

Title: Correlation between the Reduced Neutron Width and Partial Radiation Width in the Reaction $^{155}\text{Gd}(n,\gamma)$

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}(n,\gamma), E=\text{average resonance}$; measured $E\gamma, I\gamma. ^{156}\text{Gd}$ deduced levels, J, π .

Keynumber: 1973LAYG

Reference: RCN-191 (1973)

Authors: G.Lautenbach

Title: Calculated Neutron Absorption Cross Sections of 75 Fission Products

Keyword abstract: NUCLEAR REACTIONS $^{81}\text{Br}, ^{83}, ^{84}, ^{85}, ^{86}\text{Kr}, ^{85}, ^{87}\text{Rb}, ^{88}, ^{90}\text{Sr}, ^{89}\text{Y}, ^{91}, ^{92}, ^{93}, ^{94}, ^{95}, ^{96}\text{Zr}, ^{95}, ^{97}, ^{98}, ^{100}\text{Mo}, ^{99}\text{Tc}, ^{101}, ^{102}, ^{104}, ^{106}\text{Ru}, ^{103}\text{Rh}, ^{105}, ^{106}, ^{107}, ^{108}, ^{110}\text{Pd}, ^{109}\text{Ag}, ^{111}, ^{112}, ^{113}, ^{114}\text{Cd}, ^{115}\text{In}, ^{126}, ^{128}, ^{130}\text{Te}, ^{127}, ^{129}\text{I}, ^{131}, ^{132}, ^{134}, ^{136}\text{Xe}, ^{133}, ^{135}, ^{137}\text{Cs}, ^{138}\text{Ba}, ^{139}\text{La}, ^{140}, ^{142}\text{Ce}, ^{141}\text{Pr}, ^{143}, ^{144}, ^{145}, ^{146}, ^{148}, ^{150}\text{Nd}, ^{147}\text{Pm}, ^{147}, ^{148}, ^{149}, ^{150}, ^{151}, ^{152}, ^{154}\text{Sm}, ^{153}, ^{154}, ^{155}\text{Eu}, ^{155}, ^{156}, ^{157}, ^{158}\text{Gd}, ^{159}\text{Tb}(n,\gamma)$; calculated $\sigma(E)$.

Keynumber: 1973KAYI

Coden: REPT INDC(HUN)-11/L P33

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}, ^{163}\text{Dy}, ^{177}\text{Hf}(n,\gamma)$; measured $E\gamma, I\gamma. ^{156}\text{Gd}, ^{164}\text{Dy}, ^{178}\text{Hf}$ resonances deduced level-width.

Keynumber: 1972SI04

Reference: Nucl.Phys. A179, 609 (1972)

Authors: T.A.Siddiqi, F.P.Cranston, D.H.White

Title: Gamma-Ray Transitions in ^{156}Gd

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}(n,\gamma), E=\text{thermal}$; measured $E\gamma, I\gamma$; deduced $Q. ^{156}\text{Gd}$ deduced levels, decay scheme, $B(E2)$ ratios. Enriched target; Ge(Li) detectors.

Keynumber: 1972SCYT

Coden: CONF Teddington(Atomic Masses, Fund Constants), P123

Keyword abstract: NUCLEAR REACTIONS $^{107}, ^{109}\text{Ag}, ^{139}\text{La}, ^{150}\text{Sm}, ^{151}, ^{152}\text{Eu}, ^{155}, ^{157}\text{Gd}, ^{159}\text{Tb}, ^{168}, ^{171}, ^{174}\text{Yb}, ^{178}\text{Hf}, ^{181}, ^{182}\text{Ta}, ^{197}, ^{198}\text{Au}, ^{199}\text{Hg}, ^{232}\text{Th}(n,\gamma)$; measured $E\gamma. ^{108}, ^{110}\text{Ag}, ^{140}\text{La}, ^{151}\text{Sm}, ^{152}, ^{153}\text{Eu}, ^{156}, ^{158}\text{Gd}, ^{160}\text{Tb}, ^{169}, ^{172}, ^{175}\text{Yb}, ^{179}\text{Hg}, ^{182}, ^{183}\text{Ta}, ^{198}, ^{199}\text{Au}, ^{200}\text{Hg}, ^{233}\text{Th}$

deduced transitions.

Keynumber: 1972GRZA

Reference: ANCR-1088, p.63 (1972)

Authors: R.C.Greenwood

Title: Neutron Capture Gamma-Ray Studies using the 2 keV Neutron Beam Facility

Keyword abstract: NUCLEAR REACTIONS Co,Ni, $^{155}\text{Gd}(n,\gamma)$, E=2 keV; measured $E\gamma, I\gamma$. ^{60}Co , ^{156}Gd , ^{59}Ni , ^{61}Ni , ^{63}Ni , ^{65}Ni deduced transitions.

Keynumber: 1972DA20

Reference: Zh.Eksp.Teor.Fiz. 62, 1228 (1972); Sov.Phys.JETP 35, 649 (1972)

Authors: L.S.Danelyan, B.Kardon, S.K.Sotnikov

Title: Effect of Level Structure on the Intensity of Partial Radiative Transitions in the $^{155}\text{Gd}(n,\gamma)^{156}\text{Gd}$ Resonances

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}(n,\gamma)$, E=resonance; measured $I\gamma$. ^{156}Gd levels deduced level-width, J, π .

Keynumber: 1972BAZB

Reference: NP-19337, p.6 (1972)

Authors: A.Backlin, B.Fogelberg, G.Hedin, T.Nagarajan

Title: (n, γ) Spectroscopy

Keyword abstract: RADIOACTIVITY ^{122}In , ^{124}In , ^{119}In , ^{121}In , ^{123}Cd , ^{119}Ag , ^{191}Pt , ^{185}Ir , ^{186}Ir , ^{188}Ir , ^{186}Re ; ^{122}Sn , ^{124}Sn , ^{119}Sn , ^{121}Sn , ^{123}In , ^{191}Ir , ^{185}Os , ^{186}Os , ^{188}Os deduced levels.

Keyword abstract: NUCLEAR REACTIONS ^{155}Gd , ^{157}Gd , ^{235}U , $^{239}\text{Pu}(n,\gamma)$; ^{156}Gd , ^{158}Gd , ^{236}U , ^{240}Pu deduced levels.

Keynumber: 1971HEYR

Coden: REPT NP-18993,P7

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}(n,\gamma)$; measured $E\gamma, I\gamma$. ^{156}Gd deduced levels, K.

Keynumber: 1970FR03

Reference: Nucl.Phys. A146, 337 (1970)

Authors: S.J.Friesenhahn, M.P.Fricke, D.G.Costello, W.M.Lopez, A.D.Carlson

Title: Neutron Resonance Parameters and Radiative Capture Cross Section of Gd From 3 eV to 750 keV

Keyword abstract: NUCLEAR REACTIONS $^{155}\text{Gd}(n,\gamma)$, $^{157}\text{Gd}(n,\gamma)$, E=3 eV-20 keV; $\text{Gd}(n,\gamma)$, E=1-750 keV; measured $\sigma(E)$. ^{156}Gd , ^{158}Gd deduced resonances, resonance parameters. Natural, enriched targets.

Keynumber: 1970EI04

Reference: Nucl.Phys. A147, 150 (1970)

Authors: J.Eichler, F.Djadali

Title: Measurement of the Average Circular γ -Polarization and Determination of Spins for Compound States Formed in Thermal Neutron Capture

Keyword abstract: NUCLEAR REACTIONS ^{95}Mo , ^{113}Cd , ^{115}In , ^{121}Sb , ^{123}Sb , ^{127}I , ^{133}Cs , ^{141}Pr , ^{155}Gd , ^{159}Tb , ^{165}Ho , ^{181}Ta , $^{199}\text{Hg}(\text{polarized } n,\gamma)$, E = thermal; measured average γ -circular polarization. ^{96}Mo , ^{114}Cd , ^{116}In , ^{122}Sb , ^{124}Sb , ^{128}I , ^{134}Cs , ^{142}Pr , ^{156}Gd , ^{158}Gd , ^{160}Tb , ^{166}Ho , ^{182}Ta , ^{200}Hg deduced J for compound state. Natural targets.

Keynumber: 1970DA25

Reference: Zh.Eksp.Teor.Fiz. 58, 456 (1970); Sov.Phys.JETP 31, 242 (1970)

Authors: L.S.Danelyan, B.V.Efimov, S.K.Sotnikov

Title: Intensities of Partial Radiative Transitions to Rotational and Vibrational Bands of Gd^{155} and Gd^{157} Resonances

Keyword abstract: NUCLEAR REACTIONS $^{155}, ^{157}Gd(n,\gamma), E < 150$ eV; measured $I\gamma$. $^{156}, ^{158}Gd$ deduced resonances. ^{156}Gd resonances deduced J.

Keynumber: 1970BO29

Reference: Phys.Rev. C2, 1951 (1970)

Authors: L.M.Bollinger, G.E.Thomas

Title: Average-Resonance Method of Neutron-Capture γ -Ray Spectroscopy: States of ^{106}Pd , ^{156}Gd , ^{158}Gd , ^{166}Ho , and ^{168}Er

Keyword abstract: NUCLEAR REACTIONS $^{102}, ^{104}, ^{105}Pd, ^{154}, ^{155}, ^{156}, ^{157}Gd, ^{164}, ^{166}, ^{167}, ^{168}Er, ^{165}Ho(n,\gamma), E=$ thermal,epithermal; measured $E\gamma, I\gamma$; deduced Q. $^{103}, ^{105}Pd, ^{155}, ^{157}Gd, ^{165}, ^{167}, ^{169}Er$ deduced levels. $^{106}Pd, ^{156}, ^{158}Gd, ^{166}Ho, ^{168}Er$ deduced levels,J, π .

Keynumber: 1969BAZS

Reference: Proc.Intern.Symp.Neutron Capture Gamma-Ray Spectroscopy, Studsvik, Intern.At.En.Agency, Vienna, p.147 (1969)

Authors: A.Backlin, B.Fogelberg, G.Hedin, M.Saraceno, R.C.Greenwood, C.W.Reich, H.R.Koch, H.A.Baader, H.D.Breitig, O.W.B.Schult

Title: Energy Levels in ^{156}Gd

Keyword abstract: NUCLEAR REACTIONS $^{155}Gd(n,\gamma), E=$ thermal,2 keV; measured $E\gamma, I\gamma, I(ce)$. ^{156}Gd deduced levels,J, $\pi, \lambda, B(E2)$.

Keynumber: 1968SPZZ

Reference: IN-1218, p.123 (1968)

Authors: R.R.Spencer, K.T.Faler, R.A.Harlan

Title: Resonance Neutron-Capture Gamma-Ray Studies of $^{148}Sm, ^{156}Gd, ^{158}Gd$, and ^{164}Dy

Keyword abstract: NUCLEAR REACTIONS $^{147}Sm, ^{155}, ^{157}Gd, ^{163}Dy(n,\gamma), E=$ resonance; measured $E\gamma, I\gamma$; deduced Q. $^{148}Sm, ^{156}, ^{158}Gd, ^{164}Dy$ deduced levels.

Keynumber: 1968GO38

Reference: Izv.Akad.Nauk SSSR, Ser.Fiz. 32, 1719 (1968); Bull.Acad.Sci.USSR, Phys.Ser. 32, 1584 (1969)

Authors: L.I.Govor, V.A.Ivanov

Title: e- γ -Coincidence Study of ^{156}Gd Levels Excited in Thermal Neutron Capture

Keyword abstract: NUCLEAR REACTIONS $^{155}Gd, ^{149}Sm(n,\gamma), E =$ thermal; measured $E\gamma, I\gamma, ce\gamma$ -coin. ^{150}Sm deduced transitions. ^{156}Gd deduced levels, J, π , ICC, B(E2).

Keynumber: 1968BE65

Reference: Latvijas PSR Zinatnu Akad.Vestis, Fiz.Teh.Zinatnu Ser., No.6 (1968)

Authors: Y.Y.Berzin, P.T.Prokofev, G.L.Rezvaya

Title: Conversion Electron Spectrum Emitted at Thermal Neutron Capture by ^{155}Gd Nuclei

Keyword abstract: NUCLEAR REACTIONS $^{155}Gd(n,\gamma), E =$ thermal; measured $E(ce), I(ce)$. ^{156}Gd transitions deduced ICC, γ -multipolarity.