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56 reference(s) found :

Keynumber: 2000VA13

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

Authors: E.V.Vasileva, A.M.Sukhovi, 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}Gd (n, γ),E <250 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}Gd (n, γ),E=low; measured $E\gamma$, $I\gamma$. ^{150}Sm , 156 , 158 , ^{159}Gd deduced scissors resonance features.

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}Gd (polarized n, γ),E=thermal; measured $E\gamma$, $I\gamma$ 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}W (n, γ),E=thermal; analyzed $I\gamma$; 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.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}Hg (n, γ),E not given; analyzed two-photon γ cascade data; deduced structure effects.

Keynumber: [1999BO10](#)

Reference: Phys.Rev. C59, 2432 (1999)

Authors: H.G.Borner, M.Jentschel, N.V.Zamfir, R.F.Casten, M.Krticka, W.Andrejscheff

Title: Ultrahigh Resolution Study of Collective Modes in ^{158}Gd

Keyword abstract: NUCLEAR REACTIONS ^{157}Gd (n, γ),E=thermal; measured $E\gamma$, $I\gamma$. ^{158}Gd deduced levels J, π , $T_{1/2}$,B(E2),no two-phonon vibration. Gamma-ray induced Doppler broadening technique.

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}Au (n, γ),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: [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}Gd (n, γ),E=3-225 KeV; measured σ (E); deduced Maxwellian averaged cross section for kT=10 to 100 keV.

Keynumber: 1994TAZU

Reference: Proc.8th Int.Symposium on Capture Gamma-Ray Spectroscopy and Related Topic,

Fribourg, Switzerland, 20-24 September 1993, J.Kern, Ed., World Scientific, Singapore, p.460 (1994)

Authors: K.T.Tang, M.K.Harder, A.Williams

Title: A Development of the Decay Scheme of ^{158}Gd

Keyword abstract: NUCLEAR REACTIONS $^{157}\text{Gd}(n,\gamma)$,E=thermal; measured $E\gamma, I\gamma$. ^{158}Gd deduced transitions, levels J, π .

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=thermal; analyzed γ spectra; deduced Gd atoms displacement energy in $\text{GdBa}_2\text{Cu}_3\text{O}(7-\delta)$. Monte Carlo technique.

Keynumber: 1994AL41

Reference: J.Phys.(London) G20, 1943 (1994)

Authors: M.A.Ali, V.A.Khitrov, Yu.V.Kholnov, A.M.Sukhovoij, A.V.Voinov

Title: Properties of the ^{158}Gd Compound State Gamma-Decay Cascades

Keyword abstract: NUCLEAR REACTIONS $^{157}\text{Gd}(n,\gamma)$,E=thermal; measured $E\gamma, I\gamma, \gamma\gamma$ -coin, two-step cascades. ^{158}Gd deduced levels, level densities, cascade $I\gamma$. Model comparison.

Keynumber: 1992ALZL

Reference: Program and Thesis, Proc.42nd Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Alma-Ata, p.81 (1992)

Authors: M.A.Ali, E.V.Vasileva, A.V.Voinov, V.D.Kulik, Le Khong Kkhem, Yu.P.Popov, A.M.Sukhovoij, F.D.Kkhang, V.A.Khitrov, Yu.V.Kholnov, V.N.Shilin

Title: Decay of the 7973-keV ^{158}Gd Compound State Excited in (n,γ) Reaction

Keyword abstract: NUCLEAR REACTIONS $^{157}\text{Gd}(n,\gamma)$,E=thermal; measured γ -spectra, $\gamma\gamma$ -coin. ^{158}Gd deduced levels, decay features. Amplitude summation method.

Keynumber: 1990DZ01

Reference: Yad.Fiz. 51, 336 (1990); Sov.J.Nucl.Phys. 51, 215 (1990)

Authors: L.Z.Dzhilavyan, V.L.Kauts, V.I.Furman, A.Yu.Chuprikov

Title: Some Problems Related to the Population of Isomeric States

Keyword abstract: NUCLEAR REACTIONS $^{157}\text{Gd}(n,\gamma)$,E=thermal; $^{115}\text{In}(\gamma,\gamma)$,E <12 MeV; $^{180}\text{Hf}(\gamma,\gamma)$,E=3-9 MeV; analyzed data; deduced isomeric state population mechanism.

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: 1989DZZX

Reference: JINR-P4-89-320 (1989)

Authors: L.Z.Dzhilavyan, V.L.Kauts, V.I.Furman, A.Yu.Chuprikov

Title: On Some Questions of the Population of Isomeric States

Keyword abstract: NUCLEAR REACTIONS $^{157}\text{Gd}(n,\gamma), E=\text{thermal}$; calculated $\sigma(E\gamma)$. ^{158}Gd levels deduced Γ . $^{115}\text{In}, ^{180}\text{Hf}(\gamma,\gamma'), E=3-10$ MeV; calculated $^{115}\text{In}, ^{180}\text{Hf}$ isomeric σ ratios vs E , production σ (E). Statistical approach.

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

Keynumber: 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: 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: 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, ¹⁶⁰Gd, ¹⁸², ¹⁸³, ¹⁸⁴, ¹⁸⁶W, ²⁰³, ²⁰⁵Tl(n,γ),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, ¹⁶⁰Gd, ¹⁸², ¹⁸³, ¹⁸⁴, ¹⁸⁶W, ²⁰³, ²⁰⁵Tl(n,γ),E=0.5-3 MeV; measured absolute σ(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, ⁸⁹Y, ⁹³Nb,Gd,W,Pt,Tl, ¹⁵⁵, ¹⁵⁶, ¹⁵⁷, ¹⁵⁸, ¹⁶⁰Gd, ¹⁸², ¹⁸³, ¹⁸⁴, ¹⁸⁶W, ²⁰³, ²⁰⁵Tl(n,γ),E=0.5-3 MeV; measured σ(E). NaI scintillator,γ-detection. Statistical model.

Keynumber: 1980POZZ

Coden: REPT JINR-P3-12750,4/28/80,Popov

Keyword abstract: NUCLEAR REACTIONS ⁹⁵Mo, ¹⁵⁷Gd(n,γ),E=resonance; measured Eγ,Iγ. ⁹⁶Mo transition deduced correlation to reduced neutron width. ¹⁵⁸Gd transitions deduced stronger fluctuation than statistical model predictions.

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, ¹⁶⁰Gd, ¹⁸², ¹⁸³, ¹⁸⁴, ¹⁸⁶W,Au(n,γ),E=0.5 MeV-3.0 MeV; measured σ. Statistical model calculations.

Keynumber: 1978GR14

Reference: Nucl.Phys. A304, 327 (1978)

Authors: R.C.Greenwood, C.W.Reich, H.A.Baader, H.R.Koch, D.Breitag, O.W.B.Schult, B.Fogelberg, A.Backlin, W.Mampe, T.von Egidy, E.Schreckenbach

Title: Collective and Two-Quasiparticle States in ¹⁵⁸Gd Observed Through Study of Radiative Neutron Capture in ¹⁵⁷Gd

Keyword abstract: NUCLEAR REACTIONS ¹⁵⁷Gd(n,γ),E=thermal, averaged-resonance; measured Eγ,Iγ, I(ce),γγ-coin. ¹⁵⁸Gd deduced levels,J,π,ICC,B(λ),neutron binding energy. Ge(Li) detectors,curved-crystal spectrometer,magnetic-electron spectrometers. Enriched, natural targets.

Keynumber: 1976GRZN

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

Keyword abstract: NUCLEAR REACTIONS Mn, ¹⁵⁵, ¹⁵⁶, ¹⁵⁷Gd(n,γ),E=2 keV; ²³²Th(n,γ),E=2,24 keV; measured σ(Eγ). ¹⁵⁶, ¹⁵⁷, ¹⁵⁸Gd, ²³³Th deduced transitions.

Keynumber: 1975KO10

Reference: Acta Phys.Austr. 41, 335 (1975)

Authors: H.-P.Korn, P.Weinzierl, P.Riehs

Title: The Shape of γ -Ray Spectra after Thermal Neutron Capture in Coincidence to Low Energy γ -Transitions

Keyword abstract: NUCLEAR REACTIONS ^{149}Sm , ^{157}Gd , $^{181}\text{Ta}(n,\gamma)$, E=thermal; measured $\gamma\gamma$ -coin, γ -shape spectra. ^{150}Sm , ^{158}Gd , ^{182}Ta resonances deduced J.

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 keV; measured $\sigma(E)$.

Keynumber: 1974RIZB

Coden: REPT USNDC-11 P47

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

Keynumber: 1974CHZG

Reference: USNDC-11, p.46 (1974)

Authors: R.E.Chrien, K.Rimawi, R.C.Greenwood, G.W.Cole

Title: Nuclear Structure Studies Using the Fast Chopper

Keyword abstract: NUCLEAR REACTIONS $^{94, 96, 97}\text{Mo}$, $^{154, 156, 157}\text{Gd}(n,\gamma)$; measured $E\gamma, I\gamma$.

Keynumber: 1973WH04

Reference: Nucl.Phys. A217, 410 (1973)

Authors: D.H.White, T.A.Siddiqi

Title: Gamma-Ray Spectra and Positive Parity Bands in ^{158}Gd

Keyword abstract: NUCLEAR REACTIONS $^{157}\text{Gd}(n,\gamma)$, E=thermal; measured $E\gamma, I\gamma$; deduced Q. ^{158}Gd deduced levels, J, π , B(E2) ratios. Enriched target. Ge(Li) detectors.

Keynumber: 1973LAYG

Reference: RCN-191 (1973)

Authors: G.Lautenbach

Title: Calculated Neutron Absorption Cross Sections of 75 Fission Products

Keyword abstract: NUCLEAR REACTIONS ^{81}Br , $^{83, 84, 85, 86}\text{Kr}$, $^{85, 87}\text{Rb}$, $^{88, 90}\text{Sr}$, ^{89}Y , $^{91, 92, 93, 94, 95, 96}\text{Zr}$, $^{95, 97, 98, 100}\text{Mo}$, ^{99}Tc , $^{101, 102, 104, 106}\text{Ru}$, ^{103}Rh , $^{105, 106, 107, 108, 110}\text{Pd}$, ^{109}Ag , $^{111, 112, 113, 114}\text{Cd}$, ^{115}In , $^{126, 128, 130}\text{Te}$, $^{127, 129}\text{I}$, $^{131, 132, 134, 136}\text{Xe}$, $^{133, 135, 137}\text{Cs}$, ^{138}Ba , ^{139}La , $^{140, 142}\text{Ce}$, ^{141}Pr , $^{143, 144, 145, 146, 148, 150}\text{Nd}$, ^{147}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: 1973KAZL

Coden: REPT JINR-P3-6948, E N Karzhavina

Keyword abstract: NUCLEAR REACTIONS $^{111, 113}\text{Cd}$, ^{157}Gd , $^{161, 163}\text{Dy}(n,\gamma)$, E >thermal; deduced $^{112, 114}\text{Cd}$, ^{158}Gd , $^{162, 164}\text{Dy}$ resonances deduced J.

Keynumber: 1973DA30

Reference: Izv.Akad.Nauk SSSR, Ser.Fiz. 37, 1129 (1973); Bull.Acad.Sci.USSR, Phys.Ser. 37, No.5, 190 (1974)

Authors: L.S.Danelyan

Title: Nonstatic Effects in γ -Ray Spectra Emitted during the Decay of Neutron Resonances in ^{147}Sm , ^{157}Gd , and ^{177}Hf

Keyword abstract: NUCLEAR REACTIONS ^{147}Sm , ^{157}Gd , $^{177}\text{Hf}(n,\gamma)$, E=resonance; measured γ -spectra; deduced non-statistical effects.

Keynumber: 1972WHZV

Coden: JOUR BAPSA 17 899,D White,10/26/72

Keyword abstract: NUCLEAR REACTIONS $^{157}\text{Gd}(n,\gamma)$, E=thermal; measured $E\gamma, I\gamma$; deduced Q. ^{158}Gd deduced levels, γ -branching.

Keynumber: 1972WHZU

Reference: Bull.Amer.Phys.Soc. 17, No.10, 899, BB9 (1972); Priv.Comm. (1973)

Authors: D.H.White, T.A.Siddiqi

Title: Interband Transition Rates in ^{158}Gd Following Thermal Neutron Capture in ^{157}Gd

Keyword abstract: NUCLEAR REACTIONS $^{157}\text{Gd}(n,\gamma)$, E=thermal; measured $E\gamma, I\gamma$. Deduced Q. ^{158}Gd deduced levels, γ -branching.

Keynumber: 1972SCYT

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

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

Keynumber: 1972BF02

Reference: Latv.PSR Zinat.Akad.Vestis, Fiz.Teh.Zinat.Ser. No.5, 3 (1972)

Authors: Y.Y.Berzin, A.E.Kruminya, L.A.Neiburg, P.T.Prokofev

Title: Conversion Electron and γ -Ray Spectra from Thermal Neutron Capture in ^{157}Gd

Keyword abstract: NUCLEAR REACTIONS $^{157}\text{Gd}(n,\gamma)$, E=thermal; measured $E(\text{ce}), I(\text{ce})$; deduced ICC. ^{158}Gd deduced transitions, γ -multipolarities.

Keynumber: 1972BAZB

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

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

Title: (n,γ) Spectroscopy

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

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

Keynumber: 1971PA35

Reference: Izv.Akad.Nauk SSSR, Ser.Fiz. 35, 1593 (1971); Bull.Acad.Sci.USSR, Phys.Ser. 35, 1453 (1972)

Authors: Y.N.Panin, V.I.Pelekhov, V.A.Ivanov

Title: The Multipole Order Predominant in Radiative Transitions of Energy $>2m_0c^2$ in ^{114}Cd , ^{150}Sm , and ^{158}Gd Following Thermal-Neutron Capture

Keyword abstract: NUCLEAR REACTIONS ^{113}Cd , ^{149}Sm , $^{157}\text{Gd}(n,\gamma)$, $E=\text{thermal}$; measured $I(\beta+)$, $I(\beta-)$. ^{114}Cd , ^{150}Sm , ^{158}Gd transitions deduced pair ICC, dominant multipolarity.

Keynumber: 1971BAYF

Coden: REPT RISO-M-1307,12/2/71

Keyword abstract: NUCLEAR REACTIONS $^{157}\text{Gd}(n,\gamma)$, $E=\text{thermal}$; measured $E\gamma$, $I\gamma$. ^{158}Gd deduced levels, J , π . Curved-crystal spectrometer.

Keynumber: 1970PA20

Reference: Izv.Akad.Nauk SSSR, Ser.Fiz. 34, 804 (1970); Bull.Acad.Sci.USSR, Phys.Ser. 34, 714 (1971)

Authors: Y.N.Panin, V.I.Pelekhov

Title: High-Energy Internal-Conversion Electrons Emitted by ^{150}Sm and ^{158}Gd Produced in (n,γ) Reactions

Keyword abstract: NUCLEAR REACTIONS ^{149}Sm , $^{157}\text{Gd}(n,\gamma)$, $E=\text{th}$; measured $E\gamma$, $I(\text{ce})$. ^{150}Sm , ^{158}Gd deduced transitions, ICC.

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 , $^{157}\text{Gd}(n,\gamma)$, $E=3\text{ eV}-20\text{ keV}$; $\text{Gd}(n,\gamma)$, $E=1-750\text{ keV}$; measured $\sigma(E)$. 156 , ^{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 , ^{123}Sb , ^{127}I , ^{133}Cs , ^{141}Pr , 155 , ^{157}Gd , ^{159}Tb , ^{165}Ho , ^{181}Ta , $^{199}\text{Hg}(\text{polarized } n,\gamma)$, $E = \text{thermal}$; measured average γ -circular polarization. ^{96}Mo , ^{114}Cd , ^{116}In , 122 , ^{124}Sb , ^{128}I , ^{134}Cs , ^{142}Pr , 156 , ^{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 , $^{157}\text{Gd}(n,\gamma)$, $E < 150\text{ eV}$; 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 $^{102, 104, 105}\text{Pd}$, $^{154, 155, 156, 157}\text{Gd}$, $^{164, 166, 167, 168}\text{Er}$, $^{165}\text{Ho}(n,\gamma)$, $E=\text{thermal, epithermal}$; measured $E\gamma, I\gamma$; deduced Q . $^{103, 105}\text{Pd}$, $^{155, 157}\text{Gd}$, $^{165, 167, 169}\text{Er}$ deduced levels. ^{106}Pd , $^{156, 158}\text{Gd}$, ^{166}Ho , ^{168}Er deduced levels, J, π .

Keynumber: 1970BE81

Reference: Latv.PSR Zinat.Akad.Vestis, Fiz.Teh.Zinat.Ser. No.5, 124 (1970)

Authors: M.R.Beitin, Y.Y.Berzin, P.T.Prokofev, L.I.Simonova, O.A.Stolyarov

Title: Spectra of Monoenergetic Positrons from Internal Conversion in the Reaction $^{157}\text{Gd}(n,\gamma)^{158}\text{Gd}$

Keyword abstract: NUCLEAR REACTIONS $^{157}\text{Gd}(n,\gamma)$, $E=\text{thermal}$; measured $E(\beta^+), E(\beta^-)$ from pair conversion, deduced $E\gamma$. ^{158}Gd deduced transitions.

Keynumber: 1970BAYK

Reference: Thesis, Technischen Univ., Munich (1970); RISO-M-1307 (1971)

Authors: H.A.Baader

Title: Untersuchung des Kernniveauschemas von Gd 158 mittels der (n,γ) -Reaktion

Keyword abstract: NUCLEAR REACTIONS $^{157}\text{Gd}(n,\gamma)$, $E=\text{thermal}$; measured $E\gamma, I\gamma$. ^{158}Gd deduced levels, $J, \pi, B(\text{EL})$.

Keynumber: 1969BEZB

Reference: Program and Theses, Proc.19th Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Erevan, p.116 (1969)

Authors: Y.Y.Berzin, A.E.Kruminya, P.T.Prokofev

Title: Spectrum of Conversion Electrons from ^{158}Gd in the Energy Range 70-230 keV

Keyword abstract: NUCLEAR REACTIONS $^{157}\text{Gd}(n,\gamma)$, $E=\text{th}$; measured $E\gamma, I(\text{ce})$.

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

Keynumber: 1968GRZW

Reference: Bull.Am.Phys.Soc. 13, No.11, 1391, BG14 (1968)

Authors: R.C.Greenwood, C.W.Reich

Title: Levels in ^{158}Gd from the $^{157}\text{Gd}(n,\gamma)^{158}\text{Gd}$ Reaction

Keyword abstract: NUCLEAR REACTIONS $^{157}\text{Gd}(n,\gamma)$; measured $E\gamma, I\gamma$. ^{158}Gd deduced levels.

Keynumber: 1968BE71

Reference: Latvijas PSR Zinatnu Akad.Vestis, Fiz.Teh.Zinatnu Ser., No.2, 3 (1968)

Authors: Y.Y.Berzin, A.E.Legzdinya, P.T.Prokofev

Title: Spectrum of the Conversion Electrons Emitted in the Reaction $^{157}\text{Gd}(n,\gamma)^{158}\text{Gd}$

Keyword abstract: NUCLEAR REACTIONS $^{157}\text{Gd}(n,\gamma)$, $E=\text{thermal}$; measured $E(\text{ce}), I(\text{ce})$. ^{158}Gd deduced transitions.

Keynumber: 1967RA24

Reference: Proc.Intern.Conf.Atomic Masses, 3rd, Winnipeg, Canada, R.C.Barber, Ed., Univ.Manitoba Press, p.278(1967)

Authors: N.C.Rasmussen, V.J.Orphan, Y.Hukai

Title: Determination of (n, γ) Reaction Q Values from Capture γ -Ray Spectra

Keyword abstract: NUCLEAR REACTIONS ${}^6\text{Li}$, ${}^7\text{Li}$, ${}^9\text{Be}$, ${}^{10}\text{B}$, ${}^{12}\text{C}$, ${}^{14}\text{N}$, ${}^{19}\text{F}$, ${}^{23}\text{Na}$, ${}^{24}\text{Mg}$, ${}^{25}\text{Mg}$, ${}^{26}\text{Mg}$, ${}^{27}\text{Al}$, ${}^{28}\text{Si}$, ${}^{31}\text{P}$, ${}^{32}\text{S}$, ${}^{35}\text{Cl}$, ${}^{40}\text{Ca}$, ${}^{45}\text{Sc}$, ${}^{48}\text{Ti}$, ${}^{51}\text{V}$, ${}^{55}\text{Mn}$, ${}^{54}\text{Fe}$, ${}^{56}\text{Fe}$, ${}^{59}\text{Co}$, ${}^{58}\text{Ni}$, ${}^{60}\text{Ni}$, ${}^{63}\text{Cu}$, ${}^{65}\text{Cu}$, ${}^{66}\text{Zn}$, ${}^{67}\text{Zn}$, ${}^{73}\text{Ge}$, ${}^{76}\text{Se}$, ${}^{85}\text{Rb}$, ${}^{87}\text{Rb}$, ${}^{89}\text{Y}$, ${}^{93}\text{Nb}$, ${}^{103}\text{Rh}$, ${}^{113}\text{Cd}$, ${}^{123}\text{Te}$, ${}^{133}\text{Cs}$, ${}^{139}\text{La}$, ${}^{141}\text{Pr}$, ${}^{149}\text{Sm}$, ${}^{153}\text{Eu}$, ${}^{157}\text{Gd}$, ${}^{159}\text{Tb}$, ${}^{165}\text{Ho}$, ${}^{167}\text{Er}$, ${}^{169}\text{Tm}$, ${}^{181}\text{Ta}$, ${}^{182}\text{W}$, ${}^{195}\text{Pt}$, ${}^{197}\text{Au}$, ${}^{199}\text{Hg}$, ${}^{203}\text{Tl}$, ${}^{207}\text{Pb}(n,\gamma)$, E = thermal; measured E_γ ; deduced Q. Natural targets.
