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28 reference(s) found :

Keynumber: 2001SHZW

Reference: INDC(CPR)-053/L, p.29 (2001)

Authors: Q.Shen, Y.Zhuang, Q.Liang

Title: Calculation and Recommendation of $n + {}^{142-148,150}\text{Nd}$ Reactions in the Energy Region up to 20 MeV

Keyword abstract: NUCLEAR REACTIONS ${}^{142, 143, 144, 145, 146, 147, 148, 150}\text{Nd}(n,n)$, (n,γ) , (n,X) , $E < 20$ MeV; calculated $\sigma, \sigma(\theta)$. Comparisons with data.

Keynumber: 1999BO14

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

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

Keynumber: [1998WI18](#)

Reference: Phys.Rev. C57, 3452 (1998)

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

Title: Neutron Capture Resonances in ${}^{142}\text{Nd}$ and ${}^{144}\text{Nd}$

Keyword abstract: NUCLEAR REACTIONS ${}^{142, 144}\text{Nd}(n,\gamma)$, $E=2.8-20$ keV; measured $\sigma(E)$; deduced resonance areas, averaged capture σ .

Keynumber: [1998WI04](#)

Reference: Phys.Rev. C57, 391 (1998)

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

Title: Stellar Neutron Capture Cross Sections of the Nd Isotopes

Keyword abstract: NUCLEAR REACTIONS ${}^{142, 143, 144, 145, 146}\text{Nd}(n,\gamma)$, $E=3-225$ keV; measured total, capture $\sigma(E_n)$; deduced Maxwellian averaged σ at $kT=10-100$ keV, astrophysical s-process implications.

Keynumber: 1997WI13

Reference: Nucl.Phys. A621, 270c (1997)

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

Title: Neutron Capture in Neodymium Isotopes: Implications for the s-process

Keyword abstract: NUCLEAR REACTIONS ${}^{142, 143, 144, 145, 146, 148}\text{Nd}(n,\gamma)$, $E=10,30$ keV; measured capture σ . Other data compared, astrophysical s-process implications.

Keynumber: 1997SU29

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

Authors: A.M.Sukhovi, 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 , $^{197}\text{Au}(\text{n},\gamma)$, $E=\text{thermal}$; 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: 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: 1997GU16

Reference: Nucl. Phys. A621, 266c (1997)

Authors: K.H. Guber, R.R. Spencer, P.E. Koehler, R.R. Winters

Title: Measurements of 142 , $^{144}\text{Nd}(\text{n},\gamma)$ Cross Sections at ORELA for Astrophysical s-Process Studies

Keyword abstract: NUCLEAR REACTIONS 142 , $^{144}\text{Nd}(\text{n},\gamma)$, $E < 200$ keV; measured σ ; deduced reaction rates. Astrophysical s-process implications.

Keynumber: 1997GU15

Reference: Nucl. Phys. A621, 254c (1997)

Authors: K.H. Guber, R.R. Spencer, P.E. Koehler, R.R. Winters

Title: A BaF_2 Detector System for (n, γ) Cross Section Measurements at ORELA

Keyword abstract: NUCLEAR REACTIONS $^{142}\text{Nd}(\text{n},\gamma)$, $E=2-3$ keV; measured neutron tof vs $E\gamma$, multiplicity. ^{144}Nd , $^{197}\text{Au}(\text{n},\gamma)$, $E=1-2$ keV; measured tof spectra; deduced detector characteristics. 4π BaF_2 detector array.

Keynumber: [1997GU04](#)

Reference: Phys. Rev. Lett. 78, 2704 (1997)

Authors: K.H. Guber, R.R. Spencer, P.E. Koehler, R.R. Winters

Title: New 142 , $^{144}\text{Nd}(\text{n},\gamma)$ Cross Sections and the s-Process Origin of the Nd Anomalies in Presolar Meteoric Silicon Carbide Grains

Keyword abstract: NUCLEAR REACTIONS 142 , $^{144}\text{Nd}(\text{n},\gamma)$, $E=5-50$ keV; measured Maxwellian averaged σ ; deduced s-process nucleosynthesis related features in the Ce-Nd-Sm region.

Keynumber: 1993BO29

Reference: Bull. Rus. Acad. Sci. Phys. 57, 42 (1993)

Authors: V.A. Bondarenko, I.L. Kuvaga, L.K. Khiem, Yu.P. Popov, P.T. Prokofev, A.M. Sukhovoy, P.D. Khang, V.A. Khitrov, Yu.V. Kholnov

Title: Cascade of γ -Transitions in the Decay of ^{143}Nd Compound State

Keyword abstract: NUCLEAR REACTIONS $^{142}\text{Nd}(\text{n},\gamma)$, $E=\text{thermal}$; measured $\gamma\gamma$ -coin, $I\gamma$. ^{143}Nd deduced levels, two quantum cascade $I\gamma$. Enriched target.

Keynumber: 1989BE45

Reference: Nucl.Instrum.Methods Phys.Res. A284, 77 (1989)

Authors: A.G.Beda, S.I.Burov, L.N.Bondarenko, G.V.Danilyan, P.Geltenbort, F.Gonnenwein, V.L.Kuznetsov, A.N.Martemyanov, Yu.A.Mostovoy, K.Schreckenbach

Title: Investigation of the P-Odd Asymmetry in the Resonance Scattering of Neutron Capture Gamma-Rays

Keyword abstract: NUCLEAR REACTIONS ^{112}Cd , ^{118}Sn , ^{139}La , ^{141}Pr , ^{142}Nd , ^{205}Tl , ^{208}Pb (polarized n, γ),E=reactor; measured E γ , γ CP; deduced parity nonconserving asymmetry limits.

Keynumber: 1984MA66

Reference: Astrophys.J. 286, 810 (1984)

Authors: G.J.Mathews, F.Kappeler

Title: Neutron-Capture Nucleosynthesis of Neodymium Isotopes and the s-Process from A = 130 to 150

Keyword abstract: NUCLEAR REACTIONS 142 , 143 , $^{144}\text{Nd}(n,\gamma)$,E=6-200 keV; measured capture σ (E); deduced thermonuclear reaction rates,Maxwellian $\langle\sigma\rangle$ recommended values for s-,r-processes.

Keynumber: 1983MAZB

Reference: Bull.Am.Phys.Soc. 28, No.7, 997, ED3 (1983)

Authors: G.J.Mathews, R.A.Ward, F.Kaeppler

Title: Neutron Capture Cross Sections and the Stellar Nucleosynthesis of Neodymium Isotopes

Keyword abstract: NUCLEAR REACTIONS 142 , 143 , $^{144}\text{Nd}(n,\gamma)$,E=5-200 keV; measured σ (capture); deduced 30 keV Maxwellian $\langle\sigma\rangle$ implications to s-process.

Keynumber: 1983MAYY

Reference: NEANDC(E)-242U, Vol.V, p.7 (1983)

Authors: G.J.Mathews, F.Kappeler

Title: Neutron Capture Cross Section of $^{142,143,144}\text{Nd}$

Keyword abstract: NUCLEAR REACTIONS 142 , 143 , $^{144}\text{Nd}(n,\gamma)$,E=6-250 keV; measured capture σ (E); deduced Maxwellian averaged σ at 30 keV.

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}Nd , 155 , ^{157}Gd , 161 , 162 , ^{164}Dy , ^{165}Ho , 174 , $^{173}\text{Yb}(n,\gamma)$,E=thermal; measured E γ . 143 , 144 , ^{146}Nd , 156 , ^{158}Gd , 162 , 163 , 164 , ^{165}Dy , ^{166}Ho , 175 , ^{174}Yb deduced neutron separation energy.

Keynumber: 1981MAYX

Reference: Program and Theses, Proc.31st Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Samarkand, p.476 (1981)

Authors: B.A.Martsynkevich

Title:

Keyword abstract: NUCLEAR REACTIONS ^{142}Nd , $^{144}\text{Sm}(n,\gamma)$,E=thermal; calculated $\sigma(E\gamma)$.

Keynumber: 1978KO04

Reference: Yad.Fiz. 27, 10 (1978); Sov.J.Nucl.Phys. 27, 5 (1978)

Authors: V.N.Kononov, B.D.Yurlov, E.D.Poletaev, V.M.Timokhov

Title: Fast-Neutron Capture Cross Sections for Even-Even Isotopes of Neodymium, Samarium, Gadolinium, and Erbium

Keyword abstract: NUCLEAR REACTIONS $^{142, 144, 146, 148, 150}\text{Nd}$, $^{144, 148, 150, 152, 154}\text{Sm}$, $^{156, 158, 160}\text{Gd}$, $^{166, 168, 170}\text{Er}(n,\gamma)$, $E=5-350$ keV; measured $\sigma(E)$.

Keynumber: 1976MI19

Reference: Nucl.Phys. A272, 133 (1976)

Authors: J.A.Mirza, A.M.Khan, M.Irshad, H.A.Schmidt, A.F.M.Ishaq, M.Anwar-Ul-Islam

Title: The $^{142}\text{Nd}(n,\gamma)^{143}\text{Nd}$ Reaction with Thermal Neutrons

Keyword abstract: NUCLEAR REACTIONS $^{142}\text{Nd}(n,\gamma)$, $E=\text{th}$; measured $E\gamma, I\gamma, \gamma\gamma$ -coin; deduced Q. ^{143}Nd deduced levels, J, π . Enriched, natural targets. Ge(Li) detectors.

Keynumber: 1975MIZP

Coden: CONF Petten(Neutron Capture γ -ray Spect), Proc P557

Keyword abstract: NUCLEAR REACTIONS $^{142}\text{Nd}(n,\gamma)$, $E=\text{thermal}$; measured $E\gamma, I\gamma, \gamma\gamma$ -coin; deduced Q. ^{143}Nd deduced levels, J .

Keynumber: 1974MIZE

Coden: CONF Petten(Neutron Capture Gamma Ray Spectroscopy), P357

Keyword abstract: NUCLEAR REACTIONS $^{142}\text{Nd}(n,\gamma)$, $E=\text{thermal}$; measured $E\gamma, I\gamma, \gamma\gamma$ -coin; deduced Q. ^{143}Nd deduced levels, J, π .

Keynumber: 1972KN03

Reference: Nucl.Phys. A194, 458 (1972)

Authors: V.A.Knatko, E.A.Rudak

Title: Phonon-Particle Doorway States in (n,γ) Reactions on Nuclei with $N = 28$ and $N = 82$

Keyword abstract: NUCLEAR REACTIONS ^{50}Ti , ^{52}Cr , ^{54}Fe , ^{138}Ba , ^{140}Ce , $^{142}\text{Nd}(n,\gamma)$, $E=\text{thermal}$; analyzed $\sigma(E\gamma)$. ^{51}Ti , ^{53}Cr , ^{55}Fe , ^{139}Ba , ^{141}Ce , ^{143}Nd calculated levels, wave functions, $B(E1)$; analyzed phonon-particle doorway states.

Keynumber: 1972KN02

Reference: Yad.Fiz. 15, 1132 (1972); Sov.J.Nucl.Phys. 15, 626 (1972)

Authors: V.A.Knatko, E.A.Rudak

Title: Doorway States of 'Phonon + Particle' Type in (n,γ) Reactions with $N = 28$ and $N = 82$ Nuclei

Keyword abstract: NUCLEAR REACTIONS ^{50}Ti , ^{52}Cr , ^{54}Fe , ^{138}Ba , ^{140}Ce , $^{142}\text{Nd}(n,\gamma)$, $E=\text{thermal}$; calculated $E1$ $I\gamma$. ^{51}Ti , ^{53}Cr , ^{55}Fe , ^{139}Ba , ^{141}Ce , ^{143}Nd analyzed $E1$ transitions, doorway states.

Keynumber: 1969MA03

Reference: Phys.Rev.Letters 22, 303(1969)

Authors: M.A.J.Mariscotti, J.A.Moragues, W.Gelletly, W.R.Kane

Title: Correlations Between (n,γ) and (d,p) Reactions on $N = 82$ Nuclei

Keyword abstract: NUCLEAR REACTIONS ^{138}Ba , ^{140}Ce , $^{142}\text{Nd}(n,\gamma)$, $E=\text{thermal}$; ^{139}Ba , ^{141}Ce , ^{143}Nd deduced correlations between (n,γ) , (d,p) results.

Keynumber: 1968KA28

Reference: Yadern.Fiz. 8, 639 (1968); Soviet J.Nucl.Phys. 8, 371 (1969)

Authors: E.N.Karzhavina, N.N.Fong, A.B.Popov, A.I.Taskaev

Title: Neutron Resonances of Nd Isotopes

Keyword abstract: NUCLEAR REACTIONS $^{142, 143, 144, 145, 146, 148, 150}\text{Nd}(n,X)$, (n,γ) , $E < 10$ keV; measured $\sigma(E;E\gamma)$, transmission. $^{143, 144, 145, 146, 147, 149, 151}\text{Nd}$ deduced resonances, level-width, strength functions, average level spacings.

Keynumber: 1968GR29

Reference: Yadern.Fiz. 8, 619 (1969)

Authors: L.V.Groshev, V.N.Dvoretiskii, A.M.Demidov, A.S.Rakhimov

Title: Spectra of γ Rays Produced Upon Capture of Thermal Neutrons

Keyword abstract: NUCLEAR REACTIONS $^{142, 143, 144, 145, 146}\text{Nd}(n,\gamma)$, $E =$ thermal; measured $E\gamma, I\gamma$. $^{143, 144, 145, 146, 147}\text{Nd}$ deduced levels, $L(n)$, J , π . ^{144}Nd transitions deduced γ -multipolarity.

Keynumber: 1968CA28

Reference: J.Inorg.Nucl.Chem. 30, 897 (1968)

Authors: M.J.Cabell, M.Wilkins

Title: Mass Spectrometric Measurements of the Neutron Capture Cross Sections of ^{142}Nd , ^{143}Nd , ^{144}Nd and ^{145}Nd for Reactor and Maxwellian Neutrons

Keyword abstract: NUCLEAR REACTIONS $^{142, 143, 144, 145}\text{Nd}(n,\gamma)$, $E =$ reactor spectrum; measured σ .

Keynumber: 1967GR27

Reference: IAE-1489 (1967); LA-4063-tr (1970)

Authors: L.V.Groshev, V.N.Dvoretiskii, A.M.Demidov, A.S.Rakhimov

Title: Spectra of γ -Rays Excited in Capture of Slow Neutrons by Neodymium Isotopes

Keyword abstract: NUCLEAR REACTIONS $^{142, 143, 144, 145, 146}\text{Nd}(n,\gamma)$, $E =$ slow; measured $E\gamma, I\gamma$. $^{143, 144, 145, 146, 147}\text{Nd}$ deduced levels. Ge(Li) detector.