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32 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: 1999VE10

Reference: J.Nucl.Sci.Technol.(Tokyo) 36, 855 (1999)

Authors: T.Veerapasong, M.Igashira, S.Mizuno, J.-I.Hori, T.Ohsaki

Title: Measurement of keV-Neutron Capture Cross Sections and Capture Gamma-Ray Spectra of ${}^{143,145,146}\text{Nd}$

Keyword abstract: NUCLEAR REACTIONS ${}^{143, 145, 146}\text{Nd}(n,\gamma)$, $E=10-90,550$ keV; measured $E\gamma, I\gamma$, capture σ . Comparison with previous results.

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

Keynumber: 1997KA47

Reference: J.Radioanal.Nucl.Chem. 215, 193 (1997)

Authors: S.I.Kafala, T.D.MacMahon, S.B.Borzakov

Title: Neutron Activation for Precise Nuclear Data

Keyword abstract: NUCLEAR REACTIONS ^{45}Sc , ^{50}Cr , ^{59}Co , ^{64}Zn , ^{75}As , ^{85}Rb , ^{113}In , 121 , ^{123}Sb , ^{130}Ba , ^{133}Cs , ^{139}La , 140 , ^{142}Ce , ^{146}Nd , 151 , ^{153}Eu , ^{152}Gd , ^{152}Sm , ^{159}Tb , ^{165}Ho , ^{174}Yb , ^{180}Hf , ^{181}Ta , ^{186}W , ^{232}Pa , $^{238}\text{Np}(n,\gamma)$, E =reactor; measured $E\gamma$, $I\gamma$; deduced capture σ , resonance integral, least-squares fit parameters. Multi-element standard.

Keynumber: [1995TO01](#)

Reference: Phys.Rev. C51, 1540 (1995)

Authors: K.A.Toukan, K.Debus, F.Kappeler, G.Reffo

Title: Stellar Neutron Capture Cross Sections of Nd,Pm, and Sm Isotopes

Keyword abstract: NUCLEAR REACTIONS 146 , 148 , $^{150}\text{Nd}(n,\gamma)$, $E=25,30$ keV; measured $E\gamma$, $I\gamma$; deduced stellar capture $\sigma(E)$, s-, r-, p-process abundances from ^{142}Nd - ^{150}Sm . ^{147}Nd , 147 , 148 , ^{149}Pm , 147 , 148 , 149 , 150 , $^{151}\text{Sm}(n,\gamma)$, $E=1-600$ keV; 146 , 147 , ^{148}Nd , 147 , 148 , ^{149}Pm , $^{151}\text{Sm}(n,\gamma)$, $E=12-52$ keV; calculated $\sigma(E)$. ^{148}Nd , 147 , 148 , 149 , ^{150}Pm , 147 , 148 , 149 , 150 , 151 , 152 , ^{153}Sm deduced level density parameters, $\Gamma\gamma$.

Keynumber: 1989LI28

Reference: J.Radioanal.Nucl.Chem. 133, 153 (1989)

Authors: X.Lin, D.Van Renterghem, F.De Corte, R.Cornelis

Title: Correction for Neutron Induced Reaction Interferences in the NAA k_0 -Standardization Method

Keyword abstract: NUCLEAR REACTIONS ^{94}Zr , ^{133}Cs , ^{139}La , 140 , ^{142}Ce , ^{146}Nd , ^{152}Sm (n,γ) , E =fast; $^{235}\text{U}(n,F)$, E not given; analyzed threshld reaction, fission data; deduced k_0 standardization corrections.

Keynumber: 1979NAZZ

Reference: NEANDC(J)-61/U, p.1 (1979)

Authors: Y.Nakajima, A.Asami, Y.Kawarasaki, Y.Furuta, T.Yamamoto, Y.Kanda

Title: Neutron Capture Cross Section Measurements of Nd-143, Nd-145, Nd-146 and Nd-148

Keyword abstract: NUCLEAR REACTIONS 143 , 145 , 146 , $^{148}\text{Nd}(n,\gamma)$, $E=5-400$ keV; measured σ . Liquid scintillation detector.

Keynumber: 1979BRZM

Reference: Bull.Am.Phys.Soc. 24, No.7, 871, CC10 (1979)

Authors: T.Bradley, M.L.Stelts, R.E.Chrien, Z.Parsa

Title: Stellar Nucleosynthesis and the 24-keV Neutron Capture Cross Sections of Some Heavy Nuclei

Keyword abstract: NUCLEAR REACTIONS ^{112}Sn , ^{130}Ba , ^{146}Nd , ^{186}W , 190 , $^{192}\text{Os}(n,\gamma)$, $E=24$ keV; measured σ .

Keynumber: 1978NAZU

Coden: REPT NEANDC(J)-56/U,P7,Nakajima

Keyword abstract: NUCLEAR REACTIONS 143 , 145 , 146 , $^{148}\text{Nd}(n,\gamma)$, $E<00$ keV; measured σ . Enriched target.

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, ¹⁵⁰Nd, ¹⁴⁴, ¹⁴⁸, ¹⁵⁰, ¹⁵², ¹⁵⁴Sm, ¹⁵⁶, ¹⁵⁸, ¹⁶⁰Gd, ¹⁶⁶, ¹⁶⁸, ¹⁷⁰Er(n,γ),E=5-350 keV; measured σ(E).

Keynumber: 1977PIZU

Coden: REPT KFA-IKP-10/77,P53,Pinston

Keyword abstract: RADIOACTIVITY ¹⁴⁷, ¹⁴⁹Pr; measured not given. ¹⁴⁷, ¹⁴⁹Nd deduced levels.

Keyword abstract: NUCLEAR REACTIONS ¹⁴⁶, ¹⁴⁸, ¹⁵⁰Nd(n,γ); measured γ,ce spectra. ¹⁴⁷, ¹⁴⁹, ¹⁵¹Nd deduced levels.

Keynumber: 1976RUZV

Coden: REPT KFA 1975 Ann,P95,Roussille

Keyword abstract: NUCLEAR REACTIONS ¹⁴⁶Nd(n,γ),E=th; measured Eγ,Iγ. ¹⁴⁷Nd deduced levels,J,π.

Keynumber: 1976ROYT

Reference: Thesis Univ.Grenoble (1976)

Authors: R.Roussille

Title: Etude des Niveaux Excites de Trois Isotopes de Neodyme de Masse Impaire ¹⁴⁷, ¹⁴⁹, ¹⁵¹Nd

Keyword abstract: NUCLEAR REACTIONS ¹⁴⁶, ¹⁴⁸, ¹⁵⁰Nd(n,γ); measured σ(E),Eγ,Iγ,I(ce); deduced Q. ¹⁴⁷, ¹⁴⁹, ¹⁵¹Nd deduced levels,J,π,λ,K. Systematics.

Keyword abstract: RADIOACTIVITY ¹⁴⁷, ¹⁴⁹Pr; measured Eγ,absolute Iγ; deduced log ft,β-branching. ¹⁴⁷, ¹⁴⁹Nd deduced levels.

Keynumber: 1976RO03

Reference: Nucl.Phys. A258, 257 (1976)

Authors: R.Roussille, J.A.Pinston, F.Braumandl, P.Jeuch, J.Larysz, W.Mampe, K.Schreckenbach

Title: Level Structure of ¹⁴⁷Nd (III). The ¹⁴⁶Nd(n,e⁻) Reaction

Keyword abstract: NUCLEAR REACTIONS ¹⁴⁶Nd(n,γ),E=th; measured Eγ,I(ce). ¹⁴⁷Nd deduced levels,J,π,γ-multipolarity. Enriched target,ce spectrometer.

Keynumber: 1976PIZK

Coden: CONF Dubna(Selected Topics in Nucl Structure)Voll,P61

Keyword abstract: NUCLEAR REACTIONS ¹⁴⁶, ¹⁴⁸, ¹⁵⁰Nd(n,γ),E=th; measured γ,ce spectra. ¹⁴⁷, ¹⁴⁹, ¹⁵¹Nd deduced levels,K.

Keynumber: 1976PIZI

Coden: CONF Lowell(Interactions of Neutrons),CONF-760715-P2,Vol2 P1300

Keyword abstract: NUCLEAR REACTIONS ¹⁴⁶, ¹⁴⁸, ¹⁵⁰Nd(n,γ),E=th; measured γ,ce spectra. ¹⁴⁷, ¹⁴⁹, ¹⁵¹Nd deduced levels.

Keynumber: 1975RO16

Reference: Nucl.Phys. A246, 380 (1975)

Authors: R.Roussille, J.A.Pinston, H.Borner, H.R.Koch, D.Heck

Title: Level Structure of ¹⁴⁷Nd (I). The ¹⁴⁶Nd(n,γ) Reaction

Keyword abstract: NUCLEAR REACTIONS ¹⁴⁶Nd(n,γ),E=thermal; measured Eγ,Iγ,γγ-coin. ¹⁴⁷Nd deduced levels,J,π,γ-multipolarities,neutron binding energy. Enriched target. Bent crystal, Ge(Li) spectrometers.

Keynumber: 1975BOZF

Reference: KFA/IKP-10/75, p.133 (1975)

Authors: H.Borner, W.F.Davidson, Do Huu Phuoc, P.Gottel, D.Heck, H.R.Koch, J.A.Pinston, R.Roussille, P.Van Assche

Title: Measurements with the Curved Crystal Spectrometers at the Grenoble High-Flux Reactor

Keyword abstract: NUCLEAR REACTIONS 146 , 148 Nd, 99 Tc, 238 U(n, γ),E=thermal; measured E γ ,I γ , $\gamma\gamma$ -coin. 147 , 149 Nd, 100 Tc, 239 U deduced levels.

Keynumber: 1975BOYU

Coden: CONF Petten(Neutron Capture γ -ray Spect),Proc P691

Keyword abstract: NUCLEAR REACTIONS 99 Tc, 183 W, 146 , 148 Nd(n, γ),E=thermal; measured σ (E γ). 100 Tc, 184 W, 147 , 149 Nd deduced transitions.

Keynumber: 1974SI11

Reference: Ann.Phys.(New York) 83, 355 (1974)

Authors: K.Siddappa, M.S.Murty, J.R.Rao

Title: Neutron Strength Functions of Nuclei in the Deformed Region

Keyword abstract: NUCLEAR REACTIONS 138 Ba, 140 , 142 Ce, 146 , 148 Nd, 152 , 154 Sm, 158 , 160 Gd, 159 Tb, 169 Tm, 170 Er, 174 , 176 Yb, 180 Hf, 181 Ta, 186 W, 190 , 192 Os, 197 Au, 202 Hg(n, γ),E=18-28 keV; measured σ ; deduced p-wave strength functions.

Reference: Can.J.Phys. 52, 1160 (1974)

Authors: B.Singh, M.W.Johns

Title: Spin Determinations in Low Lying States of 151 Sm

Keyword abstract: RADIOACTIVITY 151 Pm; measured $\gamma\gamma$ (θ),I γ . 151 Sm levels deduced J, π , γ -mixing, λ .

Keynumber: 1974HAXO

Coden: REPT USNDC-11 P11

Keyword abstract: NUCLEAR REACTIONS 108 , 110 Pd, 146 Nd, 50 Cr, 64 Ni(n, γ),E=not given; measured σ .

Keynumber: 1973SI45

Reference: Nuovo Cim. 18A, 48 (1973)

Authors: K.Siddappa, M.Sriramachandra Murty, J.Rama Rao

Title: Neutron Activation Cross-Sections in Rare Earths and Heavier Nuclei

Keyword abstract: NUCLEAR REACTIONS 138 Ba, 140 , 142 Ce, 146 , 148 Nd, 160 Gd, 165 Ho, 180 Hf, 181 Ta, 190 Os, 197 Au, 202 Hg(n, γ),E=23 keV; measured σ .

Keynumber: 1973RI08

Reference: Can.J.Phys. 51, 1454 (1973)

Authors: M.D.Ricabarra, R.Turjanski, G.H.Ricabarra

Title: Measurement and Evaluation of the Activation Resonance Integral of 146 Nd, 148 Nd, and 150 Nd

Keyword abstract: NUCLEAR REACTIONS 146 , 148 , 150 Nd(n, γ),E not given; measured σ . Deduced resonance integral.

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

Keynumber: 1972TH03

Reference: J.Phys.(London) A5, 468 (1972)

Authors: B.V.Thirumala Rao, J.Rama Rao, E.Kondaiah

Title: Neutron Capture Cross Sections at 25 keV

Keyword abstract: NUCLEAR REACTIONS ^{84}Kr , ^{110}Cd , ^{115}In , ^{130}Te , 146 , 148 , ^{150}Nd , ^{158}Gd , $^{160}\text{Gd}(n,\gamma)$, $E=25$ keV; measured σ .

Keynumber: 1972KI24

Reference: Radiochim.Acta 17, 191 (1972)

Authors: J.I.Kim, E.Gryntakis

Title: The Thermal Neutron Cross Section and the Resonance Integral of ^{146}Nd , ^{148}Nd , ^{150}Nd and ^{41}K

Keyword abstract: NUCLEAR REACTIONS 146 , 148 , ^{150}Nd , $^{41}\text{K}(n,\gamma)$; $E=\text{thermal}$; measured I_γ , deduced σ , resonance integral.

Keynumber: 1970RAZT

Coden: CONF Madurai(Nucl,Solid State Phys),Vol2,P25

Keyword abstract: NUCLEAR REACTIONS 146 , ^{148}Nd , ^{150}Nd , $^{158}\text{Gd}(n,\gamma)$, $E=25$ MeV; measured average σ . 147 , 149 , ^{151}Nd , ^{159}Gd resonances deduced p-wave strength functions.

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}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 , $^{146}\text{Nd}(n,\gamma)$, $E = \text{thermal}$; measured E_γ, I_γ . 143 , 144 , 145 , 146 , ^{147}Nd deduced levels, $L(n)$, J , π . ^{144}Nd transitions deduced γ -multipolarity.

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 , $^{146}\text{Nd}(n,\gamma)$, $E = \text{slow}$; measured E_γ, I_γ .

$^{143}, ^{144}, ^{145}, ^{146}, ^{147}\text{Nd}$ deduced levels. Ge(Li) detector.
