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80 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: 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 ${}^{95}\text{Mo}$, ${}^{99}\text{Tc}$, ${}^{101}\text{Ru}$, ${}^{103}\text{Rh}$, ${}^{105}\text{Pd}$, ${}^{109}\text{Ag}$, ${}^{131}\text{Xe}$, ${}^{133}\text{Cs}$, ${}^{141}\text{Pr}$, ${}^{143, 145}\text{Nd}$, ${}^{147, 149, 150, 151, 152}\text{Sm}$, ${}^{153}\text{Eu}$, ${}^{155, 157}\text{Gd}(n,\gamma)$, $E < 250$ keV; compiled, analyzed capture σ , resonance parameters, related features. Comparison with data, previous evaluations.

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_γ, I_γ , capture σ . Comparison with previous results.

Keynumber: 1999RO18

Reference: Phys.Lett. 465B, 61 (1999)

Authors: S.J.Robinson, M.M.Hindi, H.G.Borner, Y.D.Chan, D.E.DiGregorio, C.Doll, M.R.Dragowsky, M.K.Harder, M.C.P.Isaac, K.S.Krane, R.-M.Larimer, A.O.Macchiavelli, R.W.Macleod, P.Miocinovic, E.B.Norman, A.Shadkam, K.Zaerpoor

Title: Quadrupole-Octupole Coupled States in ${}^{144}\text{Nd}$

Keyword abstract: NUCLEAR REACTIONS ${}^{143}\text{Nd}(n,\gamma)$, $E=\text{reactor}$; measured Doppler-broadened E_γ, I_γ . ${}^{144}\text{Nd}$ deduced levels $T_{1/2}, B(\lambda)$, configurations, quadrupole-octupole coupling. Gamma-ray-induced Doppler-broadening technique.

Keyword abstract: RADIOACTIVITY ${}^{144}\text{Pm}(\text{EC})$; measured $E_\gamma, I_\gamma, \gamma\gamma$ -coin. ${}^{144}\text{Nd}$ deduced levels, $J, \pi, B(\lambda), \delta$, quadrupole-octupole coupling. Gammasphere array.

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.Sukhvoi, 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, ¹⁸⁰Hf, ¹⁸¹Ta, ¹⁸², ¹⁸⁶W, ¹⁸⁷, ¹⁸⁹Os, ¹⁹¹Ir, ¹⁹⁵Pt, ¹⁹⁷Au, ¹⁹⁹Hg(n,γ), E not given; analyzed two-photon γ cascade data; deduced structure effects.

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, ¹⁴⁶Nd(n,γ), E=3-225 keV; measured total, capture σ(En); 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, ¹⁴⁸Nd(n,γ), 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 ¹¹³Cd, ¹²⁷I, ¹²³Te, ¹³⁴, ¹³⁶, ¹³⁷, ¹³⁸Ba, ¹⁴², ¹⁴³, ¹⁴⁵Nd, ¹⁴⁹Sm, ¹⁵⁵, ¹⁵⁷Gd, ¹⁵⁹Tb, ¹⁶⁵Ho, ¹⁶², ¹⁶³, ¹⁶⁴Dy, ¹⁶⁷Er, ¹⁶⁹Tm, ¹⁷³, ¹⁷⁴, ¹⁷⁶Yb, ¹⁷⁵, ¹⁷⁶Lu, ¹⁷⁷, ¹⁷⁸, ¹⁷⁹, ¹⁸⁰Hf, ¹⁹⁵Pt, ¹⁹⁹Hg, ¹⁸¹Ta, ¹⁸², ¹⁸⁶W, ¹⁹¹Ir, ¹⁹⁷Au(n,γ), E=thermal; analyzed γ spectra, γγ-coin. ¹¹⁴Cd, ¹²⁴Te, ¹³⁷, ¹³⁸, ¹³⁹Ba, ¹⁴⁶Nd, ¹⁵⁰Sm, ¹⁵⁶, ¹⁵⁸Gd, ¹⁶⁰Tb, ¹⁶⁴Dy, ¹⁶⁸Er, ¹⁷⁰Tm, ¹⁷⁴Yb, ¹⁸¹Hf, ¹⁹⁶Pt, ²⁰⁰Hg, ¹⁸²Ta, ¹⁸³W, ¹⁹²Ir, ¹⁹⁸Au 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 ¹⁴¹Pr, ¹⁴², ¹⁴³, ¹⁴⁴, ¹⁴⁵, ¹⁴⁶, ¹⁴⁸Nd, ¹⁶⁰, ¹⁶¹, ¹⁶², ¹⁶³, ¹⁶⁴Dy, ¹⁶⁴, ¹⁷⁰Er(n,γ), E not given; measured Maxwellian averaged σ at kT=30 keV. Activation technique.

Keynumber: 1997IGZY

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.1304 (1997)

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

Title: Measurements of keV-Neutron Capture Gamma Rays of Fission Products

Keyword abstract: NUCLEAR REACTIONS ¹⁴³Nd, ¹⁴⁹Sm(n,γ), E=10-80,550 keV; measured σ. ¹⁵³Sm, ¹⁵³Eu(n,γ), E ≈ 30 keV; measured Eγ, Iγ.

Keynumber: 1995HO20

Reference: Phys.Scr. T56, 253 (1995)

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

Title: Two-Step Gamma Cascades following Thermal-Neutron Capture in $^{143}, ^{145}\text{Nd}$

Keyword abstract: NUCLEAR REACTIONS $^{143}, ^{145}\text{Nd}(n,\gamma), E=\text{thermal}$; measured two-step cascade $I\gamma$. $^{144}, ^{146}\text{Nd}$ deduced M1 transition strength model description features. Models comparison.

Keyword abstract: NUCLEAR STRUCTURE $^{144}, ^{146}\text{Nd}$; calculated resonances, Γ . Different models.

Keynumber: [1994RO13](#)

Reference: Phys.Rev.Lett. 73, 412 (1994)

Authors: S.J.Robinson, J.Jolie, H.G.Borner, P.Schillebeeckx, S.Ulbig, K.P.Lieb

Title: E2 and E3 Transitions from Quadrupole-Octupole Coupled States in ^{144}Nd

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma), E=\text{reactor}$; measured γ line profiles, thermal Doppler broadening. ^{144}Nd levels deduced $T_{1/2}, J, \pi, \text{configuration}$.

Keynumber: 1992BE54

Reference: At.Energ. 72, 95 (1992); Sov.At.Energy 72, 91 (1992)

Authors: S.M.Bednyakov, G.N.Manturov

Title: Refining Fission-Product Capture Cross Sections in Reactivity-Perturbation Experiments

Keyword abstract: NUCLEAR REACTIONS $^{95}, ^{97}, ^{98}, ^{100}\text{Mo}, ^{103}\text{Rh}, ^{109}\text{Ag}, ^{141}\text{Pr}, ^{143}, ^{145}\text{Nd}, ^{149}\text{Sm}, ^{153}\text{Eu}(n,\gamma), E=\text{reactor}$; analyzed fission product neutron capture σ data. Reactivity-perturbation experiments.

Keynumber: [1990KO09](#)

Reference: Phys.Rev. C41, 1941 (1990)

Authors: J.Kopecky, M.Uhl

Title: Test of Gamma-Ray Strength Functions in Nuclear Reaction Model Calculations

Keyword abstract: NUCLEAR REACTIONS $^{197}\text{Au}, ^{143}\text{Nd}, ^{105}\text{Pd}, ^{93}\text{Nb}(n,\gamma), E=\text{low}$; analyzed capture data. $^{94}\text{Nb}, ^{198}\text{Au}, ^{144}\text{Nd}, ^{106}\text{Pd}$ deduced total s-wave $\Gamma\gamma$.

Keynumber: 1988MU26

Reference: Izv.Akad.Nauk SSSR, Ser.Fiz. 52, 2216 (1988); Bull.Acad.Sci.USSR, Phys.Ser. 52, No.11, 135 (1988)

Authors: A.V.Murzin

Title: Gamma Spectroscopy Based on Filtered Neutron Beams of an Atomic Reactor

Keyword abstract: NUCLEAR REACTIONS $^{179}\text{Hf}, ^{191}\text{Ir}, ^{143}, ^{145}\text{Nd}, ^{50}\text{V}(n,\gamma), E=\text{reactor}$; measured γ -spectra, reduced intensities; deduced correlation coefficient.

Keynumber: 1987KN07

Reference: Izv.Akad.Nauk SSSR, Ser.Fiz. 51, 926 (1987); Bull.Acad.Sci.USSR, Phys.Ser. 51, No.5, 88 (1987)

Authors: V.A.Knatko, I.V.Kononenko, V.A.Libman, A.V.Murzin, E.A.Shimanovich

Title: Calculation of Probabilities for High Energy γ -Transitions in the 2 keV Neutron Capture Reaction on ^{143}Nd

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma), E=2 \text{ keV}$; calculated capture $I\gamma$, widths.

Keynumber: 1987BO53

Reference: Izv.Akad.Nauk SSSR, Ser.Fiz. 51, 1923 (1987); Bull.Acad.Sci.USSR, Phys.Ser. 51, No.11, 43 (1987)

Authors: S.T.Boneva, E.V.Vasileva, A.M.Sukhovoi

Title: Reliability of γ -Transition Scheme Determination in the Coincident Pulse Amplitude Summation Method

Keyword abstract: NUCLEAR REACTIONS ^{143}Nd , ^{163}Dy , 177 , $^{178}\text{Hf}(n,\gamma)$, E not given; measured γ sum spectra. 178 , ^{179}Hf deduced γ -transitions. Coincident pulse amplitude summation method.

Keynumber: 1986KO37

Reference: Izv.Akad.Nauk SSSR, Ser.Fiz. 50, 883 (1986); Bull.Acad.Sci.USSR, Phys.Ser. 50, No.5, 51 (1986)

Authors: I.V.Kononenko, V.A.Libman, A.V.Murzin, V.A.Knatko, E.A.Shimanovich

Title: The Spectrum of γ -Quanta with ^{143}Nb Nuclear Capture of Neutrons with an Energy of 2 keV

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$, E=2 keV; measured $E\gamma, I\gamma$. ^{144}Nd deduced levels, J, π . Enriched target, Ge(Li) detector.

Keynumber: 1985PO24

Reference: Izv.Akad.Nauk SSSR, Ser.Fiz. 49, 91 (1985); Bull.Acad.Sci.USSR, Phys.Ser. 49, No.1, 94 (1985)

Authors: Yu.P.Popov, A.M.Sukhovoi, V.A.Khitrov, Yu.S.Yazvitsky

Title: Singularities of γ -Cascades that De-Excite Compound-States in the Region of the 4s-Shell

Keyword abstract: NUCLEAR REACTIONS ^{164}Dy , ^{174}Yb , $^{143}\text{Nd}(n,\gamma)$, E=thermal; analyzed coincident pulse amplitude summing data. ^{165}Dy , ^{175}Yb , ^{144}Nd deduced two-quanta transition $I\gamma$.

Keynumber: 1985KOZI

Reference: Program and Theses, Proc.35th Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Leningrad, p.86 (1985)

Authors: I.V.Kononenko, V.A.Libman, A.V.Murzin, V.A.Knatko, E.A.Shimanovich

Title:

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$, E=2 keV; measured primary $E\gamma, I\gamma$. ^{144}Nd deduced levels. Pair spectrometer.

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 , ^{164}Dy , ^{165}Ho , ^{167}Er , ^{173}Yb , ^{179}Hf (n, γ), E=thermal; measured $E\gamma, I\gamma$. ^{144}Nd , 163 , ^{165}Dy , ^{166}Ho , ^{168}Er , ^{174}Yb , ^{180}Hf deduced E2 transition $\Gamma\gamma$ upper limits. Axel-Brink hypothesis based analysis.

Keynumber: 1984POZT

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

Authors: Yu.P.Popov, A.M.Sukhovoy, V.A.Khitrov, Yu.S.Yazvitsky

Title:

Keyword abstract: NUCLEAR REACTIONS ^{143}Nd , $^{164}\text{Dy}(n,\gamma)$, E not given; measured $\gamma\gamma$ -coin; deduced γ -spectra shape. ^{144}Nd , ^{165}Dy deduced transition characteristics. Ge(Li) detectors, amplitude summation method. Statistical theory.

Keynumber: 1984PO23

Reference: Izv.Akad.Nauk SSSR, Ser.Fiz. 48, 1830 (1984)

Authors: Yu.P.Popov, A.M.Sukhovi, V.A.Khitrov, Yu.S.Yazvitsky

Title: Level Scheme of ^{144}Nd from the Reaction $(n,2\gamma)$

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma), E=\text{thermal}$; measured $E\gamma, I\gamma, \text{summed energy spectra, two quanta emission. } ^{144}\text{Nd}$ deduced levels.

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

Keynumber: 1983SN04

Reference: J.Phys.(London) G9, 763 (1983)

Authors: D.M.Snelling, W.D.Hamilton

Title: Gamma-Gamma Directional Correlation Measurements in ^{144}Nd

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma), E=\text{thermal}$; measured $E\gamma, I\gamma, \gamma\gamma(\theta)$, oriented nuclei. ^{144}Nd deduced levels, J, π, δ .

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 $^{142}, ^{143}, ^{144}\text{Nd}(n,\gamma), E=5-200 \text{ keV}$; measured $\sigma(\text{capture})$; 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 $^{142}, ^{143}, ^{144}\text{Nd}(n,\gamma), E=6-250 \text{ keV}$; measured capture σ (E); deduced Maxwellian averaged σ at 30 keV.

Keynumber: 1983HA01

Reference: J.Phys.(London) G9, L13 (1983)

Authors: W.D.Hamilton, S.J.Robinson, D.M.Snelling

Title: Are Primary γ -Ray Intensities in ARC Measurements a Reliable Basis for Level Identification and Spin-Parity Assignment (Question)

Keyword abstract: NUCLEAR REACTIONS $^{143}, ^{145}\text{Nd}(n,\gamma), E=\text{thermal}$; analyzed $\gamma\gamma(\theta)$, oriented nuclei; deduced average resonance capture analysis inadequacy. $^{146}, ^{144}\text{Nd}$ deduced levels, J, π .

Keynumber: 1982RAZG

Reference: Proc.4th.Intern.Symp.on Neutron Capture Gamma-Ray Spectroscopy and Related Topics, Grenoble (1981), T.von Egidy, F.Gonnenwein, B.Maier, Eds., p.435 (1982)

Authors: S.Raman, O.Shahal, D.A.McClure, M.J.Kenny

Title: Anomalous Transitions in ^{144}Nd and ^{146}Nd in ' 2 keV ' (n,γ) Measurements

Keyword abstract: NUCLEAR REACTIONS $^{143}, ^{145}\text{Nd}(n,\gamma), E=\text{resonance}$; measured γ -spectra. 144 ,

¹⁴⁶Nd deduced levels, J, π , γ -multipolarity.

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, ¹⁴⁵Nd, ¹⁵⁵, ¹⁵⁷Gd, ¹⁶¹, ¹⁶², ¹⁶⁴Dy, ¹⁶⁵Ho, ¹⁷⁴, ¹⁷³Yb(n, γ), E=thermal; measured E γ . ¹⁴³, ¹⁴⁴, ¹⁴⁶Nd, ¹⁵⁶, ¹⁵⁸Gd, ¹⁶², ¹⁶³, ¹⁶⁴, ¹⁶⁵Dy, ¹⁶⁶Ho, ¹⁷⁵, ¹⁷⁴Yb deduced neutron separation energy.

Keynumber: 1982BO20

Reference: Yad.Fiz. 35, 675 (1982)

Authors: V.I.Bondarenko, M.G.Urin

Title: Average Total Radiative Widths of Neutron Resonances and the E1 Transitions between the Nuclear Compound States

Keyword abstract: NUCLEAR REACTIONS ⁹⁴Mo, ¹¹⁷Sn, ¹²³Sb, ¹²³Te, ¹⁴³Nd, ¹⁹⁸Hg, ²³⁰, ²³²Th, ²³¹, ²³³Pa, ²³⁴, ²³⁸U, ²³⁹, ²⁴²Pu, ²⁴¹Am, ²⁴⁴, ²⁴⁶Cm(n, γ), E not given; analyzed E1 photoabsorption data. ⁹⁵Mo, ¹¹⁸Sn, ¹²⁴Sb, ¹²⁴Te, ¹⁴⁴Nd, ¹⁹⁹Hg, ²³¹, ²³³Th, ²³², ²³⁴Pa, ²³⁵, ²³⁹U, ²⁴⁰, ²⁴³Pu, ²⁴²Am, ²⁴⁵, ²⁴⁷Cm resonances deduced total $\Gamma\gamma$. Semi-microscopic shell model.

Keynumber: 1981PO14

Reference: Phys.Rev. C24, 2322 (1981)

Authors: H.Postma

Title: Dipole Nature of Statistical Gamma Ray Spectra in (n, γ) Reactions

Keyword abstract: NUCLEAR REACTIONS ¹⁴³Nd, ¹⁴⁹Sm(n, γ), E=thermal; analyzed γ -spectra from oriented nuclei; deduced statistical γ -ray multipolarity.

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, ¹⁴⁸Nd(n, γ), E=5-400 keV; measured σ . Liquid scintillation detector.

Keynumber: 1979ANZJ

Reference: Bull.Am.Phys.Soc. 24, No.7, 879, ED4 (1979)

Authors: R.A.Anderl, Y.D.Harker, F.Schmittroth

Title: Neodymium, Samarium and Europium Capture Cross-Section Adjustments Based on EBR-II Integral Measurements

Keyword abstract: NUCLEAR REACTIONS ¹⁴³, ¹⁴⁵Nd, ¹⁴⁷, ¹⁴⁹Sm, Eu(n, γ), E=1-100 keV; measured integral σ .

Keynumber: 1978ZA10

Reference: Yad.Fiz. 27, 1534 (1978); Sov.J.Nucl.Phys. 27, 808 (1978)

Authors: D.F.Zaretskii, V.K.Sirotkin

Title: Total Radiative Widths of Neutron Resonances

Keyword abstract: NUCLEAR REACTIONS ³⁵Cl, ⁵⁵Mn, ⁶⁸Zn, ⁷⁸Se, ⁸⁸Sr, ⁹⁶Mo, ¹⁰⁷Ag, ¹¹⁶Sn, ¹²⁹I, ¹⁴³Nd, ¹⁴⁹Sm, ¹⁶¹Dy, ¹⁶⁹Tm, ¹⁷⁹Hf, ¹⁹¹Ir, ¹⁹⁹Hg, ²⁰³Tl, ²³⁵, ²³⁸U, ²⁴³Am(n, γ); calculated total $\Gamma\gamma$

assuming dipole transitions.

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: 1977II01

Reference: J.Nucl.Sci.Technol. 14, 161 (1977)

Authors: S.Iijima, T.Nakagawa, Y.Kikuchi, M.Kawai, H.Matsunobu, K.Maki, S.Igarasi

Title: Evaluation of Neutron Cross Section of 27 Fission Product Nuclides Important for Fast Reactor

Keyword abstract: NUCLEAR REACTIONS ^{93}Zr , 95 , ^{97}Mo , ^{99}Tc , 101 , 102 , 104 , ^{106}Ru , ^{103}Rh , 105 , ^{107}Pd , ^{109}Ag , ^{129}I , ^{131}Xe , 133 , 135 , ^{137}Cs , 143 , 144 , ^{145}Nd , ^{144}Ce , ^{147}Pm , 147 , 149 , ^{151}Sm , 153 , ^{155}Eu (n,n), (n, γ), (n,n'), (n,X), $E = \text{th} - 15$ MeV; calculated σ .

Keynumber: 1976WEZQ

Reference: Bull.Am.Phys.Soc. 21, No.4, 657, JF1 (1976)

Authors: J.C.Wells, Jr., S.Raman, G.G.Slaughter

Title: Energy Levels in ^{146}Nd from Resonance Neutron Capture γ -Ray Measurements

Keyword abstract: NUCLEAR REACTIONS 143 , $^{145}\text{Nd}(n,\gamma)$; measured $\sigma(E,E\gamma)$; deduced Q. ^{146}Nd deduced resonances, neutron separation energy.

Keynumber: 1976SMZN

Coden: REPT ANL-76-96,P129,Smither

Keyword abstract: NUCLEAR REACTIONS 143 , $^{145}\text{Nd}(n,\gamma)$, $E = \text{th}$; measured γ -spectra. 144 , ^{146}Nd deduced levels, J, π .

Keynumber: 1976RA21

Reference: Izv.Akad.Nauk SSSR, Ser.Fiz. 40, 68 (1976) Bull.Acad.Sci.USSR, Phys.Ser. 40, No.1, 55 (1976)

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

Title: Some States in ^{144}Nd

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$, $E = \text{thermal}$; measured $E\gamma, I\gamma, I(\text{ce}), \gamma\gamma$ -coin. ^{144}Nd deduced levels, J, π, γ -multipolarity, ICC.

Keynumber: 1975SMZN

Coden: REPT ANL-75-75,P146

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

Keynumber: 1975SLZW

Coden: REPT ORNL-5025 P127

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$, $E = \text{thermal}$, resonance; measured $E\gamma, I\gamma$. ^{144}Nd deduced levels, J . 118 , 120 , $^{122}\text{Sn}(n,\gamma)$; measured $E\gamma, I\gamma$.

Keynumber: 1975ROYZ

Coden: CONF Petten(Neutron Capture γ -ray Spect), Proc P306

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$; measured $\sigma(E,E\gamma)$. ^{144}Nd deduced

resonances,J, π .

Keynumber: 1975RAYZ

Coden: CONF Petten(Neutron Capture γ -ray Spect),Proc P562

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$,E=thermal; measured $E\gamma$,I γ , $\gamma\gamma$ -coin. ^{144}Nd deduced levels.

Keynumber: 1975RAYY

Coden: CONF Petten(Neutron Capture γ -ray Spect),Proc P565

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$,E=thermal; measured $E\gamma$,I γ , $\gamma\gamma$ -coin,I(ce). ^{144}Nd deduced levels, λ ,J, π .

Keynumber: 1975BEXV

Coden: CONF Leningrad p102

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$,E not given; measured γ -spectra, $\gamma\gamma$ -coin,ce-spectra. ^{144}Nd deduced levels,J, π .

Keynumber: 1974ROYR

Reference: Contrib.Int.Symp.Neutron Capture Gamma Ray Spectroscopy and Related Topics, 2nd, Petten, p.71 (1974)

Authors: G.Rohr, T.van der Veen, H.Weigmann, J.Winter

Title: Low and High Energy Gamma Rays from Resonance Neutron Capture in ^{143}Nd

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$,E <1.22 keV; $\sigma(E,E\gamma)$. ^{144}Nd deduced resonances,J, π .

Keynumber: 1974RAZJ

Reference: Contrib.Int.Symp.Neutron Capture Gamma Ray Spectroscopy and Related Topics, 2nd, Petten, The Netherlands, Reactor Centrum Netherland, p.77 (1974)

Authors: S.Raman, G.G.Slaughter, J.A.Harvey, E.T.Jurney, D.A.McClure, J.C.Wells, Jr., J.Lin

Title: Energy Levels in ^{144}Nd

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$,E=thermal,resonance; measured $\sigma(E,E\gamma)$, $\gamma\gamma$ -coin. ^{144}Nd deduced resonances,J.

Keynumber: 1974RAZG

Reference: Contrib.Int.Symp.Neutron Capture Gamma Ray Spectroscopy and Related Topics, 2nd, Petten, p.363 (1974)

Authors: D.Rabenstein, Y.Y.Berzin, A.J.Krumina, L.A.Neiburg, P.T.Prokofjev

Title: Spins and Parities for Some ^{144}Nd Levels

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$; measured $E\gamma$,I γ , $\gamma\gamma$ -coin,E(ce),I(ce). ^{144}Nd deduced levels,J, π .

Keynumber: 1974MCZY

Coden: JOUR BAPSA 19 500 EH4

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$; measured $\gamma\gamma$ -coin. ^{144}Nd deduced levels.

Keynumber: 1974MCZL

Coden: REPT USNDC-11 P198

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$; measured $E\gamma, I\gamma, \gamma\gamma$ -coin. ^{144}Nd deduced levels.

Keynumber: 1973SMYW

Coden: REPT EANDC(US)-186'U' P25

Keyword abstract: NUCLEAR REACTIONS $^{143}, ^{145}\text{Nd}(n,\gamma)$; measured $E\gamma, I\gamma$. $^{144}, ^{146}\text{Nd}$ deduced transitions.

Keynumber: 1973PRZI

Reference: Spectra of Electromagnetic Transitions and Level Schemes Following Thermal Neutron Capture by Nuclides with A 143-193, P.Prokofev, J.Berzins, G.Rezvaya, Eds., Publishing House 'Zinatne', Riga (1973)

Authors: P.Prokofev, M.Balodis, M.Beitins, Y.Berzin, V.Bondarenko, N.Kramer, A.Krumina, G.Rezvaya, L.Simonova

Title:

Keyword abstract: NUCLEAR REACTIONS $^{143}, ^{145}\text{Nd}, ^{149}\text{Sm}, ^{167}\text{Er}, ^{174}\text{Yb}, ^{175}, ^{176}\text{Lu}, ^{177}, ^{178}\text{Hf}, ^{181}\text{Ta}, ^{186}\text{W}(n,\gamma)$, E=thermal; measured $E\gamma, I\gamma, I(\text{ce})$. Deduced ICC. $^{151}\text{Eu}, ^{155}\text{Gd}(n,\gamma)$, E=thermal; measured $E\gamma, I(\text{ce})$. Deduced ICC. $^{157}\text{Gd}, ^{162}, ^{164}\text{Dy}, ^{165}\text{Ho}, ^{168}\text{Yb}, ^{169}\text{Tm}(n,\gamma)$, E=thermal; measured $I(\text{ce})$. Deduced ICC. $^{191}, ^{193}\text{Ir}(n,\gamma)$, E=thermal; measured $E\gamma, I\gamma$. $^{144}\text{Nd}, ^{150}\text{Sm}, ^{156}, ^{158}\text{Gd}, ^{163}, ^{165}\text{Dy}, ^{166}\text{Ho}, ^{168}\text{Er}, ^{169}, ^{175}, ^{177}\text{Yb}, ^{170}\text{Tm}, ^{176}\text{Lu}, ^{178}\text{Hf}, ^{182}\text{Ta}$ deduced levels, J, π, γ -multipolarities. $^{146}\text{Nd}, ^{185}\text{W}, ^{194}\text{Ir}$ deduced levels, J, π . ^{152}Eu deduced transitions, γ -multipolarities. $^{187}\text{W}, ^{192}\text{Ir}$ deduced transitions.

Keynumber: 1973NA11

Reference: Nucl.Phys. A209, 252 (1973)

Authors: A.I.Namenson

Title: Monte Carlo Simulation of the Decay of Neutron Resonances to Determine Resonance Spins

Keyword abstract: NUCLEAR REACTIONS $^{143}, ^{145}\text{Nd}, ^{187}, ^{189}\text{Os}(n,\gamma)$; calculated $I\gamma, \gamma\gamma$ -coin. $^{185}, ^{187}\text{Re}, ^{177}\text{Hf}(n,\gamma)$; calculated $\gamma\gamma$ -coin. Deduced resonances, J .

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: 1973FU06

Reference: Phys.Lett. 44B, 465 (1973)

Authors: W.I.Furman, K.Niedzwiedziuk, Y.P.Popov, R.F.Rumi, V.I.Salatsky, V.G.Tishin, P.Winiwarter

Title: An Estimate of the Hindrance Factors for γ -Ray Transitions Near the Neutron Binding Energy from the Reaction $^{143}\text{Nd}(n,\gamma\alpha)^{140}\text{Ce}$

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$, E=55.3 eV; measured $\sigma(E\alpha)$. ^{144}Nd

resonance deduced α -width, γ -width, γ -hindrance. ^{144}Nd level deduced γ -width.

Keynumber: 1973CEZN

Coden: REPT EANDC(E)-157/U Vol2 P86

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$; measured σ . ^{144}Nd deduced resonances,level-width.

Keynumber: 1973BEXS

Coden: CONF Tbilisi,p76

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$,E=thermal; measured $E\gamma$, $I\gamma$. ^{144}Nd deduced transitions. Ge(Li) detector.

Keynumber: 1972WEZS

Coden: CONF Budapest,Contributions,P54,H Weigrann,10/11/72

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$,E=resonance; measured $I\gamma$. ^{144}Nd deduced resonances,J, π .

Keynumber: 1972WE06

Reference: Nucl.Phys. A185, 229 (1972)

Authors: H.Weigmann, G.Rohr, M.Heske

Title: Gamma Rays from Resonance Neutron Capture in ^{143}Nd

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$,E=55-446 eV; measured $E\gamma$, $I\gamma$. ^{144}Nd deduced levels,resonance J, π . Correlation analysis of partial radiative widths.

Keynumber: 1972ST14

Reference: Phys.Rev. C5, 2030 (1972)

Authors: A.Stolovy, A.I.Namenson, J.C.Ritter, T.F.Godlove, G.L.Smith

Title: Neutron-Resonance Spin Determinations in Nd^{143} and Nd^{145} from Capture Gamma-Ray Measurements

Keyword abstract: NUCLEAR REACTIONS 143 , $^{145}\text{Nd}(n,\gamma)$,E <900 eV; measured $\gamma\gamma$ -coin, $I\gamma$. 143 , ^{145}Nd resonances deduced J.

Keynumber: 1972JUZY

Coden: JOUR BAPSA 17 898,E Journey,10/26/72

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$,E=thermal,resonance; measured $E\gamma$, $I\gamma$. ^{144}Nd deduced 7120-keV $3^-,2_1^+$ transition,levels.

Keynumber: 1972JUZX

Coden: REPT LA-DC-72-1243 P8

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$; measured $E\gamma$. ^{144}Nd deduced resonances.

Keynumber: 1972CAZK

Coden: REPT CEA-N-1522,P295

Keyword abstract: NUCLEAR REACTIONS 143 , ^{145}Nd , ^{147}Sm , ^{165}Ho , $^{121}\text{Sb}(n,\gamma)$, measured γ -multiplicity, $I\gamma$. 144 , ^{146}Nd , ^{148}Sm , ^{166}Ho , ^{122}Sb deduced resonances,J.

Keynumber: 1971STZP

Coden: REPT BNL-50298,P132,10/21/71

Keyword abstract: NUCLEAR REACTIONS $^{143}, ^{145}\text{Nd}(n,\gamma), E=\text{resonance}$; measured $E\gamma, I\gamma, \gamma\gamma$ -coin. $^{144}, ^{146}\text{Nd}$ deduced resonances, J.

Keynumber: 1971ROZJ

Coden: CONF CONF-710301(Knoxville), Vol2,P743,11/2/71

Keyword abstract: NUCLEAR REACTIONS $^{143}, ^{145}\text{Nd}(n,\gamma), E < 2 \text{ keV}$; measured $\sigma(E)$. $^{144}, ^{146}\text{Nd}$ deduced resonance parameters.

Keynumber: 1971PAZO

Coden: REPT EANDC(E) 140 U,P91,12/30/71

Keyword abstract: NUCLEAR REACTIONS $^{121}, ^{123}\text{Sb}, ^{143}, ^{145}\text{Nd}(n,\gamma), E=\text{intermediate}$; measured $E\gamma, I\gamma$. $^{122}, ^{124}\text{Sb}, ^{144}, ^{146}\text{Nd}$ deduced resonances, levels, J, transitions.

Keynumber: 1971GRZG

Coden: CONF Moscow(NuclSpectros,Structure) Abstr P88

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma), E=\text{th}$; measured $E\gamma, I(\text{ce})$. ^{144}Nd transitions deduced ICC, multipolarity.

Keynumber: 1971GR55

Reference: Izv.Akad.Nauk SSSR, Ser.Fiz. 35, 786 (1971); Bull.Acad.Sci.USSR, Phys.Ser. 35, 723 (1972)

Authors: L.V.Groshev, V.I.Pelekhov

Title: Internal Conversion of Some Lower Radiative Transitions in ^{144}Nd

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

Keynumber: 1971DJ03

Reference: Nucl.Phys. A165, 560 (1971)

Authors: F.Djadali, J.Eichler

Title: Measurement of the Circular γ -Polarization after n-Capture in $^{141}\text{Ce}, ^{144}\text{Nd}$ and ^{140}La Using Ge (Li) Detectors

Keyword abstract: NUCLEAR REACTIONS $^{140}\text{Ce}, ^{143}\text{Nd}, ^{139}\text{La}(n,\gamma), E=\text{thermal}$; measured γ -circular polarization, $E\gamma$. $^{141}\text{Ce}, ^{144}\text{Nd}, ^{140}\text{La}$, deduced levels, J, π . Natural targets, Ge(Li) detector.

Keynumber: 1971CAYZ

Coden: CONF CONF-710301(Knoxville), Vol2,P785,11/2/71

Keyword abstract: NUCLEAR REACTIONS $^{127}\text{I}, ^{143}, ^{145}\text{Nd}, ^{147}, ^{149}\text{Sm}, ^{121}, ^{123}\text{Sb}(n,\gamma), ^{123}, ^{125}\text{Te}(n,n)$, measured σ . $^{128}\text{I}, ^{144}, ^{146}\text{Nd}, ^{148}, ^{150}\text{Sm}, ^{122}, ^{124}\text{Sb}, ^{124}, ^{126}\text{Te}$ resonances deduced J.

Keynumber: 1971CAYD

Reference: Proc.Conf.Neutron Cross Sections and Technol., 3rd, Knoxville, Tenn., R.L.Macklin, Ed., CONF-710301, Vol.2, p.785 (1971)

Authors: B.Cauvin, A.Lottin, A.Michaudon, C.M.Newstead, D.Paya, J.Trochon

Title: Spin Assignments from Capture Gamma-Rays and Scattering Measurements

Keyword abstract: NUCLEAR REACTIONS $^{127}\text{I}, ^{143}, ^{145}\text{Nd}, ^{147}, ^{149}\text{Sm}, ^{121}, ^{123}\text{Sb}(n,\gamma), E=\text{resonance}$; measured $\sigma(E\gamma), I\gamma$ ratios. $^{123}, ^{125}\text{Te}(n,n), E=\text{resonance}$; measured $\sigma(E)$. $^{128}\text{I}, ^{144}, ^{146}\text{Nd}, ^{148}, ^{150}\text{Sm}, ^{122}, ^{124}\text{Sb}, ^{124}, ^{126}\text{Te}$ resonances deduced J.

Keynumber: 1970KV01

Reference: Nucl.Phys. A154, 177 (1970)

Authors: J.Kvitek, Y.P.Popov

Title: Investigation of the (n, α) Reaction on Sm and Nd Isotopes in the Neutron Energy Region below 1 keV

Keyword abstract: NUCLEAR REACTIONS ^{149}Sm , ^{143}Nd , $^{145}\text{Nd}(n,\alpha)$, (n, γ), E=0.04-900 eV; measured $\sigma(E)$, α -width γ -width. 144 , ^{146}Nd , 148 , ^{150}Sm deduced resonances, J, π , α -width. Enriched targets.

Keynumber: 1970BE09

Reference: Izv.Akad.Nauk SSSR, Ser.Fiz. 34, 449 (1970); Bull.Acad.Sci.USSR, Phys.Ser. 34, 389 (1971)

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

Title: Levels of ^{144}Nd Excited in Thermal-Neutron Capture

Keyword abstract: NUCLEAR REACTIONS $^{143}\text{Nd}(n,\gamma)$, E=thermal; measured $E\gamma$, I(ce). ^{144}Nd deduced levels, J, π , γ -multipolarity, ICC. Enriched target.

Keynumber: 1969REZZ

Reference: Thesis, Univ.Leiden (1969)

Authors: E.R.Reddingius

Title: A Study of Neutron-Capture Gamma-Ray Spectra from Aligned Neodymium and Samarium Nuclei

Keyword abstract: NUCLEAR REACTIONS 143 , ^{145}Nd , 147 , 149 , $^{152}\text{Sm}(n,\gamma)$, E=0.047 eV; measured $E\gamma$, I γ , γ -anisotropy, linear polarization; deduced Q. 144 , ^{146}Nd , 148 , 150 , ^{153}Sm deduced levels, J, π , ICC, γ -mixing. Ge(Li) detector, aligned nuclei.

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 = thermal; measured $E\gamma$, I γ . 143 , 144 , 145 , 146 , ^{147}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: 1967PO06

Reference: Physica 34, 541 (1967)

Authors: H.Postma, E.R.Reddingius

Title: Directional Distribution of Neutron-Capture Gamma-Rays from Aligned ^{143}Nd - and ^{145}Nd -Nuclei

Keyword abstract: NUCLEAR REACTIONS $^{143}, ^{145}\text{Nd}(n,\gamma), E=0.048\text{ eV}$; measured $\sigma(E\gamma, \theta(\gamma))$. $^{143}, ^{145}\text{Nd}$ deduced levels, J, π . Aligned $^{143}, ^{145}\text{Nd}$ targets.

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