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**56 reference(s) found :**

**Keynumber:** 2001ZH11

**Reference:** Nucl.Sci.Eng. 137, 107 (2001)

**Authors:** G.Zhang, Z.Shi, G.Tang, J.Chen, G.Liu, H.Lu

**Title:** Interference of the Low-Energy Neutrons on Activation Cross-Section Measurement of the  $^{186}\text{W}(n,\gamma)^{187}\text{W}$  Reaction

**Keyword abstract:** NUCLEAR REACTIONS  $^{186}\text{W}(n,\gamma)$ , E=0.5-1.5 MeV; measured  $\sigma$ . Activation technique, effects of interference from low-energy neutrons discussed. Comparisons with previous results, evaluated data.

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**Keynumber:** 2000ZHZW

**Reference:** INDC(CPR)-050/L, p.8 (2000)

**Authors:** G.Zhang, Z.Shi, G.Liu, G.Tang, J.Chen, H.Lu

**Title:** Measurement of  $^{186}\text{W}(n,\gamma)^{187}\text{W}$  Cross Sections in the Energy Region from 0.50 to 1.50 MeV

**Keyword abstract:** NUCLEAR REACTIONS  $^{186}\text{W}(n,\gamma)$ , E=0.5-1.5 MeV; measured production  $\sigma$ . Activation technique, comparison with previous data.

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**Keynumber:** 2000GR12

**Reference:** Yad.Fiz. 63, No 3, 484 (2000); Phys.Atomic Nuclei 63, 414 (2000)

**Authors:** O.T.Grudzevich

**Title:** Temperature Dependence of Radiative Strength Functions and Isomeric Cross Sections

**Keyword abstract:** NUCLEAR REACTIONS  $^{182}, ^{183}, ^{184}, ^{186}\text{W}(n,\gamma)$ , E=0.5 MeV; calculated  $\gamma$  spectra.  $^{74}, ^{82}\text{Se}$ ,  $^{87}\text{Rb}$ ,  $^{92}\text{Mo}$ ,  $^{115}\text{In}(n,2n)$ , E=12-18 MeV;  $^{151}, ^{153}\text{Eu}(\gamma,n)$ , E=12-24 MeV;  $^{90}\text{Zr}(\gamma,n)$ ,  $(n,2n)$ , E=12-25 MeV;  $^{179}\text{Hf}$ ,  $^{181}\text{Ta}(\gamma,p)$ , E=17-24 MeV; calculated isomer production ratios.  $^{180}\text{Hf}$ ,  $^{190}\text{Os}$ ,  $^{191}\text{Ir}$ ,  $^{197}\text{Au}(\gamma,\gamma)$ , E=1-13 MeV; calculated isomer production  $\sigma$ . Comparisons with data. Other reactions discussed.

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**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:**  $(n,\gamma)$  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  $\gamma$  cascade data; deduced structure effects.

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**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  $^{113}\text{Cd}$ ,  $^{127}\text{I}$ ,  $^{123}\text{Te}$ ,  $^{134}, ^{136}, ^{137}, ^{138}\text{Ba}$ ,  $^{142}, ^{143}, ^{145}\text{Nd}$ ,  $^{149}\text{Sm}$ ,  $^{155}, ^{157}\text{Gd}$ ,  $^{159}\text{Tb}$ ,  $^{165}\text{Ho}$ ,  $^{162}, ^{163}, ^{164}\text{Dy}$ ,  $^{167}\text{Er}$ ,  $^{169}\text{Tm}$ ,  $^{173}, ^{174}, ^{176}\text{Yb}$ ,  $^{175}, ^{176}\text{Lu}$ ,  $^{177}, ^{178}, ^{179}, ^{180}\text{Hf}$ ,  $^{195}\text{Pt}$ ,  $^{199}\text{Hg}$ ,  $^{181}\text{Ta}$ ,  $^{182}, ^{186}\text{W}$ ,  $^{191}\text{Ir}$ ,  $^{197}\text{Au}(n,\gamma)$ , E=thermal; analyzed  $\gamma$  spectra,  $\gamma\gamma$ -coin.

$^{114}\text{Cd}$ ,  $^{124}\text{Te}$ ,  $^{137}$ ,  $^{138}$ ,  $^{139}\text{Ba}$ ,  $^{146}\text{Nd}$ ,  $^{150}\text{Sm}$ ,  $^{156}$ ,  $^{158}\text{Gd}$ ,  $^{160}\text{Tb}$ ,  $^{164}\text{Dy}$ ,  $^{168}\text{Er}$ ,  $^{170}\text{Tm}$ ,  $^{174}\text{Yb}$ ,  $^{181}\text{Hf}$ ,  $^{196}\text{Pt}$ ,  $^{200}\text{Hg}$ ,  $^{182}\text{Ta}$ ,  $^{183}\text{W}$ ,  $^{192}\text{Ir}$ ,  $^{198}\text{Au}$  deduced two-quantum cascade intensities vs excitation energy, level density parameters, pairing features.

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

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**Keynumber:** 1994PRZZ

**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.438 (1994)

**Authors:** P.Prokofjevs, L.Simonova, J.Berzins, V.Bondarenko, M.Balodis

**Title:** Levels of the  $^{187}\text{W}$  Nucleus

**Keyword abstract:** NUCLEAR REACTIONS  $^{186}\text{W}(n,\gamma)$ , E=thermal; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin.  $^{187}\text{W}$  deduced levels,  $J, \pi$ .

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**Keynumber:** 1992BE17

**Reference:** Z.Phys. A341, 155 (1992)

**Authors:** M.R.Beitins, S.T.Boneva, V.A.Khitrov, L.A.Malov, Yu.P.Popov, P.T.Prokofjev, G.L.Rezvaya, L.I.Simonova, A.M.Sukhovej, E.V.Vasilieva

**Title:** Study of the  $^{187}\text{W}$  States Excited in the  $(n,\gamma)$  Reaction

**Keyword abstract:** NUCLEAR REACTIONS  $^{186}\text{W}(n,\gamma)$ , E=thermal; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -sum coincidence spectra.  $^{187}\text{W}$  deduced levels,  $J, \pi$ , neutron binding energy.

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**Keynumber:** 1992AFZX

**Reference:** Program and Thesis, Proc.42nd Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Alma-Ata, p.104 (1992)

**Authors:** A.V.Afanasev, Ya.Ya.Berzin, V.A.Bondarenko, I.L.Kuvaga, P.T.Prokofev, L.I.Simonova, G.L.Rezvaya

**Title:** Spectra of  $\gamma\gamma$ -Coincidences in  $^{187}\text{W}$  from  $(n,\gamma)$  Reaction

**Keyword abstract:** NUCLEAR REACTIONS  $^{186}\text{W}(n,\gamma)$ , E=thermal; measured  $\gamma\gamma$ -coin.  $^{187}\text{W}$  deduced levels.

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**Keynumber:** 1991BO51

**Reference:** Izv.Akad.Nauk SSSR, Ser.Fiz. 55, 841 (1991); Bull.Acad.Sci.USSR, Phys.Ser. 55, No.5, 8 (1991)

**Authors:** S.T.Boneva, E.V.Vasileva, V.D.Kulik, H.K.Le, Yu.P.Popov, A.M.Sukhovi, D.K.Pharm, V.A.Khitrov, Y.V.Kholnov

**Title:** Construction of Complex  $\gamma$ -Decay Schemes of Compound Nuclear States on the Basis of Spectroscopic Data from the Reactions  $(n,2\gamma)$  and  $(n\gamma)$

**Keyword abstract:** NUCLEAR REACTIONS  $^{186}\text{W}$ ,  $^{178}\text{Hf}(n,\gamma)$ , E=thermal; measured  $\gamma\gamma$ -coin, summing amplitude.  $^{179}\text{Hf}$ ,  $^{187}\text{W}$  deduced  $\gamma$ -decay scheme, multiplets.

**Keynumber:** 1989BOZM

**Reference:** Program and Thesis, Proc.39th Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Tashkent, p.120 (1989)

**Authors:** S.T.Boneva, Yu.P.Popov, P.T.Prokofev, G.L.Rezvaya, A.M.Sukhovej, V.A.Khitrov

**Title:** Investigation of  $^{187}\text{W}$  Levels Excited in Reactions Induced by Neutrons

**Keyword abstract:** NUCLEAR REACTIONS  $^{186}\text{W}(n,\gamma)$ ,E=thermal; measured  $E\gamma, I\gamma, \gamma\gamma$ -coin.  $^{187}\text{W}$  deduced levels.

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**Keynumber:** 1989BOYT

**Reference:** JINR-P6-89-10 (1989)

**Authors:** V.A.Bondarenko, S.T.Boneva, E.V.Vasileva, I.L.Kuvaga, Yu.P.Popov, P.T.Prokofev, G.L.Rezvaya, A.M.Sukhovei, V.A.Khitrov

**Title:** Investigation of the  $^{187}\text{W}$  Level Excited by Means of the Reaction  $(n,2\gamma)$

**Keyword abstract:** NUCLEAR REACTIONS  $^{186}\text{W}(n,\gamma)$ ,E=reactor; measured  $E\gamma, I\gamma, \gamma\gamma$ -coin.  $^{187}\text{W}$  deduced levels. Amplitude summation method.

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**Keynumber:** 1989BEYS

**Reference:** Program and Thesis, Proc.39th Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Tashkent, p.119 (1989)

**Authors:** M.R.Beitins, P.T.Prokofev, G.L.Rezvaya, L.I.Simonova

**Title:**  $^{187}\text{W}$  Levels Excited in  $(n,\gamma)$  Reaction using Thermal Neutrons

**Keyword abstract:** NUCLEAR REACTIONS  $^{186}\text{W}(n,\gamma)$ ,E=thermal; measured  $E\gamma, I\gamma$ .  $^{187}\text{W}$  deduced levels,neutron separation energy.

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**Keynumber:** 1987KO37

**Reference:** Yad.Fiz. 46, 51 (1987)

**Authors:** V.N.Kononov, E.D.Poletaev, V.M.Timokhov, G.N.Manturov, M.V.Bokhovko, A.A.Voevodsky

**Title:** Fast Neutron Capture Cross Sections and Transmissions for Tungsten Isotopes

**Keyword abstract:** NUCLEAR REACTIONS  $^{180, 182, 183, 184, 186}\text{W}(n,\gamma)$ ,E=5-400 keV;  $^{180, 182, 183, 184, 186}\text{W}(n,X)$ ,E=5-1000 keV; measured  $\sigma(E)$ ,transmission.  $^{181, 183, 185, 187}\text{W}$  deduced p-,d-wave neutron strength functions. Tof. Statistical theory analyses.

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**Keynumber:** 1987KN08

**Reference:** Z.Naturforsch. 42a, 909 (1987)

**Authors:** K.Knopf, W.Waschkowski

**Title:** Wechselwirkung von Neutronen mit Wolfram und seinen Isotopen

**Keyword abstract:** NUCLEAR REACTIONS  $^{182, 183, 184, 186}\text{W}(n,n)$ ,  $(n,\gamma)$ ,E=thermal; measured coherent neutron scattering lengths,total  $\sigma$ .

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**Keynumber:** 1987BR05

**Reference:** Nucl.Phys. A465, 221 (1987)

**Authors:** A.M.Bruce, D.Hicks, D.D.Warner

**Title:** Average Resonance Capture Studies of  $^{185, 187}\text{W}$ : The Nilsson model and the SU(3) Bose-Fermi symmetry scheme

**Keyword abstract:** NUCLEAR REACTIONS  $^{184, 186}\text{W}(n,\gamma)$  E=2,24 keV; measured  $I(\gamma), E(\gamma)$ .  $^{185, 187}\text{W}$  deduced levels,J, $\pi$ . Enriched target,average resonance capture spectroscopy.

**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,  $^{89}\text{Y}$ ,  $^{93}\text{Zr}$ ,  $^{93}\text{Nb}$ ,  $^{139}\text{La}$ ,  $^{147}\text{Gd}$ ,  $^{159}\text{Tb}$ ,  $^{181}\text{Ta}$ ,  $^{187}\text{Re}$ ,  $^{195}\text{Pt}$ ,  $^{203}\text{Tl}$ ,  $^{209}\text{Bi}$ ,  $^{63}\text{Cu}$ ,  $^{65}\text{Cu}$ ,  $^{155}\text{Gd}$ ,  $^{156}\text{Gd}$ ,  $^{157}\text{Gd}$ ,  $^{158}\text{Gd}$ ,  $^{160}\text{Gd}$ ,  $^{182}\text{W}$ ,  $^{183}\text{W}$ ,  $^{184}\text{W}$ ,  $^{186}\text{W}$ ,  $^{203}\text{Tl}$ ,  $^{205}\text{Tl}(n,\gamma)$ ,  $E=0.5-3$  MeV; measured absolute  $\sigma(E)$ ; deduced capture  $\gamma$ -multiplicity.

**Keynumber:** 1984BRZY

**Reference:** Bull.Am.Phys.Soc. 29, No.4, 719, GH9 (1984)

**Authors:** A.M.Bruce, W.Gelletly, D.Hicks, D.D.Warner, R.F.Casten

**Title:**  $^{185,187}\text{W}$  and U(6/12) Boson-Fermion Symmetry

**Keyword abstract:** NUCLEAR REACTIONS  $^{184}\text{W}$ ,  $^{186}\text{W}(n,\gamma)$ ,  $E=2,24$  keV; measured not given.  $^{185}\text{W}$ ,  $^{187}\text{W}$  deduced levels,  $J,\pi$ . Average resonance capture technique, boson-fermion symmetry applicability.

**Keynumber:** 1983MA20

**Reference:** Nucl.Sci.Eng. 84, 98 (1983)

**Authors:** R.L.Macklin, D.M.Drake, E.D.Arthur

**Title:** Neutron Capture Cross Sections of  $^{182}\text{W}$ ,  $^{183}\text{W}$ ,  $^{184}\text{W}$ , and  $^{186}\text{W}$  from 2.6 to 2000 keV

**Keyword abstract:** NUCLEAR REACTIONS  $^{182}\text{W}$ ,  $^{183}\text{W}$ ,  $^{184}\text{W}$ ,  $^{186}\text{W}(n,\gamma)$ ,  $E=2.6-2000$  keV; measured  $\sigma$  (capture) vs  $E$ .  $^{184}\text{W}$  deduced resonances,  $J,\pi$ ,  $(g\Gamma\gamma\Gamma_n/\Gamma)$ .  $^{183}\text{W}$ ,  $^{185}\text{W}$ ,  $^{187}\text{W}$  deduced resonances,  $J,\pi$ ,  $(g\Gamma\gamma\Gamma_n/\Gamma)$ ,  $\langle\Gamma\gamma\rangle$ ,  $s$ -,  $p$ -,  $d$ -wave strength functions, average level spacing.

**Keynumber:** 1982MAZS

**Reference:** LA-9200-MS (1982)

**Authors:** R.L.Macklin, D.M.Drake, E.D.Arthur

**Title:** Neutron-Capture Cross Sections of the Tungsten Isotopes  $^{182}\text{W}$ ,  $^{183}\text{W}$ ,  $^{184}\text{W}$ , and  $^{186}\text{W}$  from 2.6 to 2000 keV

**Keyword abstract:** NUCLEAR REACTIONS  $^{182}\text{W}$ ,  $^{183}\text{W}$ ,  $^{184}\text{W}$ ,  $^{186}\text{W}(n,\gamma)$ ,  $E=2.6-2000$  keV; measured  $\sigma$  (capture) vs  $E$ .  $^{183}\text{W}$ ,  $^{184}\text{W}$ ,  $^{185}\text{W}$ ,  $^{187}\text{W}$  deduced resonances,  $J,\pi,\Gamma\gamma$ , resonance parameters.

**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,  $^{155}\text{Gd}$ ,  $^{156}\text{Gd}$ ,  $^{157}\text{Gd}$ ,  $^{158}\text{Gd}$ ,  $^{160}\text{Gd}$ ,  $^{182}\text{W}$ ,  $^{183}\text{W}$ ,  $^{184}\text{W}$ ,  $^{186}\text{W}$ ,  $^{203}\text{Tl}$ ,  $^{205}\text{Tl}(n,\gamma)$ ,  $E=0.5-3$  MeV; measured absolute  $\sigma$ . Integrated spectrum method.

**Keynumber:** 1981VOZU

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

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

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**Keynumber:** 1981BAYY

**Reference:** Program and Thesis, Proc.31st Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Samarkand, p.574 (1981)

**Authors:** S.V.Bakhmutkin, A.A.Nosov, A.A.Rimsky-Korsakov, V.V.Smirnov

**Title:**

**Keyword abstract:** NUCLEAR REACTIONS  $^{180}$ ,  $^{186}\text{W}(n,\gamma)$ ,  $E=4.9-467$  eV; measured  $\sigma$ .

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**Keynumber:** 1980MA02

**Reference:** Phys.Scr. 21, 21 (1980)

**Authors:** G.Magnusson, P.Andersson, I.Bergqvist

**Title:** 14.7 MeV Neutron Capture Cross-Section Measurements with Activation Technique

**Keyword abstract:** NUCLEAR REACTIONS  $^{23}\text{Na}$ ,  $^{55}\text{Mn}$ ,  $^{89}\text{Y}$ ,  $^{127}\text{I}$ ,  $^{138}\text{Ba}$ ,  $^{186}\text{W}$ ,  $^{197}\text{Au}(n,\gamma)$ ,  $E=14.7$  MeV; measured  $\sigma$ . Activation technique.

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**Keynumber:** 1979MAZF

**Reference:** NEANDC(OR)-152L, p.12 (1979)

**Authors:** G.Magnusson, P.Andersson, I.Bergqvist

**Title:** MeV Neutron Capture Cross Section Measurements with Activation Technique

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}$ ,  $^{89}\text{Y}$ ,  $^{127}\text{I}$ ,  $^{138}\text{Ba}$ ,  $^{186}\text{W}$ ,  $^{197}\text{Au}(n,\gamma)$ ,  $E=14-15$  MeV; measured  $\sigma$ .

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**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,  $^{155}$ ,  $^{156}$ ,  $^{157}$ ,  $^{158}$ ,  $^{160}\text{Gd}$ ,  $^{182}$ ,  $^{183}$ ,  $^{184}$ ,  $^{186}\text{W}$ ,  $\text{Au}(n,\gamma)$ ,  $E=0.5-3.0$  MeV; measured  $\sigma$ . Statistical model calculations.

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**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  $^{112}\text{Sn}$ ,  $^{130}\text{Ba}$ ,  $^{146}\text{Nd}$ ,  $^{186}\text{W}$ ,  $^{190}$ ,  $^{192}\text{Os}(n,\gamma)$ ,  $E=24$  keV; measured  $\sigma$ .

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**Keynumber:** 1979AG02

**Reference:** J.Phys.Soc.Jpn. 46, 1 (1979)

**Authors:** H.M.Agrawal, M.L.Sehgal

**Title:** Statistical Theory Calculations of Neutron-Capture Cross-Sections at 24 keV

**Keyword abstract:** NUCLEAR REACTIONS  $^{45}\text{Sc}$ ,  $^{55}\text{Mn}$ ,  $^{63}$ ,  $^{65}\text{Cu}$ ,  $^{69}$ ,  $^{71}\text{Ga}$ ,  $^{75}\text{As}$ ,  $^{79}$ ,  $^{81}\text{Br}$ ,  $^{80}\text{Se}$ ,  $^{85}$ ,  $^{87}\text{Rb}$ ,  $^{89}\text{Y}$ ,  $^{93}\text{Nb}$ ,  $^{96}\text{Zr}$ ,  $^{98}$ ,  $^{100}\text{Mo}$ ,  $^{107}$ ,  $^{109}\text{Ag}$ ,  $^{108}\text{Pd}$ ,  $^{114}\text{Cd}$ ,  $^{115}\text{In}$ ,  $^{127}\text{I}$ ,  $^{133}\text{Cs}$ ,  $^{138}\text{Ba}$ ,  $^{139}\text{La}$ ,  $^{140}$ ,  $^{142}\text{Ce}$ ,

<sup>141</sup>Pr, <sup>152</sup>, <sup>154</sup>Sm, <sup>158</sup>, <sup>160</sup>Gd, <sup>164</sup>Dy, <sup>165</sup>Ho, <sup>170</sup>Er, <sup>175</sup>Lu, <sup>180</sup>Hf, <sup>181</sup>Ta, <sup>184</sup>, <sup>186</sup>W, <sup>185</sup>, <sup>187</sup>Re, <sup>197</sup>Au, <sup>202</sup>Hg, <sup>208</sup>Pb, <sup>209</sup>Bi, <sup>232</sup>Th(n, $\gamma$ ),E=24 keV; calculated  $\sigma$ ; deduced ratio of average  $\Gamma\gamma$  to average level spacing. Margolis formula of statistical theory, low energy resonance parameters.

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**Keynumber:** 1976SC16

**Reference:** Nucl.Phys. A264, 105 (1976)

**Authors:** O.Schwerer, M.Winkler-Rohatsch, H.Warhanek, G.Winkler

**Title:** Measurement of Cross Sections for 14 MeV Neutron Capture

**Keyword abstract:** NUCLEAR REACTIONS <sup>37</sup>Cl, <sup>41</sup>K, <sup>50</sup>Ti, <sup>51</sup>V, <sup>55</sup>Mn, <sup>71</sup>Ga, <sup>87</sup>Rb, <sup>89</sup>Y, <sup>127</sup>I, <sup>130</sup>Te, <sup>138</sup>Ba, <sup>139</sup>La, <sup>142</sup>Ce, <sup>186</sup>W, <sup>198</sup>Pt, <sup>197</sup>Au(n, $\gamma$ ),E=14.6 MeV; measured  $\sigma$ . Natural targets.

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**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 <sup>138</sup>Ba, <sup>140</sup>, <sup>142</sup>Ce, <sup>146</sup>, <sup>148</sup>Nd, <sup>152</sup>, <sup>154</sup>Sm, <sup>158</sup>, <sup>160</sup>Gd, <sup>159</sup>Tb, <sup>169</sup>Tm, <sup>170</sup>Er, <sup>174</sup>, <sup>176</sup>Yb, <sup>180</sup>Hf, <sup>181</sup>Ta, <sup>186</sup>W, <sup>190</sup>, <sup>192</sup>Os, <sup>197</sup>Au, <sup>202</sup>Hg(n, $\gamma$ ),E=18-28 keV; measured  $\sigma$ ; 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 <sup>151</sup>Sm

**Keyword abstract:** RADIOACTIVITY <sup>151</sup>Pm; measured  $\gamma\gamma(\theta)$ , I $\gamma$ . <sup>151</sup>Sm levels deduced J, $\pi$ , $\gamma$ -mixing, $\lambda$ .

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**Keynumber:** 1974COZX

**Coden:** JOUR BAPSA 19 111 KI13

**Keyword abstract:** NUCLEAR REACTIONS <sup>152</sup>Sm, <sup>162</sup>, <sup>164</sup>Dy, <sup>170</sup>Yb, <sup>186</sup>W(n, $\gamma$ ); measured  $\sigma(E)$ . <sup>153</sup>Sm, <sup>163</sup>, <sup>165</sup>Dy, <sup>171</sup>Yb, <sup>187</sup>W levels deduced level-width.

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**Keynumber:** 1974COYZ

**Coden:** REPT USNDC-11 P42

**Keyword abstract:** NUCLEAR REACTIONS <sup>154</sup>Sm, <sup>170</sup>Yb, <sup>186</sup>W, <sup>156</sup>Gd(n, $\gamma$ ); measured  $\sigma(E\gamma)$ .

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**Keynumber:** 1974COYX

**Coden:** CONF Petten(Neutron Capture Gamma Ray Spectroscopy),P31

**Keyword abstract:** NUCLEAR REACTIONS <sup>152</sup>Sm, <sup>170</sup>Yb, <sup>162</sup>, <sup>164</sup>Dy, <sup>186</sup>W(n, $\gamma$ ),E=0.025 eV,thermal; measured  $\sigma$ .

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**Keynumber:** 1974COYK

**Coden:** REPT BNL-18976,mf

**Keyword abstract:** NUCLEAR REACTIONS <sup>162</sup>, <sup>164</sup>Dy, <sup>152</sup>Sm, <sup>170</sup>Yb, <sup>186</sup>W(n, $\gamma$ ),E=epithermal; measured  $\sigma(E\gamma)$ . <sup>163</sup>, <sup>165</sup>Dy, <sup>153</sup>Sm resonances deduced J.

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**Keynumber:** 1974CA18

**Reference:** Nucl.Phys. A228, 493 (1974)

**Authors:** R.F.Casten, D.Breitig, O.A.Wasson, K.Rimawi, R.E.Chrien

**Title:** The <sup>186</sup>W(n, $\gamma$ )<sup>187</sup>W Reaction at 24 keV, Hexadecapole Deformations, and Fragmentation of

## Nilsson Model Strength

**Keyword abstract:** NUCLEAR REACTIONS  $^{186}\text{W}(n,\gamma)$ , E=24 keV, thermal; measured  $E\gamma, I\gamma$ .  $^{187}\text{W}$  deduced levels,  $J, \pi$ .  $^{179}\text{Hf}$ ,  $^{183}$ ,  $^{184}$ ,  $^{187}\text{W}$  obtained  $\geq \sigma(d,p)$  systematics. Enriched targets, Ge(Li) detectors.

**Keynumber:** 1973YOZM

**Coden:** REPT LA-5375-PR P15

**Keyword abstract:** NUCLEAR REACTIONS  $^{182}$ ,  $^{183}$ ,  $^{184}$ ,  $^{186}\text{W}(n,\gamma)$ ; analyzed data.

**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 (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,  $J, \pi$ ,  $\gamma$ -multipolarities.  $^{146}\text{Nd}$ ,  $^{185}\text{W}$ ,  $^{194}\text{Ir}$  deduced levels,  $J, \pi$ .  $^{152}\text{Eu}$  deduced transitions,  $\gamma$ -multipolarities.  $^{187}\text{W}$ ,  $^{192}\text{Ir}$  deduced transitions.

**Keynumber:** 1973NEZX

**Reference:** Priv.Comm. (October 1973)

**Authors:** D.Netzband, H.Prade

**Keyword abstract:** NUCLEAR REACTIONS  $^{184}$ ,  $^{186}\text{W}(n,\gamma)$ ; measured  $E\gamma, I\gamma$ .  $^{185}$ ,  $^{187}\text{W}$  deduced transitions.

**Keynumber:** 1973CAYT

**Coden:** JOUR BAPSA 18 1380 AB13

**Keyword abstract:** NUCLEAR REACTIONS  $^{186}\text{W}(n,\gamma)$ ; measured  $\sigma(E\gamma), \gamma(\theta)$ .  $^{187}\text{W}$  levels deduced  $J, \pi$ .

**Keynumber:** 1973CAXQ

**Coden:** REPT EANDC(US)-186'U' P66

**Keyword abstract:** NUCLEAR REACTIONS  $^{186}\text{W}(n,\gamma)$ ; measured  $E\gamma$ .  $^{187}\text{W}$  deduced levels.

**Keynumber:** 1972ST06

**Reference:** Nucl.Phys. A181, 250 (1972)

**Authors:** F.Stecher-Rasmussen, J.Kopecky, K.Abrahams, W.Ratynski

**Title:** Circular Polarization of Neutron Capture  $\gamma$ -Rays from Mn, Ni, Ga and W

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}$ ,  $^{58}$ ,  $^{60}$ ,  $^{62}\text{Ni}$ ,  $^{69}$ ,  $^{71}\text{Ga}$ ,  $^{182}$ ,  $^{183}$ ,  $^{186}\text{W}(polarized n,\gamma)$ , E=thermal; measured  $\gamma$ -CP.  $^{56}\text{Mn}$ ,  $^{59}$ ,  $^{61}$ ,  $^{63}\text{Ni}$ ,  $^{70}$ ,  $^{72}\text{Ga}$ ,  $^{183}$ ,  $^{184}$ ,  $^{187}\text{W}$  levels deduced  $J, \pi$ . Natural targets.

**Keynumber:** 1972RA26

**Reference:** Nucl.Sci.Eng. 48, 219 (1972)

**Authors:** F.Rahn, H.S.Camarda, G.Hacken, W.W.Havens,Jr., H.I.Liou, J.Rainwater, M.Slagowitz, S.Wynchank

**Title:** Values of the Neutron Resonance Capture Integral for Some Rare Earth Isotopes

**Keyword abstract:** NUCLEAR REACTIONS  $^{152}, ^{154}\text{Sm}$ ,  $^{153}\text{Eu}$ ,  $^{154}, ^{158}, ^{160}\text{Gd}$ ,  $^{166}, ^{167}, ^{168}, ^{170}\text{Er}$ ,  $^{168}, ^{170}, ^{171}, ^{172}, ^{174}, ^{176}\text{Yb}$ ,  $^{175}\text{Lu}$ ,  $^{182}, ^{183}, ^{184}, ^{186}\text{W}(n,\gamma)$ ; calculated resonance integrals.

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**Keynumber:** 1972ANZW

**Reference:** Contrib.Conf.Nucl.Structure Study with Neutrons, Budapest, p.98 (1972)

**Authors:** W.Andrejscheff, P.Manfrass, H.Prade

**Title:** Investigation of Nanosecond Isomeric Transitions in  $^{177}\text{Lu}$ ,  $^{187}\text{W}$  using the  $(n,\gamma)$  Reaction

**Keyword abstract:** NUCLEAR REACTIONS  $^{176}\text{Lu}$ ,  $^{186}\text{W}(n,\gamma)$ , measured  $\gamma\gamma$ -delay.  $^{177}\text{Lu}$ ,  $^{187}\text{W}$  levels deduced  $T_{1/2}$ .

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**Keynumber:** 1972ANZE

**Reference:** Contrib.Conf.Nuclear Structure Study with Neutrons, Budapest, p.98 (1972)

**Authors:** W.Andrejscheff, P.Manfrass, H.Prade

**Title:** Investigations of Nanosecond Isomeric Transitions in  $^{177}\text{Lu}$  and  $^{187}\text{W}$  Using the  $(n,\gamma)$  Reaction

**Keyword abstract:** NUCLEAR REACTIONS  $^{176}\text{Lu}(n,\gamma)$ ,  $^{186}\text{W}(n,\gamma)$ ; measured  $\gamma\gamma(t)$ .  $^{177}\text{Lu}$ ,  $^{187}\text{W}$  level deduced  $T_{1/2}$ .

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**Keynumber:** 1971RAZF

**Reference:** INR-1262 (1971)

**Authors:** W.Ratynski

**Title:** Circular Polarization of Gamma Rays

**Keyword abstract:** NUCLEAR REACTIONS  $^{27}\text{Al}$ ,  $^{69}, ^{71}\text{Ga}$ ,  $^{182}, ^{183}\text{W}$ ,  $^{186}\text{W}(n,\gamma)$ ,  $E=\text{thermal}$ ; measured  $\gamma$ -polarization.  $^{28}\text{Al}$ ,  $^{70}, ^{72}\text{Ga}$ ,  $^{183}, ^{184}, ^{187}\text{W}$  levels deduced  $J,\pi$ .

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**Keynumber:** 1971PRZT

**Coden:** CONF Moscow(NuclSpectros,Structure) Abstr P126

**Keyword abstract:** NUCLEAR STRUCTURE  $^{18}\text{O}$ ,  $^{18}\text{F}$ ; calculated levels; analyzed off-shell effects.

**Keyword abstract:** NUCLEAR REACTIONS  $^{186}\text{W}(n,\gamma)$ ,  $E=\text{th}$ ; measured  $E\gamma, I(\text{ce})$ .  $^{187}\text{W}$  deduced transitions, ICC, multipolarity.

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**Keynumber:** 1971NAZW

**Reference:** Proc.3rd Intern.Conf.Neutron Cross Sections and Technology, Knoxville, Vol.1, p.259 (1971)

**Authors:** R.J.Nagle, J.H.Landrum, M.Lindner

**Title:** Neutron Capture Cross Sections in the MeV Range

**Keyword abstract:** NUCLEAR REACTIONS  $^{114}\text{Cd}$ ,  $^{181}\text{Ta}$ ,  $^{186}\text{W}$ ,  $^{185}, ^{187}\text{Re}$ ,  $^{191}, ^{193}\text{Ir}$ ,  $^{197}\text{Au}$ ,  $^{232}\text{Th}$ ,  $^{237}\text{Np}$ ,  $^{238}\text{U}(n,\gamma)$ ,  $E=0.1-3$  MeV; measured  $\sigma(E)$ .

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**Keynumber:** 1971MEZN

**Coden:** JOUR BAPSA 16 1181, M L Mehta, 10/29/71

**Keyword abstract:** NUCLEAR REACTIONS  $^{166}, ^{168}, ^{170}\text{Er}$ ,  $^{182}, ^{184}, ^{186}\text{W}$ ,  $^{238}\text{U}$ ,  $^{232}\text{Th}(n,\gamma)$ , analyzed available data; deduced widths, level spacings.

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**Keynumber:** 1971HAXR

**Coden:** REPT NCSAC-42,P61,G Hacken,5/19/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{152, 154}\text{Sm}$ ,  $^{151, 153}\text{Eu}$ ,  $^{154, 158, 160}\text{Gd}$ ,  $^{166, 167, 168, 170}\text{Er}$ ,  $^{168, 170, 171, 172, 174, 176}\text{Yb}$ ,  $^{175}\text{Lu}$ ,  $^{182, 183, 184, 186}\text{W}(n,\gamma)$ , measured capture resonance integrals.

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**Keynumber:** 1970DI03

**Reference:** Acta Phys. 28, 257 (1970)

**Authors:** M.Diksic, P.Strohal, G.Peto, P.Bornemisza-Pausperl, I.Hunyadi, J.Karolyi

**Title:** Additional Measurements of the Radiative Capture Cross Sections for 3 MeV Neutrons

**Keyword abstract:** NUCLEAR REACTIONS  $^{63}\text{Cu}$ ,  $^{74}\text{Ge}$ ,  $^{75}\text{As}$ ,  $^{80}\text{Se}$ ,  $^{81}\text{Br}$ ,  $^{130}\text{Te}$ ,  $^{141}\text{Pr}$ ,  $^{186}\text{W}$ ,  $^{209}\text{Bi}$  ( $n,\gamma$ ),  $E=3$  MeV; measured  $\sigma$ .  $^{75}\text{Ge}$ ,  $^{81}\text{Se}$ ,  $^{142}\text{Pr}$  deduced isomeric  $\sigma$  ratios, spin cut-off parameters.

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**Keynumber:** 1969MUZQ

**Reference:** Proc.Intern.Symp.Neutron Capture Gamma-Ray Spectroscopy, Studsvik, Intern.At.En.Agency, Vienna, p.579 (1969)

**Authors:** J.Murray, B.W.Thomas, E.R.Rae

**Title:** Some Statistical Properties of Partial Radiation Widths in Tungsten

**Keyword abstract:** NUCLEAR REACTIONS  $^{182, 184, 186}\text{W}(n,\gamma)$ ,  $E=\text{resonance}$ ; measured  $E\gamma, I\gamma$ .  $^{183, 185, 187}\text{W}$  deduced resonances, level-width.

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**Keynumber:** 1969MCZY

**Coden:** THESIS D McClure, Univ Missouri, DABBB 31B P2906

**Keyword abstract:** RADIOACTIVITY  $^{66}\text{Ge}$ ; measured  $E\gamma, I\gamma, I(\text{ce})$ .  $^{66}\text{Ga}$  deduced levels  $J, \pi, \gamma$ -branching,  $\gamma$ -multipolarity.

**Keyword abstract:** NUCLEAR REACTIONS  $^{186}\text{W}(n,\gamma)$ ,  $E=\text{thermal}$ ; measured  $E\gamma, I\gamma, \gamma\gamma$ -coin.  $^{105}\text{Pd}$ ,  $^{187}\text{W}$  deduced levels,  $\gamma$ -branching.

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**Keynumber:** 1969BOZN

**Reference:** Proc.Intern.Symp.Neutron Capture Gamma-Ray Spectroscopy, Studsvik, Intern.At.En. Agency, Vienna, p.389 (1969)

**Authors:** H.H.Bolotin, D.A.McClure

**Title:** Level Structure of Low-Lying Excited States of  $^{187}\text{W}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{186}\text{W}(n,\gamma)$ ,  $E=\text{thermal}$ ; measured  $E\gamma, I\gamma, \gamma\gamma$ -coin.  $^{187}\text{W}$  deduced levels,  $J, \pi, \gamma$ -branching.

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**Keynumber:** 1968BEZX

**Reference:** Proc.Conf.Slow-Neutron-Capture Gamma-Ray Spectr., Argonne, Ill. (1966), F.E.Throw, Ed., ANL-7282, p.459 (1968)

**Authors:** M.Beer, M.Bhat, R.E.Chrien, M.A.Lone, O.A.Wasson

**Title:** Resonance ( $n,\gamma$ ) Spectra in Tungsten Isotopes

**Keyword abstract:** NUCLEAR REACTIONS  $^{182, 184, 186}\text{W}(n,\gamma)$ ,  $E = \text{resonance}$ ; measured  $E\gamma$ . Ge(Li) detector.

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**Keynumber:** 1967PR09

**Reference:** Phys.Rev. 160, 1038 (1967)

**Authors:** W.V.Prestwich, R.E.Cote

**Title:** Resonance Neutron Capture in the Even-A Isotopes of Tungsten

**Keyword abstract:** NUCLEAR REACTIONS  $^{182, 186}\text{W}(n,\gamma)$ ,  $E=\text{resonance}$ ; measured  $\sigma(E\gamma)$ .  $^{183, 187}\text{W}$

resonances deduced level-width.

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