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**46 reference(s) found :**

**Keynumber:** 2001BE15

**Reference:** Nucl.Phys. A686, 204 (2001)

**Authors:** E.Betak, F.Cvelbar, A.Likar, T.Vidmar

**Title:** Model Calculations of the Radiative Capture Process and the Brink-Axel Hypothesis

**Keyword abstract:** NUCLEAR REACTIONS  $^{140}\text{Ce}$ ,  $^{208}\text{Pb}(n,\gamma)$ ,  $E=4-18$  MeV; calculated  $\sigma(E)$ , excitation functions. Consistent direct-semidirect and preequilibrium exciton models. Comparisons with data.

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**Keynumber:** 2000HA56

**Reference:** J.Nucl.Sci.Technol.(Tokyo) 37, 740 (2000)

**Authors:** S.Harnood, M.Igashira, T.Matsumoto, S.Mizuno, T.Ohsaki

**Title:** Measurement of keV-Neutron Capture Cross Sections and Capture Gamma-Ray Spectra of  $^{140}\text{Ce}$  and  $^{141}\text{Pr}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{140}\text{Ce}$ ,  $^{141}\text{Pr}(n,\gamma)$ ,  $E=10-100,550$  keV; measured  $E\gamma$ ,  $I\gamma$ , capture  $\sigma$ .

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**Keynumber:** 1997LI03

**Reference:** Nucl.Phys. A615, 18 (1997)

**Authors:** A.Likar, T.Vidmar

**Title:** Neutron Optical Potential from Capture Reactions

**Keyword abstract:** NUCLEAR REACTIONS  $^{40}\text{Ca}$ ,  $^{89}\text{Y}$ ,  $^{140}\text{Ce}$ ,  $^{208}\text{Pb}(n,\gamma)$ ,  $E \approx$  resonance; analyzed capture  $\sigma(\theta)$ ,  $\sigma(E)$ ; deduced model parameter dependence. Direct-semidirect model, optical model.

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

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**Keynumber:** [1996KA03](#)

**Reference:** Phys.Rev. C53, 1397 (1996)

**Authors:** F.Kappeler, K.A.Toukan, M.Schumann, A.Mengoni

**Title:** Neutron Capture Cross Sections of the Cerium Isotopes for s- and p-Process Studies

**Keyword abstract:** NUCLEAR REACTIONS  $^{136}$ ,  $^{140}$ ,  $^{142}$ ,  $^{138}\text{Ce}(n,\gamma)$ ,  $E=25$  keV; measured capture  $\sigma$ ; deduced s-process abundances, r-, p-process residuals between  $^{140}\text{Ce}$ ,  $^{146}\text{Nd}$ . Other data input, (n, $\gamma$ ) reaction  $\sigma$  evaluated for several Ce, Pr isotopes.

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**Keynumber:** 1995CV01

**Reference:** J.Phys.(London) G21, 377 (1995)

**Authors:** F.Cvelbar, E.Betak, A.Likar

**Title:** Pre-Equilibrium and Direct-Semi-Direct Model Calculations of Nucleon Radiative Capture

## Excitation Functions on Heavy Nuclei

**Keyword abstract:** NUCLEAR REACTIONS, ICPND  $^{142}\text{Ce}$ ,  $^{176}\text{Yb}$ ,  $^{208}\text{Pb}$ ,  $^{130}\text{Te}(p,\gamma)$ ,  $^{89}\text{Y}$ ,  $^{208}\text{Pb}$ ,  $^{140}\text{Ce}(n,\gamma)$ ,  $E \approx 4\text{-}24$  MeV; analyzed  $\sigma(E)$ . Preequilibrium, direct-semi-direct models, radiative capture.

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**Keynumber:** 1992GU15

**Reference:** Nuovo Cim. 105A, 1609 (1992)

**Authors:** R.Guidotti, F.Saporetti, A.Ventura

**Title:** Some Suggestions About the Research of the E2(T = 1) Resonance Excitation by (n, $\gamma$ ) Reaction on Cerium

**Keyword abstract:** NUCLEAR REACTIONS  $^{140}\text{Ce}(\text{polarized } n,\gamma)$ , (n, $\gamma$ ),  $E \approx 4\text{-}22$  MeV; analyzed  $\sigma(\theta)$  data.  $^{141}\text{Ce}$  deduced isovector E2 resonance identification possibilities.

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**Keynumber:** 1991ZH22

**Reference:** Chin.J.Nucl.Phys. 13, No 2, 139 (1991)

**Authors:** Z.Zhao, D.Zhou

**Title:** Systematics of Excitation Functions for (n, $\gamma$ ) Reaction Above 4 MeV

**Keyword abstract:** NUCLEAR REACTIONS  $^{40}\text{Ca}$ ,  $^{89}\text{Y}$ ,  $^{140}\text{Ce}$ ,  $^{165}\text{Ho}$ ,  $^{208}\text{Pb}(n,\gamma)$ ,  $E \approx 0.5\text{-}20$  MeV; calculated  $\sigma(E)$ . Statistical theory, exciton model.

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**Keynumber:** 1990XI04

**Reference:** Chin.J.Nucl.Phys. 12, No 3, 261 (1990)

**Authors:** Y.Xia, C.Wang, J.Yang, Z.Yang, M.Liu

**Title:** Measurement of Maxwellian Averaged Neutron Capture Cross Section of  $^{140}$ ,  $^{142}\text{Ce}$ ,  $^{139}\text{La}$  and  $^{181}\text{Ta}$  at  $kT = 24$  keV

**Keyword abstract:** NUCLEAR REACTIONS  $^{140}$ ,  $^{142}\text{Ce}$ ,  $^{139}\text{La}$ ,  $^{181}\text{Ta}(n,\gamma)$ ,  $E \leq 250$  keV; measured  $E_\gamma, I_\gamma$  following capture; deduced Maxwellian averaged capture  $\sigma$ . Hyperpure Ge detector.

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

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**Keynumber:** 1983AH01

**Reference:** Ann.Nucl.Energy 10, 41 (1983)

**Authors:** A.Ahmad

**Title:** Analysis and Evaluation of Thermal and Resonance Neutron Activation Data

**Keyword abstract:** NUCLEAR REACTIONS  $^{45}\text{Sc}$ ,  $^{50}\text{Ti}$ ,  $^{50}\text{Cr}$ ,  $^{51}\text{V}$ ,  $^{55}\text{Mn}$ ,  $^{58}\text{Fe}$ ,  $^{59}\text{Co}$ ,  $^{74}\text{Se}$ ,  $^{85}\text{Rb}$ ,  $^{94}$ ,  $^{96}\text{Zr}$ ,  $^{123}\text{Sb}$ ,  $^{130}\text{Ba}$ ,  $^{133}\text{Cs}$ ,  $^{139}\text{La}$ ,  $^{140}\text{Ce}$ ,  $^{159}\text{Tb}$ ,  $^{180}\text{Hf}$ ,  $^{181}\text{Ta}$ ,  $^{197}\text{Au}(n,\gamma)$ ,  $E = \text{thermal, epithermal}$ ; analyzed data. Generalized least-squares fit.

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**Keynumber:** 1982RA32

**Reference:** Indian J.Pure Appl.Phys. 20, 627 (1982)

**Authors:** S.K.Rathi, V.P.Varshney, H.M.Agrawal

**Title:** Calculations of Neutron Capture Cross-Sections for some Nuclei using Bilpuch Formula

**Keyword abstract:** NUCLEAR REACTIONS  $^{40, 43}\text{Ca}$ ,  $^{52, 53}\text{Cr}$ ,  $^{54, 56}\text{Fe}$ ,  $^{88}\text{Sr}$ ,  $^{90, 91, 92, 94}\text{Zr}$ ,  $^{93}\text{Nb}$ ,  $^{92, 94, 95, 96, 97, 98, 100}\text{Mo}$ ,  $^{138}\text{Ba}$ ,  $^{139}\text{La}$ ,  $^{140}\text{Ce}$ ,  $^{203}\text{Tl}(n,\gamma)$ ,  $E=24$  keV; calculated  $\sigma$ (capture). Experimental parameters, Bilpuch formula.

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**Keynumber:** 1981RA01

**Reference:** J.Phys.(London) G7, 53 (1981)

**Authors:** S.K.Rathi, H.M.Agarwal

**Title:** P-Wave Neutron Strength Functions

**Keyword abstract:** NUCLEAR REACTIONS  $^{43}\text{Ca}$ ,  $^{52}\text{Cr}$ ,  $^{56}\text{Fe}$ ,  $^{88}\text{Sr}$ ,  $^{89}\text{Y}$ ,  $^{90, 92, 94}\text{Zr}$ ,  $^{93}\text{Nb}$ ,  $^{92, 94, 95, 96, 97, 98, 100}\text{Mo}$ ,  $^{138}\text{Ba}$ ,  $^{139}\text{La}$ ,  $^{140}\text{Ce}$ ,  $^{203}\text{Tl}(n,\gamma)$ ,  $E=24$  keV; analyzed  $\sigma$ .  $^{44}\text{Ca}$ ,  $^{53}\text{Cr}$ ,  $^{57}\text{Fe}$ ,  $^{89}\text{Sr}$ ,  $^{90}\text{Y}$ ,  $^{91, 93, 95}\text{Zr}$ ,  $^{94}\text{Nb}$ ,  $^{93, 95, 96, 97, 98, 99, 101}\text{Mo}$ ,  $^{139}\text{Ba}$ ,  $^{140}\text{La}$ ,  $^{141}\text{Ce}$ ,  $^{204}\text{Tl}$  deduced p-wave strength function.

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**Keynumber:** 1981CV02

**Reference:** Fizika(Zagreb) 13, Suppl.No.2, 16 (1981)

**Authors:** F.Cvelbar, R.Martincic, A.Likar

**Title:** Sensitivity of the Direct-Semidirect Model Calculations of the Integrated Neutron Capture Cross Section on the Exactness of the Final State Wave Function

**Keyword abstract:** NUCLEAR REACTIONS  $^{89}\text{Y}$ ,  $^{140}\text{Ce}$ ,  $^{208}\text{Pb}(n,\gamma)$ ,  $E$  not given; calculated integrated  $\sigma(E)$ . Direct semi-direct capture model.

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**Keynumber:** 1980BE05

**Reference:** Phys.Rev. C21, 534 (1980); Erratum Phys.Rev. C21, 2139 (1980)

**Authors:** H.Beer, F.Kappeler

**Title:** Neutron Capture Cross Sections on  $^{138}\text{Ba}$ ,  $^{140, 142}\text{Ce}$ ,  $^{175, 176}\text{Lu}$ , and  $^{181}\text{Ta}$  at 30 Kev: Prerequisite for Investigation of the  $^{176}\text{Lu}$  Cosmic Clock

**Keyword abstract:** NUCLEAR REACTIONS  $^{138}\text{Ba}$ ,  $^{140, 142}\text{Ce}$ ,  $^{175, 176}\text{Lu}$ ,  $^{181}\text{Ta}(n,\gamma)$ ,  $E=30$  keV; measured  $\sigma$ ; deduced solar S process age, Hf/Lu abundance.

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**Keynumber:** 1979MU10

**Reference:** Aust.J.Phys. 32, 213 (1979)

**Authors:** A.R.de L.Musgrove, B.J.Allen, R.L.Macklin

**Title:** Resonance Neutron Capture in  $^{138}\text{Ba}$  and  $^{140}\text{Ce}$  and the Prompt Neutron Correction to  $\gamma$ -Ray Detectors

**Keyword abstract:** NUCLEAR REACTIONS  $^{138}\text{Ba}$ ,  $^{140}\text{Ce}(n,\gamma)$ ,  $E=3-100$  keV; measured  $\sigma$ .  $^{139}\text{Ba}$ ,  $^{141}\text{Ce}$  deduced resonance parameters, S,p-wave strength functions.

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**Keynumber:** 1979BEZE

**Reference:** Bull.Am.Phys.Soc. 24, No.7, 871, CC11 (1979)

**Authors:** H.Beer, F.Kappeler

**Title:** The Measurement of Maxwellian Averaged Capture Cross Sections for  $^{138}\text{Ba}$ ,  $^{140}\text{Ce}$ ,  $^{175}\text{Lu}$  and  $^{176}\text{Lu}$  with a Special Activation Technique

**Keyword abstract:** NUCLEAR REACTIONS  $^{138}\text{Ba}$ ,  $^{140, 142}\text{Ce}$ ,  $^{175, 176}\text{Lu}(n,\gamma)$ ,  $E$  not given; measured Maxwellian averaged  $\sigma$ .

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**Keynumber:** 1979AN22

**Reference:** Nuovo Cim. 50A, 247 (1979)

**Authors:** R.P.Anand, M.L.Jhingan, D.Bhattacharya, E.Kondaiah

**Title:** 25 keV-Neutron Capture Cross-Sections

**Keyword abstract:** NUCLEAR REACTIONS  $^{51}\text{V}$ ,  $^{63}\text{Cu}$ ,  $^{71}\text{Ga}$ ,  $^{74}\text{Ge}$ ,  $^{75}\text{As}$ ,  $^{98}$ ,  $^{100}\text{Mo}$ ,  $^{104}\text{Ru}$ ,  $^{115}\text{In}$ ,  $^{116}\text{Cd}$ ,  $^{122}$ ,  $^{124}\text{Sn}$ ,  $^{128}$ ,  $^{130}\text{Te}$ ,  $^{139}\text{La}$ ,  $^{140}$ ,  $^{142}\text{Ce}$ ,  $^{165}\text{Ho}$ ,  $^{185}$ ,  $^{187}\text{Re}(n,\gamma)$ ,  $E=25$  keV; measured  $\sigma$ ; deduced rapid, slow capture processes.

**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  $^{45}\text{Sc}$ ,  $^{55}\text{Mn}$ ,  $^{63}$ ,  $^{65}\text{Cu}$ ,  $^{69}$ ,  $^{71}\text{Ga}$ ,  $^{75}\text{As}$ ,  $^{79}$ ,  $^{81}\text{Br}$ ,  $^{80}\text{Se}$ ,  $^{85}$ ,  $^{87}\text{Rb}$ ,  $^{89}\text{Y}$ ,  $^{93}\text{Nb}$ ,  $^{96}\text{Zr}$ ,  $^{98}$ ,  $^{100}\text{Mo}$ ,  $^{107}$ ,  $^{109}\text{Ag}$ ,  $^{108}\text{Pd}$ ,  $^{114}\text{Cd}$ ,  $^{115}\text{In}$ ,  $^{127}\text{I}$ ,  $^{133}\text{Cs}$ ,  $^{138}\text{Ba}$ ,  $^{139}\text{La}$ ,  $^{140}$ ,  $^{142}\text{Ce}$ ,  $^{141}\text{Pr}$ ,  $^{152}$ ,  $^{154}\text{Sm}$ ,  $^{158}$ ,  $^{160}\text{Gd}$ ,  $^{164}\text{Dy}$ ,  $^{165}\text{Ho}$ ,  $^{170}\text{Er}$ ,  $^{175}\text{Lu}$ ,  $^{180}\text{Hf}$ ,  $^{181}\text{Ta}$ ,  $^{184}$ ,  $^{186}\text{W}$ ,  $^{185}$ ,  $^{187}\text{Re}$ ,  $^{197}\text{Au}$ ,  $^{202}\text{Hg}$ ,  $^{208}\text{Pb}$ ,  $^{209}\text{Bi}$ ,  $^{232}\text{Th}(n,\gamma)$ ,  $E=24$  keV; calculated  $\sigma$ ; deduced ratio of average  $\Gamma\gamma$  to average level spacing. Margolis formula of statistical theory, low energy resonance parameters.

**Keynumber:** 1978SAZG

**Coden:** CONF BNL(Neutron Capt  $\gamma$ -Ray Spectr),Contrib,No69,Saporetti

**Keyword abstract:** NUCLEAR REACTIONS  $^{140}\text{Ce}(n,\gamma)$ ,  $E=2-8$  MeV; calculated  $\sigma(\theta)$ ; deduced M1,E2 collective effects. Direct-semidirect model.

**Keynumber:** 1978SAYX

**Coden:** CONF Brookhaven(Neutron Capt  $\gamma$ -Ray Spectr),Proc,P741,Saporetti

**Keyword abstract:** NUCLEAR REACTIONS  $^{140}\text{Ce}(n,\gamma)$ ,  $E=2-8$  MeV; calculated  $\sigma(E,\theta)$ .  $^{141}\text{Ce}$  deduced M1,E2 collective behavior. Direct-semidirect capture model.

**Keynumber:** 1978SA27

**Reference:** Nucl.Phys. A311, 284 (1978)

**Authors:** F.Saporetti, R.Guidotti

**Title:** Giant M1 Resonance in the Direct-Semidirect Model for Nucleon Radiative Capture

**Keyword abstract:** NUCLEAR REACTIONS  $^{208}\text{Pb}(n,\gamma_0)$ ,  $(p,\gamma_0)$ ,  $^{140}\text{Ce}(n,\gamma_0)$ ,  $(p,\gamma_0)$ ,  $E=2-10$  MeV; calculated  $\sigma,\gamma(\theta)$  extending direct-semidirect model for nucleon radiative capture via E1,E2 resonances to collective M1 excitation.

**Keynumber:** 1978BEYD

**Coden:** REPT Uppsala,Tandem Accelerator Lab,1978 Ann,p55,7-4-2,Bergqvist

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}$ ,  $^{32}\text{S}$ ,  $^{40}\text{Ca}$ ,  $^{89}\text{Y}$ ,  $^{140}\text{Ce}$ ,  $^{208}\text{Pb}(n,\gamma)$ ,  $E=5-15$  MeV; measured  $\sigma$ . direct-semidirect,compound nuclear models.

**Keynumber:** 1978BE11

**Reference:** Nucl.Phys. A295, 256 (1978)

**Authors:** I.Bergqvist, B.Palsson, L.Nilsson, A.Lindholm, D.M.Drake, E.Arthur, D.K.McDaniels, P.Varghese

**Title:** Radiative Capture of Fast Neutrons by  $^{89}\text{Y}$  and  $^{140}\text{Ce}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{89}\text{Y}$ ,  $^{140}\text{Ce}(n,\gamma)$ ,  $E=6.2-15.6$  MeV; measured  $\sigma(n,\gamma)$  at  $90^\circ$ . Compare with theory.

**Keynumber:** 1976LO11

**Reference:** Nucl.Sci.Eng. 61, 40 (1976)

**Authors:** G.Longo, F.Saporetti

**Title:** Cross Sections for the Production of 8- to 20-MeV Photons

**Keyword abstract:** NUCLEAR REACTIONS  $^{140}\text{Ce}$ ,  $^{93}\text{Nb}(n,\gamma)$ ,  $E=4-15$  MeV; calculated  $\sigma(E,E\gamma)$ ,  $E\gamma < 20$  MeV.

**Keynumber:** 1976LO07

**Reference:** Lett.Nuovo Cim. 16, 193 (1976)

**Authors:** G.Longo, G.Reffo, F.Saporetti

**Title:** Compound-Nucleus and Direct-Semidirect Contributions to Radiative Capture of Fast Neutrons

**Keyword abstract:** NUCLEAR REACTIONS  $^{89}\text{Y}$ ,  $^{140}\text{Ce}$ ,  $^{208}\text{Pb}(n,\gamma)$ ,  $E=5-15$  MeV; calculated  $\sigma$ ; deduced compound nucleus contributions, direct, semidirect contributions.

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

**Keyword abstract:** RADIOACTIVITY  $^{151}\text{Pm}$ ; measured  $\gamma\gamma(\theta)$ ,  $I\gamma$ .  $^{151}\text{Sm}$  levels deduced  $J, \pi, \gamma$ -mixing,  $\lambda$ .

**Keynumber:** 1974RIZB

**Coden:** REPT USNDC-11 P47

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

**Keynumber:** 1974LO14

**Reference:** Nuovo Cim. 20A, 373 (1974)

**Authors:** G.Longo, F.Saporetti, F.Rigaud, J.L.Irigaray, G.Y.Petit

**Title:** Different Coupling Interactions in Semi-Direct Capture of 14 MeV Neutrons by Si, Sr, Ce and  $^{208}\text{Pb}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}$ ,  $^{88}\text{Sr}$ ,  $^{140}\text{Ce}$ ,  $^{208}\text{Pb}(n,\gamma)$ ,  $E=14$  MeV; calculated  $\sigma(E\gamma)$ .

**Keynumber:** 1974LIZE

**Coden:** CONF Petten(Neutron Capture Gamma Ray Spectroscopy), P157

**Keyword abstract:** NUCLEAR REACTIONS  $^{89}\text{Y}$ ,  $^{140}\text{Ce}(n,\gamma)$ ,  $E=6.2-10.9$  MeV; measured  $\sigma(E,E\gamma)$ .

**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  $^{138}\text{Ba}$ ,  $^{140}$ ,  $^{142}\text{Ce}$ ,  $^{146}$ ,  $^{148}\text{Nd}$ ,  $^{160}\text{Gd}$ ,  $^{165}\text{Ho}$ ,  $^{180}\text{Hf}$ ,  $^{181}\text{Ta}$ ,  $^{190}\text{Os}$ ,  $^{197}\text{Au}$ ,  $^{202}\text{Hg}(n,\gamma)$ ,  $E=23$  keV; measured  $\sigma$ .

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**Keynumber:** 1973RIZK

**Coden:** CONF Asilomar(Photonuclear Reactions), Vol2 P953

**Keyword abstract:** NUCLEAR REACTIONS  $^{28}\text{Si}$ ,  $^{88}\text{Sr}$ ,  $^{140}\text{Ce}$ ,  $^{208}\text{Pb}(n,\gamma)$ ; measured  $\sigma(E\gamma)$ .  $^{29}\text{Si}$ ,  $^{89}\text{Sr}$ ,  $^{141}\text{Ce}$ ,  $^{209}\text{Pb}$  deduced levels.

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**Keynumber:** 1973NIZV

**Coden:** CONF Asilomar(Photonuclear Reactions), Vol2 P949

**Keyword abstract:** NUCLEAR REACTIONS  $^{89}\text{Y}$ ,  $^{140}\text{Ce}(n,\gamma)$ ; measured  $E\gamma$ .  $^{90}\text{Y}$ ,  $^{141}\text{Ce}$  deduced levels.

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**Keynumber:** 1973MU20

**Reference:** Nucl.Phys. A213, 35 (1973)

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

**Title:** Structure of 3P Size Resonance in Neutron Strength Functions

**Keyword abstract:** NUCLEAR REACTIONS  $^{63}\text{Cu}$ ,  $^{68}\text{Zn}$ ,  $^{74}$ ,  $^{80}\text{Se}$ ,  $^{81}\text{Br}$ ,  $^{85}$ ,  $^{87}\text{Rb}$ ,  $^{96}$ ,  $^{102}$ ,  $^{104}\text{Ru}$ ,  $^{98}$ ,  $^{100}\text{Mo}$ ,  $^{108}\text{Pd}$ ,  $^{109}\text{Ag}$ ,  $^{113}$ ,  $^{115}\text{In}$ ,  $^{121}$ ,  $^{123}\text{Sb}$ ,  $^{133}\text{Cs}$ ,  $^{138}\text{Ba}$ ,  $^{140}\text{Ce}(n,\gamma)$ ,  $E=18-28$  keV; measured  $\sigma$ , extracted p-wave neutron strength function.

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**Keynumber:** 1973LIZM

**Coden:** CONF Munich(Nucl Phys), Vol1 P655

**Keyword abstract:** NUCLEAR REACTIONS  $^{89}\text{Y}$ ,  $^{140}\text{Ce}(n,\gamma)$ ; measured  $E\gamma$ ,  $I\gamma$ .

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**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  $\sigma(E)$ .

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**Keynumber:** 1973HAZZ

**Coden:** JOUR BAPSA 18 96,G Hacken,1/15/73

**Keyword abstract:** NUCLEAR REACTIONS  $^{140}\text{Ce}$ ,  $^{181}\text{Ta}$ ,  $^{197}\text{Au}(n,X)$ ,  $(n,\gamma)$ ; measured transmission.  $^{141}\text{Ce}$ ,  $^{198}\text{Au}$ ,  $^{182}\text{Ta}$  deduced resonance parameters.

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**Keynumber:** 1972KN03

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

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

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

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

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**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, $\gamma$ ) Reactions with N = 28 and N = 82 Nuclei

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

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**Keynumber:** 1972HAWB

**Coden:** REPT ANCR-1088,P3,Y Harker,12/11/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{99}\text{Tc}$ ,  $^{103}\text{Rh}$ ,  $^{133}\text{Cs}$ ,  $^{102}\text{Ru}$ ,  $^{147}\text{Pm}$ ,  $^{109}\text{Ag}$ ,  $^{104}\text{Ru}$ ,  $^{98}\text{Mo}$ ,  $^{141}\text{Pr}$ ,  $^{148}\text{Nd}$ ,  $^{150}\text{Nd}$ ,  $^{127}\text{I}$ ,  $^{107}\text{Ag}$ ,  $^{140}$ ,  $^{142}\text{Ce}$ ,  $^{159}\text{Tb}$ ,  $^{121}$ ,  $^{123}\text{Sb}$ ,  $^{158}\text{Gd}$ (n, $\gamma$ ); measured  $\sigma$ .

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**Keynumber:** 1971DJ03

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

**Authors:** F.Djadali, J.Eichler

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

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

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**Keynumber:** 1970GE03

**Reference:** Phys.Rev. C1, 1052 (1970)

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

**Title:** Level Structure of  $\text{Ce}^{141}$  from the  $\text{Ce}^{140}$ (n, $\gamma$ ) $\text{Ce}^{141}$  Reaction

**Keyword abstract:** NUCLEAR REACTIONS  $^{140}\text{Ce}$ (n, $\gamma$ ), E=thermal; measured E $\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin; deduced Q.  $^{141}\text{Ce}$  deduced levels, J,  $\pi$ .

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**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, $\gamma$ ) and (d,p) Reactions on N = 82 Nuclei

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

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**Keynumber:** 1969IRZZ

**Reference:** Proc.Intern.Symp.Neutron Capture Gamma-Ray Spectroscopy, Studsvik, Intern.At.En.Agency, Vienna, p.337 (1969)

**Authors:** J.L.Irigaray, M.Asghar, G.Y.Petit, A.Audias, J.Girard, R.Samama

**Title:** Excited Levels in  $^{139}\text{Ba}$ ,  $^{140}\text{La}$  and  $^{141}\text{Ce}$  Through Thermal Neutron Capture

**Keyword abstract:** NUCLEAR REACTIONS  $^{138}\text{Ba}$ ,  $^{139}\text{La}$ ,  $^{140}\text{Ce}$ (n, $\gamma$ ),E=thermal; measured E $\gamma$ , $I\gamma$ ; deduced Q.  $^{139}\text{Ba}$ ,  $^{140}\text{La}$ ,  $^{141}\text{Ce}$  deduced levels,J, $\pi$ , $\gamma$ -branching.

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**Keynumber:** 1969GR31

**Reference:** Yadern.Fiz. 10, 681 (1969); Soviet J.Nucl.Phys. 10, 392 (1970)

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

**Title:** Radiation of Even-Odd Nuclei Near the Magic Number N = 82 after Thermal Neutron Capture

**Keyword abstract:** NUCLEAR REACTIONS  $^{134, 136, 138}\text{Ba}$ ,  $^{138, 140, 142}\text{Ce}(n,\gamma)$ , E=thermal; measured  $E\gamma$ ,  $I\gamma$ ; deduced Q.  $^{135, 137, 139}\text{Ba}$ ,  $^{139, 141, 143}\text{Ce}$  deduced levels. Enriched targets.

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**Keynumber:** 1969GEZY

**Reference:** Bull.Am.Phys.Soc. 14, No.4, 514, BH7 (1969)

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

**Title:** Level Structure of  $\text{Ce}^{141}$  from  $\text{Ce}^{140}(n,\gamma)$  Reaction

**Keyword abstract:** NUCLEAR REACTIONS  $^{140}\text{Ce}(n,\gamma)$ , E= thermal; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin; deduced Q.  $^{141}\text{Ce}$  deduced levels. Ge(Li) detectors.