

Visit the [Isotope Explorer](#) home page!

**76 reference(s) found :**

**Keynumber:** 2001VA11

**Reference:** Yad.Fiz. 64, No 2, 195 (2001); Phys.Atomic Nuclei 64, 153 (2001)

**Authors:** E.V.Vasilieva, A.M.Sukhovej, V.A.Khitrov

**Title:** Direct Experimental Estimate of Parameters That Determine the Cascade Gamma Decay of Compound States of Heavy Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  $^{113}\text{Cd}$ ,  $^{123}\text{Te}$ ,  $^{127}\text{I}$ ,  $^{149}\text{Sm}$ ,  $^{155}\text{Gd}$ ,  $^{159}\text{Tb}$ ,  $^{169}\text{Tm}$ ,  $^{180}\text{Hf}$ ,  $^{189}\text{Os}$ ,  $^{191}\text{Ir}$ ,  $^{195}\text{Pt}$ ,  $^{199}\text{Hg}(n,\gamma)$ , E=thermal; measured  $E\gamma$ , 2-step photon cascades.  $^{114}\text{Cd}$ ,  $^{124}\text{Te}$ ,  $^{128}\text{I}$ ,  $^{150}\text{Sm}$ ,  $^{156}\text{Gd}$ ,  $^{160}\text{Tb}$ ,  $^{170}\text{Tm}$ ,  $^{181}\text{Hf}$ ,  $^{190}\text{Os}$ ,  $^{192}\text{Ir}$ ,  $^{196}\text{Pt}$ ,  $^{200}\text{Hg}$  deduced level densities vs excitation energy, sum of radiative strengths for E1 and M1 transitions. Comparison with Statistical Model calculations.

**Keynumber:** 2000VA13

**Reference:** Fiz.Elem.Chastits At.Yadra 31, 350 (2000); Phys.Part.Nucl. 31, 170 (2000)

**Authors:** E.V.Vasileva, A.M.Sukhovi, V.A.Khitrov

**Title:** Influence of the Structure of Excited States in Heavy Ions on the Process of Cascade  $\gamma$ -Decay at Energies below the Neutron Binding Energy

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}\text{I}$ ,  $^{155}$ ,  $^{157}\text{Gd}$ ,  $^{173}\text{Yb}$ ,  $^{180}\text{Hf}$ ,  $^{182}\text{W}$ ,  $^{189}\text{Os}$ ,  $^{197}\text{Au}$  (n, $\gamma$ ), E not given; analyzed level densities, dipole strength distributions, two-step cascade intensities following neutron capture; deduced structure effects.

**Keynumber:** 2000NAZY

**Reference:** INDC(JPN)-185/U (JAERI-Conf 2000-005), p.20 (2000)

**Authors:** S.Nakamura, H.Harada, T.Katoh

**Title:** Precise Measurements of Neutron Capture Cross Sections for FP

**Keyword abstract:** NUCLEAR REACTIONS  $^{90}\text{Sr}$ ,  $^{99}\text{Tc}$ ,  $^{127}$ ,  $^{129}\text{I}$ ,  $^{133}$ ,  $^{134}$ ,  $^{135}$ ,  $^{137}\text{Cs}(n,\gamma)$ , E=thermal; measured capture  $\sigma$ , resonance integrals.

**Keynumber:** 1999SU03

**Reference:** Yad.Fiz. 62, No 1, 24 (1999); Phys.Atomic Nuclei 62, 19 (1999)

**Authors:** A.M.Sukhovi, V.A.Khitrov

**Title:** Experimental Estimate of the Density of Levels in a Heavy Nucleus That Are Excited in (n, $\gamma$ ) Reactions at Excitation Energies of 3 to 4 MeV

**Keyword abstract:** NUCLEAR REACTIONS  $^{113}\text{Cd}$ ,  $^{123}\text{Te}$ ,  $^{145}\text{Nd}$ ,  $^{149}\text{Sm}$ ,  $^{155}$ ,  $^{157}\text{Gd}$ ,  $^{162}$ ,  $^{163}$ ,  $^{164}\text{Dy}$ ,  $^{167}\text{Er}$ ,  $^{173}$ ,  $^{174}\text{Yb}$ ,  $^{177}$ ,  $^{178}$ ,  $^{180}\text{Hf}$ ,  $^{187}$ ,  $^{189}\text{Os}$ ,  $^{195}\text{Pt}$ ,  $^{199}\text{Hg}$ ,  $^{127}\text{I}$ ,  $^{159}\text{Tb}$ ,  $^{165}\text{Ho}$ ,  $^{169}\text{Tm}$ ,  $^{175}\text{Lu}$ ,  $^{181}\text{Ta}$ ,  $^{191}\text{Ir}$ ,  $^{197}\text{Au}$ ,  $^{124}\text{Te}$ ,  $^{182}$ ,  $^{185}\text{W}(n,\gamma)$ , E=thermal; analyzed  $I\gamma$ ; deduced non-exponential level densities.

**Keynumber:** 1999NAZZ

**Reference:** INDC(JPN)-182/U (JAERI-Conf 99-002), p.176 (1999)

**Authors:** S.Nakamura, K.Furutaka, H.Harada, T.Katoh

**Title:** Measurements of Thermal Neutron Capture Cross Sections for Some FP Nuclides

**Keyword abstract:** NUCLEAR REACTIONS  $^{80}\text{Se}$ ,  $^{94}\text{Zr}$ ,  $^{124}\text{Sn}$ ,  $^{127}\text{I}$ ,  $^{133}\text{Cs}(n,\gamma)$ , E=thermal; measured capture  $\sigma$ , resonance integrals.

**Keynumber:** 1999KA19

**Reference:** J.Nucl.Sci.Technol.(Tokyo) 36, 223 (1999)

**Authors:** T.Katoh, S.Nakamura, H.Harada, Y.Ogata

**Title:** Measurement of Thermal Neutron Capture Cross Section and Resonance Integral of the Reaction  $^{127}\text{I}(n,\gamma)^{128}\text{I}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}\text{I}(n,\gamma)$ ,E=thermal; measured  $E\gamma, I\gamma(t)$ , capture  $\sigma$ , resonance integral.  $^{128}\text{I}$  deduced  $T_{1/2}$ . Activation technique. Comparison with previous results.

-----  
**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.Sukhovoi, 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.

-----  
**Keynumber:** 1997SU29

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

**Authors:** A.M.Sukhovoi, 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.

-----  
**Keynumber:** 1997MUZV

**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.1624 (1997)

**Authors:** S.Mughabghab

**Title:** Neutron Capture Cross Sections for Nucleosynthesis

**Keyword abstract:** NUCLEAR REACTIONS  $^{93}\text{Nb}$ ,  $^{127}\text{I}$ ,  $^{141}\text{Pr}$ ,  $^{150}$ ,  $^{152}$ ,  $^{154}\text{Sm}$ ,  $^{181}\text{Ta}(n,\gamma)$ ,E=30 keV; calculated Maxwellian averaged capture  $\sigma$ .

-----  
**Keynumber:** 1997AL29

**Reference:** Bull.Rus.Acad.Sci.Phys. 61, 1638 (1997)

**Authors:** M.A.Ali, A.T.Boneva, E.B.Vasileva, A.M.Sukhovoi, V.A.Khitrov

**Title:** Two-Quantum Gamma Cascades After Thermal Neutron Capture in  $^{127}\text{I}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}\text{I}(n,\gamma)$ ,E=thermal; measured  $E\gamma, I\gamma, \gamma\gamma$ -coin.  $^{128}\text{I}$  levels deduced collective modes contributions.

-----  
**Keynumber:** 1991SA07

**Reference:** Nucl.Phys. A528, 317 (1991)

**Authors:** S.L.Sakharov, V.L.Alexeev, I.A.Kondurov, E.K.Leushkin, Yu.E.Loginov, V.V.Martynov, V.L.Rumiantsev, P.A.Sushkov, Yu.L.Khazov, A.I.Egorov, H.Lindner, H.Hiller, T.von Egidy,

G.Hlawatsch, J.Klora, U.Mayerhofer, H.Trieb, A.Walter

**Title:** Low-Lying  $^{128}\text{I}$  Excited States from the  $(n,\gamma)$  Reaction

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}\text{I}(n,\gamma)$ ,E=thermal; measured  $E\gamma$ , $I\gamma$ , $I(\text{ce})$ , $\gamma\gamma$ -coin, $\gamma\gamma(t)$ .  $^{129}\text{I}(d,t)$ ,E=15 MeV; analyzed data.  $^{127}\text{I}(d,p)$ ,E=22 MeV; analyzed data.  $^{128}\text{I}$  deduced levels, $J,\pi$ ,ICC, $\gamma$ -multipolarity, $\gamma$ -branching, $T_{1/2}$ ,configurations. Ge(Li),Si(Li) detectors,bent-crystal spectrometer,magnetic spectrometer,natural and enriched targets.

-----  
**Keynumber:** 1990SAZK

**Reference:** Leningrad Nucl.Phys.Inst., 1988-1989 Ann.Rept., p.76 (1990)

**Authors:** S.L.Sakharov, V.L.Alexeyev, I.A.Kondurov, E.K.Leushkin, Yu.E.Loginov, V.V.Martynov, V.L.Rumiantsev, P.A.Sushkov, Yu.L.Khazov, A.I.Yegorov, G.Hlawatsch, T.von Egidy, H.Lindner

**Title:** Low-Lying  $^{128}\text{I}$  Excited States from  $(n,\gamma)$ -Reaction

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}\text{I}(n,\gamma)$ ,E=20-600 keV; measured  $E\gamma$ , $I\gamma$ , $I(\text{ce})$ , $\gamma\gamma$ -coin, $\gamma\gamma(t)$ .  $^{127}\text{I}(d,p)$ ,E=22 MeV;  $^{129}\text{I}(d,t)$ ,E=15 MeV; measured spectra.  $^{128}\text{I}$  deduced levels, $J,\pi$ , $T_{1/2}$ ,isomers.

-----  
**Keynumber:** 1990IS03

**Reference:** Z.Phys. A335, 173 (1990)

**Authors:** M.A.Islam, T.J.Kennett, W.V.Prestwich

**Title:** A Study of the  $^{127}\text{I}(n,\gamma)^{128}\text{I}$  Reaction

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}\text{I}(n,\gamma)$ ,E=reactor; measured  $E\gamma$ , $I\gamma$ .  $^{128}\text{I}$  deduced levels,possible  $J,\pi$ ,electric,magnetic dipole strength,GDR contribution,neutron separation energy.

-----  
**Keynumber:** 1989PE04

**Reference:** Nucl.Instrum.Methods Phys.Res. B40/41, 1205 (1989)

**Authors:** R.Pepelnik

**Title:** Sensitivities of High-Flux 14 MeV Neutron Activation Analysis

**Keyword abstract:** NUCLEAR REACTIONS  $^{11}\text{B}$ ,  $^{16}\text{O}$ ,  $^{19}\text{F}$ ,  $^{20}\text{Ne}$ ,  $^{23}\text{Na}$ ,  $^{24}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{28}\text{Si}$ ,  $^{34}\text{S}$ ,  $^{44}\text{Ca}$ ,  $^{51}\text{V}$ ,  $^{60}\text{Ni}$ ,  $^{75}\text{As}$ ,  $^{109}\text{Ag}(n,p)$ ,  $^{31}\text{P}$ ,  $^{40}\text{Ar}$ ,  $^{55}\text{Mn}$ ,  $^{65}\text{Cu}$ ,  $^{93}\text{Nb}(n,\alpha)$ ,  $^{35}\text{Cl}$ ,  $^{45}\text{Sc}$ ,  $^{64}\text{Zn}$ ,  $^{71}\text{Ga}$ ,  $^{76}\text{Ge}$ ,  $^{80}\text{Se}$ ,  $^{79}\text{Br}$ ,  $^{86}\text{Kr}$ ,  $^{85}\text{Rb}$ ,  $^{90}\text{Zr}$ ,  $^{100}\text{Mo}$ ,  $^{96}\text{Ru}$ ,  $^{110}\text{Pd}$ ,  $^{124}\text{Sn}$ ,  $^{123}\text{Sb}$ ,  $^{130}\text{Te}$ ,  $^{136}\text{Xe}$ ,  $^{133}\text{Cs}$ ,  $^{138}\text{Ba}$ ,  $^{140}\text{Ce}$ ,  $^{141}\text{Pr}$ ,  $^{142}\text{Nd}$ ,  $^{144}\text{Sm}$ ,  $^{160}\text{Gd}$ ,  $^{159}\text{Tb}$ ,  $^{165}\text{Ho}$ ,  $^{164}\text{Er}$ ,  $^{169}\text{Tm}$ ,  $^{168}\text{Yb}$ ,  $^{181}\text{Ta}$ ,  $^{186}\text{W}$ ,  $^{198}\text{Pt}$ ,  $^{191}\text{Ir}$ ,  $^{197}\text{Au}$ ,  $^{203}\text{Tl}$ ,  $^{208}\text{Pb}(n,2n)$ ,Ti,Cr,Fe,Sr,Cd,Eu,Hf,  $^{200}\text{Hg}(n,X)$ ,  $^{59}\text{Co}$ ,  $^{103}\text{Rh}$ ,  $^{115}\text{In}$ ,  $^{127}\text{I}$ ,  $^{164}\text{Dy}$ ,  $^{175}\text{Lu}$ ,  $^{187}\text{Re}$ ,  $^{226}\text{Ra}(n,\gamma)$ ,  $^{232}\text{Th}$ ,  $^{238}\text{U}(n,F)$ ,E=14 MeV; calculated analytical sensitivities. Activation analysis.

-----  
**Keynumber:** [1989HO01](#)

**Reference:** Phys.Rev. C39, 94 (1989)

**Authors:** Y.-K.Ho, Z.-Y.Pan

**Title:** Laser-Induced Two-Step Population of Nuclear Resonances Near Neutron Binding Energies

**Keyword abstract:** NUCLEAR REACTIONS  $^{98}\text{Mo}$ ,  $^{127}\text{I}$ ,  $^{139}\text{La}(n,\gamma)$ ,E=low; calculated capture neutron width enhancement factor. Laser induced excitation.

-----  
**Keynumber:** 1989DU03

**Reference:** Nucl.Instrum.Methods Phys.Res. A278, 484 (1989)

**Authors:** P.Durner, T.von Egidy, F.J.Hartmann

**Title:** Neutron-Capture Gamma Rays below 40 keV

**Keyword abstract:** NUCLEAR REACTIONS  $^{27}\text{Al}$ ,  $^{39}\text{K}$ ,  $^{51}\text{V}$ ,  $^{127}\text{I}$ ,  $^{133}\text{Cs}$ ,  $^{159}\text{Tb}$ ,  $^{165}\text{Ho}$ ,  $^{169}\text{Tm}$ ,  $^{175}\text{Lu}$ ,  $^{181}\text{Ta}$ ,  $^{191}\text{Ir}$ ,  $^{197}\text{Au}$ ,  $^{232}\text{Th}(n,\gamma)$ ,E=low; measured  $E\gamma$ ,absolute  $I\gamma$ .  $^{28}\text{Al}$ ,  $^{40}\text{K}$ ,  $^{52}\text{V}$ ,  $^{128}\text{I}$ ,  $^{134}\text{Cs}$ ,

$^{160}\text{Tb}$ ,  $^{166}\text{Ho}$ ,  $^{170}\text{Tm}$ ,  $^{176}\text{Lu}$ ,  $^{182}\text{Ta}$ ,  $^{192}\text{Ir}$ ,  $^{198}\text{Au}$ ,  $^{233}\text{Th}$  deduced transitions. Si-Li detector.

-----  
**Keynumber:** 1989CV01

**Reference:** Z.Phys. A332, 163 (1989)

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

**Title:** Exciton Model Comparison of the Activation and the Integrated 14 MeV Neutron Radiative Capture Cross Sections

**Keyword abstract:** NUCLEAR REACTIONS  $^{27}\text{Al}$ ,  $^{51}\text{V}$ ,  $^{45}\text{Sc}$ ,  $^{55}\text{Mn}$ ,  $^{127}\text{I}$ ,  $^{141}\text{Pr}$ ,  $^{208}\text{Pb}$ ,  $^{209}\text{Bi}$  (n, $\gamma$ ),E=14.1 MeV; calculated  $\sigma(E(\gamma))$ . Exciton model.

-----  
**Keynumber:** 1984LOZT

**Reference:** Proc.Conf.Neutron Physics, Kiev, Vol.3, p.20 (1984)

**Authors:** Ya.E.Loginov, V.V.Martynov, A.V.Murzin, E.I.Fedorova

**Title:**

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}\text{I}(\text{n},\gamma)$ ,E  $\approx$  2 keV; measured  $E\gamma$ , $I\gamma$ .  $^{128}\text{I}$  deduced levels,J, $\pi$ . Pair spectrometer,Ge(Li) detectors.

-----  
**Keynumber:** 1983MA72

**Reference:** Nucl.Sci.Eng. 85, 350 (1983)

**Authors:** R.L.Macklin

**Title:** Neutron Capture Cross Sections and Resonances of Iodine-127 and Iodine-129

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}\text{I}(\text{n},\gamma)$ ,E=3-700 keV;  $^{129}\text{I}(\text{n},\gamma)$ ,E=3-500 keV; measured average capture  $\sigma$ .  $^{128}$ ,  $^{130}\text{I}$  deduced resonances, (g $\Gamma$ n), (g $\Gamma\gamma$ ), (g $\Gamma\gamma\Gamma$ n/ $\Gamma$ ).

-----  
**Keynumber:** 1983FR29

**Reference:** Radiochim.Acta 33, 183 (1983)

**Authors:** L.Friedmann, D.C.Aumann

**Title:** The Thermal Neutron Cross-Sections and Resonance Integrals of  $^{127}\text{I}$ ,  $^{128}\text{I}$  and  $^{129}\text{I}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}$ ,  $^{128}$ ,  $^{129}\text{I}(\text{n},\gamma)$ ,E=thermal; measured effective capture  $\sigma$ . Activation technique,radioactive targets from successive neutron capture in Iodine.

-----  
**Keynumber:** 1981YAZW

**Reference:** NEANDC(J)-75/U, p.76 (1981)

**Authors:** N.Yamamuro, K.Saito, T.Emoto, T.Wada, Y.Fujita, K.Kobayashi

**Title:** Neutron Capture Cross Section Measurements of Nb-93, I-127, Ho-165, Ta-181 and U-238 between 3.2 and 80 keV

**Keyword abstract:** NUCLEAR REACTIONS  $^{93}\text{Nb}$ ,  $^{127}\text{I}$ ,  $^{165}\text{Ho}$ ,  $^{181}\text{Ta}$ ,  $^{238}\text{U}(\text{n},\gamma)$ ,E=3.2-80 keV; measured  $\sigma(\text{capture})$  vs E.

-----  
**Keynumber:** 1981POZW

**Reference:** JINR-P3-81-721 (1981)

**Authors:** A.B.Popov, K.Tshetsyak

**Title:** Parameters of Iodine and Cesium Neutron Resonances in 20-250 eV Range

**Keyword abstract:** NUCLEAR REACTIONS  $^{133}\text{Cs}$ ,  $^{127}\text{I}(\text{n},\gamma)$ , (n,X),E=20-250 eV; measured transmission.  $^{134}\text{Cs}$ ,  $^{128}\text{I}$  deduced resonances, $\Gamma\gamma$ ,resonance parameters.

-----  
**Keynumber:** 1981ALZM

**Reference:** Program and Thesis, Proc.31st Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Samarkand, p.93

(1981)

**Authors:** V.L.Alekseev, L.P.Kabina, I.A.Kondurov, E.K.Leushkin, Yu.E.Loginov, V.B.Martynov, V.L.Rumyantsev, S.L.Sakharov, Yu.L.Khazov

**Title:**

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}\text{I}(n,\gamma)$ , E=thermal; measured  $\gamma$ -,ce-spectra, $\gamma\gamma$ -coin.  $^{128}\text{I}$  deduced levels,J, $\pi$ ,configurations. Magnetic spectrometer,Ge(Li) detectors.

-----  
**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.

-----  
**Keynumber:** 1980KOZJ

**Reference:** Program and Theses, Proc.30th Ann.Conf.Nucl.Spectrosc.At.Nuclei, Leningrad, p.95 (1980)

**Authors:** I.A.Kondurov, Yu.E.Loginov, V.V.Martynov, E.I.Fedorova

**Title:** Isomeric Levels in  $^{128}\text{I}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}\text{I}(n,\gamma)$ , E=reactor; measured  $\gamma\gamma$ -coin,E $\gamma$ .  $^{128}\text{I}$  deduced levels,isomer  $T_{1/2}$ , $\gamma$ -branching.

-----  
**Keynumber:** 1980BEYE

**Coden:** CONF Kiev(Neutron Physics) Proc,Part2,P173,Belyaev

**Keyword abstract:** NUCLEAR REACTIONS  $^{121}\text{Sb}$ ,  $^{127}\text{I}(n,\gamma)$ , E=10-250 eV; measured prompt integrated  $I\gamma$  vs E $\gamma$ .  $^{122}\text{Sb}$ ,  $^{128}\text{I}$  resonances deduced nonstatistical effects in  $\gamma$ -ray intensities.

-----  
**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  $\sigma$ .

-----  
**Keynumber:** 1979BUZS

**Reference:** INDC(YUG)-6/L (1979)

**Authors:** M.Budnar, F.Cvelbar, E.Hodgson, A.Hudoklin, V.Ivkovic, A.Likar, M.V.Mihailovic, R.Martincic, M.Najzer, A.Perdan, M.Potokar, V.Ramsak

**Title:** Prompt  $\gamma$ -Ray Spectra and Integrated Cross Sections for the Radiative Capture of 14 MeV Neutrons for 28 Natural Targets in the Mass Region from 12 to 208

**Keyword abstract:** NUCLEAR REACTIONS Mg,  $^{27}\text{Al}$ , Si,  $^{31}\text{P}$ , S, Ca,  $^{45}\text{Sc}$ ,  $^{51}\text{V}$ , Cr,  $^{55}\text{Mn}$ , Fe,  $^{59}\text{Co}$ , Cu, Se, Br, Sr,  $^{89}\text{Y}$ , In, Sb,  $^{127}\text{I}$ , Ba,  $^{141}\text{Pr}$ ,  $^{165}\text{Ho}$ ,  $^{181}\text{Ta}$ , W, Tl, Pb,  $^{209}\text{Bi}(n,\gamma)$ , E=14.6 MeV; measured  $\sigma(E\gamma)$ .

-----  
**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  $^{45}\text{Sc}$ ,  $^{55}\text{Mn}$ ,  $^{63}$ ,  $^{65}\text{Cu}$ ,  $^{69}$ ,  $^{71}\text{Ga}$ ,  $^{75}\text{As}$ ,  $^{79}$ ,  $^{81}\text{Br}$ ,  $^{80}\text{Se}$ ,  $^{85}$ ,

<sup>87</sup>Rb, <sup>89</sup>Y, <sup>93</sup>Nb, <sup>96</sup>Zr, <sup>98</sup>, <sup>100</sup>Mo, <sup>107</sup>, <sup>109</sup>Ag, <sup>108</sup>Pd, <sup>114</sup>Cd, <sup>115</sup>In, <sup>127</sup>I, <sup>133</sup>Cs, <sup>138</sup>Ba, <sup>139</sup>La, <sup>140</sup>, <sup>142</sup>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,γ),E=24 keV; calculated σ; deduced ratio of average Γγ to average level spacing. Margolis formula of statistical theory, low energy resonance parameters.

-----  
**Keynumber:** 1978YA14

**Reference:** J.Nucl.Sci.Technol. 15, 637 (1979)

**Authors:** N.Yamamuro, T.Doi, T.Miyagawa, Y.Fujita, K.Kobayashi, R.C.Block

**Title:** Measurement of Neutron Capture Cross Sections with Fe-Filtered Beam

**Keyword abstract:** NUCLEAR REACTIONS <sup>93</sup>Nb, <sup>115</sup>In, <sup>127</sup>I, <sup>165</sup>Ho, <sup>181</sup>Ta, <sup>232</sup>Th, <sup>238</sup>U(n,γ),E=24 keV; measured σ. Fe-filtered beam.

-----  
**Keynumber:** 1977ROYK

**Coden:** REPT NEANDC(E)-192U,Vol3,P19,Rohr

**Keyword abstract:** NUCLEAR REACTIONS <sup>127</sup>I(n,X), (n,γ),E=20 eV-5 keV; measured σ(E). <sup>128</sup>I resonances deduced neutron resonance parameters,significance for burnup calculations.

-----  
**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,γ),E=14.6 MeV; measured σ. Natural targets.

-----  
**Keynumber:** 1975YAZX

**Coden:** JOUR BAPSA 20 168 HB22

**Keyword abstract:** NUCLEAR REACTIONS <sup>93</sup>Nb,Ag, <sup>127</sup>I, <sup>165</sup>Ho, <sup>198</sup>Au, <sup>238</sup>U(n,γ),E approx 24 keV; measured σ.

-----  
**Keynumber:** 1975RIZV

**Coden:** REPT ERDA/NDC-2, p40, Rimawi

**Keyword abstract:** NUCLEAR REACTIONS <sup>127</sup>I, <sup>197</sup>Au, <sup>238</sup>U, <sup>115</sup>In(n,γ),E=24.3 keV; measured σ.

-----  
**Keynumber:** 1975JAYM

**Coden:** CONF Petten(Neutron Capture γ-Ray Spect),Proc P165

**Keyword abstract:** NUCLEAR REACTIONS <sup>121</sup>Sb, <sup>127</sup>I, <sup>159</sup>Tb, <sup>197</sup>Au(n,γ),E=1-800 eV; measured γ-spectra; deduced width correlations.

-----  
**Keynumber:** 1974VU01

**Reference:** Lett.Nuovo Cim. 10, 1 (1974)

**Authors:** J.Vuletin, P.Kulisic, N.Cindro

**Title:** Activation Cross-Sections of (n,γ) Reactions at 14 MeV

**Keyword abstract:** NUCLEAR REACTIONS <sup>50</sup>Ti, <sup>27</sup>Mg, <sup>37</sup>Cl, <sup>55</sup>Mn, <sup>75</sup>As, <sup>127</sup>I, <sup>138</sup>Ba, <sup>141</sup>Pr, <sup>170</sup>Er (n,γ),E=14 MeV; measured σ.

-----  
**Keynumber:** 1974RIZD

**Coden:** CONF Petten(Neutron Capture Gamma Ray Spectroscopy),P151

**Keyword abstract:** NUCLEAR REACTIONS <sup>27</sup>Al, <sup>50</sup>Ti, <sup>51</sup>V, <sup>103</sup>Rh, <sup>127</sup>I, <sup>139</sup>La(n,γ),E=14.6 MeV;

measured  $\sigma(E\gamma)$ .

-----  
**Keynumber:** 1974RI14

**Reference:** Nucl.Sci.Eng. 55, 17 (1974)

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

**Title:** Improved Activation Measurements of (n, $\gamma$ ) Cross Section for 14.6-MeV Neutrons

**Keyword abstract:** NUCLEAR REACTIONS  $^{27}\text{Al}$ ,  $^{50}\text{Ti}$ ,  $^{51}\text{V}$ ,  $^{103}\text{Rh}$ ,  $^{127}\text{I}$ ,  $^{139}\text{La}(n,\gamma)$ ,  $E=14.6$  MeV; measured  $\sigma$ .

-----  
**Keynumber:** 1974JAZJ

**Coden:** CONF Petten(Neutron Capture Gamma Ray Spectroscopy),P41

**Keyword abstract:** NUCLEAR REACTIONS  $^{121}\text{Sb}$ ,  $^{127}\text{I}$ ,  $^{159}\text{Tb}$ ,  $^{197}\text{Au}(n,\gamma)$ ,  $E=1-800$  eV; measured  $\sigma(E,E\gamma)$ , analyzed data for non-statistical effects.  $^{160}\text{Tb}$  deduced intermediate structure.

-----  
**Keynumber:** 1974JA14

**Reference:** Nucl.Phys. A223, 509 (1974)

**Authors:** A.P.Jain, B.Cauvin, A.Lottin

**Title:** Width Correlations and Intermediate Structure in the n- $\gamma$  Spectra of Au, Sb, I and Tb

**Keyword abstract:** NUCLEAR REACTIONS  $^{197}\text{Au}$ ,  $^{121}\text{Sb}$ ,  $^{127}\text{I}$ ,  $^{159}\text{Tb}(n,\gamma)$ ,  $E=0-600$  eV; measured ratio of high,low energy  $\gamma$ -rays.  $^{122}\text{Sb}$ ,  $^{128}\text{I}$ ,  $^{160}\text{Tb}$ ,  $^{198}\text{Au}$  deduced resonances  $J,\pi$ , level-width, width correlations, intermediate structure.

-----  
**Keynumber:** 1973SCYA

**Coden:** REPT INDC(SEC)-36/L P8

**Keyword abstract:** NUCLEAR REACTIONS  $^{26}\text{Mg}$ ,  $^{37}\text{Cl}$ ,  $^{41}\text{K}$ ,  $^{55}\text{Mn}$ ,  $^{71}\text{Ga}$ ,  $^{81}\text{Br}$ ,  $^{87}\text{Rb}$ ,  $^{100}\text{Mo}$ ,  $^{115}\text{In}$ ,  $^{127}\text{I}$ ,  $^{133}\text{Cs}$ ,  $^{138}\text{Ba}$ ,  $^{139}\text{La}$ ,  $^{142}\text{Ce}$ ,  $^{181}\text{Ta}$ ,  $^{198}\text{Pt}(n,\gamma)$ ; measured  $\sigma$ .

-----  
**Keynumber:** 1973SCXT

**Coden:** REPT HEDL-TME-73-79,F Schmittroth

**Keyword abstract:** NUCLEAR REACTIONS  $^{63}\text{Cu}$ ,  $^{65}\text{Cu}$ ,  $^{75}\text{As}$ ,  $^{79}\text{Br}$ ,  $^{107}\text{Ag}$ ,  $^{115}\text{In}$ ,  $^{71}\text{Ga}$ ,  $^{103}\text{Rh}$ ,  $^{127}\text{I}$ ,  $^{165}\text{Ho}$ ,  $^{193}\text{Ir}$ ,  $^{197}\text{Au}(n,\gamma)$ ; calculated  $\sigma(E)$ .

-----  
**Keynumber:** 1973PE10

**Reference:** Acta Phys. 33, 363 (1973)

**Authors:** G.Peto, J.Csikai, G.M.Shuriet, I.Jozsa, V.Asztalos

**Title:** Average Cross Sections for Pu- $\alpha$ -Be Neutrons; Low-Energy Neutrons from  $\alpha$ -n Sources

**Keyword abstract:** NUCLEAR REACTIONS  $^{27}\text{Al}$ ,  $^{28}\text{Si}$ ,  $^{31}\text{P}(n,p)$ ,  $^{77}\text{Se}$ ,  $^{79}\text{Br}$ ,  $^{87}\text{Sr}$ ,  $^{89}\text{Y}$ ,  $^{111}\text{Cd}$ ,  $^{115}\text{In}$ ,  $^{135}\text{Ba}$ ,  $^{137}\text{Ba}$ ,  $^{197}\text{Au}$ ,  $^{199}\text{Hg}$ ,  $^{204}\text{Pb}(n,n'\gamma)$ ,  $^{76}\text{Se}$ ,  $^{79}\text{Br}$ ,  $^{86}\text{Sr}$ ,  $^{110}\text{Cd}$ ,  $^{115}\text{In}$ ,  $^{127}\text{I}$ ,  $^{134}\text{Ba}$ ,  $^{136}\text{Ba}$ ,  $^{197}\text{Au}$ ,  $^{198}\text{Hg}(n,\gamma)$ ,  $E < 2$  MeV; measured  $\sigma$ .

-----  
**Keynumber:** 1973LAYT

**Reference:** INDC(HUN)-11/L, p.26 (1973)

**Authors:** L.Lakosi, A.Veres

**Title:** Activation Experiments of Photo-Neutrons by using  $^{24}\text{Na}$ -Be Source

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}$ ,  $^{114}\text{Cd}$ ,  $^{116}\text{Cd}$ ,  $^{115}\text{In}$ ,  $^{127}\text{I}$ ,  $^{152}\text{Sm}$ ,  $^{154}\text{Sm}$ ,  $^{166}\text{Er}$ ,  $^{170}\text{Er}$ ,  $^{175}\text{Lu}$ ,  $^{191}\text{Ir}$ ,  $^{193}\text{Ir}(n,\gamma)$ ,  $^{107}\text{Ag}$ ,  $^{109}\text{Ag}$ ,  $^{111}\text{Cd}$ ,  $^{115}\text{In}$ ,  $^{167}\text{Er}$ ,  $^{176}\text{Lu}(n,n'\gamma)$ ; measured  $\sigma$ .

**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:** 1973JAYX

**Coden:** REPT EANDC(E)-157/U Vol2 P11

**Keyword abstract:** NUCLEAR REACTIONS  $^{121}\text{Sb}$ ,  $^{127}\text{I}$ ,  $^{159}\text{Tb}$ ,  $^{197}\text{Au}(n,\gamma)$ ; measured  $E\gamma$ .  $^{122}\text{Sb}$ ,  $^{128}\text{I}$ ,  $^{160}\text{Tb}$ ,  $^{198}\text{Au}$  deduced resonances.

**Keynumber:** 1973HAYX

**Reference:** ANCR-1129, p.3 (1973)

**Authors:** Y.D.Harker, R.G.Nisle, E.H.Turk, J.R.Berreth

**Title:** Integral Capture Cross Section Measurements of Fission Product Isotopes (CFRMF)

**Keyword abstract:** NUCLEAR REACTIONS  $^{87}\text{Rb}$ ,  $^{99}\text{Tc}$ ,  $^{102}$ ,  $^{104}\text{Ru}$ ,  $^{115}\text{In}$ ,  $^{121}$ ,  $^{123}\text{Sb}$ ,  $^{127}\text{I}$ ,  $^{132}$ ,  $^{134}\text{Xe}$ ,  $^{133}\text{Cs}$ ,  $^{141}\text{Pr}$ ,  $^{147}\text{Pm}$ ,  $^{148}$ ,  $^{150}\text{Nd}$ ,  $^{152}$ ,  $^{154}\text{Sm}(n,\gamma)$ ,  $E$ =reactor spectrum; measured  $\sigma$ .

**Keynumber:** 1973HAYP

**Coden:** REPT EANDC(US)-186'U' P6

**Keyword abstract:** NUCLEAR REACTIONS  $^{98}$ ,  $^{100}\text{Mo}$ ,  $^{109}\text{Ag}$ ,  $^{127}$ ,  $^{129}\text{I}$ ,  $^{139}\text{La}$ ,  $^{151}$ ,  $^{153}\text{Eu}$ ,  $^{159}\text{Tb}$ ,  $^{169}\text{Tm}$ ,  $^{181}\text{Ta}(n,\gamma)$ ; measured integral  $\sigma$ .

**Keynumber:** 1972VA29

**Reference:** Nucl.Instrum.Methods 103, 549 (1972)

**Authors:** M.Valkonen, J.Kantele

**Title:** The Role of Target Geometry in 14 MeV Neutron Capture Cross-Section Measurements

**Keyword abstract:** NUCLEAR REACTIONS  $^{81}\text{Br}$ ,  $^{103}\text{Rh}$ ,  $^{127}\text{I}$ ,  $^{170}\text{Er}(n,\gamma)$ ,  $E=14.5$  MeV; measured  $\sigma$ ; analyzed target geometry effects.

**Keynumber:** 1972KA21

**Reference:** Phys.Lett. 39B, 625 (1972)

**Authors:** J.Kantele, M.Valkonen

**Title:** Mass Number Dependence of Activation Capture Cross Sections for 14 MeV Neutrons

**Keyword abstract:** NUCLEAR REACTIONS  $^{51}\text{V}$ ,  $^{81}\text{Br}$ ,  $^{103}\text{Rh}$ ,  $^{127}\text{I}$ ,  $^{154}\text{Sm}$ ,  $^{160}\text{Gd}$ ,  $^{165}\text{Ho}$ ,  $^{170}\text{Er}(n,\gamma)$ ,  $E=14.5$  MeV; measured activation  $\sigma$ .

**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  $\sigma$ .

**Keynumber:** 1972CAYH

**Coden:** JOUR FZKAA 4 Suppl,59



**Keyword abstract:** NUCLEAR REACTIONS  $^{23}\text{Na}$ ,  $^{27}\text{Al}$ ,  $^{37}\text{Cl}$ ,  $^{55}\text{Mn}$ ,  $^{41}\text{K}$ ,  $^{127}\text{I}(\text{n},\gamma)$ ,  $E=14$  MeV; measured activation  $\sigma$ .

-----  
**Keynumber:** 1971SC07

**Reference:** Nucl.Phys. A165, 415 (1971)

**Authors:** L.A.Schaller, J.Kern, B.Michaud

**Title:** Study of the Reaction  $^{127}\text{I}(\text{n},\gamma)^{128}\text{I}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}\text{I}(\text{n},\gamma)$ ,  $E=\text{th}$ ; measured  $E\gamma$ ,  $I\gamma$ ; deduced Q.  $^{128}\text{I}$  deduced levels.

-----  
**Keynumber:** 1971RYZZ

**Reference:** Proc.Int.Conf.Chemical Nuclear Data, Measurements and Applications, Canterbury, England, M.L.Hurrell, Ed., Institution of Civil Engineers, London, p.139 (1971)

**Authors:** T.B.Ryves

**Title:** Thermal Neutron Capture Cross Section Measurements at the NPL

**Keyword abstract:** NUCLEAR REACTIONS  $^{23}\text{Na}$ ,  $^{26}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{30}\text{Si}$ ,  $^{37}\text{Cl}$ ,  $^{41}\text{K}$ ,  $^{50}\text{Ti}$ ,  $^{51}\text{V}$ ,  $^{58}\text{Fe}$ ,  $^{64}\text{Ni}$ ,  $^{63}$ ,  $^{65}\text{Cu}$ ,  $^{69}$ ,  $^{71}\text{Ga}$ ,  $^{75}\text{As}$ ,  $^{79}$ ,  $^{81}\text{Br}$ ,  $^{89}\text{Y}$ ,  $^{107}$ ,  $^{109}\text{Ag}$ ,  $^{115}\text{In}$ ,  $^{121}$ ,  $^{123}\text{Sb}$ ,  $^{127}\text{I}$ ,  $^{139}\text{La}$ ,  $^{151}\text{Eu}$ ,  $^{196}$ ,  $^{198}\text{Pt}$  (n, $\gamma$ ),  $E=\text{thermal}$ ; measured  $\sigma$ .

-----  
**Keynumber:** 1971RYZX

**Coden:** CONF Canterbury(Chem Nucl Data),P139,12/10/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{23}\text{Na}$ ,  $^{26}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{30}\text{Si}$ ,  $^{37}\text{Cl}$ ,  $^{41}\text{K}$ ,  $^{50}\text{Ti}$ ,  $^{51}\text{V}$ ,  $^{58}\text{Fe}$ ,  $^{64}\text{Ni}$ ,  $^{63}$ ,  $^{65}\text{Cu}$ ,  $^{69}$ ,  $^{71}\text{Ga}$ ,  $^{75}\text{As}$ ,  $^{79}\text{Br}$ ,  $^{81}\text{Br}$ ,  $^{89}\text{Y}$ ,  $^{107}$ ,  $^{109}\text{Ag}$ ,  $^{115}\text{In}$ ,  $^{121}$ ,  $^{123}\text{Sb}$ ,  $^{127}\text{I}$ ,  $^{139}\text{La}$ ,  $^{151}\text{Eu}$ ,  $^{196}$ ,  $^{198}\text{Pt}$  (n, $\gamma$ ),  $E=\text{thermal}$ ; measured  $\sigma$ ; deduced resonance integrals.

-----  
**Keynumber:** 1971HAXS

**Coden:** REPT V D Harker,NCSAC-42, P5,5/19/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{87}\text{Rb}$ ,  $^{102}$ ,  $^{104}\text{Ru}$ ,  $^{121}$ ,  $^{123}\text{Sb}$ ,  $^{127}\text{I}$ ,  $^{148}$ ,  $^{150}\text{Nd}(\text{n},\gamma)$ ,  $E=\text{pile}$ ; measured integral  $\sigma$ .

-----  
**Keynumber:** 1971CAYZ

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

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}\text{I}$ ,  $^{143}$ ,  $^{145}\text{Nd}$ ,  $^{147}$ ,  $^{149}\text{Sm}$ ,  $^{121}$ ,  $^{123}\text{Sb}(\text{n},\gamma)$ ,  $^{123}$ ,  $^{125}\text{Te}$  (n,n), measured  $\sigma$ .  $^{128}\text{I}$ ,  $^{144}$ ,  $^{146}\text{Nd}$ ,  $^{148}$ ,  $^{150}\text{Sm}$ ,  $^{122}$ ,  $^{124}\text{Sb}$ ,  $^{124}$ ,  $^{126}\text{Te}$  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.  $^{123}$ ,  $^{125}\text{Te}(\text{n},\text{n})E=\text{resonance}$ ; 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:** 1971BR57

**Reference:** Acta Phys.Pol. B2, 489 (1971)

**Authors:** J.S.Brzosko, E.Gierlik, A.Soltan, Jr., Z.Szeflinski, Z.Wilhelmi

**Title:** Measurement of  $\gamma$ -Ray Spectra Accompanying Radiative Capture of Nucleons

**Keyword abstract:** NUCLEAR REACTIONS  $^{115}\text{In,Sb}$ ,  $^{127}\text{I}$ ,  $^{133}\text{Cs}$ ,  $^{159}\text{Tb}$ ,  $^{165}\text{Ho}$ ,  $^{181}\text{Ta}$ ,  $^{197}\text{Au,Tl}$ ,  $^{238}\text{U}(n,\gamma)$ , E approx 400 keV; measured  $\sigma(E\gamma)$ .  $^{115}\text{In}$ ,  $^{181}\text{Ta}$ ,  $^{197}\text{Au}(n,\gamma)$ , E=0.03-1.4 MeV; measured  $\sigma(E;E\gamma)$ .  $^{115}\text{In,Ag}$ ,  $^{181}\text{Ta}$ ,  $^{197}\text{Au}(p,\gamma)$ , E approx 4 MeV; measured  $\sigma(E\gamma)$ .

-----  
**Keynumber:** 1970SCZW

**Coden:** JOUR HPACA 43 741

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}\text{I}(n,\gamma)$ , E=thermal; measured  $E\gamma, I\gamma$ ; deduced Q.  $^{128}\text{I}$  deduced levels, transitions.

-----  
**Keynumber:** 1970MA65

**Reference:** Indian J.Phys. 44, 204 (1970)

**Authors:** M.Majumder

**Title:** Capture Cross Section of 14 MeV Neutrons

**Keyword abstract:** NUCLEAR REACTIONS  $^{71}\text{Ga}$ ,  $^{75}\text{As}$ ,  $^{127}\text{I}$ ,  $^{138}\text{Ba}$ ,  $^{141}\text{Pr}(n,\gamma)$ , E=14.8 MeV; measured  $\sigma$ . Activation method.

-----  
**Keynumber:** 1970HAZB

**Coden:** CONF Madurai(Nucl,Solid State Phys),Vol2,P36

**Keyword abstract:** NUCLEAR REACTIONS  $^{103}\text{Rh}$ ,  $^{127}\text{I}$ ,  $^{175}\text{Lu}(n,\gamma)$ , E=14.8 MeV; measured  $\sigma$ .

-----  
**Keynumber:** 1970FU03

**Reference:** Lett.Nuovo Cimento 3, 785 (1970)

**Authors:** A.Fubini, E.Ivanov, V.Rado

**Title:** A New Isomer of  $^{128}\text{I}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}\text{I}(n,\gamma)$ , E=thermal; measured  $\gamma\gamma$ -coin,  $\gamma\gamma$ -delay,  $E\gamma$ .  $^{128\text{m}}\text{I}$  deduced J,  $\pi$ , levels,  $T_{1/2}$ ,  $\gamma$ -multipolarity.

-----  
**Keynumber:** 1970EI04

**Reference:** Nucl.Phys. A147, 150 (1970)

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

**Title:** Measurement of the Average Circular  $\gamma$ -Polarization and Determination of Spins for Compound States Formed in Thermal Neutron Capture

**Keyword abstract:** NUCLEAR REACTIONS  $^{95}\text{Mo}$ ,  $^{113}\text{Cd}$ ,  $^{115}\text{In}$ ,  $^{121}$ ,  $^{123}\text{Sb}$ ,  $^{127}\text{I}$ ,  $^{133}\text{Cs}$ ,  $^{141}\text{Pr}$ ,  $^{155}$ ,  $^{157}\text{Gd}$ ,  $^{159}\text{Tb}$ ,  $^{165}\text{Ho}$ ,  $^{181}\text{Ta}$ ,  $^{199}\text{Hg}(\text{polarized } n,\gamma)$ , E = thermal; measured average  $\gamma$ -circular polarization.  $^{96}\text{Mo}$ ,  $^{114}\text{Cd}$ ,  $^{116}\text{In}$ ,  $^{122}$ ,  $^{124}\text{Sb}$ ,  $^{128}\text{I}$ ,  $^{134}\text{Cs}$ ,  $^{142}\text{Pr}$ ,  $^{156}$ ,  $^{158}\text{Gd}$ ,  $^{160}\text{Tb}$ ,  $^{166}\text{Ho}$ ,  $^{182}\text{Ta}$ ,  $^{200}\text{Hg}$  deduced J for compound state. Natural targets.

-----  
**Keynumber:** 1970CV01

**Reference:** Nucl.Phys. A158, 251 (1970)

**Authors:** F.Cvelbar, A.Hudoklin, M.Potokar

**Title:** Comparison between the Activation Cross Sections and Integrated Cross Sections for the Radiative Capture of 14 MeV Neutrons

**Keyword abstract:** NUCLEAR REACTIONS Mg,  $^{27}\text{Al,Si}$ ,  $^{31}\text{P}$ ,  $^{32}\text{S}$ ,  $^{40}\text{Ca}$ ,  $^{51}\text{V}$ ,  $^{52}\text{Cr}$ ,  $^{55}\text{Mn,Fe,Cu}$ , Br, Se,  $^{115}\text{In}$ ,  $^{127}\text{I,Ba}(n,\gamma)$ , E=14 MeV; measured  $\sigma(E\gamma)$ ; deduced integrated  $\sigma$ .

-----  
**Keynumber:** 1970CHYM

**Coden:** CONF Madurai(Nucl,Solid State Phys),Vol2,P615,10/25/71

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}$ ,  $^{63}\text{Cu}$ ,  $^{75}\text{As}$ ,  $^{98}\text{Mo}$ ,  $^{114}\text{Cd}$ ,  $^{127}\text{I}$ ,  $^{139}\text{La}$ ,  $^{141}\text{Pr}$  (n, $\gamma$ ),E=24 keV; measured  $\sigma$ .

-----  
**Keynumber:** 1969SP06

**Reference:** Phys.Rev. 184, 1201 (1969)

**Authors:** D.Sperber

**Title:** Statistical Theory of (n, $\gamma$ ) and (p, $\gamma$ ) Excitation Functions

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}\text{I}$ (n, $\gamma$ ), E = 2-14 MeV;  $^{209}\text{Bi}$ (p, $\gamma$ ), E = 3-22 MeV; calculated  $\sigma$ (E).

-----  
**Keynumber:** 1969KO23

**Reference:** Nucl.Phys. A138, 392 (1969)

**Authors:** R.G.Korteling, J.M.D'Auria, C.H.W.Jones, T.L.Isenhour

**Title:** Lifetimes Associated with Low-Energy Gamma Transitions in  $^{128}\text{I}$  and  $^{134}\text{Cs}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}\text{I}$ ,  $^{133}\text{Cs}$ (n, $\gamma$ ), E = thermal; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -delay.  $^{128}\text{I}$ ,  $^{134}\text{Cs}$  deduced levels,  $T_{1/2}$ .

-----  
**Keynumber:** 1969BR34

**Reference:** Can.J.Phys. 47, 2849 (1969)

**Authors:** J.S.Brzosko, E.Gierlik, A.Soltan,Jr., Z.Wilhelmi

**Title:** Effect of the Pigmy Resonance on the Calculations of the Neutron Capture Cross Section

**Keyword abstract:** NUCLEAR REACTIONS  $^{103}\text{Rh}$ ,  $^{127}\text{I}$ ,  $^{181}\text{Ta}$ ,  $^{197}\text{Au}$ (n, $\gamma$ ),E <6 keV; calculated  $\sigma$  (E; $E\gamma$ ); analyzed pigmy resonance effects.

-----  
**Keynumber:** 1968KA33

**Reference:** Osterr.Akad.Wiss., Math.-Naturw.Kl., Anz. No.10, 1 (1968)

**Authors:** B.Karlik

**Title:** Messungeiniger Einfangsquerschnitte fur schnelle Nautronen

**Keyword abstract:** NUCLEAR REACTIONS  $^{26}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{37}\text{Cl}$ ,  $^{51}\text{V}$ ,  $^{55}\text{Mn}$ ,  $^{65}\text{Cu}$ ,  $^{68}\text{Zn}$ ,  $^{75}\text{As}$ ,  $^{115}\text{In}$ ,  $^{127}\text{I}$ ,  $^{138}\text{Ba}$ (n, $\gamma$ ),E=2.9 MeV; measured  $\sigma$ .

-----  
**Keynumber:** 1968DI03

**Reference:** Nucl.Phys. A111, 360(1968)

**Authors:** H.Dinter

**Title:** Gammaspektren und Wirkungsquerschnitte beim Einfang von 14 MeV Neutronen in  $^{27}\text{Al}$  und  $^{127}\text{I}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{27}\text{Al}$ ,  $^{127}\text{I}$ (n, $\gamma$ ),E=14 MeV; measured  $\sigma$ ( $E\gamma$ ); deduced reaction mechanism. Natural targets.

-----  
**Keynumber:** 1968CR11

**Reference:** Acad.Rep.Populare Romine, Studii Cercetari Fiz. 20, 577 (1968)

**Authors:** M.I.Cristu

**Title:** Tranzitii Si Stari de Joasa Energie Ale Nucleelor Impar-Impare Excitate Prin Captura Radiativa a Neutronilor

**Keyword abstract:** NUCLEAR REACTIONS  $^{75}\text{As}$ ,  $^{127}\text{I}$ (n, $\gamma$ ), E=thermal; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin.  $^{76}\text{As}$ ,  $^{128}\text{I}$  deduced levels, J,  $\pi$ .

**Keynumber:** 1968COZW

**Coden:** REPT UCRL-tr-10603,J Colditz,1/3/73

**Keyword abstract:** NUCLEAR REACTIONS  $^{26}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{37}\text{Cl}$ ,  $^{51}\text{V}$ ,  $^{55}\text{Mn}$ ,  $^{65}\text{Cu}$ ,  $^{66}\text{Zn}$ ,  $^{75}\text{As}$ ,  $^{115}\text{In}$ ,  $^{127}\text{I}$ ,  $^{138}\text{Ba}(n,\gamma)$ ,  $E=2.9$  MeV; measured  $\sigma$ .

-----

**Keynumber:** 1968BRZW

**Coden:** REPT INR-P-967,J Brzosko

**Keyword abstract:** NUCLEAR REACTIONS  $^{103}\text{Rh}$ ,  $^{127}\text{I}$ ,  $^{181}\text{Ta}$ ,  $^{197}\text{Au}(n,\gamma)$ ; calculated  $\sigma(E)$ .  $^{104}\text{Rh}$ ,  $^{128}\text{I}$ ,  $^{182}\text{Ta}$ ,  $^{198}\text{Au}$  deduced level spacing, level-width, pigmy resonance effects.

-----

**Keynumber:** 1966AR09

**Reference:** Nucl.Phys. 83, 241 (1966); Erratum Nucl.Phys. 89, 706 (1966)

**Authors:** N.P.Archer, L.B.Hughes, T.J.Kennett, W.V.Prestwich

**Title:** A Study of the  $^{127}\text{I}(n,\gamma)^{128}\text{I}$  and  $^{133}\text{Cs}(n,\gamma)^{134}\text{Cs}$  Reactions

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}\text{I}$ ,  $^{133}\text{Cs}(n,\gamma)$ ,  $E = \text{th}$ ; measured  $E\gamma$ ,  $I\gamma$ ,  $Q$ .  $^{128}\text{I}$ ,  $^{134}\text{Cs}$  deduced levels.

-----

**Keynumber:** 1965RO10

**Reference:** Nucl.Phys. 71, 417(1965)

**Authors:** J.C.Robertson

**Title:** The Radiative Capture Cross Section of Iodine at 24 keV and Thermal Energy

**Keyword abstract:** NUCLEAR REACTIONS  $^{127}\text{I}(n,\gamma)$ ,  $E = \text{th}$ , 24 keV; measured  $\sigma(E)$ .

-----