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**55 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.Sukhovoij, 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:** 2000WIZZ

**Reference:** Proc.2nd Intern.Conf Fission and Properties of Neutron-Rich Nuclei, St Andrews, Scotland, June 28-July 3, 1999, J.H.Hamilton, W.R.Phillips, H.K.Carter, Eds., World Scientific, Singapore, p.379 (2000)

**Authors:** J.B.Wilhelmy, M.M.Fowler, R.C.Haight, G.G.Miller, R.S.Rundberg, E.H.Seabury, J.L.Ullmann, M.Heil, F.Kaeppler, R.Reifarth, F.Voss, K.Wisshak

**Title:** Neutron Capture on Radioactive Targets: Probing the s-Process

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}$ ,  $^{171}\text{Tm}(n,\gamma)$ , E=0.1, 100 keV; measured  $E\gamma, \sigma$ . Comparison with statistical model calculations.

**Keynumber:** 1999SU03

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

**Authors:** A.M.Sukhovoij, 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:** 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.Sukhovoij, 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:** 1998HUZY

**Reference:** INDC(CPR)-045 (1998)

**Authors:** X.Huang, H.Lu, W.Zhao, W.Yu, X.Han

**Title:** Neutron Activation Cross Section Measurements and Evaluations in CIAE

**Keyword abstract:** NUCLEAR REACTIONS  $^{46, 47}\text{Ti}$ ,  $^{54, 56}\text{Fe}$ ,  $^{59}\text{Co}$ ,  $^{58, 60}\text{Ni}$ ,  $^{64}\text{Zn}$ ,  $^{92}\text{Mo}(n,p)$ ,  $^{54}\text{Fe}$ ,  $^{62}\text{Ni}$ ,  $^{63}\text{Cu}(n,\alpha)$ ,  $^{58}\text{Ni}(n,np)$ ,  $^{71}\text{Ga}$ ,  $^{159}\text{Tb}$ ,  $^{169}\text{Tm}(n,\gamma)$ ,  $^{85}\text{Rb}$ ,  $^{93}\text{Nb}$ ,  $^{140}\text{Ce}$ ,  $^{175}\text{Lu}$ ,  $^{176}\text{Hf}$ ,  $^{181}\text{Ta}$ ,  $^{185, 187}\text{Re}(n,2n)$ ,  $E \approx 5\text{-}20\text{ MeV}$ ; measured activation  $\sigma$ .

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**Keynumber:** 1997YUZZ

**Reference:** INDC(CPR)-042/L, p.66 (1997)

**Authors:** B.Yu, G.Tang, Z.Shi

**Title:** Evaluation and Calculation of Activation Cross Sections for  $^{169}\text{Tm}(n,2n)$ ,  $(n,3n)$ ,  $(n,\gamma)$  and  $(n,x)$  Reactions Below 20 MeV

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,2n)$ ,  $(n,3n)$ ,  $(n,\gamma)$ ,  $(n,X)$ ,  $E=0\text{-}20\text{ MeV}$ ; analyzed  $\sigma$ .

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**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  $^{113}\text{Cd}$ ,  $^{127}\text{I}$ ,  $^{123}\text{Te}$ ,  $^{134, 136, 137, 138}\text{Ba}$ ,  $^{142, 143, 145}\text{Nd}$ ,  $^{149}\text{Sm}$ ,  $^{155, 157}\text{Gd}$ ,  $^{159}\text{Tb}$ ,  $^{165}\text{Ho}$ ,  $^{162, 163, 164}\text{Dy}$ ,  $^{167}\text{Er}$ ,  $^{169}\text{Tm}$ ,  $^{173, 174, 176}\text{Yb}$ ,  $^{175, 176}\text{Lu}$ ,  $^{177, 178, 179, 180}\text{Hf}$ ,  $^{195}\text{Pt}$ ,  $^{199}\text{Hg}$ ,  $^{181}\text{Ta}$ ,  $^{182, 186}\text{W}$ ,  $^{191}\text{Ir}$ ,  $^{197}\text{Au}(n,\gamma)$ ,  $E=\text{thermal}$ ; 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:** 1997CHZX

**Reference:** INDC(CPR)-043/L, p.9 (1997)

**Authors:** J.Chen, Z.Shi, G.Tang, G.Zhang, H.Lu, X.Han, X.Huang, Y.Chang, J.Wang, W.Wang

**Title:** Measurement of Activation Cross Sections for  $^{159}\text{Tb}(n,\gamma)$ ,  $^{160}\text{Tb}$  and  $^{169}\text{Tm}(n,\gamma)$ ,  $^{170}\text{Tm}$  Reactions

**Keyword abstract:** NUCLEAR REACTIONS  $^{159}\text{Tb}$ ,  $^{169}\text{Tm}(n,\gamma)$ ,  $E=0.57, 1.10, 1.60\text{ MeV}$ ; measured  $\sigma$ . Activation technique, other results compared.

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**Keynumber:** 1997BOZV

**Reference:** Proc.9th Intern.Symposium on Capture Gamma-Ray Spectroscopy and Related Topics, Budapest, Hungary, October 1996, G.L.Molnar, T.Belgya, Zs.Revay, Eds., Vol.1, p.483 (1997)

**Authors:** S.T.Boneva, V.A.Khitrov, Yu.P.Popov, A.M.Sukhovoj

**Title:** Nuclear Phase Transition - The Discovery and Experimental Study Possibilities

**Keyword abstract:** NUCLEAR REACTIONS  $^{155}\text{Gd}$ ,  $^{167}\text{Er}$ ,  $^{169}\text{Tm}$ ,  $^{197}\text{Au}(n,\gamma)$ ,  $E$  not given; analyzed two-step cascade intensity distributions; deduced pairing role, temperature effects.

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**Keynumber:** 1996VA23

**Reference:** Bull.Rus.Acad.Sci.Phys. 60, 1695 (1996)

**Authors:** E.V.Vasilieva, A.V.Voinov, A.M.Sukhovoi, V.A.Khitrov, Yu.V.Kholnov

**Title:** Features of Cascade  $\gamma$ -Decay of the  $^{170}\text{Tm}$  Compound State Excited by Thermal Neutron Capture

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma)$ ,  $E=\text{thermal}$ ; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -coin.  $^{170}\text{Tm}$  deduced levels, level density, cascade intensities related features. Model comparisons.

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**Keynumber:** [1996HO12](#)

**Reference:** Phys.Rev. C54, 78 (1996)

**Authors:** R.W.Hoff, H.G.Borner, K.Schreckenbach, G.G.Colvin, F.Hoyler, W.Schauer, T.von Egidy,

R.Georgii, J.Ott, S.Schrunder, R.F.Casten, R.L.Gill, M.Balodis, P.Prokofjevs, L.Simonova, J.Kern, V.A.Khitrov, A.M.Sukhovoij, O.Bersillon, S.Joly, G.Graw, D.Hofer, B.Valnion

**Title:** Nuclear Structure of  $^{170}\text{Tm}$  from Neutron-Capture and (d,p)-Reaction Measurements

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma)$ , E=thermal; measured  $\gamma\gamma$ -coin, I(ce), E $\gamma$ , I $\gamma$ .  $^{169}\text{Tm}(d,p)$ , E=26 MeV; measured spectra,  $\sigma(\theta)$ .  $^{170}\text{Tm}$  deduced levels, J,  $\pi$ , subshell ICC,  $\gamma$ -multipolarity, band structure.

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**Keynumber:** 1995HOZU

**Reference:** Program and Thesis, Proc.45th Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, St.Petersburg, p.101 (1995)

**Authors:** R.W.Hoff, H.G.Borner, K.Schreckenbach, G.G.Colvin, F.Hoyler, T.von Egidy, S.Schrunder, W.Schauer, R.Georgii, R.F.Casten, R.Gill, M.Balodis, P.Prokofjevs, L.Simonova, J.Berzins, V.Bondarenko, S.Joly, O.Bersillon, J.Kern

**Title:** Nuclear Structure of  $^{170}\text{Tm}$  from Neutron-Capture and (d,p)-Reaction Measurements

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma)$ , E=thermal, resonances, 2.24 keV; measured E $\gamma$ , I $\gamma$ ,  $\gamma\gamma$ -coin.  $^{169}\text{Tm}(d,p)$ , E not given; measured  $\sigma(\text{Ep})$ .  $^{170}\text{Tm}$  deduced levels, J,  $\pi$ , configurations.

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**Keynumber:** 1995BEZY

**Reference:** Program and Thesis, Proc.45th Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, St.Petersburg, p.99 (1995)

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

**Title:**  $\gamma\gamma$ -Coincidences in the Reaction  $^{169}\text{Tm}(n,\gamma)^{170}\text{Tm}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma)$ , E=thermal; measured  $\gamma\gamma$ -coin.  $^{170}\text{Tm}$  deduced levels.

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**Keynumber:** 1994HOZZ

**Reference:** Priv.Comm. (1994)

**Title:**

**Authors:** R.W.Hoff, H.G.Borner, K.Schreckenbach, G.G.Colvin, F.Hoyler, T.von Egidy, R.Georgii, J.Ott, W.Schauer, S.Schrunder, R.F.Casten, R.Gill, M.Balodis, P.Prokofjevs, L.Simonova, J.Kern, O.Bersillon, S.Joly

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma)$ , E=thermal; analyzed  $\gamma\gamma$ -coin data.  $^{170}\text{Tm}$  deduced levels, E $\gamma$ , I $\gamma$ .

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**Keynumber:** 1989XI01

**Reference:** Chin.J.Nucl.Phys. 11, No.2, 75 (1989)

**Authors:** Y.Xia, J.Yang, Z.Yang, W.Zhao, W.Yu

**Title:** Measurement of Neutron Capture Cross Sections of  $^{169}\text{Tm}$  in the Energy Range from 10 to 100 keV

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma)$ , E=10-100 keV; measured capture  $\sigma(\text{E})$ .

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**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.

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**Keynumber:** 1988XI02

**Reference:** Chin.J.Nucl.Phys. 10, 102 (1988)

**Authors:** Xia Yijun, Yang Jingfu, Yang Zhihua, Zhao Wenrong, Yu Weixiang

**Title:** Measurement of the Neutron Capture Cross Section of  $^{169}\text{Tm}$  in the Energy Range from 10 to 100 keV

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma)$ ,  $E=10-100$  keV; measured capture  $\sigma(E)$ . Moxon-Rae detector,  $^{197}\text{Au}$  standard.

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**Keynumber:** 1987XU02

**Reference:** Chin.J.Nucl.Phys. 9, 127 (1987)

**Authors:** Xu Haishan, Xiang Zhengyu, Mu Yunshan, Chen Yaoshun, Liu Jinrong, Li Yexiang

**Title:** Measurements of Fast Neutron Capture Cross Section of the  $^{169}\text{Tm}$  and  $^{181}\text{Ta}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}$ ,  $^{181}\text{Ta}(n,\gamma)$ ,  $E=1.01, 1.21, 1.44$  MeV; measured capture  $\sigma(E)$ . Tof, liquid scintillation counter.

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**Keynumber:** 1982MA33

**Reference:** Nucl.Sci.Eng. 82, 143 (1982)

**Authors:** R.L.Macklin, D.M.Drake, J.J.Malanify, E.D.Arthur, P.G.Young

**Title:** Cross Section of the  $^{169}\text{Tm}(n,\gamma)$  Reaction from 2.6 keV to 2 MeV

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma)$ ,  $E=3-2000$  keV; measured  $\sigma(\text{capture})$ .  $^{170}\text{Tm}$  deduced resonances, parameters, s-, p-, d-wave strength functions.

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**Keynumber:** 1982JI03

**Reference:** Chin.J.Nucl.Phys. 4, 136 (1982)

**Authors:** Jiang Songsheng, Luo Dexing, Zhou Zuying, Chen Ying

**Title:** Measurement of Neutron Capture Cross Sections for  $^{169}\text{Tm}$  from 0.1 to 1.5 MeV

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma)$ ,  $E=0.1-1.5$  MeV; measured  $\sigma(\text{capture})$ . Activation technique,  $^{197}\text{Au}$  standard,  $4\pi$   $\beta$ - $\gamma$  coincidence.

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**Keynumber:** 1979JO10

**Reference:** Phys.Rev. C20, 2072 (1979)

**Authors:** S.Joly, D.M.Drake, L.Nilsson

**Title:** Gamma-Ray Strength Functions for  $^{104}\text{Rh}$ ,  $^{170}\text{Tm}$ , and  $^{198}\text{Au}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{103}\text{Rh}$ ,  $^{169}\text{Tm}$ ,  $^{197}\text{Au}(n,\gamma)$ ,  $E=0.5-3.0$  MeV; measured  $\sigma(E, E\gamma)$ .  $^{104}\text{Rh}$ ,  $^{170}\text{Tm}$ ,  $^{198}\text{Au}$  deduced  $\gamma$ -ray strength functions,  $\Gamma\gamma$ .

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**Keynumber:** 1978ZA10

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

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

**Title:** Total Radiative Widths of Neutron Resonances

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

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**Keynumber:** 1978SIZS

**Coden:** CONF BNL(Neutron Capt  $\gamma$ -Ray Spectr), Contrib, No73, Simon

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma), E=.00001\text{ eV}-20\text{ MeV}$ ; calculated  $\sigma$  using published resonance parameters, Reich-Moore formalism for  $E < 760.6\text{ eV}$ , statistical model at higher energies.

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**Keynumber:** 1978SIZI

**Coden:** CONF Brookhaven(Neutron Capt  $\gamma$ -Ray Spectr), Proc, P754, Simon

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma), E=.00001-760.6\text{ eV}$ ; calculated  $\sigma$ . Reich-Moore formalism.  $^{169}\text{Tm}(n,\gamma), E=760.6\text{ eV}-20\text{ MeV}$ ; calculated  $\sigma$ . Statistical model.

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**Keynumber:** 1978JOZU

**Coden:** CONF BNL(Neutron Capt  $\gamma$ -Ray Spectr), Contrib, No36, Joly

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}, ^{197}\text{Au}(n,\gamma), E=0.5-3.0\text{ MeV}$ ; measured  $\sigma(E\gamma)$ .  $^{170}\text{Tm}, ^{198}\text{Au}$  deduced  $\gamma$ -strength function.

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**Keynumber:** 1978JOZR

**Coden:** CONF Brookhaven(Neutron Capt  $\gamma$ -Ray Spectr), Proc, P637, Joly

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}, ^{197}\text{Au}(n,\gamma), E=0.5-3.0\text{ MeV}$ ; measured  $E\gamma, I\gamma$ .  $^{170}\text{Tm}, ^{198}\text{Au}$  deduced  $\gamma$ -strength functions. Statistical model, spectrum fitting method.

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**Keynumber:** 1975ARZX

**Coden:** JOUR BAPSA 20 139 BB17

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}, ^{197}\text{Au}(n,\gamma)$ ; measured  $\sigma$ .  $^{170}\text{Tm}, ^{198}\text{Au}$  resonances deduced J, level-width.

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**Keynumber:** 1974THZF

**Coden:** PC B W Thomas, 11/19/74

**Keyword abstract:** NUCLEAR REACTIONS  $^{103}\text{Rh}, ^{93}\text{Nb}, ^{169}\text{Tm}, ^{240}\text{Pu}(n,\gamma)$ ; measured  $E\gamma, I\gamma$ .  $^{104}\text{Rh}, ^{94}\text{Nb}, ^{170}\text{Tm}, ^{241}\text{Pu}$  deduced levels, J,  $\pi$ , neutron binding energies.  $^{238}\text{U}(n,\gamma), E < 350\text{ eV}$ ; measured  $\sigma(E\gamma)$ .  $^{239}\text{U}$  deduced  $T_{1/2}$ , resonances.

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

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**Keynumber:** 1974BA27

**Reference:** Nucl.Phys. A222, 525 (1974)

**Authors:** Y.Baudinet-Robinet

**Title:** Statistical Analysis of Correlations between Partial Widths of Different Channels

**Keyword abstract:** NUCLEAR REACTIONS  $^{29}\text{Si}(\gamma,n)$ ,  $^{169}\text{Tm}$ ,  $^{163}\text{Dy}$ ,  $^{207}\text{Pb}(n,\gamma)$ ; calculated correlations.

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**Keynumber:** 1974ARZG

**Coden:** REPT USNDC-11 P73

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma)$ ; measured not given.  $^{170}\text{Tm}$  deduced resonance parameters.

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**Keynumber:** 1973HE15

**Reference:** Z.Phys. 258, 315 (1973)

**Authors:** R.Henkelmann

**Title:** Low Energy Gamma Rays from Thermal Neutron Capture

**Keyword abstract:** NUCLEAR REACTIONS  $^{45}\text{Sc}$ ,  $^{59}\text{Co}$ ,  $\text{Cu}$ ,  $\text{Se}$ ,  $\text{In}$ ,  $\text{La}$ ,  $^{141}\text{Pr}$ ,  $\text{Nd}$ ,  $\text{Sm}$ ,  $\text{Eu}$ ,  $\text{Gd}$ ,  $^{159}\text{Tb}$ ,  $\text{Dy}$ ,  $^{165}\text{Ho}$ ,  $\text{Er}$ ,  $^{169}\text{Tm}$ ,  $\text{Lu}$ ,  $\text{Hg}(n,\gamma)$ ; measured  $E\gamma, I\gamma$ .

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**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  $\sigma$ .

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**Keynumber:** 1973BO32

**Reference:** Phys.Lett. 45B, 81 (1973)

**Authors:** E.Boridy, C.Mahaux

**Title:** Relation between the Background Cross Section and the Correlation between Partial Widths

**Keyword abstract:** NUCLEAR REACTIONS  $^{29}\text{Si}$ ,  $^{208}\text{Pb}(\gamma,n)$ ,  $^{169}\text{Tm}(n,\gamma)$ ; measured nothing, calculated background  $\sigma$ .

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**Keynumber:** 1973ARZZ

**Coden:** JOUR BAPSA 18 96,J Arbo,1/15/73

**Keyword abstract:** NUCLEAR REACTIONS  $^{103}\text{Rh}$ ,  $^{169}\text{Tm}$ ,  $^{197}\text{Au}(n,\gamma)$ ; measured  $\sigma(E;E\gamma)$ .  $^{104}\text{Rh}$ ,  $^{170}\text{Tm}$ ,  $^{198}\text{Au}$  deduced resonance parameters.

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**Keynumber:** 1973ARYW

**Coden:** REPT COO-2176-20 P8

**Keyword abstract:** NUCLEAR REACTIONS  $^{103}\text{Rh}$ ,  $^{169}\text{Tm}(n,\gamma)$ ; measured  $\sigma(E)$ .  $^{104}\text{Rh}$ ,  $^{170}\text{Tm}$  deduced resonances.

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**Keynumber:** 1973ARYE

**Coden:** REPT USNDC-7 P79

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}$ ,  $^{103}\text{Rh}(n,\gamma)$ ; measured  $\sigma$ .  $^{170}\text{Tm}$ ,  $^{104}\text{Rh}$  deduced resonances, level-width.

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**Keynumber:** 1972THZU

**Reference:** AERE-PP/NP 18, p.23 (1972)

**Authors:** B.W.Thomas, H.P.Axmann, P.Riehs, E.R.Rae

**Title:** Resonance Capture Gamma-Ray Studies

**Keyword abstract:** NUCLEAR REACTIONS  $^{133}\text{Cs}$ ,  $^{167}\text{Er}$ ,  $^{169}\text{Tm}$ ,  $^{181}\text{Ta}(n,\gamma)$ ; measured  $\sigma(E\gamma)$ .  $^{134}\text{Cs}$ ,  $^{168}\text{Er}$ ,  $^{170}\text{Tm}$ ,  $^{182}\text{Ta}$  resonances deduced J.

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**Keynumber:** 1972TEZR

**Coden:** REPT CEA-N-1563

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma)$ ; measured  $\sigma(E\gamma)$ .

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**Keynumber:** 1972SI20

**Reference:** J.Phys.(London), A5, 877 (1972)

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

**Title:** p Wave Neutron Capture in Medium and Heavy Weight Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  $^{74}, ^{78}\text{Se}, ^{84}\text{Sr}, ^{109}\text{Ag}, ^{122}\text{Te}, ^{159}\text{Tb}, ^{169}\text{Tm}, ^{174}, ^{176}\text{Yb}, ^{178}, ^{179}\text{Hf}, ^{192}\text{Os}(n,\gamma), E=25 \text{ keV}$ ; measured average  $\sigma$ .

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**Keynumber:** 1972CHZJ

**Coden:** REPT ORNL-4743,P79,6/7/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma), E=5-900 \text{ eV}$ ; measured  $E\gamma, I\gamma$ .  $^{170}\text{Tm}$  deduced levels, J.

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**Keynumber:** 1972AR39

**Reference:** Trans.Amer.Nucl.Soc. 15, 943 (1972)

**Authors:** J.C.Arbo, J.P.Felvinci, W.W.Havens, Jr., C.Ho, E.Melkonian, F.J.Rahn

**Title:** Capture Resonance Parameters of  $^{169}\text{Tm}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma)$ ; measured  $\sigma(E;E\gamma)$ .  $^{170}\text{Tm}$  deduced resonances.

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**Keynumber:** 1971CHZN

**Coden:** JOUR BAPSA 16 1181,R E Chrien,10/29/71

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma)$ , measured unspecified.  $^{170}\text{Tm}$  resonances deduced J,level-width correlations.

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**Keynumber:** 1971CHZL

**Coden:** REPT BNL-16105,R E Chrien,12/4/71

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma), ^{98}\text{Mo}(n,\gamma), E < 5 \text{ keV}$ ; measured  $I\gamma$ .  $^{170}\text{Tm}, ^{99}\text{Mo}$  deduced resonances, J,level-width,strength functions.

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**Keynumber:** 1971CHYU

**Coden:** REPT NCSAC-42,P33,R E Chrien,5/19/72

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma), E < 1 \text{ keV}$ ; measured  $I\gamma$ .  $^{170}\text{Tm}$  deduced resonances, J.

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**Keynumber:** 1971BE48

**Reference:** Ann.Phys.(N.Y.) 65, 181 (1971)

**Authors:** M.Beer

**Title:** Doorway States and Primary Neutron Capture Gamma-Rays

**Keyword abstract:** NUCLEAR REACTIONS  $^{93}\text{Nb}, ^{165}\text{Ho}, ^{166}\text{Er}, ^{169}\text{Tm}, ^{183}\text{W}(n,\gamma), E=\text{resonance}$ ; calculated resonance widths, doorway state contributions.

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**Keynumber:** 1970SI10

**Reference:** J.Inorg.Nucl.Chem. 32, 2839 (1970)

**Authors:** G.H.E.Sims, D.G.Juhnke

**Title:** The Thermal Neutron Capture Cross-Sections and Resonance Capture Integrals of  $^{44}\text{Ca}$ ,  $^{62}\text{Ni}$ ,  $^{168}\text{Yb}$ ,  $^{174}\text{Yb}$ ,  $^{169}\text{Tm}$ , and  $^{203}\text{Tl}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{44}\text{Ca}$ ,  $^{62}\text{Ni}$ ,  $^{168}$ ,  $^{174}\text{Yb}$ ,  $^{169}\text{Tm}$ ,  $^{203}\text{Tl}(n,\gamma)$ ,  $E=\text{thermal}$ ; measured  $\sigma$ ; deduced resonance integrals.

**Keynumber:** 1970MUZS

**Coden:** CONF Madurai(Nucl,Solid State Phys),Vol2,P29

**Keyword abstract:** NUCLEAR REACTIONS  $^{74}\text{Se}$ ,  $^{84}\text{Sr}$ ,  $^{109}\text{Ag}$ ,  $^{122}\text{Te}$ ,  $^{159}\text{Tb}$ ,  $^{168}\text{Yb}$ ,  $^{174}$ ,  $^{176}\text{Yb}$ ,  $^{169}\text{Tm}$ ,  $^{178}$ ,  $^{179}\text{Hf}$ ,  $^{191}\text{Ir}$ ,  $^{192}\text{Os}(n,\gamma)$ ,  $E=25\text{ MeV}$ ; measured  $\sigma$ .

**Keynumber:** 1970BH03

**Reference:** Phys.Rev. C2, 2030 (1970)

**Authors:** M.R.Bhat, R.E.Chrien, D.I.Garber, O.A.Wasson

**Title:** Low-Energy Gamma Rays from Resonant Neutron Capture in  $\text{Tm}^{169}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma)$ ,  $E=\text{slow}$ ; measured  $E\gamma$ ,  $I\gamma$ ,  $\gamma\gamma$ -delay.  $^{170}\text{Tm}$  resonances deduced  $J$ .  $^{170\text{m}}\text{Tm}$  deduced  $T_{1/2}$ .

**Keynumber:** 1968LO09

**Reference:** Phys.Rev. 174, 1512 (1968)

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

**Title:** Resonant and Nonresonant Capture of Slow Neutrons in  $\text{Tm}^{169}(n,\gamma)\text{Tm}^{170}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}\text{Tm}(n,\gamma)$ ,  $E < 136\text{ eV}$ ; measured  $E\gamma$ ,  $I\gamma$ .  $^{170}\text{Tm}$  deduced resonances, levels,  $J$ ,  $\pi$ , level-width.

**Keynumber:** 1968CRZY

**Reference:** Proc.Conf.Advances in Mass Spectroscopy, Berlin, E.Kendrick, Ed., Inst. Of Petroleum, London, Vol.4, p.955 (1968)

**Authors:** I.H.Crocker, R.D.Werner, W.Cherrin

**Title:** A Mass Spectrometric Determination of the Electron Capture to Electron Emission Ratio of  $^{170}\text{Tm}$  and the Reactor Neutron Cross-Sections of  $^{169}\text{Tm}$ ,  $^{170}\text{Tm}$ , and  $^{171}\text{Tm}$

**Keyword abstract:** RADIOACTIVITY  $^{170}\text{Tm}$ ; measured  $EC/\beta^-$  branching ratio.

**Keyword abstract:** NUCLEAR REACTIONS  $^{169}$ ,  $^{170}$ ,  $^{171}\text{Tm}(n,\gamma)$ ,  $E=\text{reactor spectrum}$ ; measured  $\sigma$ .

**Keynumber:** 1967RA24

**Reference:** Proc.Intern.Conf.Atomic Masses, 3rd, Winnipeg, Canada, R.C.Barber, Ed., Univ.Manitoba Press, p.278(1967)

**Authors:** N.C.Rasmussen, V.J.Orphan, Y.Hukai

**Title:** Determination of  $(n,\gamma)$  Reaction Q Values from Capture  $\gamma$ -Ray Spectra

**Keyword abstract:** NUCLEAR REACTIONS  $^6\text{Li}$ ,  $^7\text{Li}$ ,  $^9\text{Be}$ ,  $^{10}\text{B}$ ,  $^{12}\text{C}$ ,  $^{14}\text{N}$ ,  $^{19}\text{F}$ ,  $^{23}\text{Na}$ ,  $^{24}\text{Mg}$ ,  $^{25}\text{Mg}$ ,  $^{26}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{28}\text{Si}$ ,  $^{31}\text{P}$ ,  $^{32}\text{S}$ ,  $^{35}\text{Cl}$ ,  $^{40}\text{Ca}$ ,  $^{45}\text{Sc}$ ,  $^{48}\text{Ti}$ ,  $^{51}\text{V}$ ,  $^{55}\text{Mn}$ ,  $^{54}\text{Fe}$ ,  $^{56}\text{Fe}$ ,  $^{59}\text{Co}$ ,  $^{58}\text{Ni}$ ,  $^{60}\text{Ni}$ ,  $^{63}\text{Cu}$ ,  $^{65}\text{Cu}$ ,  $^{66}\text{Zn}$ ,  $^{67}\text{Zn}$ ,  $^{73}\text{Ge}$ ,  $^{76}\text{Se}$ ,  $^{85}\text{Rb}$ ,  $^{87}\text{Rb}$ ,  $^{89}\text{Y}$ ,  $^{93}\text{Nb}$ ,  $^{103}\text{Rh}$ ,  $^{113}\text{Cd}$ ,  $^{123}\text{Te}$ ,  $^{133}\text{Cs}$ ,  $^{139}\text{La}$ ,  $^{141}\text{Pr}$ ,  $^{149}\text{Sm}$ ,  $^{153}\text{Eu}$ ,  $^{157}\text{Gd}$ ,  $^{159}\text{Tb}$ ,  $^{165}\text{Ho}$ ,  $^{167}\text{Er}$ ,  $^{169}\text{Tm}$ ,  $^{181}\text{Ta}$ ,  $^{182}\text{W}$ ,  $^{195}\text{Pt}$ ,  $^{197}\text{Au}$ ,  $^{199}\text{Hg}$ ,  $^{203}\text{Tl}$ ,  $^{207}\text{Pb}(n,\gamma)$ ,  $E = \text{thermal}$ ; measured  $E\gamma$ ; deduced Q. Natural targets.

**Keynumber:** 1967BE52

**Reference:** Yadern.Fiz. 6, 3 (1967); Soviet J.Nucl.Phys. 6, 1 (1968)

**Authors:** A.M.Berestovoi, I.A.Kondurov, Y.E.Loginov, L.K.Peker



**Title:** K-Forbidden Isomeric E1 transition in Tm<sup>170</sup>

**Keyword abstract:** NUCLEAR REACTIONS <sup>169</sup>Tm(n,γ),E=thermal; measured Eγ,Iγ,γγ-coin,γγ-delay. <sup>170</sup>Tm deduced K-forbidden isomeric transition, T<sub>1/2</sub>, γ-multipolarity.

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**Keynumber:** 1967BA17

**Reference:** Phys.Letters 24B, 389 (1967)

**Authors:** A.Backlin

**Title:** E2/M1 Mixing Ratios of Transitions in <sup>170</sup>Tm

**Keyword abstract:** NUCLEAR REACTIONS <sup>169</sup>Tm(n,γ),E=thermal; measured I(ce),E(ce). <sup>170</sup>Tm transitions deduced γ-mixing ratios.

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**Keynumber:** 1967AN04

**Reference:** Nucl.Phys. A102, 241 (1967)

**Authors:** A.Andreeff, R.Kastner, P.Manfrass, M.Bonitz, J.Borggreen, N.J.Sigurd Hansen

**Title:** The ±-Forbidden Decay of the 4.1 μs Isomeric State in <sup>170</sup>Tm

**Keyword abstract:** NUCLEAR REACTIONS <sup>169</sup>Tm(n,γ), E=th; <sup>170m</sup>Tm measured T<sub>1/2</sub>, σ act, Eγ, Iγ, γγ-coin, γ-delay. <sup>170</sup>Tm deduced levels. Natural target. <sup>169</sup>Tm(d,p), E=9 MeV; <sup>170m</sup>Tm measured T<sub>1/2</sub>, Eγ, Iγ, E(ce), I(ce), γ-delay, ce-delay. Natural target.