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**49 reference(s) found :**

**Keynumber:** [\*\*1991YU01\*\*](#)

**Reference:** Phys.Rev. C43, 2765 (1991)

**Authors:** Z.-S.Yuan, Y.-K.Ho

**Title:** Unified Formalism to Study Nonstatistical Effects in Radiative Capture Reactions

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}$ ,  $^{89}\text{Y}$ ,  $^{208}\text{Pb}$ ,  $^{27}\text{Al}(\text{n},\gamma)$ ,  $E < 20 \text{ MeV}$ ; calculated capture  $\sigma(E)$ . Unified formalism, nonstatistical effects.

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**Keynumber:** 1989SH31

**Reference:** J.Nucl.Sci.Technol.(Tokyo) 26, 955 (1989)

**Authors:** K.Shibata

**Title:** Calculation of Neutron-Induced Reaction Cross Sections of Manganese-55

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}(\text{n},2\text{n})$ ,  $(\text{n},\text{p})$ ,  $(\text{n},\alpha)$ ,  $(\text{n},\text{np})$ ,  $(\text{n},\text{n}\alpha)$ ,  $(\text{n},\gamma)$ ,  $E$

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**Keynumber:** [\*\*1989HO21\*\*](#)

**Reference:** Phys.Rev. C40, 2541 (1989)

**Authors:** Y.-K.Ho, J.-F.Liu, Z.-S.Yuan

**Title:** Averaged Nonstatistical Effects in the 3s Region for Capture Reactions

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}(\text{n},\gamma)$ ,  $E \leq 2 \text{ MeV}$ ; calculated  $\sigma(E)$ . Statistical, nonstatistical contributions.

**Keyword abstract:** NUCLEAR STRUCTURE  $A=30-70$ ; calculated neutron capture  $\sigma(E)$ . Averaged nonstatistical effects.

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

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**Keynumber:** 1987AI03

**Reference:** J.Phys.(London) G13, 945 (1987)

**Authors:** S.Ait-Tahar, P.E.Hodgson

**Title:** Weisskopf-Ewing Calculations: Neutron-induced reactions

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}(\text{n},\text{n})$ ,  $^{55}\text{Mn}$ ,  $^{59}\text{Co}$ ,  $^{63}\text{Cu}(\text{n},\text{p})$ ,  $(\text{n},\text{np})$ ,  $(\text{n},2\text{n})$ ,  $(\text{n},\gamma)$ ,  $(\text{n},\alpha)$ ,  $(\text{n},\text{n}\alpha)$ ,  $(\text{n},\text{t})$ ,  $(\text{n},\text{nd})$ ,  $(\text{n},2\text{p})$ ,  $(\text{n},\text{p}\alpha)$ ,  $^{59}\text{Co}$ ,  $^{63}\text{Cu}(\text{n},\text{n}')$ ,  $E=1-20 \text{ MeV}$ ; calculated  $\sigma(E)$ . Weisskopf-Ewing model.

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**Keynumber:** [\*\*1986KR16\*\*](#)

**Reference:** Phys.Rev. C34, 2103 (1986)

**Authors:** B.Krusche, K.P.Lieb

**Title:** Dipole Transition Strengths and Level Densities  $A \leq 80$  Odd-Odd Nuclei Obtained from Thermal Neutron Capture

**Keyword abstract:** NUCLEAR REACTIONS  $^{19}\text{F}$ ,  $^{23}\text{Na}$ ,  $^{27}\text{Al}$ ,  $^{31}\text{P}$ ,  $^{35}\text{Cl}$ ,  $^{39}\text{K}$ ,  $^{41}\text{K}$ ,  $^{45}\text{Sc}$ ,  $^{55}\text{Mn}$ ,  $^{59}\text{Co}$ ,  $^{63}\text{Cu}$ ,  $^{71}\text{Ga}$ ,  $^{75}\text{As}$ ,  $^{79}\text{Br}(\text{n},\gamma)$ ,  $E=\text{thermal}$ ; analyzed data.  $^{20}\text{F}$ ,  $^{24}\text{Na}$ ,  $^{28}\text{Al}$ ,  $^{32}\text{P}$ ,  $^{36}\text{Cl}$ ,  $^{40}\text{K}$ ,  $^{42}\text{Sc}$ ,

$^{56}\text{Mn}$ ,  $^{60}\text{Co}$ ,  $^{64}\text{Cu}$ ,  $^{72}\text{Ga}$ ,  $^{76}\text{As}$ ,  $^{80}\text{Br}$  deduced primary E1,M1 transition strengths,level density parameters. Bethe,constant temperature Fermi gas models.

**Keynumber:** 1986HI05

**Reference:** J.Radioanal.Nucl.Chem. 105, 351 (1986)

**Authors:** P.Z.Hien, T.K.Mai, T.X.Quang, T.N.Thuy

**Title:** Determination of  $k_0$ -Factors by Thermal Neutron Activation Technique

**Keyword abstract:** NUCLEAR REACTIONS  $^{27}\text{Al}$ ,  $^{26}\text{Mg}$ ,  $^{51}\text{V}$ ,  $^{55}\text{Mn}$ ,  $^{56}\text{Fe}$ ,  $^{64}\text{Ni}$ ,  $^{59}\text{Co}$ ,  $^{63}\text{Cu}$ ,  $^{109}\text{Ag}$ ,  $^{196}\text{Hg}$ (n, $\gamma$ ),E=thermal; measured composite nuclear constant. Activation technique.

**Keynumber:** 1985MA29

**Reference:** Nucl.Sci.Eng. 89, 362 (1985)

**Authors:** R.L.Macklin

**Title:** Resonance Neutron Capture by Manganese below 2.5 keV

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}$ (n, $\gamma$ ),E <2.5 keV; measured capture  $\sigma(E)$ .  $^{56}\text{Mn}$  deduced resonances, ( $g\Gamma\Gamma n/\Gamma$ ).

**Keynumber:** 1985KO48

**Reference:** Nucl.Instrum.Methods Phys.Res. B10/11, 1058 (1985)

**Authors:** K.Koh, R.Finn, P.Smith, E.Tavano, J.Dwyer, H.Sheh

**Title:** Activation Analysis Utilizing Byproduct Neutrons of Cyclotron Internal Target Runs

**Keyword abstract:** NUCLEAR REACTIONS  $^{58}\text{Ni}$ (n,2n),  $^{27}\text{Al}$ (n, $\alpha$ ),  $^{56}\text{Fe}$ ,  $^{65}\text{Cu}$ ,  $^{24}\text{Mg}$ ,  $^{58}\text{Ni}$ (n,p),  $^{23}\text{Na}$ ,  $^{55}\text{Mn}$ ,  $^{64}\text{Ni}$ ,  $^{71}\text{Ga}$ ,  $^{81}\text{Br}$ ,  $^{109}\text{Ag}$ ,  $^{115}\text{In}$ ,  $^{197}\text{Au}$ (n, $\gamma$ ),E=thermal-14.4 MeV; measured thermal,absorption  $\sigma$ ,reaction rates. Neutron activation analysis.

**Keynumber:** 1985AX01

**Reference:** Ann.Nucl.Energy 12, 315 (1985)

**Authors:** E.J.Axton

**Title:** The Thermal-Neutron Capture Cross-Section of  $^{55}\text{Mn}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}$ (n, $\gamma$ ),E=thermal; analyzed data; deduced capture  $\sigma$ . Other evaluations input.

**Keynumber:** 1983SA30

**Reference:** Aust.J.Phys. 36, 583 (1983)

**Authors:** D.G.Sargood

**Title:** Effect of Excited States on Thermonuclear Reaction Rates

**Keyword abstract:** NUCLEAR REACTIONS,ICPND  $^{20}\text{Ne}$ ,  $^{21}\text{Ne}$ ,  $^{22}\text{Ne}$ ,  $^{23}\text{Na}$ ,  $^{24}\text{Mg}$ ,  $^{25}\text{Mg}$ ,  $^{26}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{28}\text{Si}$ ,  $^{29}\text{Si}$ ,  $^{30}\text{Si}$ ,  $^{31}\text{P}$ ,  $^{32}\text{S}$ ,  $^{33}\text{S}$ ,  $^{34}\text{S}$ ,  $^{35}\text{S}$ ,  $^{36}\text{S}$ ,  $^{37}\text{Cl}$ ,  $^{38}\text{Ar}$ ,  $^{39}\text{Ar}$ ,  $^{40}\text{Ar}$ ,  $^{41}\text{K}$ ,  $^{42}\text{Ca}$ ,  $^{43}\text{Ca}$ ,  $^{44}\text{Ca}$ ,  $^{45}\text{Sc}$ ,  $^{46}\text{Sc}$ ,  $^{47}\text{Sc}$ ,  $^{48}\text{Sc}$ ,  $^{49}\text{Ti}$ ,  $^{50}\text{Ti}$ ,  $^{51}\text{V}$ ,  $^{52}\text{Cr}$ ,  $^{53}\text{Cr}$ ,  $^{54}\text{Cr}$ ,  $^{55}\text{Mn}$ ,  $^{56}\text{Mn}$ ,  $^{57}\text{Mn}$ ,  $^{58}\text{Fe}$ ,  $^{59}\text{Co}$ ,  $^{58}\text{Zn}$ ,  $^{60}\text{Zn}$ ,  $^{61}\text{Zn}$ ,  $^{62}\text{Zn}$ ,  $^{64}\text{Ni}$ ,  $^{63}\text{Cu}$ ,  $^{65}\text{Cu}$ ,  $^{66}\text{Zn}$ ,  $^{67}\text{Zn}$ (n, $\gamma$ ), (n,p), (n, $\alpha$ ), (p, $\gamma$ ), (p,n), (p, $\alpha$ ), ( $\alpha$ , $\gamma$ ), ( $\alpha$ ,n), ( $\alpha$ ,p),  $^{70}\text{Zn}$ (p, $\gamma$ ), (p,n), (p, $\alpha$ ), ( $\alpha$ , $\gamma$ ), ( $\alpha$ ,n), ( $\alpha$ ,p),E=low; compiled target thermal distribution energy state to ground state thermonuclear reaction rate of reaction  $\sigma$  vs temperature. Statistical model.

**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  $^{45}\text{Sc}$ ,  $^{50}\text{Ti}$ ,  $^{50}\text{Cr}$ ,  $^{51}\text{V}$ ,  $^{55}\text{Mn}$ ,  $^{58}\text{Fe}$ ,  $^{59}\text{Co}$ ,  $^{74}\text{Se}$ ,  $^{85}\text{Rb}$ ,  $^{94}$ ,

$^{96}\text{Zr}$ ,  $^{123}\text{Sb}$ ,  $^{130}\text{Ba}$ ,  $^{133}\text{Cs}$ ,  $^{139}\text{La}$ ,  $^{140}\text{Ce}$ ,  $^{159}\text{Tb}$ ,  $^{180}\text{Hf}$ ,  $^{181}\text{Ta}$ ,  $^{197}\text{Au}(\text{n},\gamma)$ , E=thermal,epithermal; analyzed data. Generalized least-squares fit.

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**Keynumber:** 1981RI03

**Reference:** Int.J.Appl.Radiat.Isotop. 32, 219 (1981)

**Authors:** R.Rieppo

**Title:** A Study of the Average Neutron Activation Cross Sections of the  $^{55}\text{Mn}(\text{n},\gamma)^{56}\text{Mn}$  and  $^{115}\text{In}(\text{n},\gamma)^{116}\text{In}$  Reactions for a  $^{241}\text{AmBe}$  Neutron Source

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}$ ,  $^{115}\text{In}(\text{n},\gamma)$ , E=thermal-0.2 MeV; measured  $\sigma$  (average). Activation technique,  $^{241}\text{AmBe}$  source.

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**Keynumber:** 1980MA02

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

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

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

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

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**Keynumber:** 1980IS02

**Reference:** Can.J.Phys. 58, 168 (1980)

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

**Title:** A Self-Consistent Set of Neutron Separation Energies

**Keyword abstract:** NUCLEAR REACTIONS  $^1\text{H}$ ,  $^9\text{Be}$ ,  $^{14}\text{N}$ ,  $^{24,25}\text{Mg}$ ,  $^{27}\text{Al}$ ,  $^{28,29}\text{Si}$ ,  $^{32}\text{S}$ ,  $^{35}\text{Cl}$ ,  $^{40,44}\text{Ca}$ ,  $^{47,48,49}\text{Ti}$ ,  $^{50,52}\text{Cr}$ ,  $^{55}\text{Mn}$ ,  $^{54,56,57}\text{Fe}(\text{n},\gamma)$ , E=thermal; measured  $E\gamma, I\gamma$ .  $^2\text{H}$ ,  $^{10}\text{Be}$ ,  $^{25,26}\text{Mg}$ ,  $^{28}\text{Al}$ ,  $^{29,30}\text{Si}$ ,  $^{33}\text{S}$ ,  $^{36}\text{Cl}$ ,  $^{41,45}\text{Ca}$ ,  $^{48,49,50}\text{Ti}$ ,  $^{51,53,54}\text{Cr}$ ,  $^{56}\text{Mn}$ ,  $^{55,57,58}\text{Fe}$  deduced Q,neutron binding energy.

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**Keynumber:** 1980GA14

**Reference:** Rev.Roum.Phys. 25, 107 (1980)

**Authors:** I.Garlea, C.Miron, E.Popă

**Title:** Integral Cross Sections Measured in  $\Sigma$  the  $\Sigma$  Spectrum

**Keyword abstract:** NUCLEAR REACTIONS  $^{59}\text{Co}$ ,  $^{58}\text{Fe}$ ,  $^{55}\text{Mn}$ ,  $^{109}\text{Ag}(\text{n},\gamma)$ ,  $^{54,56}\text{Fe}$ ,  $^{59}\text{Co}$ ,  $^{46,48}\text{Ti}$  ( $\text{n},\text{p}$ ),  $^{59}\text{Co}(\text{n},2\text{n})$ ,  $^{58,59}\text{Co}(\text{n},\alpha)$ , E=thermal; measured integral  $\sigma$ .

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**Keynumber:** 1980DE20

**Reference:** Nucl.Phys. A341, 45 (1980)

**Authors:** P.P.J.Delheij, K.Abrahams, W.J.Huiskamp, H.Postma

**Title:** The  $^{55}\text{Mn}(\text{n},\gamma)^{56}\text{Mn}$  Reaction Studied with Polarized Neutrons and Polarized Manganese Nuclei

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}(\text{polarized n},\gamma)$ , E=0.017 eV; measured  $I\gamma(\theta), \gamma\text{-CP}$ .  $^{56}\text{Mn}$  levels deduced J. Natural polarized,unpolarized targets.

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**Keynumber:** 1979MAZF

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

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

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

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

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**Keynumber:** 1979GAZS

**Reference:** INDC(RUM)-11/LN, p.28 (1979)

**Authors:** I.Garlea, C.Miron, E.Pop, M.Lupu

**Title:** Integral Cross Sections in the  $\Sigma\Sigma$  Spectrum for Some Reactions used in Reactor Dosimetry

**Keyword abstract:** NUCLEAR REACTIONS  $^{54}$ ,  $^{56}$ Fe,  $^{65}$ Cu,  $^{59}$ Co,  $^{46}$ ,  $^{47}$ ,  $^{48}$ Ti,  $^{46}$ Sc(n,p),  $^{55}$ Mn,  $^{63}$ Cu,  $^{59}$ Co,  $^{109}$ Ag(n, $\gamma$ ),  $^{59}$ Co(n,2n), E=thermal,fast; measured  $\sigma$ .

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

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**Keynumber:** 1979AG02

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

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

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

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

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

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**Keynumber:** 1978GA20

**Reference:** Phys.Rev. C18, 2079 (1978)

**Authors:** J.B.Garg, R.L.Macklin, J.Halperin

**Title:** Neutron Capture Cross Section of Manganese

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}$ Mn(n, $\gamma$ ), E=3.0-600 keV; measured  $\sigma(E)$ .  $^{56}$ Mn deduced neutron resonance parameters, linear correlation, time-of-flight technique, non-hydrogenous liquid scintillation detector.

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**Keynumber:** 1976SC16

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

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

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

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

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**Keynumber:** 1975LOZX

**Coden:** THESIS DABBB 35B 4103

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}$ ,  $^{59}\text{Co}(\text{n},\gamma)$ ; measured  $\sigma(E\gamma)$ .  $^{56}\text{Mn}$ ,  $^{60}\text{Co}$  resonances deduced level-width.

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**Keynumber:** 1975CO05

**Reference:** Can.J.Phys. 53, 236 (1975)

**Authors:** A.H.Colenbrander, T.J.Kennett

**Title:** An Investigation of the Reaction  $^{55}\text{Mn}(\text{n},\gamma)^{56}\text{Mn}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}(\text{n},\gamma)$ , E=5-7 MeV; measured  $E\gamma, I\gamma$ .  $^{56}\text{Mn}$  deduced levels.

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**Keynumber:** 1974VU01

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

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

**Title:** Activation Cross-Sections of  $(\text{n},\gamma)$  Reactions at 14 MeV

**Keyword abstract:** NUCLEAR REACTIONS  $^{50}\text{Ti}$ ,  $^{27}\text{Mg}$ ,  $^{37}\text{Cl}$ ,  $^{55}\text{Mn}$ ,  $^{75}\text{As}$ ,  $^{127}\text{I}$ ,  $^{138}\text{Ba}$ ,  $^{141}\text{Pr}$ ,  $^{170}\text{Er}$  ( $\text{n},\gamma$ ), E=14 MeV; measured  $\sigma$ .

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**Keynumber:** 1974CO23

**Reference:** Nucl.Instrum.Methods 116, 251 (1974)

**Authors:** A.H.Colenbrander, T.J.Kennett

**Title:** The Application of a Statistical Description for Complex Spectra to the  $(\text{n},\gamma)$  Reaction

**Keyword abstract:** NUCLEAR REACTIONS  $^{27}\text{Al}$ ,  $^{45}\text{Sc}$ ,  $^{55}\text{Mn}$ ,  $^{59}\text{Co}$ ,  $^{63}\text{Cu}$ ,  $^{75}\text{As}$ ,  $^{103}\text{Rh}$ ,  $^{109}\text{Ag}$ ,  $^{115}\text{In}$ ,  $^{133}\text{Cs}$ ,  $^{185}\text{Re}$ ,  $^{197}\text{Au}$ ,  $^{203}\text{Tl}(\text{n},\gamma)$ ; measured  $E\gamma, I\gamma$ .  $^{28}\text{Al}$ ,  $^{46}\text{Sc}$ ,  $^{56}\text{Mn}$ ,  $^{60}\text{Co}$ ,  $^{64}\text{Cu}$ ,  $^{76}\text{As}$ ,  $^{104}\text{Rh}$ ,  $^{110}\text{Ag}$ ,  $^{116}\text{In}$ ,  $^{134}\text{Cs}$ ,  $^{186}\text{Re}$ ,  $^{198}\text{Au}$ ,  $^{204}\text{Tl}$  deduced nuclear temperature, level densities.

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**Keynumber:** 1974BO19

**Reference:** Z.Naturforsch. 29a, 385 (1974)

**Authors:** H.Borner, O.W.B.Schult

**Title:** Resonance Neutron Capture in  $^{55}\text{Mn}$  and Levels in  $^{56}\text{Mn}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}(\text{n},\gamma)$ , E=0.3-2.4 keV; measured  $E\gamma, I\gamma$ , deduced Q.  $^{56}\text{Mn}$  deduced transitions.

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**Keynumber:** 1973SCYA

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

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

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**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  $^{55}\text{Mn}$ ,  $^{114}$ ,  $^{116}\text{Cd}$ ,  $^{115}\text{In}$ ,  $^{127}\text{I}$ ,  $^{152}$ ,  $^{154}\text{Sm}$ ,  $^{166}$ ,  $^{170}\text{Er}$ ,

$^{175}\text{Lu}$ ,  $^{191}\text{Ir}(\text{n},\gamma)$ ,  $^{107}\text{Ag}$ ,  $^{111}\text{Cd}$ ,  $^{115}\text{In}$ ,  $^{167}\text{Er}$ ,  $^{176}\text{Lu}(\text{n},\text{n}'\gamma)$ ; measured  $\sigma$ .

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**Keynumber:** 1972ST06

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

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

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

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

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**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  $\sigma$ .

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**Keynumber:** 1971VA01

**Reference:** Nucl.Phys. A160, 367 (1971)

**Authors:** P.H.M.Van Assche, H.A.Baader, H.R.Koch, B.P.K.Maier, U.Gruber, O.W.Schult, J.B.McGrory, J.R.Comfort, K.Rimawi, R.E.Chrien, O.A.Wasson, D.I.Garber

**Title:** Energy Levels of  $^{56}\text{Mn}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}(\text{n},\gamma)$ , E=thermal,resonance; measured  $E\gamma, I\gamma$ .  $^{56}\text{Mn}$  deduced levels,ICC,T<sub>1/2</sub>,B(M1),J, $\pi$ .

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**Keynumber:** 1971ARZJ

**Coden:** CONF Legnaro(1f<sub>7/2</sub> Nuclei),P251

**Keyword abstract:** NUCLEAR REACTIONS  $^{36}\text{Ar}$ ,  $^{40}\text{Ar}$ ,  $^{40}\text{K}$ ,  $^{40}\text{Ca}$ ,  $^{42}\text{Ca}$ ,  $^{44}\text{Ca}$ ,  $^{46}\text{Ca}$ ,  $^{48}\text{Ca}$ ,  $^{47}\text{Ti}$ ,  $^{55}\text{Mn}$ ,  $^{57}\text{Fe}$ ,  $^{59}\text{Co}(\text{n},\gamma)$ , E=thermal; surveyed  $E\gamma, I\gamma, \gamma\gamma$ -coin,  $\gamma\gamma(\theta)$ ,  $\gamma$ -polarization data.  $^{37}\text{Ar}$ ,  $^{41}\text{Ar}$ ,  $^{41}\text{K}$ ,  $^{41}\text{Ca}$ ,  $^{43}\text{Ca}$ ,  $^{45}\text{Ca}$ ,  $^{47}\text{Ca}$ ,  $^{49}\text{Ca}$ ,  $^{48}\text{Ti}$ ,  $^{56}\text{Mn}$ ,  $^{58}\text{Fe}$ ,  $^{60}\text{Co}$  deduced levels,J, $\pi$ , $\gamma$ -mixing.

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**Keynumber:** 1970STZZ

**Reference:** Thesis, Virginia Poly. (1970); Diss.Abst.Int. 31B, 3638 (1970)

**Authors:** E.P.Stergakos

**Title:** Studies of Resonances in  $^{23}\text{Na}$ ,  $^{26}\text{Mg}$ ,  $^{41}\text{K}$ ,  $^{55}\text{Mn}$  and  $^{59}\text{Co}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{23}\text{Na}$ ,  $^{26}\text{Mg}$ ,  $^{41}\text{K}$ ,  $^{55}\text{Mn}$ ,  $^{59}\text{Co}(\text{n},\gamma)$ , E=thermal; measured  $E\gamma, I\gamma$ .  $^{24}\text{Na}$ ,  $^{27}\text{Mg}$ ,  $^{42}\text{K}$ ,  $^{56}\text{Mn}$ ,  $^{60}\text{Co}$  deduced resonances, level-width.

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**Keynumber:** 1970ME14

**Reference:** Nucl.Phys. A154, 385 (1970)

**Authors:** J.Mellema, H.Postma

**Title:** Investigation of Nuclear Level Spins of  $^{56}\text{Mn}$  by Means of Nuclear Orientation

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}(\text{n},\gamma)$ , E=thermal; measured  $I\gamma, E\gamma$ ; deduced Q.  $^{56}\text{Mn}$  deduced levels,J, $\gamma$ -mixing. Ge(Li) detector, enriched target.

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**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  $\sigma$ .

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**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  $\sigma$ .

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**Keynumber:** 1969VAZY

**Reference:** Use Reference 71Va01

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}(n, \gamma)$ , E=thermal; measured  $E\gamma$ ,  $I\gamma$ .  $^{56}\text{Mn}$  deduced levels, J,  $\pi$ . Curved-crystal spectrometer.

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**Keynumber:** 1969KO05

**Reference:** Nucl.Phys. A127, 385 (1969)

**Authors:** J.Kopecky, E.Warming

**Title:** Circular Polarization Measurements with a Ge(Li) Detector

**Keyword abstract:** NUCLEAR REACTIONS  $^{32}\text{S}$ ,  $^{35}\text{Cl}$ ,  $^{48}\text{Ti}$ ,  $^{55}\text{Mn}$ ,  $^{56}\text{Fe}$ ,  $^{59}\text{Co}$ ,  $^{63}\text{Cu}$ (polarized n,  $\gamma$ ), E = thermal; measured  $\gamma$  circular polarization.  $^{33}\text{S}$ ,  $^{36}\text{Cl}$ ,  $^{49}\text{Ti}$ ,  $^{56}\text{Mn}$ ,  $^{57}\text{Fe}$ ,  $^{60}\text{Co}$ ,  $^{64}\text{Cu}$  levels deduced J,  $\gamma$ -mixing. Natural targets.

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**Keynumber:** 1969KE15

**Reference:** Yadern.Fiz. 10, 907 (1969); Soviet J.Nucl.Phys. 10, 524 (1970)

**Authors:** J.Kecskemeti, D.Kiss

**Title:** Measurement of Average Multiplicity in (n,  $\gamma$ ) Reactions Induced by Thermal Neutrons

**Keyword abstract:** NUCLEAR REACTIONS  $^{23}\text{Na}$ ,  $^{27}\text{Al}$ ,  $^{31}\text{P}$ ,  $^{32}\text{S}$ ,  $^{35}\text{Cl}$ ,  $^{48}\text{Ti}$ ,  $^{51}\text{V}$ ,  $^{53}\text{Cr}$ ,  $^{52}\text{Cr}$ ,  $^{55}\text{Mn}$ ,  $^{56}\text{Fe}$ ,  $^{59}\text{Co}$ ,  $^{60}\text{Ni}$ , Ni, Cu,  $^{63}\text{Cu}$ , Ge,  $^{73}\text{Ge}$ ,  $^{75}\text{As}$ , Se, Br, Sr, Zr,  $^{93}\text{Nb}$ , Mo,  $^{103}\text{Rh}$ , Ag(n,  $\gamma$ ) E=thermal; measured average  $\gamma$  multiplicity.

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**Keynumber:** 1968TS02

**Reference:** Izv.Akad.Nauk SSSR, Ser.Fiz. 32, 1972 (1968); Bull.Acad.Sci.USSR, Phys.Ser. 32, 1816 (1969)

**Authors:** F.Tsvelbar, A.Khudoklin, M.V.Mikhailovich, M.Naizher, M.Petrishich

**Title:** Coarse Structure of the Spectra of Gamma Rays Emitted in Radiative Capture of 14.1 MeV Neutrons

**Keyword abstract:** NUCLEAR REACTIONS  $^{51}\text{V}$ ,  $^{52}\text{Cr}$ ,  $^{55}\text{Mn}$ ,  $^{56}\text{Fe}(n, \gamma)$ , E=14 MeV; measured  $\sigma(E\gamma)$ ; deduced coarse structure.

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**Keynumber:** 1968OR01

**Reference:** J.Inorg.Nucl.Chem. 30, 1353 (1968)

**Authors:** E.Orvini, G.Gaggero, L.Lesca, A.M.Bresesti, M.Bresesti

**Title:** Determination of the Neutron Capture Resonance Integrals of  $^{55}\text{Mn}$ ,  $^{115}\text{In}$ ,  $^{121}\text{Sb}$ ,  $^{123}\text{Sb}$  and  $^{139}\text{La}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}$ ,  $^{115}\text{In}$ ,  $^{121}\text{Sb}$ ,  $^{123}\text{Sb}$ ,  $^{139}\text{La}(n, \gamma)$ , E=epithermal; measured resonance integrals.

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**Keynumber:** 1968NA21

**Reference:** Thesis, Physikinstitut, Reaktorzentrum Seibersdorf, Austria (1968); SGAE-PH-78/1968

**Authors:** H.Nabielek

**Title:** Untersuchung von Obergangsraten Elektromagnetischer Übergange durch Messung der Lebensdauer Angeregter Kernniveaus nach Neutroneneinfang

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}$ ,  $^{197}\text{Au}$ ,  $^{152}\text{Sm}$ ,  $^{162}$ ,  $^{164}\text{Dy}$ ,  $^{166}\text{Er}$ ,  $^{168}\text{Yb}(n,\gamma)\text{E}$  not given; measured  $\gamma\gamma$ -delay.  $^{56}\text{Mn}$ ,  $^{153}\text{Sm}$ ,  $^{163}$ ,  $^{165}\text{Dy}$ ,  $^{198}\text{Au}$ ,  $^{167}\text{Er}$ ,  $^{169}\text{Yb}$  levels deduced  $T_{1/2}$ .

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**Keynumber:** 1968KA33

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

**Authors:** B.Karlik

**Title:** Messungen einiger Einfangsquerschnitte für schnelle Neutronen

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

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**Keynumber:** 1968COZW

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

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

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

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**Keynumber:** 1965WA15

**Reference:** Nucl.Phys. 73, 499(1965)

**Authors:** O.A.Wasson, J.E.Draper

**Title:** Search for Direct Neutron Capture in Manganese

**Keyword abstract:** NUCLEAR REACTIONS  $^{55}\text{Mn}(n,\gamma)$ ,  $E = 5-4000$  ev; measured  $I\gamma(E)$  for high, low  $E\gamma$ ; deduced interference between capture, resonance.