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**27 reference(s) found :**

**Keynumber:** 2000PO07

**Reference:** J.Res.Natl.Inst.Stand.Technol. 105, 173 (2000)

**Authors:** S.Pospisil, F.Becvar, C.Granja Bustamante, J.Kubasta, S.A.Telezhnikov

**Title:** Secondary  $\gamma$  Transitions in  $^{159}\text{Gd}$  after Neutron Capture at Isolated Resonances

**Keyword abstract:** NUCLEAR REACTIONS  $^{158}\text{Gd}(n,\gamma)$ ,E=reactor; measured  $E\gamma$ , $I\gamma$ .  $^{159}\text{Gd}$  deduced transitions,branching ratios,resonances.

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**Keynumber:** 2000BEZQ

**Reference:** Proc.10th Intern.Symposium on Capture Gamma-Ray Spectroscopy and Related Topics, Santa Fe, New Mexico, 30 August-3 September 1999, S.Wender, Ed., p.657 (2000); AIP Conf.Proc. 529 (2000)

**Authors:** F.Becvar, M.Krticka, I.Tomandl, J.Honzatko, F.Voss, K.Wisshak, F.Kappeler

**Title:** Neutron Capture in  $^{155,157,158}\text{Gd}$  and  $^{149}\text{Sm}$ : A search for scissors M1 resonances build on excited states

**Keyword abstract:** NUCLEAR REACTIONS  $^{149}\text{Sm}$ ,  $^{155}$ ,  $^{157}$ ,  $^{158}\text{Gd}(n,\gamma)$ ,E=low; measured  $E\gamma$ , $I\gamma$ .  $^{150}\text{Sm}$ ,  $^{156}$ ,  $^{158}$ ,  $^{159}\text{Gd}$  deduced scissors resonance features.

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**Keynumber:** 1997POZW

**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.432 (1997)

**Authors:** S.Pospisil, E.Havrankova, C.Granja Bustamante, J.Kubasta, S.A.Telezhnikov

**Title:** Primary Transitions in  $^{159}\text{Gd}$  Studied at Isolated Neutron Resonances of  $^{158}\text{Gd}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{158}\text{Gd}(n,\gamma)$ ,E=reactor; measured resonance capture  $\gamma$  spectra.

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**Keynumber:** [1995WI25](#)

**Reference:** Phys.Rev. C52, 2762 (1995)

**Authors:** K.Wisshak, F.Voss, F.Kappeler, K.Guber, L.Kazakov, N.Kornilov, M.Uhl, G.Reffo

**Title:** Stellar Neutron Capture Cross Sections of the Gd Isotopes

**Keyword abstract:** NUCLEAR REACTIONS  $^{152}$ ,  $^{154}$ ,  $^{155}$ ,  $^{156}$ ,  $^{157}$ ,  $^{158}\text{Gd}(n,\gamma)$ ,E=3-225 KeV; measured  $\sigma(E)$ ; deduced Maxwellian averaged cross section for  $kT=10$  to 100 keV.

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**Keynumber:** 1986VO03

**Reference:** Nucl.Sci.Eng. 93, 43 (1986); Corrigendum Nucl.Sci.Eng. 96 343 (1987)

**Authors:** J.Voignier, S.Joly, G.Grenier

**Title:** Capture Cross Sections and Gamma-Ray Spectra from the Interaction of 0.5- to 3.0-MeV Neutrons with Nuclei in the Mass Range  $A = 63$  to 209

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

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**Keynumber:** 1981VOZW

**Reference:** CEA-R-5089 (1981)

**Authors:** J.Voignier, S.Joly, G.Grenier

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

Rubidium, Yttrium, Niobium, Gadolinium, Tungsten, Platinum and Thallium between 0.5 and 3.0 MeV

**Keyword abstract:** NUCLEAR REACTIONS Rb, Y, Nb, Gd, W, Pt, Tl, <sup>155</sup>, <sup>156</sup>, <sup>157</sup>, <sup>158</sup>, <sup>160</sup>Gd, <sup>182</sup>, <sup>183</sup>, <sup>184</sup>, <sup>186</sup>W, <sup>203</sup>, <sup>205</sup>Tl(n,γ), E=0.5-3 MeV; measured absolute σ. Integrated spectrum method.

**Keynumber:** 1981VOZU

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

**Keyword abstract:** NUCLEAR REACTIONS Rb, Y, Nb, Gd, W, Pt, Tl, <sup>155</sup>, <sup>156</sup>, <sup>157</sup>, <sup>158</sup>, <sup>160</sup>Gd, <sup>182</sup>, <sup>183</sup>, <sup>184</sup>, <sup>186</sup>W, <sup>203</sup>, <sup>205</sup>Tl(n,γ), E=0.5-3 MeV; measured absolute σ(capture) vs E. Integrated spectrum method.

**Keynumber:** 1981GRZY

**Reference:** CEA-N-2195 (1981)

**Authors:** G.Grenier, J.Voignier, S.Joly

**Title:** Capture Cross-Section Measurements for Different Elements at Neutron Energies between 0.5 and 3.0 MeV

**Keyword abstract:** NUCLEAR REACTIONS Rb, <sup>89</sup>Y, <sup>93</sup>Nb, Gd, W, Pt, Tl, <sup>155</sup>, <sup>156</sup>, <sup>157</sup>, <sup>158</sup>, <sup>160</sup>Gd, <sup>182</sup>, <sup>183</sup>, <sup>184</sup>, <sup>186</sup>W, <sup>203</sup>, <sup>205</sup>Tl(n,γ), E=0.5-3 MeV; measured σ(E). NaI scintillator, γ-detection. Statistical model.

**Keynumber:** 1981BEZC

**Reference:** NEANDC(E)-222U, Vol.V, p.5 (1981)

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

**Title:** Capture Cross Section Measurements on Xe, Sm, Eu and Gd-Isotopes with the Activation Method

**Keyword abstract:** NUCLEAR REACTIONS <sup>124</sup>, <sup>132</sup>, <sup>134</sup>Xe, <sup>152</sup>Sm, <sup>151</sup>Eu, <sup>152</sup>, <sup>158</sup>, <sup>160</sup>Gd(n,γ), E=25 keV; measured σ(capture). Activation technique. <sup>197</sup>Au standard.

**Keynumber:** 1979GRZO

**Reference:** Bull.Am.Phys.Soc. 24, No.7, 871, CC5 (1979)

**Authors:** G.Grenier, J.P.Delaroche, S.Joly, Ch.Lagrange, J.Voignier

**Title:** Neutron Capture Cross Sections of Y, Nb, Gd, W and Au between 0.5 MeV and 3.0 MeV

**Keyword abstract:** NUCLEAR REACTIONS Y, Nb, Gd, W, <sup>155</sup>, <sup>156</sup>, <sup>157</sup>, <sup>158</sup>, <sup>160</sup>Gd, <sup>182</sup>, <sup>183</sup>, <sup>184</sup>, <sup>186</sup>W, Au(n,γ), E=0.5 MeV-3.0 MeV; measured σ. Statistical model calculations.

**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 <sup>45</sup>Sc, <sup>55</sup>Mn, <sup>63</sup>, <sup>65</sup>Cu, <sup>69</sup>, <sup>71</sup>Ga, <sup>75</sup>As, <sup>79</sup>, <sup>81</sup>Br, <sup>80</sup>Se, <sup>85</sup>, <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:** 1978KO04

**Reference:** Yad.Fiz. 27, 10 (1978); Sov.J.Nucl.Phys. 27, 5 (1978)

**Authors:** V.N.Kononov, B.D.Yurlov, E.D.Poletaev, V.M.Timokhov

**Title:** Fast-Neutron Capture Cross Sections for Even-Even Isotopes of Neodymium, Samarium,

Gadolinium, and Erbium

**Keyword abstract:** NUCLEAR REACTIONS <sup>142, 144, 146, 148, 150</sup>Nd, <sup>144, 148, 150, 152, 154</sup>Sm, <sup>156, 158, 160</sup>Gd, <sup>166, 168, 170</sup>Er(n,γ), E=5-350 keV; measured σ(E).

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**Keynumber:** 1977GRZL

**Reference:** Bull.Amer.Phys.Soc. 22, No.8, 1032, ED9 (1977)

**Authors:** R.C.Greenwood, R.E.Chrien

**Title:** Distribution of Low-Spin States in Odd-Gd Isotopes Observed from 2- and 24-keV Neutron Capture Reactions

**Keyword abstract:** NUCLEAR REACTIONS <sup>154, 156, 158, 160</sup>Gd(n,γ), E=2,24 keV; measured γ-spectra. <sup>155, 157, 159, 161</sup>Gd deduced level distribution.

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**Keynumber:** 1975CHZT

**Coden:** REPT ERDA/NDC-2, p31, Chrien

**Keyword abstract:** NUCLEAR REACTIONS <sup>162, 164</sup>Dy, <sup>152</sup>Sm, <sup>156</sup>Gd, <sup>170</sup>Yb, <sup>158, 160</sup>Gd, <sup>164, 166, 168, 170</sup>Er(n,γ), E=0.0253 eV; measured σ(E<sub>γ</sub>). <sup>163, 165</sup>Dy, <sup>153</sup>Sm, <sup>151</sup>Gd, <sup>171</sup>Yb resonances deduced J,π.

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**Keynumber:** 1974SI11

**Reference:** Ann.Phys.(New York) 83, 355 (1974)

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

**Title:** Neutron Strength Functions of Nuclei in the Deformed Region

**Keyword abstract:** NUCLEAR REACTIONS <sup>138</sup>Ba, <sup>140, 142</sup>Ce, <sup>146, 148</sup>Nd, <sup>152, 154</sup>Sm, <sup>158, 160</sup>Gd, <sup>159</sup>Tb, <sup>169</sup>Tm, <sup>170</sup>Er, <sup>174, 176</sup>Yb, <sup>180</sup>Hf, <sup>181</sup>Ta, <sup>186</sup>W, <sup>190, 192</sup>Os, <sup>197</sup>Au, <sup>202</sup>Hg(n,γ), E=18-28 keV; measured σ; deduced p-wave strength functions.

**Reference:** Can.J.Phys. 52, 1160 (1974)

**Authors:** B.Singh, M.W.Johns

**Title:** Spin Determinations in Low Lying States of <sup>151</sup>Sm

**Keyword abstract:** RADIOACTIVITY <sup>151</sup>Pm; measured γγ(θ), I<sub>γ</sub>. <sup>151</sup>Sm levels deduced J,π,γ-mixing,λ.

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**Keynumber:** 1974SH03

**Reference:** Yad.Fiz. 19, 5 (1974); Sov.J.Nucl.Phys. 19, 2 (1974)

**Authors:** V.S.Shorin, V.N.Kononov, E.D.Poletaev

**Title:** Neutron Radiative-Capture Cross Sections in the Energy Region 5-70 keV For Gd and Er Isotopes

**Keyword abstract:** NUCLEAR REACTIONS <sup>154, 155, 156, 157, 158, 160</sup>Gd(n,γ), <sup>166, 167, 168, 170</sup>Er(n,γ), E=5-70 keV; measured σ(E).

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**Keynumber:** 1974RA23

**Reference:** Phys.Rev. C10, 1904 (1974)

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

**Title:** Neutron Resonance Spectroscopy: <sup>154, 158, 160</sup>Gd

**Keyword abstract:** NUCLEAR REACTIONS <sup>154, 158, 160</sup>Gd(n,n), (n,γ), E=0-10 keV; measured σ(E). <sup>155, 159, 161</sup>Gd resonances deduced g n-width,γ-width.

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**Keynumber:** 1973LAYG

**Reference:** RCN-191 (1973)

**Authors:** G.Lautenbach

**Title:** Calculated Neutron Absorption Cross Sections of 75 Fission Products

**Keyword abstract:** NUCLEAR REACTIONS  $^{81}\text{Br}$ ,  $^{83}$ ,  $^{84}$ ,  $^{85}$ ,  $^{86}\text{Kr}$ ,  $^{85}$ ,  $^{87}\text{Rb}$ ,  $^{88}$ ,  $^{90}\text{Sr}$ ,  $^{89}\text{Y}$ ,  $^{91}$ ,  $^{92}$ ,  $^{93}$ ,  $^{94}$ ,  $^{95}$ ,  $^{96}\text{Zr}$ ,  $^{95}$ ,  $^{97}$ ,  $^{98}$ ,  $^{100}\text{Mo}$ ,  $^{99}\text{Tc}$ ,  $^{101}$ ,  $^{102}$ ,  $^{104}$ ,  $^{106}\text{Ru}$ ,  $^{103}\text{Rh}$ ,  $^{105}$ ,  $^{106}$ ,  $^{107}$ ,  $^{108}$ ,  $^{110}\text{Pd}$ ,  $^{109}\text{Ag}$ ,  $^{111}$ ,  $^{112}$ ,  $^{113}$ ,  $^{114}\text{Cd}$ ,  $^{115}\text{In}$ ,  $^{126}$ ,  $^{128}$ ,  $^{130}\text{Te}$ ,  $^{127}$ ,  $^{129}\text{I}$ ,  $^{131}$ ,  $^{132}$ ,  $^{134}$ ,  $^{136}\text{Xe}$ ,  $^{133}$ ,  $^{135}$ ,  $^{137}\text{Cs}$ ,  $^{138}\text{Ba}$ ,  $^{139}\text{La}$ ,  $^{140}$ ,  $^{142}\text{Ce}$ ,  $^{141}\text{Pr}$ ,  $^{143}$ ,  $^{144}$ ,  $^{145}$ ,  $^{146}$ ,  $^{148}$ ,  $^{150}\text{Nd}$ ,  $^{147}\text{Pm}$ ,  $^{147}$ ,  $^{148}$ ,  $^{149}$ ,  $^{150}$ ,  $^{151}$ ,  $^{152}$ ,  $^{154}\text{Sm}$ ,  $^{153}$ ,  $^{154}$ ,  $^{155}\text{Eu}$ ,  $^{155}$ ,  $^{156}$ ,  $^{157}$ ,  $^{158}\text{Gd}$ ,  $^{159}\text{Tb}(n,\gamma)$ ; calculated  $\sigma(E)$ .

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**Keynumber:** 1972TH03

**Reference:** J.Phys.(London) A5, 468 (1972)

**Authors:** B.V.Thirumala Rao, J.Rama Rao, E.Kondaiah

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

**Keyword abstract:** NUCLEAR REACTIONS  $^{84}\text{Kr}$ ,  $^{110}\text{Cd}$ ,  $^{115}\text{In}$ ,  $^{130}\text{Te}$ ,  $^{146}$ ,  $^{148}$ ,  $^{150}\text{Nd}$ ,  $^{158}\text{Gd}$ ,  $^{160}\text{Gd}$  (n, $\gamma$ ),E=25 keV; measured  $\sigma$ .

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**Keynumber:** 1972RA26

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

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

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

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

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**Keynumber:** 1972HAWB

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

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

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**Keynumber:** 1971HAXR

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

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

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**Keynumber:** 1971GRZK

**Reference:** Program and Theses, Proc.21st Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Moscow, Pt.1, p.99 (1971)

**Authors:** L.V.Groshev, A.M.Demidov, L.L.Sokolovskii

**Title:** De-Excitation Even-Odd Isotopes of Samarium and Gadolinium after Capture of Slow Neutrons

**Keyword abstract:** NUCLEAR REACTIONS  $^{154}\text{Sm}$ ,  $^{158}\text{Gd}(n,\gamma)$ ,E=slow; measured  $E_\gamma$ , $I_\gamma$ ; deduced Q.  $^{155}\text{Sm}$ ,  $^{159}\text{Gd}$  deduced transitions.

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**Keynumber:** 1971GRZC

**Coden:** CONF Moscow(NuclSpectros,Structure) Abstr P99

**Keyword abstract:** NUCLEAR REACTIONS  $^{154}\text{Sm}$ ,  $^{158}\text{Gd}(n,\gamma)$ ,E=th; measured  $E_\gamma$ ; deduced Q.  $^{155}\text{Sm}$ ,  $^{159}\text{Gd}$  deduced levels.

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**Keynumber:** 1971GR42

**Reference:** Izv.Akad.Nauk SSSR, Ser.Fiz. 35, 1644 (1971); Bull.Acad.Sci.USSR, Phys.Ser. 35, 1497 (1972)

**Authors:** L.V.Groshev, A.M.Demidov, L.L.Sokolovskii

**Title:** Radiations from Even-Odd Samarium and Gadolinium Nuclei Following Thermal-Neutron Capture

**Keyword abstract:** NUCLEAR REACTIONS  $^{154}\text{Sm}$ ,  $^{156}$ ,  $^{158}$ ,  $^{160}\text{Gd}(n,\gamma)$ ,  $E=\text{thermal}$ ; measured  $E\gamma$ ,  $I\gamma$ ,  $Q$ .  $^{155}\text{Sm}$ ,  $^{157}$ ,  $^{159}$ ,  $^{161}\text{Gd}$  deduced levels.

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**Keynumber:** 1971DO19

**Reference:** Int.J.Mass Spectrom.Ion Phys. 6, 435 (1971)

**Authors:** R.Dobrozemsky, F.Pichlmayer, F.P.Viehbock

**Title:** Massenspektrometrische Bestimmung der Neutronen-Einfangsquerschnitte von Isotopen der Seltenen Erden

**Keyword abstract:** NUCLEAR REACTIONS  $^{147}$ ,  $^{148}\text{Sm}$ ,  $^{154}$ ,  $^{158}\text{Gd}$ ,  $^{160}$ ,  $^{161}$ ,  $^{162}$ ,  $^{163}\text{Dy}$ ,  $^{166}\text{Er}$ ,  $^{170}$ ,  $^{171}$ ,  $^{172}$ ,  $^{173}\text{Yb}(n,\gamma)$ ,  $E=\text{pile,thermal}$ ; measured  $\sigma$ ; deduced effective resonance integral.

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**Keynumber:** 1970RAZT

**Coden:** CONF Madurai(Nucl,Solid State Phys),Vol2,P25

**Keyword abstract:** NUCLEAR REACTIONS  $^{146}$ ,  $^{148}\text{Nd}$ ,  $^{150}\text{Nd}$ ,  $^{158}\text{Gd}(n,\gamma)$ ,  $E=25\text{ MeV}$ ; measured average  $\sigma$ .  $^{147}$ ,  $^{149}$ ,  $^{151}\text{Nd}$ ,  $^{159}\text{Gd}$  resonances deduced p-wave strength functions.