

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

**15 reference(s) found :**

**Keynumber:** 2000KA30

**Reference:** Appl.Radiat.Isot. 53, 825 (2000)

**Authors:** Ye.A.Karelin, V.N.Efimov, V.T.Filimonov, R.A.Kuznetsov, Yu.L.Revyakin, O.I.Andreev, I.Yu.Zhemkov, V.G.Bukh, V.M.Lebedev, Ye.N.Spiridonov

**Title:** Radionuclide Production using a Fast Flux Reactor

**Keyword abstract:** NUCLEAR REACTIONS  $^{89}\text{Y}$ ,  $^{32}\text{S}$ ,  $^{33}\text{S}$ ,  $^{35}\text{Cl}(\text{n},\gamma)$ ,  $^{116}\text{Sn}$ ,  $^{151}\text{Eu}$ ,  $^{152}\text{Gd}$

( $\text{n},\gamma$ ),E=reactor; measured yields; deduced irradiation parameters for isotope production in fast flux reactor.

---

**Keynumber:** 1997KA47

**Reference:** J.Radioanal.Nucl.Chem. 215, 193 (1997)

**Authors:** S.I.Kafala, T.D.MacMahon, S.B.Borzakov

**Title:** Neutron Activation for Precise Nuclear Data

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

---

**Keynumber:** 1996SPZZ

**Reference:** BLG 703 (1996), edited by A.Spits and P.H.M.Van Assche

**Authors:** A.Spits, P.H.M.Van Assche, H.G.Borner, W.F.Davidson, K.Schreckenbach, G.G.Colin, R.C.Greenwood, C.W.Reich, P.O.Lipas, J.Suhonen, P.Sinkko, A.Backlin

**Title:** Spectroscopy of the  $^{153}\text{Gd}$  and  $^{154}\text{Gd}$  Isotopes

**Keyword abstract:** NUCLEAR REACTIONS  $^{153}\text{Gd}$ ,  $^{152}\text{Gd}(\text{n},\gamma)$ ,E=thermal; measured  $E\gamma, I\gamma, I(\text{ce})$ ; deduced capture  $\sigma(E)$  for  $^{153}\text{Gd}$ .  $^{153}\text{Gd}$ ,  $^{154}\text{Gd}$  deduced levels,J, $\pi$ , $\gamma$ -multipolarity,B( $\lambda$ ),neutron binding energies. Double neutron capture on  $^{152}\text{Gd}$ .

---

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

---

**Keynumber:** 1992SPZZ

**Reference:** Priv.Comm. (1992)

**Authors:** A.M.J.Spits, P.H.M.Van Assche, H.G.Borner, W.F.Davidson, D.D.Warner, K.Schreckenbach, G.G.Colin, R.C.Greenwood, C.W.Reich, P.O.Lipas, J.Suhonen, P.Sinkko, A.Backlin

**Title:** Levels in  $^{153}\text{Gd}$  and  $^{154}\text{Gd}$  Studied by Radiative Neutron Capture in  $^{152}\text{Gd}$  and  $^{153}\text{Gd}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{152}\text{Gd}(\text{n},\gamma)$ ,E=thermal,2 keV; measured  $E\gamma, I\gamma, I(\text{ce})$ ; deduced  $Q, \sigma$ .  $^{153}\text{Gd}$ ,  $^{154}\text{Gd}$  deduced levels, $\gamma$ -multipolarity, $\delta, J, \pi, X(E0/E2)$ . Curved crystal,pair,magnetic electron spectrometers,enriched targets,single,double neutron capture on  $^{152}\text{Gd}$ . Model comparisons.

---

**Keynumber:** 1988BE32

**Reference:** Astrophys.J. 331, 1047 (1988)

**Authors:** H.Beer, R.L.Macklin

**Title:** The  $^{151}\text{Sm}$  Branching; A probe for the irradiation time scale of the s-process

**Keyword abstract:** NUCLEAR REACTIONS  $^{152}, ^{154}, ^{155}, ^{157}\text{Gd}(n,\gamma), E=3\text{-}500 \text{ keV}$ ; measured  $\sigma(E)$ ; deduced  $\sigma$ , Maxwellian averaged  $\langle s \rangle$ s-process time scale.

**Keynumber:** 1987MA13

**Reference:** Nucl.Sci.Eng. 95, 304 (1987)

**Authors:** R.L.Macklin

**Title:** Neutron Capture Resonances of  $^{152}\text{Gd}$  and  $^{154}\text{Gd}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{152}, ^{154}\text{Gd}(n,\gamma), E \leq 2.76 \text{ keV}$ ; measured capture  $\sigma(E)$ .  $^{153}, ^{155}\text{Gd}$  deduced resonances,  $\Gamma, \Gamma_n, \Gamma_\gamma$ , average spacing, capture integral. Enriched targets, tof.

**Keynumber:** 1986BEZD

**Reference:** Program and Theses, Proc.36th, Ann.Conf.Nucl.Spectrosc.Struct.At.Nuclei, Kharkov, p.306 (1986)

**Authors:** F.Bechvarzh, M.E.Montero-Cabrera, S.A.Telzhnikov, Huynh Thuong Hiep

**Title:**

**Keyword abstract:** NUCLEAR REACTIONS  $^{147}, ^{149}\text{Sm}, ^{152}, ^{154}, ^{156}\text{Gd}(n,\gamma), E=\text{resonance}$ ; measured  $\gamma$ -spectra.  $^{148}, ^{150}\text{Sm}, ^{153}, ^{155}, ^{157}\text{Gd}$  deduced radiative strength function.

**Keynumber:** 1984NEZR

**Reference:** Proc.Conf.Neutron Physics, Kiev, Vol.3, p.143 (1984)

**Authors:** K.Nedvedyuk, Yu.P.Popov

**Title:** Determination of the Average Radiative Neutron Capture from Systematics

**Keyword abstract:** NUCLEAR REACTIONS  $^{74}, ^{82}\text{Se}, ^{82}\text{Kr}, ^{84}\text{Sr}, ^{102}, ^{109}, ^{112}\text{Pd}, ^{104}, ^{109}, ^{115}, ^{117}, ^{118}\text{Cd}, ^{110}, ^{113}, ^{114}, ^{115}, ^{121}\text{Sn}, ^{120}, ^{127}, ^{129}, ^{131}, ^{132}\text{Te}, ^{131}, ^{132}, ^{133}\text{Ba}, ^{145}, ^{146}, ^{151}, ^{156}\text{Sm}, ^{152}, ^{154}, ^{159}\text{Gd}, ^{156}, ^{158}, ^{160}, ^{165}\text{Dy}, ^{166}, ^{168}, ^{169}, ^{175}\text{Yb}, ^{190}\text{Os}(n,\gamma), E=30 \text{ keV}$ ; analyzed average radiative  $\sigma$  dependence on neutron number, neutron binding energy; deduced  $\sigma$ .

**Keynumber:** 1981GRZZ

**Reference:** Priv.Comm. (1981)

**Authors:** R.C.Greenwood

**Title:** The Neutron Separation Energy for  $^{153}\text{Gd}$

**Keyword abstract:** NUCLEAR REACTIONS  $^{152}\text{Gd}(n,\gamma), E=2 \text{ keV}$ ; measured  $E\gamma, I\gamma$ .  $^{153}\text{Gd}$  deduced neutron separation energy.

**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  $^{124}, ^{132}, ^{134}\text{Xe}, ^{152}\text{Sm}, ^{151}\text{Eu}, ^{152}, ^{158}, ^{160}\text{Gd}(n,\gamma), E=25 \text{ keV}$ ; measured  $\sigma(\text{capture})$ . Activation technique.  $^{197}\text{Au}$  standard.

**Keynumber:** 1980BEZW

**Coden:** REPT JINR-P3-12516,2/1/80,Becvar

**Keyword abstract:** NUCLEAR REACTIONS  $^{152}\text{Gd}(n,\gamma), E=\text{slow-}1600 \text{ eV}$ ; measured  $E\gamma, I\gamma$ .  $^{153}\text{Gd}$

deduced B(n),resonances,J, $\pi$ . Statistical model.

---

**Keynumber:** 1978SPZY

**Coden:** CONF Brookhaven(Neutron Capt  $\gamma$ -Ray Spectr),Proc,P763,Spits

**Keyword abstract:** NUCLEAR REACTIONS  $^{152}$ ,  $^{153}$ ,  $^{154}$ Gd(n, $\gamma$ ),E=thermal; measured E $\gamma$ ,I $\gamma$ .  $^{153}$ Gd deduced levels, $\gamma$ -branching.  $^{154}$ ,  $^{155}$ Gd deduced levels. Dumond-type gamma diffraction spectrometer.

---

**Keynumber:** 1978SPZX

**Coden:** CONF BNL(Neutron Capt  $\gamma$ -Ray Spectr),Contrib,No77,Spits

**Keyword abstract:** NUCLEAR REACTIONS  $^{152}$ ,  $^{153}$ ,  $^{154}$ Gd(n, $\gamma$ ),E=th; measured E $\gamma$ ,I $\gamma$ .  $^{153}$ ,  $^{154}$ ,  $^{155}$ Gd deduced levels, $\gamma$ -branching.

---

**Keynumber:** 1972ST25

**Reference:** J.Inorg.Nucl.Chem. 34, 2699 (1972)

**Authors:** E.Steinnes

**Title:** Resonance Activation Integrals of Some Nuclides of Interest in Neutron Activation Analysis

**Keyword abstract:** NUCLEAR REACTIONS  $^{152}$ Gd(n, $\gamma$ ),E=thermal; measured  $\sigma$ .  $^{59}$ Co,  $^{232}$ Th,  $^{238}$ U,  $^{23}$ Na,  $^{46}$ Ca,  $^{45}$ Sc,  $^{58}$ Fe,  $^{64}$ Zn,  $^{68}$ Zn,  $^{85}$ Rb,  $^{84}$ Sr,  $^{98}$ Mo,  $^{121}$ Sb,  $^{133}$ Cs,  $^{130}$ Ba,  $^{139}$ La,  $^{140}$ Ce,  $^{141}$ Pr,  $^{146}$ Nd,  $^{152}$ Sm,  $^{152}$ ,  $^{158}$ Gd,  $^{159}$ Tb,  $^{165}$ Ho,  $^{169}$ Tm,  $^{168}$ Yb,  $^{174}$ Yb,  $^{180}$ Hf,  $^{181}$ Ta(n, $\gamma$ ),E=thermal; measured activation resonance integrals.

---