

<sup>88</sup>Sr(p, $\gamma$ ) IAR [1968Sh03](#),[1983Na15](#),[1972PaYW](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 114, 1 (2013)	20-Oct-2012

Includes (pol p, $\gamma$ ):GDR.

[1968Sh03](#): E=5.85 to 8.4 MeV. Measured  $\gamma$  spectra, area analysis of excitation function at 90°, deduced  $(2J+1)(\Gamma_p)(\Gamma_{\gamma 0})/\Gamma$ .

[1983Na15](#): E=5.0 to 8 MeV. Measured  $\gamma$  spectra at  $\theta=90^\circ$ , Breit-Wigner analysis of  $\sigma(E\gamma)$ , determined  $\Gamma_\gamma$  to the 1507 state and the 1744 state.

[1972PaYW](#): E=5.6 to 6.4 MeV. Measured excitation functions, Breit-Wigner analysis, determined  $\Gamma_{\gamma 0}$ .

[1969Ri08](#): E=5.064 MeV. Measured excitation functions, determined  $\Gamma_\gamma$  to the 1507 state and the 1744 state.

[1977LeZW](#): (pol p, $\gamma$ ) E=5-27 MeV. Measured  $\sigma(\theta)$  of GDR in <sup>89</sup>Y.

[1978We07](#): (pol p, $\gamma$ ) E<14 MeV. Measured  $\sigma(\theta)$ ,  $A_y(\theta)$  of GDR.

<sup>89</sup>Y Levels

E(level) <sup>†</sup>	J <sup><math>\pi</math></sup>	E(p)(c.m.) (keV)	Comments
12076 15	5/2 <sup>+</sup>	4999 15	$\Gamma_\gamma(\text{to } 1507)=8 \text{ eV } 2$ ( <a href="#">1972PaYW</a> ). $\Gamma_\gamma(1745)=3.5 \text{ eV } 10$ ( <a href="#">1972PaYW</a> ), 4 eV 3 ( <a href="#">1969Ri08</a> ). $\Gamma_\gamma(\text{to g.s.})=7 \text{ eV } 2$ ( <a href="#">1969Ri08</a> ).
13070 15	(1/2 <sup>+</sup> )	5993 15	$\Gamma_{\gamma 0}=16 \text{ eV } 3$ $\Gamma_{\gamma 0}$ : Weighted average of 18 eV 3 ( <a href="#">1972PaYW</a> ) and 11 eV 4 determined from $(2J+1) \times \Gamma_p \times \Gamma_{\gamma 0}/\Gamma=14 \text{ eV } 5$ ( <a href="#">1968Sh03</a> ), with $\Gamma$ , $\Gamma_p$ taken from <a href="#">1968Co02</a> in (p,p').
14060 15	3/2 <sup>+</sup>	6983 15	$\Gamma_{\gamma 0}=7 \text{ eV } 3$ $\Gamma_{\gamma 0}$ : Determined from $(2J+1) \times \Gamma_p \times \Gamma_{\gamma 0}/\Gamma=17 \text{ eV } 6$ ( <a href="#">1968Sh03</a> ), with $\Gamma$ , $\Gamma_p$ taken from <a href="#">1968Co02</a> in (p,p'). The 6914 and the 6983 resonances are not resolved, and from J <sup><math>\pi</math></sup> and RUL it is concluded that a contribution from the 6914 resonance is negligible.
14492 15	3/2 <sup>+</sup>	7415 15	$\Gamma_{\gamma 0}=11.3 \text{ eV } 19$ $\Gamma_{\gamma 0}$ : Weighted average of 11 eV 2 ( <a href="#">1972PaYW</a> ) and 14 eV 5 determined from $(2J+1) \times \Gamma_p \times \Gamma_{\gamma 0}/\Gamma=17 \text{ eV } 6$ ( <a href="#">1968Sh03</a> ), with $\Gamma$ , $\Gamma_p$ taken from <a href="#">1968Co02</a> in (p,p').
15837 15	(1/2 <sup>+</sup> )	8760 15	$\Gamma_\gamma(\text{to } 1745 \text{ level})\leq 2 \text{ eV}$ ( <a href="#">1972PaYW</a> ). $\Gamma_{\gamma 0}=40 \text{ eV } 8$ ( <a href="#">1972PaYW</a> )

<sup>†</sup> Center of mass energies from (p,p'), S(p)=7077.2 25 ([2011AuZZ](#)).