

$^{88}\text{Sr}(p,2n\gamma)$  **1980Fi06**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	T. D. Johnson and W. D. Kulp(a)		NDS 129, 1 (2015)	27-Jul-2015

$E_p=22.8$  MeV, measured  $n\gamma$  coincidences,  $\gamma\gamma$  coincidences,  $\gamma$  spectra, and angular distributions.

$^{87}\text{Y}$  Levels

E(level)	$J^\pi^\dagger$	$T_{1/2}^\ddagger$	E(level)	$J^\pi^\dagger$	E(level)	$J^\pi^\dagger$
0	1/2 <sup>-</sup>		1590.7 2	11/2 <sup>+</sup>	2479.0 3	(13/2) <sup>-</sup>
380.8 1	9/2 <sup>+</sup>	13.37 h 3	1623.2 3	(5/2,7/2)	2676.0 2	17/2 <sup>-</sup>
793.6 2	5/2 <sup>-</sup>		2008.0 3	(7/2)	2827.3 2	21/2 <sup>+</sup>
1202.6 2	(5/2) <sup>-</sup>		2366.9 2	15/2 <sup>-</sup>		
1404.5 2	13/2 <sup>+</sup>		2428.2 2	17/2 <sup>+</sup>		

<sup>†</sup> From  $^{87}\text{Y}$  Adopted Levels.

<sup>‡</sup> From  $^{87}\text{Y}$  Adopted Levels.

$\gamma(^{87}\text{Y})$

$E_\gamma$	$I_\gamma$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult. <sup>†</sup>	Comments
309.1 1	$\leq 5$	2676.0	17/2 <sup>-</sup>	2366.9	15/2 <sup>-</sup>		
380.8 1		380.8	9/2 <sup>+</sup>	0	1/2 <sup>-</sup>		
399.1 1	$\leq 5$	2827.3	21/2 <sup>+</sup>	2428.2	17/2 <sup>+</sup>		$E_\gamma$ : this placement is by the evaluators and is based on the $^{87}\text{Y}$ Adopted $\gamma$ 's. Because this $\gamma$ is very weak in this reaction no unique assignment can be made on the basis of the observed coincidences.
793.6 2	260 50	793.6	5/2 <sup>-</sup>	0	1/2 <sup>-</sup>		$A_2=+0.54$ 3, $A_4=+0.09$ 3 Although authors note that contaminant peaks add an unknown systematic error.
829.5 2	75 11	1623.2	(5/2,7/2)	793.6	5/2 <sup>-</sup>		$A_2=+1.10$ 10, $A_4=+0.25$ 10 Although authors note that contaminant peaks add an unknown systematic error.
888.2 2	32 4	2479.0	(13/2) <sup>-</sup>	1590.7	11/2 <sup>+</sup>	(D)	$A_2=-0.11$ 6, $A_4=-0.02$ 7.
962.4 1	86 17	2366.9	15/2 <sup>-</sup>	1404.5	13/2 <sup>+</sup>		
1023.6 <sup>‡</sup> 1	290 <sup>‡</sup> 32	1404.5	13/2 <sup>+</sup>	380.8	9/2 <sup>+</sup>		
1023.6 <sup>‡</sup> 1	290 <sup>‡</sup> 32	2428.2	17/2 <sup>+</sup>	1404.5	13/2 <sup>+</sup>		
<sup>x</sup> 1188.8 2	37 4						
1202.5 2	66 8	1202.6	(5/2) <sup>-</sup>	0	1/2 <sup>-</sup>	(Q)	$A_2=+0.12$ 2, $A_4=-0.04$ 3.
1209.8 1	100	1590.7	11/2 <sup>+</sup>	380.8	9/2 <sup>+</sup>	(D+Q)	$A_2=-0.88$ 3, $A_4=+0.04$ 4.
1214.3 2	26 3	2008.0	(7/2)	793.6	5/2 <sup>-</sup>		$A_2=+0.08$ 8, $A_4=0$ .
<sup>x</sup> 1227.0 2	68 9						

<sup>†</sup> From  $\gamma$  angular distribution.

<sup>‡</sup> Multiply placed with undivided intensity.

<sup>x</sup>  $\gamma$  ray not placed in level scheme.

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Legend

## Level Scheme

Intensities: Relative  $I_\gamma$   
 & Multiply placed: undivided intensity given

- $\blacktriangleright$   $I_\gamma < 2\% \times I_\gamma^{max}$
- $\color{blue}\blacktriangleright$   $I_\gamma < 10\% \times I_\gamma^{max}$
- $\color{red}\blacktriangleright$   $I_\gamma > 10\% \times I_\gamma^{max}$
- $\bullet$  Coincidence
- $\circ$  Coincidence (Uncertain)

