

$^{87}\text{Sr}(\text{d,t})$ 1985Li17

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Alexandru Negret, Balraj Singh		NDS 124, 1 (2015)	30-Nov-2014

$J^\pi(^{87}\text{Sr g.s.})=9/2^+$.

1985Li17: E=18 MeV, enriched target. Magnetic spectrometer. FWHM=12 keV. Measured $\sigma(\theta)$, DWBA analysis.

Cross section data			
Level	$d\sigma/d\Omega$ ($\mu\text{b/sr}$) (maximum)	Level	$d\sigma/d\Omega$ ($\mu\text{b/sr}$) (maximum)
0	53	2956	509
1077	165(L=4)+31(L=2)	2997	772
1854	46(L=4)+14(L=2)	3056	160
2102	2.6	3101	1.7
2203	4.3	3185	1740
2230	243(L=4)+38(L=2)	3291	59
2482	878	3318	804
2642	18(L=4)+6.3(L=2)	3362	2.7(L=4)+4.9(L=2)
2673	3160	3482	105(L=3)+44(L=4)
2788	4.8(L=4)+2.3(L=2)	3500	353
2857	366(L=4)+71(L=2)	3831	1477
2878	182(L=0)+15(L=2)		

 ^{86}Sr Levels

E(level) [†]	L [‡]	C ² S [#]	Comments
0	4	0.13	
1077	4+2	0.58+0.01	
1854	4+2	0.21+0.006	
2102	4	0.013	
2203	4	0.022	
2230	4+2	1.28+0.019	
2482	1	0.24	
2642	4+2	0.107+0.004	
2673	1	0.95	
2788	4+2	0.030+0.001	
2857	4+2	2.40+0.049	
2878	2(+0)	0.010+0.009	
2956	4	3.46	
2997	1	0.27	
3056	1	0.058	
3101	4	0.012	
3185	1	0.68	
3291	1	0.025	
3318	1	0.34	
3362	4+2	0.021+0.004	
3482	3+4	0.66+0.37	E(level): doublet.
3500	1	0.17	
3831	(1)	0.83	E(level): 3823 (1985Li17).

[†] Rounded values from Adopted Levels.

[‡] From DWBA analysis.

[#] C²S defined by $\sigma(\text{exp})=(3.37)(\text{C}^2\text{S})(\sigma(\text{DWBA}))/((2J+1))$.