^{88}Sr(p,t) 1976Oe02,1973Ba56

History

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

1976Oe02: E=42 MeV. FWHM=12 keV. Measured $\sigma(\theta)$. DWBA analysis, core-coupling model.
1973Ba56 (also 1972Ba75): E=31 MeV. FWHM=18 keV. Measured $\sigma(\theta)$, DWBA analysis, deduced enhancement factors and L-transfers for ten levels up to 3 MeV excitation.
1973Mo11: E=49.5 MeV. FWHM=75 keV. Measured $\sigma(\theta)$. A total of 14 groups reported.
1969Ta16: measured $\sigma(\theta)$.

Cross section data from 1976Oe02

Level	dσ/dΩ (μb/sr) (summed)	Level	dσ/dΩ (μb/sr) (summed)
0	125.2	2955	13.3
1075	92.6	2995	53.3
1855	8.2	3055.7	10.8
2102	16.0	3101	1.7
2203	14.6	3185.2	14.0
2230	52.9	3317.6	3.6
2480	41.8	3362.1	12.1
2635	8.2	3430	15.5
2675	196.8	3481	48.6
2785	90.4	3644.9	10.9
2857	26.6	3686.7	44.0

See also 1973Mo11 for cross section data

^{86}Sr Levels

E(level)[†]	L[‡]	Enhancement factor[b]	Comments
0	0	9.5	
1075[#] *5*	2	4.3	
1855[#] *5*	(2)	0.9	
2102 *2*	0	1.2	Additional information 1.
2203[@] *2*	0		
2230[#] *5*	4	2.3	
2480[#] *5*	3	1.4	
2635[#] *5*	2	0.4	
2675[#] *5*	5	0.1	
2785[#] *5*	2	4.2	
2857 *2*	6		Additional information 2. L: (5,6) (1973Ba56).
2955 *2*	(8)		
2995[#] *5*	3	1.4	
3055.7	5		
3101 *2*	(0,3)		
3185.2	3		
3317.6	5		
3362.1	4		
3430 *2*	2		
3481 *2*	(6)		L: (2) for a 3510 *30* group (1973Mo11).
3644.9	3		
3686.7	2[&]		L: (5) for a 3666 *30* group (1973Mo11).
3770[a] *30*			

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^{88}Sr(p,t) 1976Oe02,1973Ba56 (continued)

^{86}Sr Levels (continued)

E(level)[†]
3910[a] *30*
4160[a] *30*

† From 1976Oe02, unless otherwise stated. Values given to nearest 0.1 keV are from 1970Ra06 and combined with energies (from 1970Ra06) of several other low-lying levels were used as internal calibrants by 1976Oe02.
‡ From DWBA analysis of angular distributions and empirical shape comparisons with transitions of known L transfers (1976Oe02). For high L values, $\sigma(\theta)$ become structureless, and L assignment should be treated with caution. L-values assigned to 11 levels by 1973Ba56 are in agreement with those from 1976Oe02.
# From 1973Ba56.
@ Level reported by 1976Oe02 only but is in agreement with systematics of second-excited 0^+ states in the Sr isotopes (see 1973Ba56).
& Not in agreement with radioactive-decay work of 1970Ra06, who assigned a spin of $3\pm$ or 4^+ to this level on the basis of log *ft* value and γ decay to the 2^+ first-excited state (see ^{86}Y ε decay data set).
[a] From 1973Mo11. $\Delta E \approx 30$ keV.
[b] From 1973Ba56.