

$^{86}\text{Sr}(t,\alpha)$ 1973Ra26

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen		NDS 116, 1 (2014)	31-Dec-2013

1973Ra26: (t, α), E=15 MeV, resolution 50 keV, $\theta=12.5^\circ-90^\circ$. DWBA analysis of angular distributions. 97.6% ^{86}Sr target.

 ^{85}Rb Levels

E(level) [†]	L [@]	S [#]	Comments
0	3	3.73	Additional information 1.
151.5 20	1	2.08	Additional information 2.
281 2	1	0.50	Additional information 3.
514 3	4	0.68	Additional information 4.
732 6	(3,4)	0.09	Additional information 5. S: for 5/2 ⁻ .
880 7	1	0.15	Additional information 6.
925 10	1	0.09	Additional information 7.
960 10	(3,4)	0.17	Additional information 8. S: for 5/2 ⁻ .
1172 5	(3)	0.21	Additional information 9.
1291 7	1	0.08	Additional information 10.
1375 8	(3,4)	0.30	Additional information 11. S: for 5/2 ⁻ .
1492 8	1	0.16	Additional information 12.
1627 4	3	0.87	Additional information 13.
1792 [‡] 15	(3,4)	0.08	Additional information 14. L: L=1 gives nearly as good a fit as L=(3,4) in agreement with Adopted J ^π .
1891 15		≈0.10	Additional information 15.
1940 [‡] 10		≈0.07	Additional information 16.
2006 10		≈0.10	Additional information 17.
2056 5		≈0.20	Additional information 18.
2191 10	(1)	0.12	Additional information 19. S: for 3/2 ⁻ .
2304 12		≈0.13	Additional information 20.
4195 10	(3)	0.10	Additional information 21.

[†] Excitation energies based on $^{16}\text{O}(t,\alpha)$ and $^{86}\text{Sr}(t,\alpha)$ $Q(\beta^-)$ values of 7686.9 6 and 10175.6 28, respectively on the basis of $Q(\beta^-)$ values from 1977Wa08. This means that excitation energies are overestimated by 1973Ra26 by 0.14%.

[‡] Probable doublet.

[#] The values are for a normalization factor N=40, which was derived from sum-rule considerations. The authors also give spectroscopic factors for N=50.

[@] All L=1 transfers except to 281 level were assumed to be 2p_{3/2}; L=(3,4) pickups from 1f_{5/2}, and L=4 pickup from 1g_{9/2}.