

$^{87}\text{Rb}(t,\alpha)$ 1972Tu04

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

$J^\pi(^{87}\text{Rb g.s.})=3/2^-$.

1972Tu04 (also 1972TuZZ): E=15 MeV, FWHM 40-50 keV, measured $\sigma(\theta)$ for $\theta=13^\circ$ to 73° . DWBA analysis.

 ^{86}Kr Levels

E(level) [†]	L [#]	S [@]	Comments
0	1	0.53	$\sigma(\text{exp})/\sigma(\text{DWBA})=1.9$.
1565 2	1	0.88	$\sigma(\text{exp})/\sigma(\text{DWBA})=3.2$.
2249 2	3	1.78	$\sigma(\text{exp})/\sigma(\text{DWBA})=4.3$.
2346 3	1	0.61	$\sigma(\text{exp})/\sigma(\text{DWBA})=2.2$.
2724 5	1	0.14	$\sigma(\text{exp})/\sigma(\text{DWBA})=0.52$.
2847 5	1	0.44	$\sigma(\text{exp})/\sigma(\text{DWBA})=1.6$.
2917 6	3	2.03	$\sigma(\text{exp})/\sigma(\text{DWBA})=4.9$.
3010 6	3	0.58	$\sigma(\text{exp})/\sigma(\text{DWBA})=1.4$.
3117 [‡] 25			$\sigma(\text{exp})/\sigma(\text{DWBA})=0.055$. S: 0.04 for assumed L=4.
3322 8	(1)	0.12	$\sigma(\text{exp})/\sigma(\text{DWBA})=0.43$.
3541 6	1	0.22	$\sigma(\text{exp})/\sigma(\text{DWBA})=0.80$.
3783 6	(1)	0.06	$\sigma(\text{exp})/\sigma(\text{DWBA})=0.2$.
3930 15	(3)	0.12	$\sigma(\text{exp})/\sigma(\text{DWBA})=0.3$.
4037 12	4	0.08	$\sigma(\text{exp})/\sigma(\text{DWBA})=0.12$.
4173 [‡] 20			
4277 [‡] 10			

[†] Calibration by background groups from $^{37}\text{Cl}(t,\alpha)$ (1971OI02).

[‡] Weak group, obscured by background lines at most angles.

[#] From DWBA analysis of $\sigma(\theta)$.

[@] Following orbitals used for transferred proton used in calculating spectroscopic factors based on shell-model systematics: $2p_{3/2}$ for L=1, $1f_{5/2}$ for L=3, and $1g_{9/2}$ for L=4. L=1 summed strength was normalized to 3, and all other S values adjusted accordingly.