

$^{86}\text{Kr}(^3\text{He,d})$ 1975Me18

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=18 MeV, FWHM=20 keV, $\theta=7^\circ-41^\circ$, multi-angle spectrograph, measured $\sigma(\theta)$, DWBA analysis.

 ^{87}Rb Levels

E(level) [†]	L [‡]	(2J+1)C ² S [‡]	Comments
0	1	1.36	
399 5	3	1.18	
846 5	1	2.04	
1468 5	1	0.031	E(level): 1463 in Adopted Levels.
1578 [@] 5	4	9.87	
1893 10	1	0.023	
2396 5	1	0.17	
2548 7	2	0.11	
2731 5	4	0.14	
2810 5	2	0.024	
2973 5	4	0.13	
3060 5	0	0.036	
3309 5	2	0.25	
3335 8	1	0.058	
3692 [#] 7	1+(4)	0.016+0.12	
3764 5	1	0.021	
3834 5	0	0.024	
3973 5	2	0.24	
4146 5	2	0.021	
4266 [#] 5	(1)+2	0.014+0.031	
4379 5	2	0.39	
4492 5	2	0.19	
4681 5	1	0.034	
4862 [#] 5	(0+2)	0.003+0.008	
4941 5	0	0.012	
5118 9	2	0.12	
5196 5	0	0.056	
5233 5	2	0.11	
5316 5	2	0.089	
5347 5	2	0.13	
5491 5	2	0.43	
5542 [#] 5	(0+2)	0.026+0.17	
5634 7	0	0.17	
5750 5	0	0.044	
5802 [#] 5	(0+2)	0.016+0.081	
5845 5	2	0.056	
5884 5	2	0.051	
5978 5	2	0.13	
6018 5	0	0.076	
6089 5	2	0.073	
6176 5	0	0.030	
6206 5	2	0.071	
6307 5	2	0.085	
6375 [#] 5	(0+2)	0.022+0.083	
6468 5	0	0.034	
6512 5	2	0.086	
6548 5	0	0.056	

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$^{86}\text{Kr}(^3\text{He,d})$ 1975Me18 (continued) ^{87}Rb Levels (continued)

<u>E(level)[†]</u>	<u>L[‡]</u>	<u>(2J+1)C²S[‡]</u>
6618 5	2	0.092
6652 5	2	0.12
6744 10	2	0.10
6791 [#] 9	(0+2)	0.022+0.075
6838 5	0	0.056
6989 5	0	0.053

[†] Uncertainties of 5 keV are from general statement.

[‡] From DWBA analysis of $\sigma(\theta)$. For L=1, 2, and 4, $2p_{1/2}$, $2d_{5/2}$, and $1g_{9/2}$ configurations were assumed, unless the spin is known otherwise. The exceptions are for J=3/2 for the ground state and the J(399 level), for L=3, J is taken as 5/2.

[#] Doublet.

[@] Level appears to contain most of the $g_{9/2}$ single-particle proton strength.