

$^{87}\text{Rb}(\text{d,p})$ 1971Ra17,1971To05

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan and A. A. Sonzogni		NDS 115, 135 (2014)	1-Nov-2013

$J^\pi(\text{target})=3/2^-$.

1971Ra17: E(d)=11 MeV. Measured $\sigma(\theta)$ for $\theta=20^\circ$ to 120° with two Si detectors (FWHM=18 keV); DWBA analysis.

1971To05: E(d)=4-6 MeV. Measured $\sigma(\theta)$ for $\theta=60^\circ$ to 160° using two Si surface-barrier detectors (FWHM=30 keV); DWBA analysis.

 ^{88}Rb Levels

E(level) [†]	L [‡]	$[(2J_f+1)/(2J_i+1)]S^{\textcircled{a}}$	E(level) [†]	L [‡]	$[(2J_f+1)/(2J_i+1)]S^{\textcircled{a}}$
0.0	0+2	0.11+0.57	1660	16	0.25
28 [#] 3	2	1.38	1915	9	0.51
199 7	2	0.18	1951	9	0.26
268 [#] 6	2	1.52	2089	9	
358 [#] 12			2255	9	
386 [#] 12			2349	15	
407 [#] 12			2451 ^{&} 9	(2) ^a	
862 9	0	0.19	2500	12	
1138 8	0	0.31	2562	9	(2) ^a
1166 ^{#b} 20	(0)	0.11	2710	9	
1209 8	0	0.28	2769	9	
1222 10	2	0.28	2826	9	
1347 8	0	0.27	2934 ^{&} 8		
1610 9	(2)	0.21			

[†] From 1971To05, except where noted.

[‡] From DWBA (1971Ra17), except where noted.

[#] From 1971Ra17.

[ⓐ] From DWBA (1971Ra17). Uncertainty of absolute cross sections $\approx 25\%$.

[&] Centroid of a multiplet.

^a Tentative assignment based on excitation function (1971To05).

^b Weak peak in 1971Ra17. Since level is not observed by 1971To05 or in any other reactions, evaluators consider it questionable.