

⁸⁵Rb(p,d) 1978Sh11

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	F. G. Kondev	NDS 110,2815 (2009)	30-Sep-2009

⁸⁴Rb Levels

J^π(target)=5/2⁻.

E(p)=22.6 MeV. Enriched target. Magnetic spectrometer, FWHM=20 keV.

E(level) [†]	J ^π [†]	L [‡]	C ² S [#]	E(level) [†]	J ^π [†]	L [‡]	C ² S [#]
0&	2 ⁻	4	0.47	832 3	(2,3,4) ⁺	1	0.36
249& 3	(3) ⁻	4	0.82	890 5	(2,3,4) ⁺	1	0.079
468 @& 3	(6,5) ⁻	4	2.99	929 4	(2,3,4) ⁺	1	0.082
564 3	(2,3,4) ⁺	1	0.89	957 8			
615& 3	(4) ⁻	4	0.62	1007 6			
678& 5	(7) ⁻	4	1.32	1136 5	(2,3,4) ⁺	1	0.10
718 8				1165 3			
768 5	(2,3)	0+2	0.002+0.01 ^a	1286 3	(2,3,4) ⁺	1	0.37
797 6				1335 6			

[†] From 1978Sh11.

[‡] From fits of the angular distribution data with DWBA predictions in 1978Sh11.

[#] From DWBA analysis in 1978Sh11 with estimated uncertainty of 15%. νp_{1/2} and νg_{9/2} transfers were assumed for L=1 and 4, respectively.

@ The peak at 468 keV is observed to be a somewhat wider, which considered with the large C²S value and the energy shift against the 463.6-keV isomeric level, suggests that this level may be a doublet with an energy separation of <12 keV (1978Sh11).

& Configuration=((π f_{5/2})(ν g_{9/2})) multiplet.

^a Deduced for νs_{1/2} and νd_{5/2} transfers, respectively.