^{86}Kr(α,p) 1983StZQ

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 114, 1 (2013)	20-Oct-2012

E=26 MeV. Enriched (99.6%) target, FWHM≈65 keV. Measured $\sigma(\theta)$ and compared with DWBA analysis. Absolute cross sections are accurate to 5-10%. Model calculations of energy levels and spectroscopic factors.
Results given here are from thesis by 1983StZQ.

^{89}Rb Levels

E(level)[†]	J$^\pi$[#]	L[‡]	σ(exp)/σ(DWBA)[@]	Comments
0	3/2$^-$	(1)	1.10	J$^\pi$: from Adopted Levels.
227	(5/2$^-$)	(3)	0.29	
≈500				E(level): estimated (evaluator) for a weak unlabelled group in figure VIII-5 (1983StZQ). This may correspond to 497 known from ^{89}Kr β^- decay.
≈600		(1)	1.15	E(level): peak labeled as 497 in figure VIII-5 (1983StZQ) is incorrect in energy. The evaluator estimates the energy of this peak at≈600. This group may correspond to 577, 586 doublet known from ^{89}Kr β^- decay. σ(exp)/σ(DWBA): for L=1, J$^\pi$=1/2$^-$.
856	(1/2$^-$)	(1)	8.41	
991	(7/2,9/2$^+$)	(3,4)	0.34,[&] 0.32	σ(exp)/σ(DWBA): 0.18 for L=4, J=9/2$^+$.
1186	(7/2,9/2$^+$)	(3,4)	8.6,[&] 7.8	σ(exp)/σ(DWBA): 4.3 for L=4, J=9/2$^+$.
1345	(7/2,9/2$^+$)	(3,4)	0.24,[&] 0.23	σ(exp)/σ(DWBA): 0.13 for L=4, J=9/2$^+$.
1515	(3/2)	(1,2)	2.7, 2.2	
1694	(5/2)	(2,3)	3.5, 6.5	
1833	(5/2)	(2,3)	2.2, 4.4	
2004	(7/2,9/2$^+$)	(3,4)	9.1,[&] 8.4	σ(exp)/σ(DWBA): 4.7 for L=4, J=9/2$^+$.
2168	(5/2)	(2,3)	5.2, 2.6	
2395	(1/2)	(0,1)	11.5, 19.9	
2512	(5/2)	(2,3)	2.7, 5.6	
2614	(3/2)	(1,2)	3.9, 2.9	
2842	(11/2)	(5,6)	1.8, 2.1	
3020	(3/2)	(1,2)	10.7, 9.2	

[†] Uncertainty is not given. From comparison with E(level) from ^{89}Kr β^- decay, it is expected to be≈10 keV.
[‡] As suggested by J$^\pi$ assignments of 1983StZQ. These values are considered tentative (evaluator).
[#] From 1983StZQ for excited states. The assignments are considered (evaluator) tentative since the L(α,p) assignments and J-dependence from $\sigma(\theta)$ data and DWBA calculations do not seem firm as presented in figures VIII.18 to VIII.20 (1983StZQ).
[@] Two values correspond to L-values and corresponding J$^\pi$ values.
[&] First value for 7/2$^-$ and second for 7/2$^+$.