

$^{84}\text{Kr}(\text{p},\text{p}')$ 1974Ar29

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. K. Tuli, A. Luca, S. Juutinen, and B. Singh		NDS 110,2815 (2009)	30-Sep-2009

 ^{84}Kr Levels

1974Ar29: E=12.0 MeV, FWHM=35 keV, $\theta=30^\circ$ to 160° .

DWBA and coupled-channels analysis (cca).

1978Ma11, 1979Sa14: E=51.9 MeV. Enriched target. Broad-range magnetic spectrometer, FWHM=100 keV. $\theta=10^\circ$ to 80° . DWBA and coupled-channels (cca) analysis.

E(level) [†]	L [‡]	β_L [#]	Comments
0			
882	2	0.131	β_L : $\beta_L(\text{DWBA})=0.153$, $\beta_L(\text{CCA})=0.153$ (1979Sa14), 0.138 (1974Ar29).
1834	0	0.019	
1900	2	0.063	β_L : $\beta_L(\text{DWBA})=0.066$, $\beta_L(\text{CCA})=0.062$ (1979Sa14).
2086	4	0.064	L: from 1979Sa14. L=(4) from 1974Ar29. β_L : $\beta_L(\text{DWBA})=0.069$, $\beta_L(\text{CCA})=0.072$ (1979Sa14).
2337	4	0.056	
2626			
2705	3	0.157	B(E3)=15.8 24 (1978Ma11), $\beta_L(\text{CCA})=0.155$ (1974Ar29).
2775	2	≈ 0.04	
3048			
3225	(1)	≈ 0.04	L: $J^\pi(3219 \text{ level})=5^-$ in $(\alpha, 2n\gamma)$. $\sigma(\theta)$ shape for 3225 is not too different from L=5 3650 level.
3335			
3477	(1)	0.057	
3570	(3)	0.063	
3650	(5)	0.051	
3721	(3)	≈ 0.04	
3795			
3916			
4006			
4061			
4157			
4707			
4898			
5358			
5466			

[†] From 1974Ar29, if not noted otherwise. Uncertainty <10 keV for lower levels and 20 keV for higher excited states.

[‡] From DWBA of 1974Ar29, if not noted otherwise. Parentheses have been added by the evaluators where there is poor fit for the L-values. β_L is not reliable for these levels.

[#] β_L are obtained from DWBA analysis of 1974Ar29. See 1974Ar29 for parameters used in coupled-channel analysis.