

$^{78}\text{Kr}(\text{pol d,t})$ 1979Ca03

Type	History		Literature Cutoff Date
	Author	Citation	
Full Evaluation	Balraj Singh	ENSDF	30-Sep-2020

1979Ca03: E(d)=15.95 MeV. Measured $\sigma(\theta)$ and vector-analyzing powers. Target enrichment=99%. Experimental $\sigma(\theta)$ and analyzing power data compared with DWBA. Absolute cross section uncertainty=5%. Energy resolution=60 keV.
 Other: $^{78}\text{Kr}(\text{d,t})$; E=29.1 MeV (1987Mo06). Only the g.s. and 66-keV level seen and used to determine reaction Q value.

 ^{77}Kr Levels

E(level) [‡]	J^π [†]	L	S
0	5/2 ⁺	2	0.089
67	3/2 ⁻	1	0.612
150			
245 [#]		#	@
279 [#]		#	@
460 ^{&}	1/2 ⁻	1	
500 ^{&}			
1243			

[†] From vector-analyzing powers.

[‡] ΔE not given by authors.

[#] 245 and 279 levels are unresolved. S=0.95+2.3 for L=3+4 with $J^\pi=5/2^-$ and $9/2^+$ are determined for 245+279 doublet.

[@] 1979Ca03 treat values as uncertain because of lack of good agreement between theory and experiment. These values are based on $J^\pi(245)=5/2^-$ and $J^\pi(279)=9/2^+$. 1979Ca03 erroneously quote S=2.3 for 460 level. This S value should be for the 279 level instead.

[&] 460 and 500 levels are unresolved.