^{250}Cf(α,t)   **1978Ah02**

| | | History | |
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. Morse	NDS 189,111 (2023)	23-Sep-2022

1978Ah02: E(α)=28 MeV, FWHM=18 keV, θ=80°, 110°. Spectroscopic factors are deduced and compared with theory. Preliminary results in 1977Ah01.

^{251}Es Levels

E(level)	J^{π}	(2J+1)S[#]	Comments
0[†]	3/2$^-$	0.09 2	configuration=π3/2$^-$[521]
35[†] 3	5/2$^-$	0.14 4	
78[†] 2	7/2$^-$	0.74 8	
186 2	13/2$^+$	2.44 27	configuration=π7/2$^+$[633]
411[‡] 2	1/2$^-$	0.32 5	configuration=π1/2$^-$[521]
452[‡] 2	5/2$^-$	0.72 9	
523 2	9/2$^-$	1.62 25	configuration=π7/2$^-$[514]
548[‡] 2	7/2$^-$	0.31[@] 6	
548[‡] 2	9/2$^-$	0.28[@] 5	
661 3	1/2$^+$	0.19 6	configuration=π1/2$^+$[400]
942 4	13/2$^+$	1.13 24	configuration=π9/2$^+$[624]
962 5	13/2$^+$		configuration={π7/2$^+$[633]$\otimes$2$^+$}11/2$^+$
			Member of γ-vibrational band, c.f. ^{251}Fm ε decay.

[†] Band(A): π3/2$^-$[521].
[‡] Band(B): π1/2$^-$[521].
[#] (2J+1)S=(dσ/dΩ)$_{exp}$/N/(dσ/dW)$_{DW}$, with N=150.
[@] "The partition between the 7/2 and 9/2 intensities was made on the basis of the theoretical spectroscopic factors" (1978Ah02).

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Band(B): $\pi 1/2^-$[521]

9/2$^-$ ⎯⎯ **548**

5/2$^-$ **452**

1/2$^-$ **411**

Band(A): $\pi 3/2^-$[521]

7/2$^-$ **78**

5/2$^-$ **35**

3/2$^-$ **0**

$^{251}_{99}$Es$_{152}$