

${}^1\text{H}({}^{27}\text{F}, {}^{25}\text{F}), \text{Be}({}^{36}\text{S}, \text{X})$ 2004E110, 2002Az02

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	R. B. Firestone	NDS 110, 1691 (2009)	1-Feb-2008

2004E110: ${}^1\text{H}({}^{27}\text{F}, {}^{25}\text{F})$ E>40 MeV/A. Beam produced by Ta(${}^{40}\text{Ar}, \text{x}$), E=94 MeV/A at the RIKEN particle fragment separator. Identification by E Δ E and TOF. NaI(Tl) detector array.

2002Az02: Be(${}^{36}\text{S}, \text{x}$) E=77 MeV/A. SPEG Fragment separator, BaF₂ γ -ray array.

 ${}^{25}\text{F}$ Levels

E(level) [†]	J π [‡]	Comments
0	5/2 ⁺	
3300	(9/2 ⁺)	
3700	(7/2 ⁺)	
4430?		J π : From systematics.
5450?		

[†] Suggested decay scheme from 2002Az02.

[‡] From systematics and Adopted Levels.

 $\gamma({}^{25}\text{F})$

E γ [†]	E _i (level)	J π _i	E _f	J π _f	Comments
727 22	4430?		3700	(7/2 ⁺)	
\approx 1000 [‡]	5450?		4430?		E γ : Weak transition placed by energy sums.
^x 1350					
1753 53	5450?		3700	(7/2 ⁺)	
3300	3300	(9/2 ⁺)	0	5/2 ⁺	
3700	3700	(7/2 ⁺)	0	5/2 ⁺	

[†] Energies with uncertainties from 2004E110.

[‡] Placement of transition in the level scheme is uncertain.

^x γ ray not placed in level scheme.

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Legend

Level Scheme

-----▶ γ Decay (Uncertain)

