

$^{56}\text{Fe}(\alpha,2n\gamma)$ 1976Ba10

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Caroline D. Nesaraja, Scott D. Geraedts and Balraj Singh		NDS 111,897 (2010)	12-Jan-2010

E=18-24 MeV.

Measured: $\sigma(E)$, G. ^{58}Ni Levels

E(level)	$J\pi^\dagger$	Comments
0.0	0 ⁺	
1454	2 ⁺	
2459	4 ⁺	
3619	4 ⁺	
4381	(5 ⁺)	
5125	6 ⁺	
5662?	7	E(level): this level is questionable and omitted In Adopted Levels due to the reassignment of 537 γ from 6604,8 ⁺ level In recent high-spin studies.

 † Adopted values. $\gamma(^{58}\text{Ni})$

E_γ	I_γ^\dagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Comments
537 ‡	10	5662?	7	5125	6 ⁺	E_γ : this γ is assigned to a 6604,8 ⁺ level In recent high-spin studies.
744	10	5125	6 ⁺	4381	(5 ⁺)	
762	25	4381	(5 ⁺)	3619	4 ⁺	
1005	75	2459	4 ⁺	1454	2 ⁺	
1160	25	3619	4 ⁺	2459	4 ⁺	
1454	100	1454	2 ⁺	0.0	0 ⁺	

 † Relative at $E(\alpha)=24$ MeV. ‡ Placement of transition in the level scheme is uncertain.

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Legend

Level Scheme

Intensities: Relative I_γ

- ▶ $I_\gamma < 2\% \times I_\gamma^{max}$
- ▶ $I_\gamma < 10\% \times I_\gamma^{max}$
- ▶ $I_\gamma > 10\% \times I_\gamma^{max}$
- - - -▶ γ Decay (Uncertain)

