

$^{24}\text{Mg}(^{32}\text{S},2n\gamma)$ 2006Ga33

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Yang Dong, Huo Junde		NDS 121, 1 (2014)	20-Jun-2014

E=75 MeV. Measured E_γ , I_γ , $\gamma\gamma$, γn coin, γ (charged particles) coin using Euroball IV array of 26 ‘Clovers’ and 15 ‘Clusters’ of Compton-suppressed Ge detectors for γ rays, the charged-particle detector Euclides array of 40 ΔE -E Si telescopes and a neutron wall of 50 liquid scintillator detectors. Level energies compared to isobars ^{54}Co and ^{54}Fe and cross conjugate A=42 nuclei. Shell-model calculations.

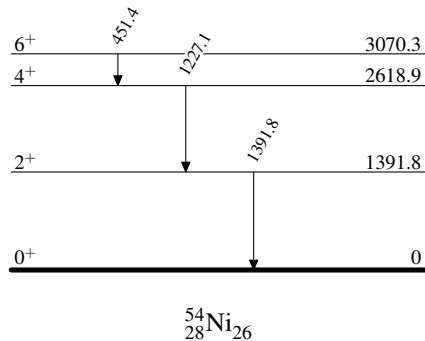
 ^{54}Ni Levels

E(level)	J^π
0 [†]	0 ⁺
1391.8 [†]	2 ⁺
2618.9 [†]	4 ⁺
3070.3 [†]	6 ⁺

[†] Band(A): Yrast sequence.

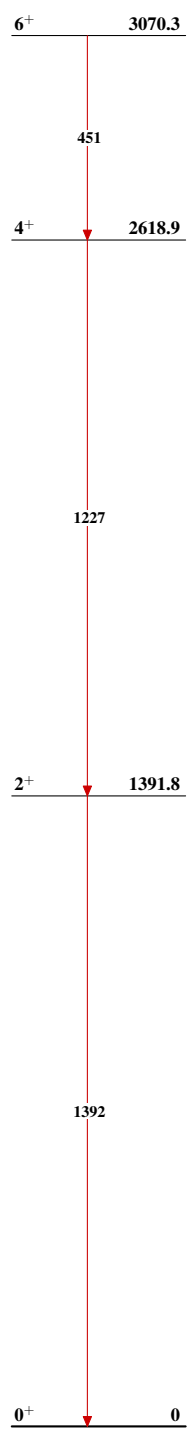
 $\gamma(^{54}\text{Ni})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
451.4	3070.3	6 ⁺	2618.9	4 ⁺
1227.1	2618.9	4 ⁺	1391.8	2 ⁺
1391.8	1391.8	2 ⁺	0	0 ⁺

 $^{24}\text{Mg}(^{32}\text{S},2n\gamma)$ 2006Ga33Level Scheme

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Band(A): Yrast sequence

 $^{54}_{28}\text{Ni}_{26}$