

$^{112}\text{Sn}(^{58}\text{Ni},2n\gamma)$ 1998Ki20

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 111, 1807 (2010)	15-Jun-2010

1998Ki20: $^{112}\text{Sn}(^{58}\text{Ni},2n\gamma)$, E=265 MeV; 93.2% ^{112}Sn target; gas-filled recoil separator, Si strip detector in focal plane; JUROSPHERE γ detector array (17 Compton-suppressed Ge detectors); measured $E\gamma$, $I\gamma$ from recoil-gated α -tagged γ spectrum, $\gamma\gamma$ coin.

 ^{168}Pt Levels

E(level) [†]	J^π	$T_{1/2}$	Comments
0.0 [#]	0 ⁺ [‡]	2.0 ms 2	$T_{1/2}$: from 6800 α (t) (1998Ki20).
582 [#]	(2 ⁺) [‡]		
1176 [#]	(4 ⁺) [‡]		
1901 [#]	(6 ⁺) [‡]		

[†] Tentative values assuming the observed γ cascade should be ordered by decreasing $E\gamma$ as in ^{170}Pt ; authors could not determine order of transitions due to similarity between the intensities. ADOPTED values for the upper two levels differ from those shown here.

[‡] Authors' tentative values assuming excitation of g.s. band. However, only the J=0 and 2 members are adopted. more extensive information from the $^{92}\text{Mo}(^{78}\text{Kr},2n\gamma)$ reaction (2009Go16) identify different energy levels as the J=4 and 6 g.s. band members.

[#] Band(A): g.s. band?.

 $\gamma(^{168}\text{Pt})$

E_γ [†]	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
582 [‡]	69 15	582?	(2 ⁺)	0.0	0 ⁺
594 [‡]	69 15	1176?	(4 ⁺)	582?	(2 ⁺)
725 [‡]	62 14	1901?	(6 ⁺)	1176?	(4 ⁺)

[†] Energy uncertainties unstated by authors.

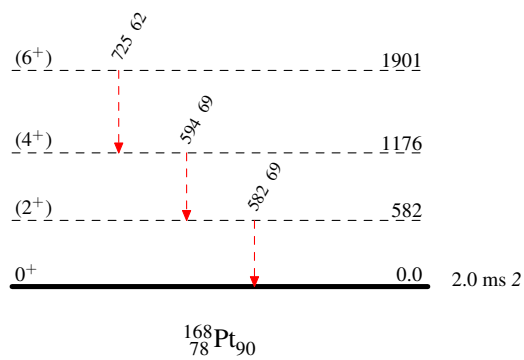
[‡] Placement of transition in the level scheme is uncertain.

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Level Scheme

 Intensities: Relative I_γ

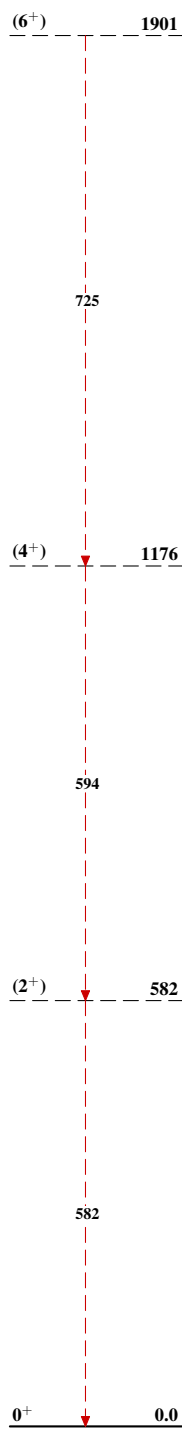
Legend

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



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Band(A): g.s. band?



$^{168}_{78}\text{Pt}_{90}$