^{117}Sn(n,γ) E=res 1984Al14

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	K. Kitao	NDS 75,99 (1995)	1-Feb-1993

See 1966HaZY for thermal neutron capture.
1984Al14 E=1.33, −29 and 38.8 eV; semi, NaI(Tl), 89% enriched enriched target.
1968Bh01 E=38.8 eV; semi.
1968Sa16 E=39, 120, 124 and 196 eV, semi.
Others: (pol n,γ) 1976Da26, 1983Al08, 1983Va14, 1984Al23; these papers deal with parity nonconservation in neutron resonances.
1977Be55 also reported asymmetry in (n,γ) with polarized cold neutrons.
$J^\pi(^{117}Sn)=1/2^+$.

^{118}Sn Levels

E(level)†	Jπ‡	E(level)†	Jπ‡	E(level)†	Jπ‡	E(level)†	Jπ‡
0.0	0^+	2044.0 *17*	2^+	2400#	2^+	2736 *3*	4^+
1230.0 *17*	2^+	2056 *3*	0^+	2497#	0^+	2911#	
1760#	0^+	2329 *3*	2^+	2677 *3*	2^+	(9326.3@ *14*)	

† From a least-squares fit to E(γ′s).
‡ From Adopted Levels unless otherwise noted.
# From authors′s drawing. No γ from this level was reported by authors.
@ No indication of parity admixture by (pol n,γ) (1983Al08).

γ(^{118}Sn)

See 1984Al14 for primary γ′s from −29-eV 1^+ res, 1.33-eV 1^- res and 3.38-eV 1^+ res.

E_γ†	I_γ‡#	E_i(level)	J_i^π	E_f	J_f^π	Comments
814 *2*	6.0 *15*	2044.0	2^+	1230.0	2^+	
826 *2*	3 *1*	2056	0^+	1230.0	2^+	
1099 *2*	11.6 *15*	2329	2^+	1230.0	2^+	
1230 *2*	92	1230.0	2^+	0.0	0^+	ΔIγ: +5-15.
1447 *2*	24 *6*	2677	2^+	1230.0	2^+	
1506 *2*	3.3 *8*	2736	4^+	1230.0	2^+	
2044 *2*	5.6 *14*	2044.0	2^+	0.0	0^+	

† Secondary γ′s from 38.8-eV 1^+ res (1984Al14).
‡ Per 100 neutron captures.
# Intensity per 100 neutron captures.

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Level Scheme

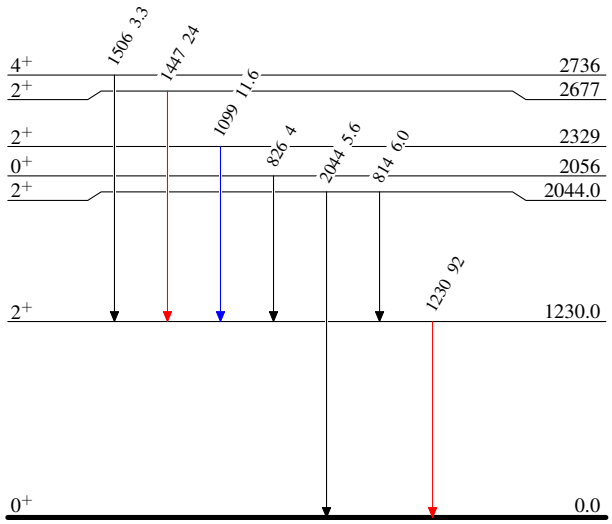
Intensities: Iγ per 100 N-captures

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$



$^{118}_{50}Sn_{68}$