^{112}Sn(p,p′)   1980Bl01,1979BlZZ

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	S. Lalkovski, F. G. Kondev	NDS 124, 157 (2015)	1-Aug-2014

1980Bl01,1979BlZZ: Facility: AVF cyclotron at the Free University; Beam: E(p)=20.51 and 25.0 MeV; Target: 190 μg/cm^2
    enriched to 87.51% in ^{112}Sn; Detectors: ENGE split-pole spectrograph, six position-sensitive solid-state detectors; Measured:
    E(p)(θ), dσ/dΩ; Deduced: ^{112}Sn levels, L, J^π, DWBA analysis.

Others: 1990JoZZ, 1989JoZZ, 1975RaYL, 1975SrZZ, 1974Ka10, 1974SrZZ, 1973De01, 1972DeZU, 1971Ha43, 1971RaZV,
    1968Ma34.

^{112}Sn Levels

E(level)[†]	J^{π}[‡]	L[#]	Comments
0.0	0$^+$		
1257 2	2$^+$	2	β_2=0.147 4, weighted average of 0.143 5 and 0.150 5 in 1980Bl01; Other: 0.152 in 1968Ma34.
2151 2	2$^+$	2	
2190 2	0$^+$		
2247 2	4$^+$	4	
2354 2	3$^-$	3	β_3=0.152 6, weighted average of 0.146 5 and 0.157 5 in 1980Bl01; Other: 0.203 15 in 1968Ma34.
2475 2	2$^+$		
2521 2	4$^+$		
2550 2	6$^+$		
2618 2	0$^+$		
2723 2	2$^+$	2	
2760 2	(3)$^+$		
2786 2	4$^+$	4	
2860 2			
2915 2	4$^+$	4	Possible doublet structure.
2928 2	6$^+$		
2947 2	4$^+$	4	
2969 2	2$^+$		
2989 2	0$^+$	(0)	
3095 7	2$^+$	2	
3118 7	(0$^+$ to 4$^+$)		
3137 7	5$^-$	5	
3152 7	4$^+$	4	
3253 7	2$^+$	(2)	
3278 7	4$^+$	4	
3292 7	(1,2$^+$)		
3360 7	(7)$^-$		
3387 7	(3)$^-$		
3402 7	4$^+$		
3424 7	4$^+$	4	
3440 7	1$^-$		
3477 7	4$^{(+)}$		
3502 7	5$^{(-)}$		
3522 7			
3532 7	(2$^+$,3,4$^+$)		
3558 7			
3580 7	4$^{(+)}$	4	
3611 7			
3624 7	(2$^+$,4$^+$)	(2)	J^π: L=(2) in 1980Bl01 supports 2$^+$.
3654 7	2$^+$	2	
3695 7	(9)$^-$		
3737 7			
3756 7			

^{112}Sn(p,p′)   **1980Bl01,1979BlZZ (continued)**

^{112}Sn Levels (continued)

E(level)[†]	J$^{\pi}$[‡]	E(level)[†]	J$^{\pi}$[‡]	L[#]	E(level)[†]	J$^{\pi}$[‡]	E(level)[†]	J$^{\pi}$[‡]
3773 7		4138 7			4461 7		4887 7	
3815 7		4151 7			4502 7		4928 7	(11)$^-$
3832 7		4171 7	4$^{(+)}$	4	4544 7		4957 7	
3857 7		4193 7			4571 7	10$^-$	5059 7	
3877 7		4222 7			4610 7		5089 7	
3914 7		4239 7			4685 7	(10$^+$)	5116 7	
3988 7		4279 7			4738 7		5144 7	
4031 7		4325 7			4757 7		5181 7	
4054 7		4364 7			4794 7		5270 7	
4078 7	8$^+$	4402 7			4825 7	10$^+$	5355 7	
4105 7		4437 7			4850 7			

[†] From 1980Bl01; ΔE estimated by the evaluators on the basis of the author′s statement that ΔE=2-7 from the low-lying to the higher-lying states.
[‡] From the Adopted Levels.
[#] From 1980Bl01, based on DWBA.