

$^{114}\text{Sn}(\text{p,t})$ 2012Gu10,1980BI01

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

2012Gu10: Facility: Munich technical university tandem; Beam: E(p)= 22 MeV; Target: 113 $\mu\text{g}/\text{cm}^2$ enriched to 71% in ^{114}Sn with 10 $\mu\text{g}/\text{cm}^2$ carbon backing; Detectors: Munich Q3D spectrograph, focal plane detector comprising a position-sensitive proportional counter and a plastic scintillator (FWHM=8 keV); Measured: E, L; Deduced: level scheme, DWBA, σ , $d\sigma/d\Omega$.

1980BI01: Facility: Free University AVF cyclotron; Beam: E(p)=27.5 MeV; Targets: 160 and 190 $\mu\text{g}/\text{cm}^2$ with 1.26% of ^{112}Sn ; Detectors: Enge split-pole spectrograph, six position-sensitive solid-state detectors (FWHM 10-15 keV); Measured: E(θ), $d\sigma/d\Omega$; Deduced: ^{112}Sn level scheme, L, J^π , DWBA; Also, from the same collaboration: [1979BIZZ](#).

Others: [1998GuZW](#), [1979BIZZ](#), [1970FI08](#).

 ^{112}Sn Levels

E(level) [†]	J^π [‡]	L [#]	Comments
0	0 ⁺	0	
1257 3	2 ⁺	2	
2151 3	2 ⁺	2	
2192? @ 10	0 ⁺	0	E(level),L: from 1980BI01 ; level not reported in 2012Gu10 .
2248 3	4 ⁺	4	
2355 3	3 ⁻	3	
2476 3	2 ⁺	2	
2521 3	4 ⁺	4	
2549 3	6 ⁺	6	
2618 3	0 ⁺	0	
2722 3	2 ⁺	2	
2784 3	4 ⁺	4	
2927 3	6 ⁺	6	
2966 3	2 ⁺	2	
2988 3	0 ⁺	0	
3132 3	5 ⁻	5	
3248 3	2 ⁺	2	
3275 3	4 ⁺	4	
3286 3	2 ⁽⁺⁾	2	
3345 3	2 ⁺	2	
3400 3	4 ⁺	4	
3414 3	6 ⁺	4,6	unresolved doublet in 2012Gu10 .
3445 3	4 ⁺	4	
3481 3	4 ⁽⁺⁾	4	
3510 3	5 ⁽⁻⁾	5	
3554 3	3 ⁽⁻⁾	3	
3586 3	2 ⁽⁺⁾	2	
3624 3	(2 ⁺ ,4 ⁺)	4	J^π : L=4 in 2012Gu10 supports 4 ⁺ .
3663 @ 10	2 ⁺		
3715 @ 10			
3776 @ 10			
3818 @ 10			
3874 @ 10			
3930 @ 10			
4048 @ 10			
4091 @ 10	8 ⁺		
4164 @ 10			
4241 @ 10			

Continued on next page (footnotes at end of table)

 $^{114}\text{Sn}(\text{p,t})$ [2012Gu10,1980Bl01](#) (continued)

 ^{112}Sn Levels (continued)

<u>E(level)[†]</u>	<u>E(level)[†]</u>	<u>J^π[‡]</u>	<u>E(level)[†]</u>
4287 [@] 10	4455 [@] 10		4629 [@] 10
4316 [@] 10	4486 [@] 10		4724 [@] 10
4363 [@] 10	4576 [@] 10	10 ⁻	4740 [@] 10

[†] From [2012Gu10](#), unless otherwise noted.

[‡] From the Adopted Levels.

[#] Based on DWBA in [2012Gu10](#), unless otherwise noted.

[@] From [1980Bl01](#). ΔE assigned by the evaluators.