^{62}Ni(^{3}He,d), ^{62}Ni(^{3}He,dp) IAS 1976Br36,1976Bo06,1979Fi02

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Huo Junde, Yang Dong, Huo Meirong,	ENSDF	28-Aug-2008

(^{3}He,d) 1976Br36 E=18 MeV, FWHM=30 keV.
1976Bo06 E=30.2 MeV, FWHM≈50 keV.
1965Bl14 E=22 MeV, FWHM=70-90 keV.
1968Sm01 E=11 MeV, FWHM=21 keV.
(^{3}He,dp) IAS 1979Fi02 E=30.2 MeV.

^{63}Cu Levels

Below E(level)=8000, data are from 1976Br36 except as noted; above E(level)=8000, data are taken from 1976Bo06 and 1979Fi02.

E(level)[†]	J^{π}[#]	L[@]	C^2S'	Comments
0	$3/2^-$	1	3.0	
667 *20*	$1/2^-$	1	1.38	
965 *20*	$5/2^-$	3	1.92	
1329 *20*	$7/2^-$	3	0.64	
1416 *20*	$5/2^-$	3	2.70	
1538 *20*	$(3/2^-)$	(1)	<0.01	
2014 *20*	$3/2^-$	1	0.12	
2061 *20*	$1/2^-$	1	0.29	
2336 *20*	$5/2^-$	3	0.48	
2409 *20*	$7/2^-$	3	0.24	
2500 *20*	$9/2^+$	4	5.30	
2686 *20*	$1/2^-$	1	0.06	
2780 *20*	$3/2^-$	1	0.16	
2860 *20*	$1/2^-$	1	0.06	
3040 *20*	$1/2^-$	1	0.04	
3106 *20*	$1/2^-$	1	0.02	
3220 *20*	$5/2^-$	3	0.30	
3295 *20*	$5/2^+$	2	0.12	
3424 *20*	$1/2^-$	1	0.12	
3472 *20*	$5/2^+$	2	0.60	
3576 *20*	$1/2^-$	1	0.08	
3708 *20*	$1/2^-$	1	0.02	
3785 *20*	$1/2^-$	1	0.04	
3881 *20*	$5/2^+$	(2)	0.10	
3947				
3980 *50*	$9/2^+$	4	0.51	All data from 1965Bl14.
4008				
4035				
4060 *50*	$1/2^-$	1	0.12	All data from 1965Bl14.
4594				
4635				
4678				
4734				
4782				
4844				
4871				
4904				
5132				
5216				
5302				
5330				

Continued on next page (footnotes at end of table)

^{62}Ni(^{3}He,d), ^{62}Ni(^{3}He,dp) IAS 1976Br36,1976Bo06,1979Fi02 (continued)

^{63}Cu Levels (continued)

E(level)[†]	Jπ[#]	L[@]	C^{2}S′	Comments
5358				
5397				
5446				
5489				
5533				
5568				
5595				
5635[‡]				
5694[‡]				
5723[‡]				
5756[‡]				
5795[‡]				
5835				
5859				
5920				
5994				
6032[‡]				
6070				
6104				
6166				
8660[a] *40*	1/2$^-$	1	0.78	IAS(g.s. ^{63}Ni).
8790 *40*	5/2$^-$,3/2$^-$	3,1	2.90,0.98[&]	J=5/2$^-$, IAS(88 ^{63}Ni); J=3/2$^-$, IAS(155 ^{63}Ni).
9970[a] *40*	9/2$^+$	4	4.80	IAS(1292 ^{63}Ni). C^{2}S′: coupling the 2$^+$ core to a proton: C^{2}S′(L=2)<0.02; C^{2}S′(L=4)=1.04 (1979Fi02).
10960[a] *40*	5/2$^+$	2	1.80	IAS(2291 ^{63}Ni).
11230[a] *40*	9/2$^+$	4	2.24	IAS(2514 ^{63}Ni). C^{2}S′: coupling the 2$^+$ core to a proton: C^{2}S′(L=2)=0.02; C^{2}S′(L=4)=1.54 (1979Fi02).

[†] ΔE not given by 1976Br36 and 1965Bl14, estimated by the evaluator.
[‡] Weak states.
[#] Values assumed by the authors for the extraction of S.
[@] From DWBA analysis of $\sigma(\theta)$.
[&] Unresolved group. Sp are calculated using the relative strength implied by Sn from (d,p) and the total strength from (^{3}He,d).
[a] proton branching ratio, see 1979Fi02.