^{182}W(^{3}He,d),(α,t) 1971Lu01

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 134, 149 (2016)	15-Apr-2015

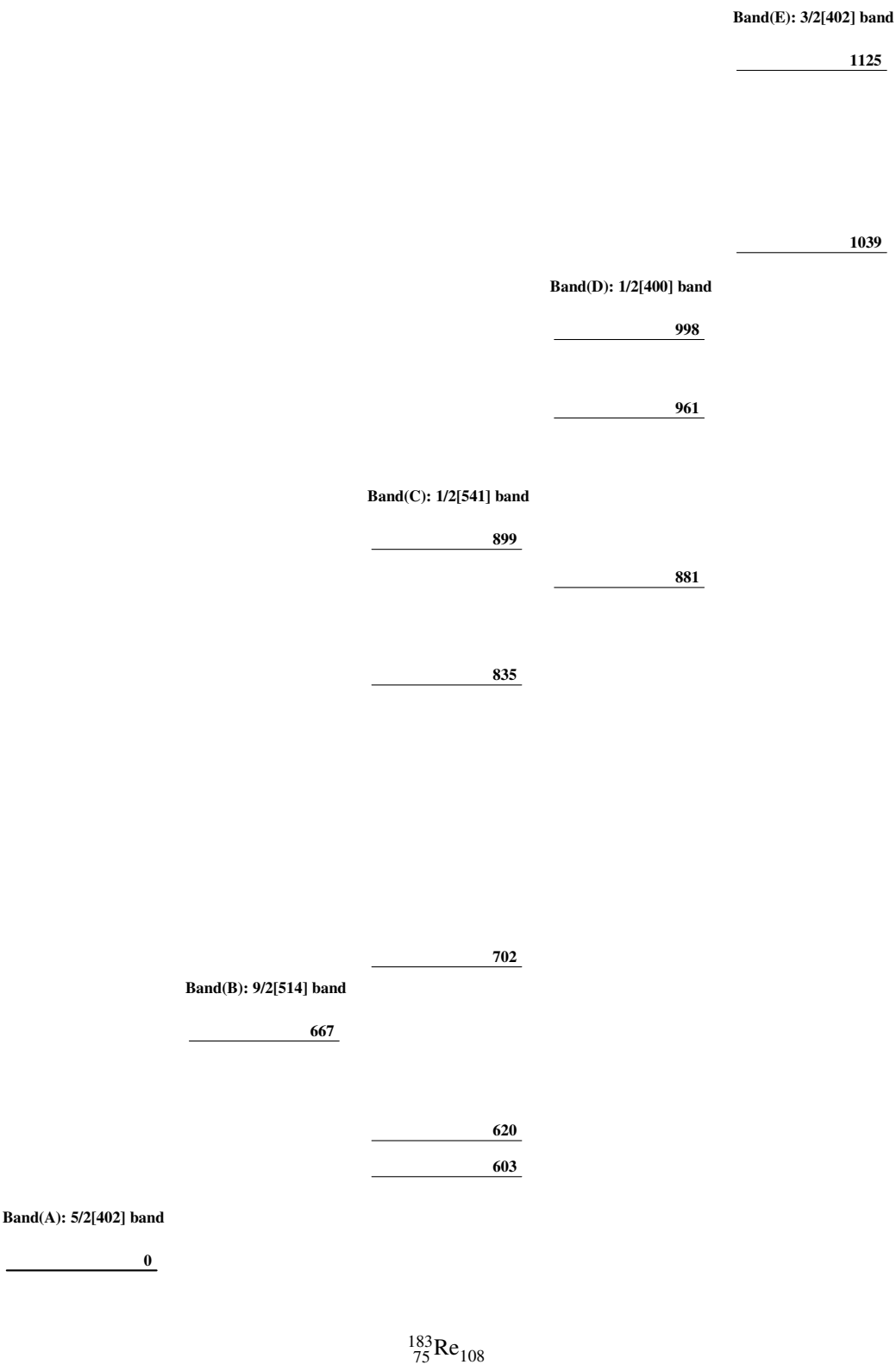
1971Lu01: isotopically-enriched targets; Enge broad-range spectrograph; DWBA calculations.
^{182}W(^{3}He,d): E(^{3}He)=28 MeV, FWHM=25 keV; θ(lab)=15°−55°.
^{182}W(α,t): E(^{4}He)=30 MeV, FWHM=11 keV; θ(lab)=45° and 60°.

^{183}Re Levels

E(level)[†]	L	C^2S[‡]	Comments
0[#]	2	0.74	
603[&]	3	0.56	C^2S: 0.35 from (α,t).
620[&]	5	1.53	C^2S: 1.34 from (α,t).
667[@]	4,5	0.44	C^2S: 0.19 from (α,t).
702[&]	1	0.03	
835[&]	1	0.04	
881[a]	0	0.33	C^2S: 0.29 from (α,t).
899[&]	(3)	0.12	C^2S: 0.09 from (α,t).
961[a]	(2)	0.07	C^2S: 0.04 from (α,t).
998[a]	2	0.06	C^2S: 0.06 from (α,t).
1039[b]	2	0.51	C^2S: 0.41 from (α,t).
1064			
1075			
1125[b]	(2)	0.06	C^2S: 0.09 from (α,t).
1290			
1309	5	0.71	likely configuration: π 11/2[505] (1971Lu01). C^2S: 0.46 from (α,t).
1338			
1422	0 0	0.61	likely configuration: π 1/2[660] (1971Lu01). C^2S: 0.44 from (α,t).
1470	2,3	0.71	likely configuration: π 3/2[651] (1971Lu01). C^2S: 0.72 from (α,t).
1532	(2)		
1631	(0)		
1653	(0)		

[†] Mean value from (α,t) and (^{3}He,d). E(level) from (^{3}He,d) At different angles deviated from the average value by <5 keV and authors estimate uncertainties of about 2 and 3 keV, respectively, In E from (α,t) and (^{3}He,d). however, E from 1971Lu01 ranges from 7 keV high to 5 keV low compared with precise adopted values, so the evaluator assigns a 7 keV uncertainty In Adopted Levels to E(level) data taken from this dataset.
[‡] From (^{3}He,d). values from (α,t) are given In comments. the authors′ DWBA calculations were normalized to agree with theory for the g.s..
[#] Band(A): 5/2[402] band.
[@] Band(B): 9/2[514] band.
[&] Band(C): 1/2[541] band.
[a] Band(D): 1/2[400] band.
[b] Band(E): 3/2[402] band.

^{182}W(^{3}He,d),(α,t) 1971Lu01



$^{183}_{75}Re_{108}$