^{171}Yb(d,t) 1967Bu21

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. M. Baglin[1], E. A. Mccutchan[2], S. Basunia[1]	NDS 153, 1 (2018)	1-Oct-2018

Target $J^\pi=1/2^-$.
E=12 MeV; measured dσ/dΩ with broad-range magnetic spectrograph; Nilsson model analysis.

^{170}Yb Levels

E(level)[†]	J$^\pi$[‡]	dσ/dΩ(90°)[#]	E(level)[†]	J$^\pi$[‡]	dσ/dΩ(90°)[#]	E(level)[†]	J$^\pi$[‡]	dσ/dΩ(90°)[#]
0[@]	0^+	130	1358		10	1757		12
84[@]	2^+	30	1398	(3^-)	19	1774		27
275[@]	4^+	47	≈1445[a]	5^+	≈3	≈1789	(3^-)	
573[@]	6^+	≈5	1473		56	1829		32
1065[&]	0^+	22	1508		≈6	1911		4.5
1138[a]	2^+	45	1529		15	1963		≈3
1221[a]	3^+	14	1552		≈5	2000		24
1289		16	1564		45	2106		21
1324[a]	4^+	32	1655		16			
1341		16	1690		≈2			

[†] ΔE<3 keV for low energy states, <6 keV near 1.5 MeV (see 1966Bu16).
[‡] Based on measured dσ/d$\Omega(\theta)$, comparison to Nilsson-model analysis and band configuration.
[#] dσ/dΩ(90°) in μb/sr; see 1967Bu21 for dσ/dΩ at 45°, 60°, 125°.
[@] Band(A): $K^\pi=0^+$ g.s. band.
[&] Band(B): $K^\pi=(0^+)$.
[a] Band(C): $K^\pi=2^+$.

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Band(C): $K^{\pi}=2^{+}$

5^{+} ≈1445

4^{+} 1324

3^{+} 1221

2^{+} 1138

Band(B): $K^{\pi}=(0^{+})$

0^{+} 1065

Band(A): $K^{\pi}=0^{+}$ g.s. band

6^{+} 573

4^{+} 275

2^{+} 84

0^{+} 0

$^{170}_{70}Yb_{100}$