

¹³⁰Te(p,n) 1989Ma35

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 93, 33 (2001)	11-May-2001

1989Ma35: E=134.4 MeV. Measured neutron spectra with tof method, FWHM=350 keV for 130 MeV neutrons, $\sigma(\theta)$. Deduced low-lying structures in the GT strength functions.

¹³⁰I Levels

B(GT)=reduced transition strength.

E(level) [†]	J ^π [@]	dσ/dΩ (mb/sr) [‡]	Comments
48	2 ⁺		E(level): used as a reference peak for calibration of neutron spectra. This probably corresponds to the 40-keV isomer with J ^π =2 ⁺ .
80	2 ⁻	0.84 2	
850 [#]		0.89 4	B(GT)=0.32.
1670 [#]		0.34 3	B(GT)=0.12.
2350 [#]		1.40 6	B(GT)=0.52.
3590 [#]		0.78 6	B(GT)=0.29.
4200 [#]		0.43 4	J ^π : not ΔL=0.
6200 [#]	1 ⁺	7.9 4	B(GT)=3.25.
7850 [#]	1 ⁺	3.9 3	B(GT)=1.68.
9570 [#]	1 ⁺	2.74 22	B(GT)=1.26.
12480	0 ⁺	8.35 6	E(level): IAS of ¹³⁰ Te g.s..
13590	1 ⁺	70.3 6	B(GT)=38.5. E(level): giant-dipole resonance.
21050 [#]		14.7 3	
24790 [#]		11.2 3	
29110 [#]		5.73 19	

[†] Energy of first 2⁺ state (at 48 keV) used as a reference line for determining other energies.

[‡] At 0.3°. 1989Ma35 give cross section data at 4.0° and 8.5° also.

Broad peak.

@ From $\sigma(\theta)$.