

$^{123}\text{Te}(\text{d,t})$ 1999Sc19

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	T. Tamura	NDS 108, 455 (2007)	30-Sep-2006

$J^\pi(^{123}\text{Te}=1/2^+)$.

1999Sc19: E(d)=28 MeV; broad-range magnetic spectrograph, enriched target 70.4%, measured triton energy spectra at $\theta=30^\circ$, 50° ; discussed in terms of IBM model and quasi-phonon model.

 ^{122}Te Levels

Population intensity (arbitrary units) for 30° and 50° are listed in level comments. Additional notes from 1999Sc19 are included in comments.

E(level) [†]	Comments
0.0	I(30°)=3000 80, I(50°)=249 11.
564.12 14	I(30°)=970 50, I(50°)=126 10.
1181.4 10	I(30°)=18 7, I(50°)=6.5 12.
1256.91 21	I(30°)=313 20, I(50°)=35.1 28.
1357.4 9	I(30°)=19 4, I(50°)=2.2 7.
1749.03 28	I(30°)=194 9, I(50°)=25.0 24 (sum for 1747.0+1751.3+1752.6 levels at 30° and 50°).
1909.7 4	I(30°)=416 15 (only small admixture of ^{122}Te at 30°), I(50°)=12.7 18.
2041.4 9	I(30°)=5? 4, I(50°)=3.4 12.
2099.25 22	I(30°)=61 17, I(50°)=5.1 12.
2196.6 5	I(30°)=61 9, I(50°)=8.9 12.
2287.45 25	I(30°)=86 9, I(50°)=13.8 19.
2298.28 29	I(30°)=68 8, I(50°)=6.8 13.
2310.92 21	I(30°)=111 10, I(50°)=11.4 16.
2408.17 13	I(30°)=594 20, I(50°)=54 4.
2438.84 26	I(50°)=11.8 18.
	E(level): not observed any other reactions.
2450.6 4	I(30°)=220 40, I(50°)=21.7 24 (admixture of other isotopes at 30° and 50°).
2477.72 25	I(30°)=48 8, I(50°)=6.5 15.
2499.71 26	I(30°)=666 28, I(50°)=48 4.
2508.15 18	I(30°)=138 12, I(50°)=16.8 21.
2539.8 6	I(30°)=17 5, I(50°)=2.0 10.
2593.92 12	I(30°)=443 20, I(50°)=30 4 (sum for 2592.4+2593.9 levels at 30° and 50°).
2601.07 22	I(30°)=164 15, I(50°)=14.2 23.
2636.1 7	I(30°)=51 12 (admixture of other isotopes).
2668.6 5	I(30°)=35 7, I(50°)=4.0 13.
2680.3 4	I(30°)=26 7, I(50°)=7.1 15.
2695.1 6	I(30°)=31 6, I(50°)=3.9 10 (probably main intensity from other isotopes at 30° and 50°).
2719.34 16	I(30°)=180 12, I(50°)=19.0 23.
2742.05 15	I(30°)=227 14, I(50°)=20.9 23 (admixture of other isotopes at 30° and 50°).
2758.51 14	I(30°)=473 20, I(50°)=72 5.
2771.9 5	I(30°)=80 10 (admixture of other isotopes).
2778.6 5	I(30°)=64 8, I(50°)=14.8 18.
2794.4? 8	I(30°)=40 8.
2799.8 5	I(30°)=54 8, I(50°)=8.7 15.
2840.1? 5	I(30°)=26 6.
2863.2 4	I(30°)=254 28 (admixture of other isotopes).
2900.36 21	I(30°)=227 15.
2911.4 4	I(30°)=117 12 (admixture of other isotopes).
2920.49 21	I(30°)=340 19.
2960.72 17	I(30°)=787 28.
2969.5 6	I(30°)=72 12 (probably main intensity from other isotopes).
2985.5 4	I(30°)=125 13 (admixture of other isotopes).

Continued on next page (footnotes at end of table)

 $^{123}\text{Te}(\text{d,t})$ [1999Sc19](#) (continued)

 ^{122}Te Levels (continued)

E(level) [†]	Comments
2994.43 29	I(30°)=460 40.
2999.8 5	I(30°)=179 30 (admixture of other isotopes).
3038.4 7	I(30°)=80 13.
3045.1 7	I(30°)=68 13.
3062.6 6	I(30°)=53 10.
3106.5? 7	I(30°)=35 7.
3141.4 4	I(30°)=153 13.
3149.53 29	I(30°)=257 16.
3160.9 4	I(30°)=137 12 (probably main intensity from other isotopes).
3183.5 5	I(30°)=74 9 (probably main intensity from other isotopes).
3198.0 8	I(30°)=31 7.
3207.8 12	I(30°)=52 19.
3213.3 4	I(30°)=278 24 (sum for 3211.1+3216 levels).

[†] From [1999Sc19](#).