

¹²⁰Te(d,t),(pol d,t) **1987Ro15,2000Bu19**

| Type | Author | History | Citation | Literature Cutoff Date |
|-----------------|---------------------------------------|---------|---------------------|------------------------|
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1987Ro15: (d,t), E(d)=17 MeV, multigap magnetic spectrograph, FWHM≈13 keV; θ=7.5°–77.5°. Enriched target (≈ 100%), thickness 10.0 μg/cm². Measured σ(E(t),θ). DWBA, CCBA analysis; deduced L, S.

See also ¹²⁰Te(³He,α).

2000Bu19: (pol d,t), E(d)=24 MeV,θ=8°–40°, magnetic spectrograph, FWHM 5-7 keV; enriched target (99.8%), thickness 1.0 μg/cm². Measured σ(E(t),θ). DWBA analysis; deduced L, S.

¹¹⁹Te Levels

| E(level) [†] | J ^π | L | S [#] | E(level) [†] | J ^π | L | S [#] |
|-----------------------|---------------------------------------|-----|----------------|-----------------------|---------------------------------------|-----|----------------|
| 0.0 | 1/2 ⁺ | 0 | 0.40 | 1505.1 5 | 1/2 ⁺ | 0 | 0.017 |
| 257.4 3 | 3/2 ⁺ | 2 | 0.56 | 1512.2 4 | 3/2 ⁺ ,5/2 ⁺ | 2 | 0.04, 0.03 |
| 261.5 5 | 11/2 ⁻ | 5 | 0.27 | 1530.7 4 | (3/2) ⁺ | 2 | 0.004 |
| 320.4 3 | 5/2 ⁺ | 2 | 1.20 | 1540.2 5 | 7/2 ⁺ | 4 | 0.05 |
| 360.4 3 | 7/2 ⁺ | 4 | 2.24 | 1592.8 4 | 3/2 ⁺ | 2 | 0.005 |
| 501.2 2 | 7/2 ⁻ | 3 | 0.27 | 1620.0 5 | 1/2 ⁻ | 1 | 0.002 |
| 557.9 4 | 5/2 ⁺ | 2 | 0.20 | 1654.8 5 | 3/2 ⁺ ,5/2 ⁺ | 2 | 0.032, 0.0 26 |
| 635.9 2 | 3/2 ⁺ | 2 | 0.12 | 1673.8 5 | 3/2 ⁺ ,5/2 ⁺ | 2 | 0.008, 0.0 07 |
| 660.0 5 | (5/2 ⁻ ,7/2 ⁻) | (3) | 0.022, 0.0 16 | 1680.2 5 | | (3) | 0.08 |
| 669.8 4 | 7/2 ⁺ | 4 | 0.21 | 1705.2 4 | | (4) | 0.035 |
| 707.5 3 | 1/2 ⁺ | 0 | 0.26 | 1720.0 5 | 1/2 ⁻ | 1 | 0.011 |
| 723.7 3 | 5/2 ⁺ | 2 | 0.059 | 1741.3 5 | (5/2 ⁻ ,7/2 ⁻) | (3) | 0.07, 0.05 |
| 742.9 3 | (7/2) ⁻ | 3 | 0.12 | 1770.5 5 | 7/2 ⁻ ,7/2 ⁻ | 3 | 0.055, 0.0 40 |
| 747 [±] 20 | (3/2 ⁺) | (2) | 0.05 | 1796.4 8 | | | |
| 767.6 4 | (7/2) ⁻ | 3 | 0.085 | 1808.9 5 | 1/2 ⁺ | 0 | 0.006 |
| 772 [±] 10 | (5/2 ⁻) | 3 | 0.2 | 1823.7 6 | (7/2) ⁻ | 3 | 0.02 |
| 813.9 4 | 3/2 ⁺ | 2 | 0.09 | 1833.8 6 | 3/2 ⁺ | 2 | 0.005 |
| 877.2 3 | 3/2 ⁺ | 2 | 0.025 | 1863.9 11 | 1/2 ⁻ | 1 | 0.006 |
| 889.3 3 | 3/2 ⁺ | 2 | 0.0075 | 1877.1 9 | 1/2 ⁺ | 0 | 0.02 |
| 901.0 6 | (5/2 ⁺) | (3) | 0.03 | 1892.3 9 | 7/2 ⁺ ,9/2 ⁺ | 4 | 0.041, 0.0 25 |
| 957.1 4 | | | | 1910.3 10 | (1/2) ⁻ | 1 | 0.002 |
| 964.1 3 | 5/2 ⁺ | 2 | 0.59 | 1936.4 10 | (5/2) ⁺ | 2 | 0.04 |
| 984.6 3 | 7/2 ⁺ | 4 | 0.19 | 1973.6 10 | 1/2 ⁺ | 0 | 0.0009 |
| 993.2 4 | 5/2 ⁻ | 3 | 0.25 | 1999 2 | | | |
| 1002.2 5 | 1/2 ⁺ | 0 | 0.085 | 2005 2 | | | |
| 1055.6 8 | (7/2 ⁺) | (4) | 0.034 | 2014.5 10 | (1/2 ⁺) | (0) | 0.0013 |
| 1092.6 7 | | | | 2048.3 10 | 1/2 ⁺ | 0 | 0.003 |
| 1113.2 4 | 5/2 ⁺ | 2 | 0.0055 | 2059.1 8 | 1/2 ⁻ | 1 | 0.003 |
| 1132.1 4 | 1/2 ⁺ | 0 | 0.0016 | 2075.5 8 | 7/2 ⁺ | 4 | 0.06 |
| 1154.7 4 | 1/2 ⁻ | 1 | 0.025 | 2089.6 8 | 1/2 ⁺ | (0) | 0.0008 |
| 1189.0 3 | 7/2 ⁺ | 4 | 0.15 | 2138.4 9 | (3/2 ⁺) | (2) | 0.012 |
| 1196.7 4 | 5/2 ⁺ | 2 | 0.085 | 2153.4 9 | 1/2 ⁻ | 1 | 0.0045 |
| 1251.0 5 | | | | 2217.5 12 | (7/2 ⁺) | (4) | 0.05 |
| 1264.3 4 | (1/2 ⁺) | (0) | 0.0015 | 2239.0 9 | 3/2 ⁺ | 2 | 0.009 |
| 1277.2 4 | 1/2 ⁺ | 0 | 0.007 | 2254 2 | 1/2 ⁺ | 0 | 0.0018 |
| 1290.8 5 | 1/2 ⁺ | 0 | 0.002 | 2266.8 9 | 3/2 ⁺ | 2 | 0.0071 |
| 1361.1 5 | 3/2 ⁺ | 2 | 0.007 | 2325.8 9 | (3/2 ⁺) | (2) | 0.004 |
| 1369.0 14 | | | | 2346.0 8 | 3/2 ⁺ | 2 | 0.023 |
| 1400.9 4 | 7/2 ⁺ | 4 | 0.075 | 2376.5 9 | 3/2 ⁺ | 2 | 0.0135 |
| 1418.0 4 | 7/2 ⁺ | 4 | 0.109 | 2389.1 9 | 3/2 ⁺ ,5/2 ⁺ | 2 | 0.005, 0.0 04 |
| 1434.0 4 | (7/2 ⁺) | (4) | 0.022 | 2405.0 9 | 3/2 ⁻ | 1 | 0.0035 |
| 1444.6 4 | 1/2 ⁺ | 0 | 0.024 | 2418.4 12 | 1/2 ⁺ | 0 | 0.0018 |
| 1479 1 | | | | 2466.5 9 | 3/2 ⁺ | 2 | 0.005 |

Continued on next page (footnotes at end of table)

 $^{120}\text{Te}(\text{d,t}),(\text{pol d,t})$ **1987Ro15,2000Bu19** (continued) ^{119}Te Levels (continued)

| <u>E(level)[†]</u> | <u>J^π</u> | <u>L</u> | <u>S[#]</u> |
|-----------------------------|------------------------------------|----------|----------------------|
| 2480.0 9 | 3/2 ⁻ | 1 | 0.0035 |
| 2506.2 12 | | | |
| 2518.8 10 | 3/2 ⁺ ,5/2 ⁺ | 2 | 0.012, 0.0 10 |

[†] From [2000Bu19](#).

[‡] From [1987Ro15](#), uncertainty assigned by evaluators. Not seen in [2000Bu19](#).

[#] C²S.