

**Coulomb excitation    1979Sa05,1977Sa04,1974Ba45**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. Katakura, Z. D. Wu	NDS 109, 1655 (2008)		1-Apr-2008

1979Sa05: ( $^3\text{He}, ^3\text{He}'$ ) E=19.52 MeV, ( $\alpha, \alpha'$ ) E=19.3 MeV measured Coulomb-nuclear interference.

1977Sa04: ( $\alpha, \alpha'$ ) E=8-18 MeV.

1974Ba45: ( $\alpha, \alpha'$ ) E=10 MeV, ( $^{16}\text{O}, ^{16}\text{O}'$ ) E=42 MeV.

1956Te26: ( $\alpha, \alpha'$ ) E=6.5 MeV.

1962Ga13: ( $^{14}\text{N}, ^{14}\text{N}'$ ) E=53 MeV.

1965Ro09: ( $\alpha, \alpha'$ ) E=6-9 MeV.

1967St16: ( $\alpha, \alpha'$ ) E=9-12 MeV, ( $^{16}\text{O}, ^{16}\text{O}'$ ) E=37-43 MeV.

1969He11: ( $^{16}\text{O}, ^{16}\text{O}'$ ) E=33-38 MeV, IMPAC.

1970Ch14: ( $\alpha, \alpha'$ ) E=12-14 MeV.

1970LaZM: ( $^{14}\text{N}, ^{14}\text{N}'$ ) E=40-49 MeV.

1974La05: ( $^{32}\text{S}, ^{32}\text{S}'$ ) E=57.5-65.0 MeV.

1975Ki07: ( $\alpha, \alpha'$ ) E=8.5-17 MeV, ( $^{16}\text{O}, ^{16}\text{O}'$ ) E=39-44 MeV.

1981Sh15: ( $^{32}\text{S}, ^{32}\text{S}'$ ) E=80 MeV IMPAC.

 **$^{124}\text{Te}$  Levels**

E(level)	$J^\pi$	$T_{1/2}$	Comments
0.0 602.7	$0^+$ $2^+$	6.2 ps 1	B(E2)=0.568 5 (for + sign of interference term), 0.566 5 (for - sign of interference term) (1975Ki07). Others: 0.47 4 (1970Ch14); 0.571 11 (for - sign), 0.568 11 (for - sign) (1974Ba45); 0.561 24 (1977Sa04); 0.48 1 ( $\alpha, \alpha'$ ) 0.46 2 ( $^3\text{He}, ^3\text{He}'$ ) (1979Sa05). Q=-0.41 8 (for + sign) or -0.16 8 (for - sign). Q from 1975Ki07; others: -0.49 8 (for + sign), -0.28 8 (for - sign) (1974La05); -0.46 10 (for + sign), -0.11 10 (for - sign) (1974Ba45). g factor=0.26 10 (1981Sh15). $T_{1/2}$ : from B(E2)=0.567 5.
1325	$2^+$	0.4 ps 2	B(E2) $\uparrow$ =0.019 5 (1962Ga13) E(level): From 1962Ga13.
2300	$3^-$	0.17 ps 6	$T_{1/2}$ : from B(E2). B(E3) $\uparrow$ =0.09 3 E(level): From 1979Sa05. B(E3) from 1979Sa05; others: <0.15 (1970Ch14), <0.45 (1963Ha20). $T_{1/2}$ : from B(E3) and $\gamma$ -branching to g.s.=0.0059 2 (adopted $\gamma$ 's).

<sup>†</sup> From Adopted Levels.