

$^{48}\text{Ti}(\text{d}, ^6\text{Li})$ 1978Fo32,1975Me01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen, Balraj Singh and John A. Cameron		NDS 112, 2357 (2011)	31-Jul-2011

1978Fo32: E=55 MeV deuteron beam produced from the K.V.I. cyclotron. Target of 210 $\mu\text{g}/\text{cm}^2$ self-supporting foil of ^{48}Ti (96.5% enriched). Outgoing ^6Li ions momentum analyzed with the QMG/2 magnetic spectrograph and detected in a gas-filled position-sensitive detector along the focal plane. Measured $\sigma(\text{E}(^6\text{Li}), \theta)$. Deduced levels, J^π , L, relative spectroscopic factors from DWBA analysis.

1975Me01: E=28 MeV deuteron beam produced from the Princeton AVF cyclotron. Target of enriched ^{48}Ti (99%) on 20 $\mu\text{g}/\text{cm}^2$ carbon backing. ^6Li detected in a three-detector telescope of ΔE (35– μm), E (500– μm) and anticoincidence detectors. Measured $\sigma(\text{E}(^6\text{Li}), \theta)$. Deduced levels, J^π , relative spectroscopic factors for g.s., 1157 and 1880 levels from DWBA analysis.

Target ^{48}Ti $J^\pi=0^+$.

 ^{44}Ca Levels

ΔE : Estimated by the reviewer from measured spectrum in [1978Fo32](#).

E(level) [†]	J^π	L	Relative S	Comments
0	0^+	0	1.0	$\sigma(\text{exp})/\sigma(\text{DWBA})=26000$ (1975Me01).
1157 50	2^+		0.15	E(level): from 1975Me01 . $\sigma(\text{exp})/\sigma(\text{DWBA})=5200$ (1975Me01).
1880 50	0^+	0	0.13	$\sigma(\text{exp})/\sigma(\text{DWBA})=4400$ (1975Me01).
2280 50				
2660 50				
3040 50				
3300 50				
3590 50	0^+	0	0.55	
3920 50				
4170 50				
4400 50				
4550 50				

[†] From [1978Fo32](#), unless otherwise noted.

[‡] Estimated by the reviewer from measured spectrum in [1978Fo32](#).