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

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen and Balraj Singh	NDS 190,1 (2023)	20-Jun-2023

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

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

^{44}Ca Levels

E(level)[†]	L[‡]	Relative S[‡]	Comments
0	0	1.0	σ(exp)/σ(DWBA)=26000 (1975Me01).
1157		0.17	E(level),Relative S: from 1975Me01. σ(exp)/σ(DWBA)=5200 (1975Me01).
1880	0	0.13	Relative S: other: 0.20 (1975Me01). σ(exp)/σ(DWBA)=4400 (1975Me01).
2280			
2660			
3040			
3300			
3590	0	0.55	
3920			
4170			
4400			
4550			

[†] From 1978Fo32, unless otherwise noted.
[‡] From DWBA analysis of measured $\sigma(\theta)$ (1978Fo32).