^{50}V(d,α)   1966Do06

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 179, 1 (2022)	30-Nov-2021

J^{π}(^{50}V g.s.)=6^{+}.

1966Do06: E=7.5 MeV deuteron beam was produced from the MIT-ONR electrostatic generator. Targets were 15-35 μg/cm^2 ^{50}V (99% enriched) on carbon foils. Reaction products were momentum-analyzed with a multi-gap spectrograph. Measured $\sigma(\theta=30°$ to 165°). Deduced Levels.

1964Bj01: E=3.0-4.3 MeV deuterons were produced from the University of Copenhagen 4-MeV electrostatic generator. Targets were ≈5μg/cm^2 to ≈30 μg/cm^2 thick ≈70% enriched ^{47}Ti on ≈50 μg/cm^2 carbon backings. Reaction products were momentum-analyzed with a heavy particle spectrograph (FWHM≈0.4%) and detected with photographic plates. Measured spectra at 145.5°. Deduced levels, Q-value.

^{48}Ti Levels

E(level)[†]	Comments
0.0	
983[‡]	
2298[‡]	E(level): other: 2293 (1964Bj02, for calibration).
2405[#] *12*	
3233[#] *12*	E(level): multiplet in 1966Do06.
3244[‡]	
3334[#] *12*	
3372 *12*	E(level): weighted average of 3379 *12* (1966Do06) and 3365 *12* (1964Bj01).
3516 *12*	E(level): weighted average of 3522 *12* (1966Do06) and 3510 *12* (1964Bj01).
3628 *12*	
3713 *12*	
3760 *12*	
3799 *12*	
3868 *12*	
4056 *12*	
4086 *12*	
4212 *12*	
4328 *12*	
4358 *12*	
4402[@] *12*	
4417 *12*	
4472 *12*	
4578[@] *12*	
4729 *12*	
4806 *12*	
4879 *12*	
4927 *12*	
4965 *12*	
5005 *12*	
5063 *12*	
5169[@] *12*	
5184 *12*	
5205 *12*	
5266 *12*	
5317 *12*	
5371 *12*	
5395 *12*	
5509 *12*	
5530 *12*	

<u>^{50}V(d,α)</u>   **1966Do06 (continued)**

<u>^{48}Ti Levels (continued)</u>

<u>E(level)†</u>

5555 *12*
5639$^{@}$ *15*
5775 *12*

   † From 1966Do06, unless otherwise noted.
   ‡ As quoted by 1966Do06 from previous studies.
   $^{\#}$ From 1964Bj01.
   $^{@}$ Multiplet (1966Do06).