^{36}Ar(^{3}He,t) 2010Wr02,1970Dz04

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Ninel Nica, John Cameron and Balraj Singh	NDS 113, 1 (2012)	31-Dec-2011

2010Wr02 (also 2010Wr01): E=32 MeV. Tritons analyzed by Munich Q3D magnetic spectrograph. Measurements at 10° and 20°. Energies and parameters of proton resonances corresponding to ^{35}Ar(p,γ) reaction of astrophysical significance were deduced from these data. FWHM=13-18 keV.
Additional information 1.
1970Dz04 (also 1971MiZS thesis): E=22.17 MeV, measured triton spectra using a counter telescope. FWHM ≈ 100 keV.
1966Ma58: measured Q value.

^{36}K Levels

E(level)[†]	Relative intensity[a]	Comments
0[‡]	40	
800[‡] *15*	50	
1112.35[#] *45*	45	E(level): 1115 *15* (1970Dz04).
1618.64[#] *72*	30	E(level): 1590 *20* (1970Dz04), not well resolved from 1670 level.
1706.8 *6*	40	E(level): 1670 *20* (1970Dz04).
1918.3 *7*	40	T=1 E(level): 1890 *20* (1970Dz04).
2196.9 *7*		
2281.8 *7*	110	E(level): 2270 *20* (1970Dz04).
2446.2 *6*	30	E(level): 2410 *30* (1970Dz04).
2578.7[@] *17*	50	E(level): 2560 *30* (1970Dz04).
2628.4?[@&] *30*		
2869.4[@] *20*	40	E(level): 2850 *30* (1970Dz04).
3383.0[@] *31*	10	E(level): 3350 *40* (1970Dz04).
3627?[@&] *6*		
3653.2[@] *21*		E(level): a peak near 3630 is present in spectral figure 1 of 1970Dz04.

[†] From 2010Wr02, unless otherwise stated.
[‡] From 1970Dz04.
[#] From 2010Wr01, evaluated from ^{36}Ca decay data. This value used as calibration point for the triton spectrum.
[@] Tentative detection, not kinematically verified.
[&] Weak peak, low statistics.
[a] At 30° (from figure 1 of 1970Dz04).