^{70}Ge(^{3}He,α), ^{69}Ga(^{3}He,t) 1967Fo05,1988Ch38

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja	NDS 115, 1 (2014)	31-Jul-2013

1988Ch38: E=29.8 MeV, measured σ(ET), decay products in coincidence with $T_{1/2}$ using a Si surface barrier detector to determine α-decay branching from the IAS at 7.00 *5* MeV.
1967Fo05: E=18 MeV, resolution (FWHM)≈70 keV; solid state detectors; measured $\sigma(\theta)$, $\theta\approx0°-120°$; DWBA calculations.

^{69}Ge Levels

E(level)	J^{π}‡	L†	C^2S#	Comments
0	$5/2^-$	3	3.4 *7*	
90 *50*	$(5/2^-)$	(3)	0.6 *1*	J^{π}: L=(3) not in agreement with $J^{\pi}(86.8)=1/2^-$ in Adopted Levels.
230 *50*		(1)	0.2@ *1*	
380 *50*	$3/2^-$	1	3.9 *8*	
1000 *50*		(1)	0.7@ *1*	
1450 *50*				
3600 *50*				
3800 *50*				
7000 *50*	$3/2^-$	1	0.2 *1*	This state may be the analog of the ground state of ^{69}Ga. $\Gamma\alpha/\Gamma\leq0.01$ at 95% confidence level (1988Ch38).

† From DWBA analysis of $\sigma(\theta)$.
‡ Assumed to extract spectroscopic factors.
# Uncertainties in absolute values estimated by authors (1967Fo05) to be about 20%. Note that 1977En02 have suggested a different normalization factor than that used by the authors. The revision was applied in the A=21-44 region but might apply here. This revised normalization factor would increase the values given here by the factor 1.77.
@ J used in calculation not specified but for L=1 values of C^2S are similar for J=1/2 and J=3/2.