^{42}Ca(α,^{2}He) 1990Fi07

History

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

1990Fi07: E=55.7 MeV alpha beam was produced from the Bonn isochronous cyclotron. Target was 87.7% enriched ^{42}Ca with a thickness of 530 μg/cm^2. Reaction products were detected with two ΔE-E telescopes (FWHM=200-300 keV). Measured σ(E(2p),θ). Deduced levels, J, π, L-transfers from DWBA analysis.

^{44}Ca Levels

E(level)†	L†	relative yield†	Comments
0	0	1.00×10^3 *28*	
2030	2	33 *10*	
3290	6	80 *20*	
4550	(6,7)	15 *5*	relative yield: or 11 *2* (1990Fi07).
5210	4+5	21 *6*	E(level): unresolved doublet (1990Fi07).
5860	0	1.7×10^3 *5*	
6210	2	40 *15*	
8050	3	10 *4*	
8290	5	10 *4*	
8860	(5,6,7)		
9460	3	70 *15*	
9750	(7,8)		

† From 1990Fi07. L is from DWBA analysis of measured $\sigma(\theta)$.