^{238}U(t,p) 1973Ba72

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, E. Browne	NDS 109, 2439 (2008)	31-Jul-2008

1973Ba72 (also 1972Ca19): E=16 MeV. Angular distributions measured. FWHM=15-20 keV. Comparison of $\sigma(\theta)$ with DWBA predictions for first 0^+, 2^+ and 4^+ states.

^{238}U(t,pF): 1977An09 (E=12.7 MeV); 1974Ba28 (E=15 MeV), 1970Cr09 and 1969Br11 (E=18 MeV). Deduced fission probability; Q value measured in 1969Br11.

^{240}U Levels

E(level)	J^{π}‡	L	dσ/dΩ (max) mb/sr#	E(level)	dσ/dΩ (max) mb/sr#
0	0^+	0	0.30	1670 *5*	0.03
45 *1*	(2^+)	†	0.10	1708 *5*	0.03
151 *2*	(4^+)	†	0.023	1756 *5*	0.025
1040 *5*			0.014	1792 *5*	0.045
1160 *5*			0.06	1893 *5*	0.02
1545 *5*			0.024	1929 *5*	0.03
1596 *5*			0.05	2010 *5*	0.03

† Poor agreement of $\sigma(\theta)$ with DWBA calculations for L=2 (45 level) and L=4 (151 level).

‡ From the systematics of e-e nuclides and 'Adopted Levels'.

Uncertainty is 20%.