

$^{44}\text{Ca}(\text{d,d}'),(\text{pol d,d})$ 1968Ha31

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen, Balraj Singh and John A. Cameron		NDS 112, 2357 (2011)	31-Jul-2011

1968Ha31: (d,d') E=7.5 MeV deuteron beam produced from the ONR electrostatic generator. Enriched target (98.6% ^{44}Ca , 13 $\mu\text{g}/\text{cm}^2$) on thin carbon foil plus formval foils, thickness . Reaction products momentum analyzed in the MIT multi-angle spectrograph, FWHM=7-9 keV. Measured $\sigma(E_d, \theta)$. Deduced levels, J^π , L from DWBA analysis.

Others:

1968Be36: (d,d) E=7.00 and 7.20 MeV.

1970Fi01: (d,d) E=11.8 MeV.

1970Br27: (d,d) E=12 MeV.

1980Ha14: (pol d,d) E=56 MeV.

1982En06: (d,d) E=2,3,4,4.5 MeV.

All data from 1968Ha31, unless otherwise noted.

 ^{44}Ca Levels

E(level)	J^π †	L	$d\sigma/d\Omega$ (max) mb/sr
0	0^+		
1157 4	2^+	2	1.72
1884 5	0^+		0.15
2285 6	4^+		0.10
2658 6	2^+		0.12
3309 8	3^-	3	0.21

† From Adopted Levels.