

$^{42}\text{Ca}(\gamma,\gamma)$ 1966Me11

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen [#] and Balraj Singh		NDS 135, 1 (2016)	31-May-2016

1966Me11: E=1520 keV γ -rays from ^{42}K radioactive source. Targets of natural and enriched CaCO_3 (94.42% in ^{42}Ca). Scattered γ -rays were detected with a 3 by 3 in. NaI(Tl) detector. Measured cross section for resonant scattering. Deduced $T_{1/2}$ from measured resonance width for the 1.52 MeV level.

Other: [1972KaXR](#).

 ^{42}Ca Levels

E(level)	J^π [†]	$T_{1/2}$	Comments
0	0^+		
1520	2^+	0.97 ps 22	$T_{1/2}$: from $\Gamma=0.00048$ eV 11 (1966Me11). Other: 0.520 ps 35 (1972KaXR).

[†] From Adopted Levels.

 $\gamma(^{42}\text{Ca})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Comments
1520	1520	2^+	0	0^+	$B(E2)\downarrow=0.0074$ 17

 $^{42}\text{Ca}(\gamma,\gamma)$ 1966Me11Level Scheme