

$^{42}\text{Ca}(\text{p},\text{p}'\gamma):\text{resonances}$ 1984Ka27

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen [#]		NDS 126, 1 (2015)	31-Mar-2015

1984Ka27: E=3.00-3.35 MeV. Measured (inelastically) scattered protons and γ -rays, $\sigma(\theta)$. For proton spectrum, FWHM=6 keV.

 ^{43}Sc Levels

E(level) [†]	J π ^{&}	E(p)(lab) [@]	Cross section (mb) [@]	E(level) [†]	E(p)(lab) [@]	Cross section (mb) [@]
8021 $\ddagger$		3165	11	8112 [#]	3258	0.9
8027 [#]		3171	0.3	8122 [#]	3268	1.7
8054 [#]		3198	0.4	8132 [#]	3278	2.9
8063 $\ddagger$		3208	37	8139 [#]	3285	1.3
8068 $\ddagger$	3/2 ⁻	3212	27	8149 [#]	3296	1.4
8074 $\ddagger$ [#]	3/2 ⁻	3220 ^a	51	8193 [#]	3341	0.7
8093 $\ddagger$ [#]		3237 ^b	20			

[†] From $E_{\text{c.m.}} + S(\text{p})$ where $S(\text{p})=4929.8$ 19 from 2012Wa38 and $E_{\text{c.m.}}$ deduced from $E_{\text{p}}(\text{lab})$ unless otherwise noted.

$\ddagger$ (p,p') from 1525, 2⁺ (1525 γ) in ^{42}Ca .

[#] (p,p') from 1837, 0⁺ (312 γ to 1525 level) in ^{42}Ca .

[@] Values read off the plots shown by 1984Ka27.

[&] From $\sigma(\theta)$.

^a $\sigma=2.9$ mb for scattering from 1837, 0⁺.

^b $\sigma=1.1$ mb for scattering from 1837, 0⁺.