

$^{40}\text{Ar}(\gamma, \text{p})$  1965Re08

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 149, 1 (2018)	1-Jan-2018

[1965Re08](#): E=17.71 MeV  $\gamma$  ray was produced via  $^7\text{Li}(\text{p}, \gamma)$  at the 441-keV resonance with protons provided by the University of British Columbia 3-MeV Van de Graaff accelerator on metallic lithium. Target was argon gas.  $\gamma$  rays were detected by a NaI(Tl) crystal. Measured  $\sigma(E_p)$ . Deduced Q-value=12460 100.

[1958Gu10](#): E=15 MeV. Measured  $\sigma(\theta)$ , possible group at 800 200 with  $J^\pi=1/2^+$ .

[1951Wi51](#): E=17.6 MeV. Measured Q-value, possible group at 1 MeV.

[Additional information 1](#).

 $^{39}\text{Cl}$  Levels

$\sigma=4.8$  mb *IO* for excited states above the E=500 level ([1965Re08](#)).

E(level) <sup>†</sup>	$J^\pi$	$\sigma$ (mb) <sup>†</sup>	Comments
0	3/2 <sup>+</sup>	1.15 20	$J^\pi$ : from Adopted Levels.
≈500	1/2 <sup>+</sup>	1.26 20	$J^\pi$ : from Adopted Levels for E=396 level.

<sup>†</sup> From [1965Re08](#). Four peaks were observed and identified with proton transitions to the ground, first and higher excited states in  $^{39}\text{Cl}$ .