^{40}Ar(^{7}Li,^{7}Be),(^{11}B,^{11}C) 1984Fi02

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 140, 1 (2017)	30-Sep-2015

1984Fi02: E(^{7}Li)=52, 54 and E(^{11}B)=81 MeV beams were produced from the Australian National University 14 UD pelletron accelerator. Target was ^{40}Ar gas in a stainless steel gas cell. Reaction products were momentum analyzed by an Enge split-pole spectrometer (FWHM=180 keV for ^{7}Be spectra) and detected by a multi-element gas-filled detector at the focal plane. Measured σ(E). Deduced mass excess, levels.

^{40}Cl Levels

E(level)†	Jπ‡	Comments
0	2^-	
230 *40*		
640 *30*	(4^-)	Jπ: 5^- from 1984Fi02.
840 *30*	(5^-)	Jπ: 3^- from 1984Fi02.
1160 *40*	(4^-)	Jπ: suggested by 1984Fi02.
1580 *40*		
1740 *40*		
2020 *40*		
2290 *40*		

† From 1984Fi02.

‡ From Adopted Levels, unless otherwise noted. 1984Fi02 suggest that low-lying levels of $J^\pi=2^-$ to 5^- may arise from weak coupling of $3/2^+$ ^{37}Cl g.s. to levels in ^{43}Ca, as in ^{38}Cl. The assignments from 1984Fi02 are considered as tentative by the evaluator.