

$^{48}\text{Ca}(^{48}\text{Ca}, ^{44}\text{Ar}\gamma) \quad 2000\text{Fo03}$

Type	Author	Citation	History Literature Cutoff Date
Full Evaluation	Jun Chen and Balraj Singh	NDS 190,1 (2023)	20-Jun-2023

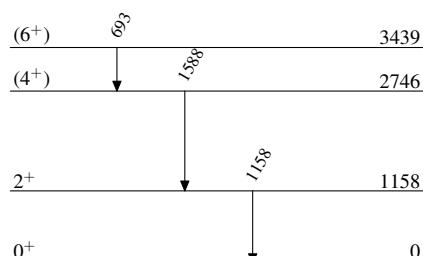
2000Fo03: E=140 MeV ^{48}Ca beam produced from the Tandem accelerator in Laboratori Nazionali di Legnaro. Target of 0.74 mg/cm² ^{48}Ca backed by 40 mg/cm² evaporated ^{208}Pb . γ -ray detected by the Euroball III array. Measured E γ , I γ , $\gamma\gamma$ -coin. Deduced levels, J, π . Comparison with shell-model calculations.

 ^{44}Ar Levels

E(level)	J $^\pi$
0	0 $^+$
1158	2 $^+$
2746	(4 $^+$)
3439	(6 $^+$)

 $\gamma(^{44}\text{Ar})$

E γ	E $_l$ (level)	J $^\pi_i$	E $_f$	J $^\pi_f$
693	3439	(6 $^+$)	2746	(4 $^+$)
1158	1158	2 $^+$	0	0 $^+$
1588	2746	(4 $^+$)	1158	2 $^+$

 $^{48}\text{Ca}(^{48}\text{Ca}, ^{44}\text{Ar}\gamma) \quad 2000\text{Fo03}$ Level Scheme $^{44}_{18}\text{Ar}_{26}$