

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

Type	Author	History	Citation	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 π
0	0 ⁺
1158	2 ⁺
2746	(4 ⁺)
3439	(6 ⁺)

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

E_γ	$E_i(\text{level})$	J π_i	E_f	J π_f
693	3439	(6 ⁺)	2746	(4 ⁺)
1158	1158	2 ⁺	0	0 ⁺
1588	2746	(4 ⁺)	1158	2 ⁺

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