Si(^{33}Al,^{33}Al′γ) 2002Mi44

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen and Balraj Singh	NDS 199,1 (2025)	30-Sep-2024

2002Mi44 (also 2002Mi48): E=55 MeV/nucleon ^{33}Al beam was produced by fragmentation of ^{36}S beam at GANIL facility. Fragments were separated by the recoil fragment separator SPEG. The secondary target was silicon. γ rays were detected with a 4π array of 72 BaF_2 detectors surrounding the target; charged particles were stopped and detected in a telescope of ΔE and E silicon detectors. Measured Eγ, (particle)γ-coin. Report a 730γ.

^{33}Al Levels

E(level)	Jπ†
0	(5/2$^+$)
730 *50*	(5/2$^+$)

† From shell-model predictions (2002Mi44).

γ(^{33}Al)

Eγ	Ei(level)	J_i^π	E_f	J_f^π	Comments
730 *50*	730	(5/2$^+$)	0	(5/2$^+$)	Eγ: from 2002Mi44. Population σ=5 mb *1* (2002Mi44).

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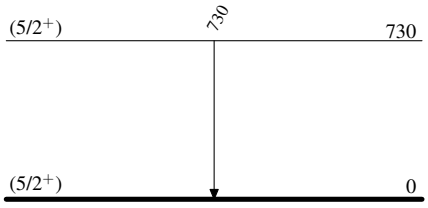
Level Scheme



$^{33}_{13}Al_{20}$