

²⁸Si(³²Mg, ³²Mg'γ) 2002Mi44

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 201,1 (2025)	31-Oct-2024

Inelastic scattering on ²⁸Si target.
2002Mi44 (also 2002Mi48): E≈55 MeV/nucleon ³²Mg secondary beam was produced by fragmentation of a ³⁶S primary beam provided by the GANIL facility and transported to the SPEG reaction chamber. The reaction target was ²⁸Si. Outgoing particles were detected with a telescope of ΔE and E silicon detectors; γ rays were detected with a 4π array consisting of 72 BaF₂ detectors. Measured E_γ, I_γ, (particle)-γ-coin, σ.

³²Mg Levels

E(level) [†]	J ^π	Comments
0		
860 50	2 ⁺	J ^π : from Adopted Levels. Population σ=40 mb 10 (2002Mi44).
2320 70		J ^π : 3 ⁻ proposed by 2002Mi44 based on measured σ of inelastic scattering. Population σ=15 mb 5 (2002Mi44).

[†] From E_γ data.

γ(³²Mg)

E _γ [†]	E _i (level)	J ^π _i	E _f	J ^π _f	Comments
860 50	860	2 ⁺	0		
1460 50	2320		860	2 ⁺	E _γ : other: 1470 50 (2002Mi44).

[†] From 2002Mi44.

$^{28}\text{Si}(^{32}\text{Mg}, ^{32}\text{Mg}'\gamma)$ 2002Mi44

Level Scheme

