^{32}Si(^{30}Si,X):GDR 2021Go15

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Huang Xiaolong, and Wang Xianghan	NDS 204,1 (2025)	30-Jun-2023

2021Go15: ^{32}Si(^{30}Si,X)^{62}Zn*,E(^{30}Si)=75,98 MeV; measured high-energy Eγ, Iγ using GALILEO array of 25 HPGe detectors and ten $LaBr_3$(Ce) scintillators at the Tandem accelerator facility of INFN-Legnaro. Deduced energies and widths of the Giant dipole resonance, isospin mixing parameter and isospin-symmetry-breaking correction by analyzing experimental γ-spectra using statistical model calculations.

^{62}Zn Levels

E(level)	Γ (GDR)	Comments
18.4×10^3 *1*	11.6 MeV *2*	Energy and width of the GDR from data at E(^{30}Si)=75 MeV. Corresponding values at E(^{30}Si)=98 MeV are: E(GDR)=18.1 MeV *1*, Γ(GDR)=12.6 MeV *2* (2021Go15).