

¹⁴⁸Nd(α,α')

2025Ab25,2024Ab13

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 208,1 (2026)	17-Jan-2026

2025Ab25 and 2024Ab13 compiled for XUNDL databsse by E.A. McCutchan (NNDC,BNL).
2025Ab25, 2024Ab13 (same group): E(α)=386 MeV from RCNP, Osaka University, Japan incident on self-supporting and enriched target foils, 5 mg/cm². Measured E α , I α , $\alpha(\theta)$ high-resolution Grand Raiden spectrograph. (FWHM=175 keV). Deduced IsoScalar Giant Monopole resonance (ISGMR), Isoscalar Giant Quadrupole Resonance (ISGQR), and Isoscalar Giant Dipole Resonance (ISGDR).

¹⁴⁸Nd Levels

E(level)	Γ	Comments
11.5×10 ³ 5	3.5 MeV 12	E(level): ISGMR state.
12.2×10 ³ 1	6.7 MeV 2	E(level): ISGQR state.
15.2×10 ³ 2	4.3 MeV 4	E(level): ISGMR state.
23.0×10 ³ 5	9.7 MeV 12	E(level): ISGDR state.
25.2×10 ³ 6	12.3 MeV 20	E(level): ISGQR state.