^{160}Gd(p,p) IAR 1973Me24

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	C. W. Reich	NDS 112,2497 (2011)	1-Jun-2011

All data are from study of isobaric-analog resonances (1973Me24) by proton elastic scattering on enriched ^{160}Gd target with E(p)= 9.7-11.5 MeV. Protons measured with Si(Li) detectors at 90°, 125°, 141°, and 160° with FWHM=25 keV at 12 MeV.
Results are from data at 125° and 160°, except as noted.
Additional information 1.

^{161}Tb Levels

E(level)†	Jπ‡	L	Comments
17040	(5/2⁻)		E(c.m.)=10231, IAS(g.s).
17113	(7/2⁻)		E(c.m.)=10304, IAS(73).
17353	(3/2⁻)	1	E(c.m.)=10544, IAS(313). At 141° E(c.m.)=10539.
17396	(1/2⁻)	1	E(c.m.)=10587, IAS(356). At 141° E(c.m.)=10582.
17478	(5/2⁻)	3	E(c.m.)=10669, IAS(438).
17569	(7/2⁻)		E(c.m.)=10760, IAS(529).
17874	(1/2⁻,3/2⁻)	1	E(c.m.)=11065, IAS(834). At 141° E(c.m.)=11060.
17929	(7/2⁻)	3	E(c.m.)=11120, IAS(889).

† Level energy is E(c.m.)+S_p, where E(c.m.) is the resonance energy in the center-of-mass system and S_p=6809 keV (2009AuZZ). No uncertainties are given for the values of E(c.m.).

‡ The isobaric-analog states, IAS, are in ^{161}Gd and the associated J^π assignments are given in the ^{161}Gd Adopted Levels. The values listed here are based on the association of a given resonance with a specific ^{161}Gd state.