^{143}Nd(pol p,α) E=23.5 MeV 2003GuZU

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 154, 1 (2018)	20-Nov-2018

2003GuZU, 2003GuZV: p(pol) at Stern-Gerlach atomic beam source of negative polarized hydrogen ions (Munich) at 1.5 μA and 60% polarization; reaction products analyzed with Q3D magnetic spectrograph and detected with focal plane cathode-strip readout detector; studied homologous states in ^{139,140}Pr; measured E_α and compared deduced levels with 1994Pe19.
1996Gu03: same reaction with unpolarized p at E=23.1 MeV. Measured $\sigma(\theta,E\alpha)$.

^{140}Pr Levels

E(level)†	E(level)†	E(level)†	E(level)†
0.0	1058	1672	2446
30	1079	1684	2466
129	1208	1718	2491
192	1217	1751	2542
272	1231	1768	2570
288	1327	1825	2602
332	1335	1939	2632
393	1378	1973	2655
421	1385	1984	2748
578	1405	2020	2822
643	1484	2117	2859
787	1502	2221	2895
863	1525	2277	2929
889	1565	2333	2953
1034	1586	2349	2990
1045	1652	2416	3005

† General good agreement with Adopted Levels, with values systematically higher by 1-2 keV; levels 393, 787, 1208 are higher by 3-4 keV.