^{168}Er(α,α') 1986Go02

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 111, 1807 (2010)	15-Jun-2010

1986Go02: E(α)=36 MeV, θ(lab)=20° to 70° (5° intervals); ^{168}Er targets evaporated onto carbon foils; measured Eα (mag spect, FWHM=18), angular distributions, differential cross sections; deduced isoscalar transition strengths in units of e^2b^L (quoted uncertainties are due to statistical errors only; no model-dependence or other systematic errors are included).

These results combine data from both α and deuteron scattering.

^{168}Er Levels

E(level)	J$^\pi$[†]	Comments
0.0	0^+	
79 *5*	2^+	Isoscalar E2 transition strength=6.8 *9*.
264 *5*	4^+	Isoscalar E4 transition strength=0.004 *35*.
548 *5*	6^+	Isoscalar E6 transition strength=0.0072 *20* (transition has a negative value for matrix element).
821 *5*	2^+	Isoscalar E2 transition strength=0.136 *15*.
928 *5*	8^+	
994 *5*	4^+	E(level): misprinted As 944 In table ii of 1986Go02. Isoscalar E4 transition strength=0.083 *16*.
1193 *5*	5^-	
1263 *5*	6^+	Isoscalar E6 transition strength=0.015 *4*.
(1276)	2^+	E(level): rounded value from Adopted Levels; level expected but not observed in (α,α'); isoscalar E2 transition strength≤0.002.
1358 *5*	1^-	
1431 *5*	3^-	Isoscalar E3 transition strength=0.046 *5*.
1541 *5*	3^-	Isoscalar E3 transition strength=0.003 *1*.
1574 *5*	5^-	
1633 *5*	3^-	Isoscalar E3 transition strength=0.058 *6*.
1736 *5*	4^+	
1786 *5*	1^-	
1828 *5*	3^-	Isoscalar E3 transition strength=0.007 *2*.
1913 *5*	3^-	Isoscalar E3 transition strength=0.023 *3*.
1999 *5*	$(3)^-$	Isoscalar E3 transition strength=0.005 *1*.
2055 *5*	$(4)^+$	Isoscalar E4 transition strength=0.0028 *14*.
2129 *5*	5^-	
2185 *5*	$(5)^-$	
2269 *5*	3^-	Isoscalar E3 transition strength=0.055 *6*.
2324 *5*	3^-	Isoscalar E3 transition strength=0.018 *2*.
2430 *5*		
2486 *5*	3^-	Isoscalar E3 transition strength=0.020 *2*.
2535 *5*		
2634 *5*		

[†] From Adopted Levels.