^{192}Os(p,p′), (pol p,p′) 1987Ic04,1989Ba54

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 113, 1871 (2012)	15-Jun-2012

Others: 1971Kr10, 1988Ic02.

1987Ic04 (also 1986Ic02): E(p)=65 MeV, polarized proton beam; osmium targets enriched to 99.40% in ^{192}Os; measured E(level) (mag spect, FWHM=20-26 keV), cross sections, analyzing powers, angular distributions (10° to 70°, with 1° steps at forward angles, 2° steps at backward angles); deduced quadrupole and hexadecapole transition strengths to γ vibrational band; used coupled channels analysis to interpret data.

1989Ba54 (also 1985Ba64): E(p)=134.5 MeV, typical polarization=0.70-0.80; osmium oxide targets enriched to 99.03% in ^{192}Os; measured E(level) (mag spect, position-sensitive proportional counter, FWHM=80-100 keV), differential cross sections, analyzing powers; used coupled channels analysis to interpret data; described E2 and E4 properties of ^{192}Os (one-step processes shown to dominate).

^{192}Os Levels

E(level)[†]	E4 matrix element[‡]	Comments
0.0		
206		
489		
580	-1.96×10^{3} *11*	
910	1.16×10^{3} *29*	
1070	1.08×10^{3} *27*	1985Ba64, 1989Ba54 suggest that level is lowest g-boson intruder state (single g-boson coupled to a 0^+ system of s and d bosons).
1340		E(level): from 1987Ic04.

[†] From 1989Ba54, except where noted.

[‡] For excitation (e fm^4) (1989Ba54). Other: 1987Ic04.