

$^{148}\text{Sm}(\text{p,p}'), (\text{pol p,p}') \quad \mathbf{1964\text{Ke03}}$

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 117, 1 (2014)	1-Oct-2013

1964Ke03: E=12.03 MeV, FWHM=0.1%; measured $\sigma(E,\theta)$.

1989Ob02: E=24 MeV, FWHM=18 keV; measured $\sigma(\theta)$ for elastic and inelastic scattering, coupled-channels (CC) and collective-models analysis.

1989Gu09: E=66.5 MeV, FWHM \leq 25 keV; measured $\sigma(\theta)$ for elastic and inelastic scattering, first-order vibrational model, CC analysis.

1993Co03: E=26 MeV, FWHM=about 50 keV; measured $\sigma(\theta)$ for inelastic scattering, coupled-channels analysis.

1993Pe16: E(pol p)=20.4 MeV, FWHM=20 keV and 80%–90% polarization; measured $\sigma(\theta)$ for elastic and inelastic scattering, DWBA and CC analysis.

See also [1967Ku14](#), [1967St09](#), [1970Br19](#), [1971Kr10](#), [1972Ku15](#), [1972Wo03](#), [1972Ku32](#), [1974Ku21](#).

 ^{148}Sm Levels

E(level) [†]	Comments
0.0	
552 3	$\beta_2=0.132$ (1989Ob02); 0.120 <i>l</i> 0 (1993Co03). See also 1993Pe16 for details of coupled-channel analysis and the deformation parameters deduced.
1165 [‡] 5	$\beta_3=0.120$ (1989Ob02); 0.130 <i>l</i> 0 (1993Co03). See also 1993Pe16 for details of coupled-channel analysis and the deformation parameters deduced.
1182 [‡] 5	
1432 8	
1464 8	
1594 8	
1669 8	
1740 8	
1909 8	
1982 8	
2104 8	
2152 8	
2222 8	

[†] From (d,p) and (p,p') data ([1964Ke03](#)).

[‡] Unresolved doublet ([1964Ke03](#)).