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 **$^{144}\text{Sm}(\text{p},\text{p}),(\text{p},\text{p}'),(\text{pol p},\text{p}')$     1977Cl02**

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Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 110, 507 (2009)	1-Oct-2008

Polarized protons with E=9.0-12.7 MeV (1977Cl02), 8.5-14 MeV (1984Ce01).

Measured:  $\sigma(E,\theta)$ , analyzing power; DWBA analysis.

Studied: IAR (levels in  $^{145}\text{Eu}$ ) analogs of lower levels of  $^{145}\text{Sm}$ .

Deduced: E,  $J^\pi$ ,  $\Gamma$ , S.

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 **$^{145}\text{Eu}$  Levels**

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E(level)	$J^\pi$	Comments
9340	$7/2^-$	Analog to $^{145}\text{Sm}$ ground state.
10210	$3/2^-$	
10780	$9/2^-$	
10940	$1/2^-$	
11000	$5/2^-$	
11140	$9/2^-$	
11220	$7/2^-$	
11320	$3/2^-$	
11340	$5/2^-$	
11490	$3/2^-$	
11500	$1/2^-$	
11640?	$(3/2^-)$	
11690	$5/2^-$	
11780	$5/2^-$	
12040	$7/2^-$	
12160?	$(5/2^-)$	
12350?	$(5/2^-)$	
12430	$1/2^-$	
12490	$3/2^-$	