

$^{150}\text{Sm}(p,\alpha)$  1978Sh17

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	N. Nica and B. Singh		NDS 181, 1 (2022)	9-Mar-2022

**Additional information 1.**

**1978Sh17:** E(p)=17 MeV. Measured  $E\alpha$ ,  $\sigma(\theta)$  at 20°, 30° and 45° using Enge split-pole magnetic spectrograph and emulsion plates. FWHM $\approx$ 16 keV. Measured cross sections compared to those measured in single-proton transfer reactions in **1979St01**.

Comparison with theoretical calculations using direct three-nucleon microscopic and cluster transfer reaction as well as two-step sequential transfer reaction mechanisms.

**1975Mi15:** E(p)=20-30 MeV; measured  $E\alpha$ ,  $\sigma(\theta)$ ; deduced probability of  $\alpha$ -cluster preformation.

 $^{147}\text{Pm}$  Levels

E(level) <sup>†</sup>	J <sup>π</sup> <sup>†</sup>	dσ/dΩ (μb/sr) <sup>‡</sup>
0	7/2 <sup>+</sup>	12.7
91	5/2 <sup>+</sup>	15.7
649	11/2 <sup>-</sup>	9.2

<sup>†</sup> From the Adopted Levels.

<sup>‡</sup> From **1978Sh17**.