

$^{16}\text{O}(\text{p},\text{p}^3\text{He})$ 

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. H. Kelley, C. G. Sheu and J. E. Purcell		NDS 198,1 (2024)	1-Aug-2024

[1973Be36](#):  $^{16}\text{O}(\text{p},\text{p}^3\text{He})$  E=29, 39 and 62 MeV; analyzed particle knockout systematics.

[1975Gr40](#), [1977Gr04](#):  $^{16}\text{O}(\text{p},\text{p}^3\text{He})$  E=75 MeV; also  $^{12}\text{C}(\text{p},\text{p}^3\text{He})$  measured  $\text{p}^3\text{He}$ -coin; compared reaction on  $^{12}\text{C}$  and  $^{16}\text{O}$ , deduced S. Indicate the reaction mechanism is more complex than quasifree knockout.

 $^{13}\text{C}$  Levels

E(level)	$J^\pi$ <sup>†</sup>	$L$ <sup>†</sup>	S <sup>†</sup>
0	$1/2^-$	1	1.57
3090	$1/2^+$		
3680	$3/2^-$	1	2.29
3850	$5/2^+$		
7600 <sup>‡</sup>			

<sup>†</sup> From DWIA analysis of spectroscopic factors in ([1975Gr40](#),[1977Gr04](#)). S is normalized to the predicted spectroscopic factor of the  $^{12}\text{C} \rightarrow {}^9\text{B}_{\text{g.s.}}$  transition.

<sup>‡</sup> Some states are not associated with Adopted Levels because inadequate details for association are given in the literature.