

$^{34}\text{S}(\text{p},\text{n})$  1987Fu11,1997Jo08,2002Or05

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Ninel Nica, Balraj Singh		NDS 113, 1563 (2012)	28-May-2012

1987Fu11: E=35 MeV, target of 94.4%-enriched  $^{34}\text{S}$  on carbon covered with gold. Measured angular distributions, DWBA.

1997Jo08: same As 1987Fu11 with improved DWBA fit of neutrons to  $^{34}\text{Cl}$   $0^+$  g.s..

2002Or05: E=35 MeV. Used time-of-flight technique and ten organic liquid scintillator detectors. Extract Gamow-Teller matrix element B(GT) from (p,n) cross section for the  $0^+ \rightarrow 1^+$  excitation.

All references are interrelated.

 $^{34}\text{Cl}$  Levels

E(level) <sup>†</sup>	J <sup>π</sup> <sup>‡</sup>	Comments
0.0	$0^+$	IAS of $^{34}\text{S}$ g.s. observed by 1987Fu11, 1997Jo08.
461	$1^+$	
666	$1^+$	
1230	$2^+$	
1890	$2^+$	
2581	$1^+$	
3128	$1^+$	B(GT)=1.30 7 (2002Or05).
3380	$2^+$	
4985	$1^+, 2^+$	E(level): unresolved 4971+4996 doublet.

<sup>†</sup> From 1987Fu11.

<sup>‡</sup> From 1987Fu11 (based on DWBA calculations which depend on different  $\Delta J(\Delta L, \Delta S)$  combinations).