

$^{33}\text{S}(\text{p}, ^3\text{He})$ 1979Na07

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen and Balraj Singh		NDS 184, 29 (2022)	24-Jun-2022

Target $J^\pi(^{33}\text{S g.s.})=3/2^+$.

1979Na07: E=40 MeV proton beam from Michigan State University cyclotron. Enge split pole magnetic spectrograph for separating reaction products FWHM=30 keV. Position-sensitive wire counter and plastic scintillator combination. Enriched targets (76.8% ^{33}S). DWBA analysis. See also 1976Na18.

 ^{31}P Levels

E(level)	L^\ddagger	Comments
0	2	$\sigma_{\text{exp}}/\sigma_{\text{DWBA}}=0.85$.
1270	0	$\sigma_{\text{exp}}/\sigma_{\text{DWBA}}=0.61$.
2230	(2,3,4)	$\sigma_{\text{exp}}/\sigma_{\text{DWBA}}=1.09$.
3130	0+2	$\sigma_{\text{exp}}/\sigma_{\text{DWBA}}=1.21$.
3300	2	$\sigma_{\text{exp}}/\sigma_{\text{DWBA}}=1.76$.
3410	2	$\sigma_{\text{exp}}/\sigma_{\text{DWBA}}=0.67$.
3510	0+2	$\sigma_{\text{exp}}/\sigma_{\text{DWBA}}=1.09$.
4190	0+2+4	$\sigma_{\text{exp}}/\sigma_{\text{DWBA}}=0.52$.
4260	0(+2)	$\sigma_{\text{exp}}/\sigma_{\text{DWBA}}=1.45$.
4590	0+2	$\sigma_{\text{exp}}/\sigma_{\text{DWBA}}=0.39$.
4630	2	$\sigma_{\text{exp}}/\sigma_{\text{DWBA}}=0.97$.
4780	0+2	$\sigma_{\text{exp}}/\sigma_{\text{DWBA}}=0.85$.
5010 [†]		
5120 [†]		
5250 [†]		
5340 [†]		
5530 [†]		
5670 [†]		
5770 [†]		
5890 [†]		
6080 [†]		
6230 [†]		
6380	0	$\sigma_{\text{exp}}/\sigma_{\text{DWBA}}=0.91$.
6450 [†]		
6610 [†]		
6690 [†]		
7070 [†]		
7140 [†]		
7340 [†]		
7470 [†]		
7600 [†]		

[†] From triton spectrum in FIG.1 of 1979Na07.

[‡] From DWBA analysis of measured $\sigma(\theta)$ in 1979Na07.