

$^{33}\text{S}(\text{p},\text{p}'\gamma)$  1964Va12,1969An35

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen and Balraj Singh		NDS 112, 1393 (2011)	31-Mar-2011

**1964Va12:**  $E_p=1.2-3.2$  MeV proton beams produced from the Utrecht 3 MV Van de Graaff accelerator. CdS target (22%  $^{33}\text{S}$ ).

Detectors: a cylindrical NaI(Tl) crystal for detecting  $\gamma$ -rays. Measured  $\sigma(E_p)$ ,  $E_\gamma$ ,  $\gamma(\theta)$ . Deduced levels.

**1969An35:**  $E_p=6.03$  MeV proton beams on an InS target (45.4%  $^{33}\text{S}$ ). inelastic protons detected by a Si(Li) detector. Measured  $\sigma(E_p, \theta)$ . Deduced levels.

 $^{33}\text{S}$  Levels

E(level)<sup>†</sup>  
 0  
 840.0 10  
 1960.1 10  
 2310  
 2870  
 2940  
 2970  
 3220

<sup>†</sup> Values with uncertainties from the least-squares fit to  $E_\gamma$  data and others are from 1969An35.

 $\gamma(^{33}\text{S})$ 

<u><math>E_i(\text{level})</math></u>	<u><math>E_\gamma</math><sup>†</sup></u>	<u><math>I_\gamma</math></u>	<u><math>E_f</math></u>	Comments
840.0	840		0	
1960.1	1960	<97	0	$A2=-0.42$ 4, $A4=-0.03$ 6 or $A2=-0.49$ 1, $A4=-0.04$ 3 (1964Va12).

<sup>†</sup> From 1964Va12.

$^{33}\text{S}(\text{p},\text{p}'\gamma)$  1964Va12,1969An35Level Scheme

Intensities: % photon branching from each level

