

$^{30}\text{Si}(^3\text{He,p}),(^3\text{He,p}\gamma)$ 1975Na05

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Christian Ouellet, Balraj Singh		NDS 112, 2199 (2011)	24-Aug-2011

1975Na05: ($^3\text{He,p}$) E=28 MeV from the MP tandem accelerator of the Max Planck Institute in Heidelberg. Enriched targets of SiO_2 foils (98% ^{30}Si). Protons momentum analyzed in a magnetic multigap spectrometer with nuclear emulsion detectors. FWHM=40-45 keV. Measured angular distributions, DWBA calculations.

1972Fo12: ($^3\text{He,p}\gamma$) ^3He beam from the 4MV Van de Graaff accelerator of the Institut de Physique Nucleaire at Orsay. Enriched ^{30}Si target (95%). Ge detectors. Measured $\sigma(\theta)$ and coincidence E_γ and I_γ of 5073 keV level.

1971Ad06: ($^3\text{He,p}\gamma$): University of Pennsylvania. SiO targets. NaI(Tl) detectors. Measured $p\gamma$ coin and $p\gamma(\theta)$, I_γ . [1977Ba50](#) contains the same data.

 ^{32}P Levels

E(level) [†]	J^π	$L^\dagger$	Comments
0		0+2	
80		2	
510			
1150		0(+2)	
1320		2	
1750		2+4	
2180		2+4	
2220			
2230		2(+0)	
2660		2	
2740		0+2	
3000		2+4	
5073.0 14	0 ⁺		E(level): from 1972Fo12 . J^π : from 1977Ba50 and 1972Fo12 $p\gamma(\theta)$.

[†] From [1975Na05](#), unless otherwise noted.

 $\gamma(^{32}\text{P})$

$E_i(\text{level})$	J_i^π	$E_\gamma^\dagger$	$I_\gamma^\dagger$	E_f	Comments
510		510	100	0	
1150		636	52	510	
		1071	40	80	
2230		2152	95	80	
5073.0	0 ⁺	2840	6.6 8	2230	Additional information 1.
		3924	85.6 18	1150	Additional information 2.
		5073	7.8 14	0	Additional information 3.

[†] From [1971Ad06](#).

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Level Scheme

Intensities: % photon branching from each level

