

$^9\text{Be}(^{32}\text{S}, ^{31}\text{S}\gamma)$ 2004Ga15

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

One-neutron knockout reaction.

2004Ga15: Beam= ^{32}S at 62.8 MeV/nucleon produced by fragmentation of ^{36}Ar beam at 150 MeV/nucleon by a ^9Be target and separated by A1900 fragment-recoil separator at NSCL facility. Target= ^9Be placed at target position of the S800 spectrograph. Measured E_γ , I_γ , (particle) γ coin with the segmented Ge-detector array (SeGA) consisting of 32-fold segmented Ge detectors.

 ^{31}S Levels

E(level)	J^π [†]	Comments
0	$1/2^+$	$C^2S=0.85$ 21. $\sigma \leq 12$ mb 3, 11 mb 3 from momentum distribution. Inclusive $\sigma=36$ mb 4.
1249 7	$3/2^+$	$C^2S=1.22$ 20. $\sigma \leq 12$ mb 2.
2242 9	$5/2^+$	$C^2S=1.28$ 32. $\sigma \leq 12$ mb 3.

[†] From the Adopted Levels.

 $\gamma(^{31}\text{S})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
1249 7	1249	$3/2^+$	0	$1/2^+$
2242 9	2242	$5/2^+$	0	$1/2^+$

 $^9\text{Be}(^{32}\text{S}, ^{31}\text{S}\gamma)$ 2004Ga15Level Scheme