

${}^9\text{Be}({}^{20}\text{Ne}, {}^{21}\text{Na}\gamma)$ 2007Ga58

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	R. B. Firestone	NDS 127, 1 (2015)	15-Jan-2015

$E=63$ MeV/nucleon ${}^{20}\text{Ne}$ beam produced by the fragmentation of ${}^{36}\text{Ar}$ beam at 150 MeV/nucleon with ${}^9\text{Be}$ target at the Coupled Cyclotron at NSCL facility. A1900 fragment separator used to select particles. The secondary target was positioned at the focal plane of S-800 spectrograph. Measured γ -rays, $\gamma({}^{21}\text{Na})$ coin using segmented germanium (SeGA) array of 32 HPGe detectors and particle detection. DW analysis, shell-model description.

 ${}^{21}\text{Na}$ Levels

E(level)	J^π [†]	σ (mb)	Comments
0	$3/2^+$	<0.06	
330 3	$5/2^+$	1.59 25	
1712 7	$7/2^+$	0.20 5	
2420 10	$1/2^+$	≤ 0.12	E(level): 10 keV uncertainty assumed by the evaluator.
4294	$5/2^+$		
4468	$3/2^+$		

[†] Based on DWBA calculations and C^2S from the shell model.

 $\gamma({}^{21}\text{Na})$

E_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π
330 3	330	$5/2^+$	0	$3/2^+$
1382 6	1712	$7/2^+$	330	$5/2^+$
2420 10	2420	$1/2^+$	0	$3/2^+$

[†] As implied from Fig. 2 of 2007Ga58.

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Level Scheme

