

**Coulomb excitation 2008Sc18,2009Sc28**

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

Beam= $^{21}\text{Na}$  at 1.7 MeV/nucleon, target= $^{\text{nat}}\text{Ti}$ .

E=1.7 MeV/nucleon beam provided by TRIUMF-ISAC facility. Scattered beam and target particles were detected by a segmented Si detector BAMBINO,  $\gamma$ -rays were detected by using two TIGRESS HPGe clover detectors. Measured  $\gamma$ -ray yields and angular distributions. Deduced B(E2) from g.s. to first excited state using known B(E2) $\downarrow$ = 0.01522 38 for first  $2^+$  to g.s. excitation (983.5 $\gamma$ ) in  $^{48}\text{Ti}$  as a reference. GOSIA analysis of Coulomb excitation yields.

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

E(level)	$J^\pi$	$T_{1/2}$	Comments
0	$3/2^+$		
331.9	$5/2^+$	7.08 ps 8	B(E2) $\uparrow$ =0.0205 14

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

$E_\gamma$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult.	$\delta$	Comments
331.9	331.9	$5/2^+$	0	$3/2^+$	M1+E2	0.083 3	B(E2)(W.u.)=39.7 27 (2008Sc18); B(M1) $\downarrow$ =0.1513 17 (2008Sc18) $\delta$ : Deduced by from B(E2) $\uparrow$ $T_{1/2}$ =7.08 ps 8.

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