

$^9\text{Be}(^{56}\text{Ni}, X\gamma)$ 2009Br06

Type	Author	Citation	History	Literature Cutoff Date
Full Evaluation	B. Singh and A. Chakraborty	ENSDF		11-Jun-2013

2009Br06 (also 2010Be20): secondary ^{56}Ni beam obtained from fragmentation of ^{58}Ni beam at E=160 MeV/nucleon with ^9Be target at NSCL facility. Fragments separated using A1900 FRS. Transmitted ^{56}Ni ions impinged on a secondary ^9Be target placed at the target position of S800 spectrometer. Particle identification was done using energy loss and time-of-flight methods. Measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin using the SeGA array of Ge detectors. Comparison with shell-model calculations.

[Additional information 1.](#)

 ^{53}Ni Levels

E(level)	J^π [†]
0.0	(7/2 ⁻)
319.7 50	(5/2 ⁻)
1453.4 58	(11/2 ⁻)

[†] From mirror analogs in ^{53}Mn , see also Adopted Levels.




 $\gamma(^{53}\text{Ni})$

E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
319.7 50	100 16	319.7	(5/2 ⁻)	0.0	(7/2 ⁻)
1453.4 58	44 21	1453.4	(11/2 ⁻)	0.0	(7/2 ⁻)

 $^9\text{Be}(^{56}\text{Ni}, X\gamma)$ 2009Br06Level Scheme

Intensities: Relative I_γ

Legend

	$I_\gamma < 2\% \times I_\gamma^{\text{max}}$
	$I_\gamma < 10\% \times I_\gamma^{\text{max}}$
	$I_\gamma > 10\% \times I_\gamma^{\text{max}}$

