

$^{46}\text{Ti}(^{58}\text{Ni},3n\gamma)$  2007Se04

Type	History		Literature Cutoff Date
	Author	Citation	
Full Evaluation	Balraj Singh	ENSDF	15-Oct-2007

E=192 MeV beam produced at Argonne Linac accelerator. Fragments were separated using a fragment mass analyzer (FMA), and implanted in a double sided silicon strip detector. Decays were observed in a large area Si detector and four single sided Si strip detectors. The  $\gamma$  rays were detected using GAMMASPHERE array with 99 Compton-suppressed HPGe detectors. The  $\gamma$  rays were identified using the recoil-decay tagging method following the  $\beta$ -delayed proton decay of  $^{101}\text{Sn}$ . Comparisons with shell-model calculations.

 $^{101}\text{Sn}$  Levels

E(level)	$J^\pi$ <sup>†</sup>	$T_{1/2}$	Comments
0	(5/2 <sup>+</sup> )	1.3 s 5	$T_{1/2}$ : from recoil-decay tagging method (2007Se04). $d_{5/2}$ orbital.
171.7 6	(7/2 <sup>+</sup> )		$g_{7/2}$ orbital.

<sup>†</sup> From shell-model interpretation.

 $\gamma(^{101}\text{Sn})$ 

$E_\gamma$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$
171.7 6	171.7	(7/2 <sup>+</sup> )	0	(5/2 <sup>+</sup> )

 $^{46}\text{Ti}(^{58}\text{Ni},3n\gamma)$  2007Se04Level Scheme