^{116}Sn(^{60}Ni,^{61}Ni) 2016Mo15

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	ENSDF	20-Jan-2020

One-neutron pickup channel.

2016Mo15: E(^{116}Sn)=245 MeV beam from XTU-Tandem accelerator at LNL-Legnaro. Measured particle and gamma spectra, (particle)γ-coin, using PRISMA magnetic spectrometer and AGATA array for γ rays. Deduced transfer probabilities for the one-neutron pickup channel. Comparison with theoretical calculations.

Only the 283γ was seen from the $1/2^-$ to $3/2^-$ g.s. The absence of the 67-keV transition from the $5/2^-$ state to the g.s. was due to the 600−μm thick Sn x-ray absorber placed in front of the Ge detectors.

^{61}Ni Levels

E(level)	J$^\pi$[†]
0	$3/2^-$
283	$1/2^-$

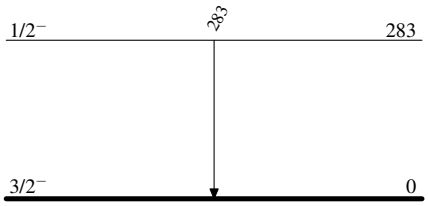
[†] From the Adopted Levels.

γ(^{61}Ni)

E$_\gamma$	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$
283	283	$1/2^-$	0	$3/2^-$

^{116}Sn(^{60}Ni,^{61}Ni) 2016Mo15

Level Scheme



$^{61}_{28}Ni_{33}$