^{9}Be(^{42}P,Xγ),(^{43}S,Xγ),(^{44}S,Xγ) 2011So22

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja, E. A. Mccutchan	NDS 133, 1 (2016)	30-Sep-2015

Secondary beams of ^{42}P, ^{43}S and ^{44}S were produced through ^{12}C(^{48}Ca,X) and ^{181}Ta(^{48}Ca,X) reactions with E(^{48}Ca)=60 MeV/nucleon, selected using the SISSI device coupled to the α spectrometer, and identified through ΔE and time-of-flight measurements. ^{41}Si was produced in the 1p, 2p and 2p1n reaction channels from ^{42}P, ^{43}S and ^{44}S secondary beams, respectively, on a Be target, selected using the SPEG spectrometer and identified through ΔE, time-of-flight and Bρ measurements. Measured Eγ, Iγ using the 4π Chateau de Crystal array consisting of 74 BaF_2 scintillators. Production cross section for the 2p knockout from the ^{43}S secondary beam at 41.5 MeV/nucleon was determined to be 71 μb *14*.

^{41}Si Levels

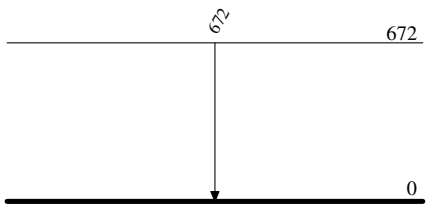
E(level)
0
672 *14*

γ(^{41}Si)

E$_\gamma$	E$_i$(level)	E$_f$	Comments
672 *14*	672	0	E$_\gamma$: given the observed width of the transition, it may be possible that it includes the decay of the triplet predicted by the shell model (2011So22).

^{9}Be(^{42}P,Xγ),(^{43}S,Xγ),(^{44}S,Xγ) 2011So22

Level Scheme



$^{41}_{14}Si_{27}$