^{22}Na(n,p),(n,α): res 1982Gl07,1971Eh01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia[#], A. Chakraborty[##]	NDS 171,1 (2021)	1-Jun-2020

Other: 1988Ko25.
1982Gl07: ^{22}Na target of activity 500 μCi. Measured proton emission spectrum alpha from capture state with Si detector.
1971Eh01: ^{22}Na target of activity 2 μCi/cm^2. Measured proton and alpha emission from capture state with Si detector. Measured 35900 b *1200* total cross section.

^{23}Na Levels

E(level)	J$^\pi$	Γ	Comments
0.0			
1.235×10^4 *31*			E(level): Average from Ep(0)(c.m.)=4000, Ep(1275)(c.m.)=2250 for proton emission to levels in ^{22}Ne; and Eα(0)(c.m.)=1770, Eα(110+197)(c.m.)=1430 to levels in ^{19}F (1971Eh01). Overlaps three or more in Adopted Levels − not referenced.
12419.8 *2*	(7/2$^+$,5/2$^+$)	116 eV *20*	E(level): From neutron resonance state at 0.145 keV *11* (1982Gl07) and Sn=12419.66 *17* (AME2016 − 2017Wa10). From Ep(Lab)=2250 keV and 3470 keV to 1st and g.s. of ^{22}Ne − would result 12421.2 keV, considering Sp=8792.10 *2* (AME2016 − 2017Wa10). J$^\pi$: Based on measured Γ_{p0}/Γ_{p1} and shell model calculations. Γ: From Γ_{n0}=1.6 eV *2*, Γ_{p1}=114 eV *20*, and Γ_{p0}=0.7 eV.