^{4}He(HI,xγ) 2006FuZX

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen and Balraj Singh	NDS 184, 29 (2022)	24-Jun-2022

Beam could include $^{31-38}$Na, $^{30-33}$Mg, $^{32-35}$Al, $^{34-36}$Si and ^{37}P.

2006FuZX: Cocktail beam produced by the projectile fragmentation of E(^{40}Ar)=63 MeV/nucleon beam on a carbon beryllium target. Primary constituents of beam include $^{31-38}$Na, $^{30-33}$Mg, $^{32-35}$Al, $^{34-36}$Si and ^{37}P at E(average)=40 MeV/nucleon and analyzed with the RIKEN Projectile-fragment Separator (RIPS). Secondary target was liquid Helium. Levels in ^{31}Mg can be populated in a variety of reactions. Outgoing particles were identified by energy loss and time-of-flight. γ rays were detected with the GRAPE array of segmented Ge detectors. Measured Eγ, particle-γ-coin. Deduced levels.

^{31}Mg Levels

E(level)†	Comments
0.0	
49.93 *6*	E(level): from Adopted Levels.
220.8 *10*	
942.8 *6*	

† From Eγ data.

γ(^{31}Mg)

E$_\gamma$†	E$_i$(level)	E$_f$
169.6 *15*	220.8	49.93
221.9 *8*	220.8	0.0
892.7 *6*	942.8	49.93

† From 2006FuZX, with placements from Adopted Gammas.

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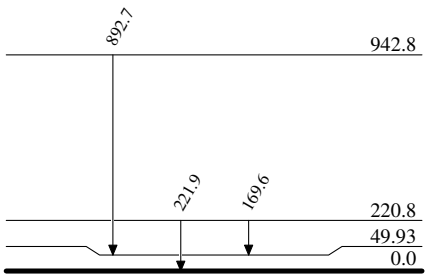
Level Scheme



$^{31}_{12}Mg_{19}$