^{9}Be(^{32}Mg,2pγ) 2010Fa04

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia	NDS 111, 2331 (2010)	30-Jun-2010

Other: 2007RoZY, 2006FaZX.

2010Fa04, 2007RoZY, 2006FaZX: ^{30}Ne was produced from a ^{48}Ca primary beam fragmentation (E=140 MeV/A) followed by 2p knockout reaction of ^{32}Mg secondary beam on ^{9}Be (inclusive cross section=0.22 *3* mb); Detector: Segmented HPGe array SeGA; Reported measured Eγ and level scheme. In 2006FaZX, a tentative 1090γ is placed from a tentative 4^+ state at 1883 keV to 2^+ state at 797 keV level. This 1090γ is discarded in 2010Fa04.

All data are from 2010Fa04.

^{30}Ne Levels

E(level)	J$^\pi$[†]	Comments
0.0	0^+	
792 *4*	(2^+)	
2235 *12*	(4^+)	J$^\pi$: In addition to the comparison of the experimental level energy with the predicted level energy by the MCSM calculation, the properties of direct two-proton knockout from the $1d_{5/2}$ level are used to constrain the data for the J$^\pi$=(4_1+) assignment (2010Fa04).

[†] From 2010Fa04, based on comparison of the experimental level energy with the predicted level energy by MCSM.

γ(^{30}Ne)

E$_\gamma$	I$_\gamma$	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$
792 *4*	100	792	(2^+)	0.0	0^+
1443 *11*	39 *12*	2235	(4^+)	792	(2^+)

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Level Scheme

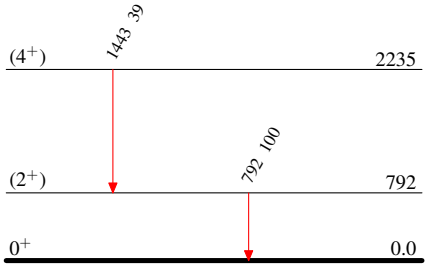
Intensities: Relative I_γ

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$



$^{30}_{10}Ne_{20}$