$^{12}C(^{27}Na,^{26}F\gamma)$ 2012St01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia and A. M. Hurst	NDS 134, 1 (2016)	1-Feb-2016

Also $^{12}C(^{28}Na,26(fragment)\gamma)$.

E=60 MeV/nucleon secondary $^{27,28}Na$ beam was produced by fragmentation of 77.5 MeV/nucleon ^{36}S beam with a 398 mg/cm^2 C target at GANIL facility. The spectrometer was optimized to ^{27}, ^{28}Na selection. ^{26}F nuclei were selected and identified on an event-by-event basis through the SPEG spectrometer using time-of-flight, focal-plane position and energy loss information. The secondary reaction target was 103.5 mg/cm^2 plastic scintillator sandwiched between two carbon foils of 51 mg/cm^2. Gamma rays detected by an array of 74 BaF_2 detectors. Deduced level energies. Comparison with shell-model calculations.

^{26}F Levels

E(level)	J^{π} †
0.0	1^+
657 *7*	(2^+)

† From Adopted Levels.

$\gamma(^{26}F)$

E_γ	E_i(level)	J^{π}_i	E_f	J^{π}_f
657 *7*	657	(2^+)	0.0	1^+

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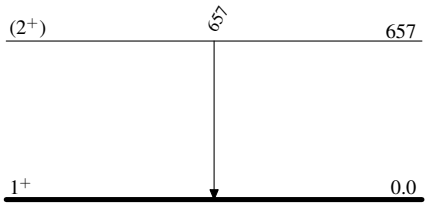
Level Scheme



$^{26}_{9}F_{17}$