^{9}Be(^{238}U,Fγ) 2014Na01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	ENSDF	10-Jun-2015

2014Na01: E(^{238}U)=6.2 MeV/nucleon beam from GANIL accelerator facility. Target=10 micron thick ^{9}Be. Detected and identified fission fragments by TOF and energy loss using VAMOS++ magnetic spectrometer, Multi-wire Avalanche counters, drift chambers, ionization chamber, array of 40 Si detectors. Measured Eγ, Iγ, $\gamma\gamma$-coincidence, $\gamma\gamma$(isotopically separated fission fragments)-coincidence using EXOGAM array of 11 Compton-suppressed segmented clover HPGe detectors. Deduced levels, J, π, configuration. Comparison with IBM calculations.

^{106}Zr Levels

E(level)[†]	J$^{\pi}$
0[‡]	0$^+$
152[‡] *2*	(2$^+$)
476[‡] *2*	(4$^+$)
946[‡] *3*	(6$^+$)
1571[‡] *4*	(8$^+$)

[†] From Eγ data.
[‡] Band(A): The g.s. band.

γ(^{106}Zr)

E$_\gamma$	E$_i$(level)	J$_i^{\pi}$	E$_f$	J$_f^{\pi}$
152 *2*	152	(2$^+$)	0	0$^+$
324 *1*	476	(4$^+$)	152	(2$^+$)
470 *1*	946	(6$^+$)	476	(4$^+$)
625 *2*	1571	(8$^+$)	946	(6$^+$)

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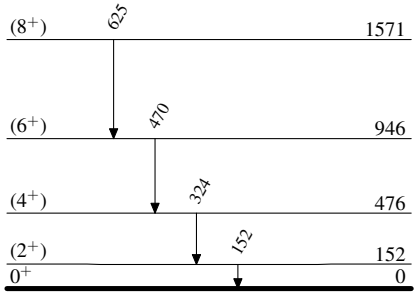
Level Scheme



$^{106}_{40}Zr_{66}$

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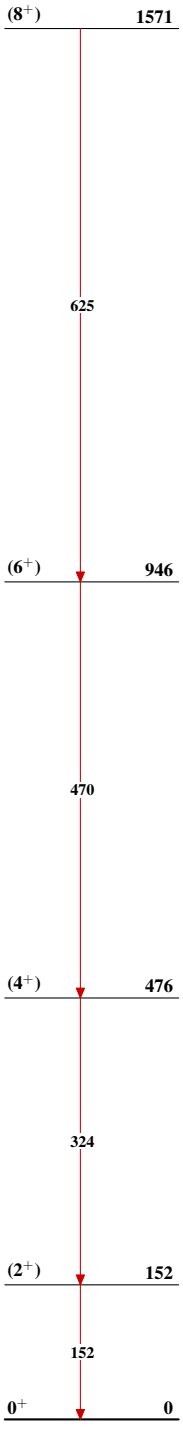
Band(A): The g.s. band



$^{106}_{40}Zr_{66}$