^{9}Be(^{238}U,Fγ) 2017Ha12

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	S. Lalkovski, J. Timar and Z. Elekes	NDS 161, 1 (2019)	1-Apr-2019

2017Ha12: Facility: GANIL; Beam: E(^{238}U)= 6.2 MeV/nucleon; Target: 2.3 mg/cm^2 thick ^{8}Be; Detectors: VAMOS magnetic spectrometer, degrader, two multiwhire parallel plate avalanche counters, two drift chambers, segmented ionization chamber, wall of silicon detectors, EXOGAM comprising 10 compton-supressed Clovers each of which having 4 segmented HPGe crystals, plunger; Measured: energy loss (ΔE), time of flight (ToF), particle position, Eγ, Iγ; Deduced: A/Q ratio, mass number A, ^{105}Nb level scheme, τ from RDDS.

^{105}Nb Levels

E(level)[†]	J$^\pi$[‡]	T$_{1/2}$[#]
0.0[@]	(5/2$^+$)	
128.0[@] *8*	(7/2$^+$)	
290.0[@] *8*	(9/2$^+$)	24 ps *5*
511.2[@] *10*	(11/2$^+$)	5.9 ps *15*
734.6[@] *11*	(13/2$^+$)	3.5 ps *14*

[†] From a least-squares fit to Eγ. ΔEγ=1 assumed by the evaluators.
[‡] From the Adopted Levels.
[#] From RDDS in 2017Ha12.
[@] Band(A): π5/2[422] g.s. band.

γ(^{105}Nb)

E$_i$(level)	J$_i^\pi$	E$_\gamma$[†]	E$_f$	J$_f^\pi$
128.0	(7/2$^+$)	128	0.0	(5/2$^+$)
290.0	(9/2$^+$)	162	128.0	(7/2$^+$)
		290	0.0	(5/2$^+$)
511.2	(11/2$^+$)	221	290.0	(9/2$^+$)
		383	128.0	(7/2$^+$)
734.6	(13/2$^+$)	223	511.2	(11/2$^+$)
		445	290.0	(9/2$^+$)

[†] From 2017Ha12.

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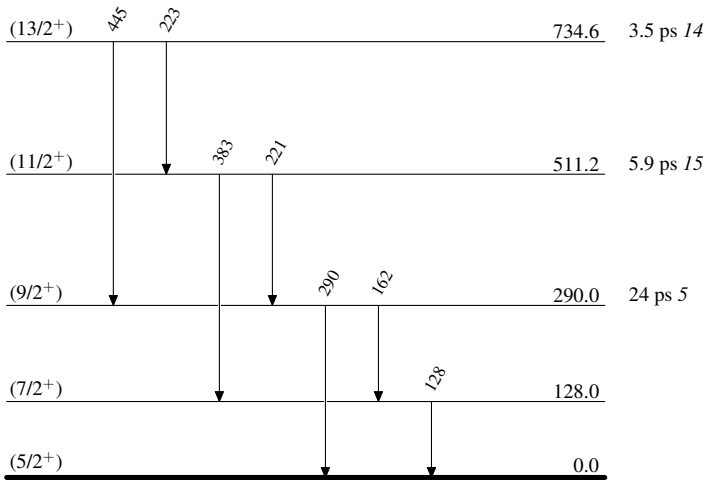
Level Scheme



$^{105}_{41}Nb_{64}$

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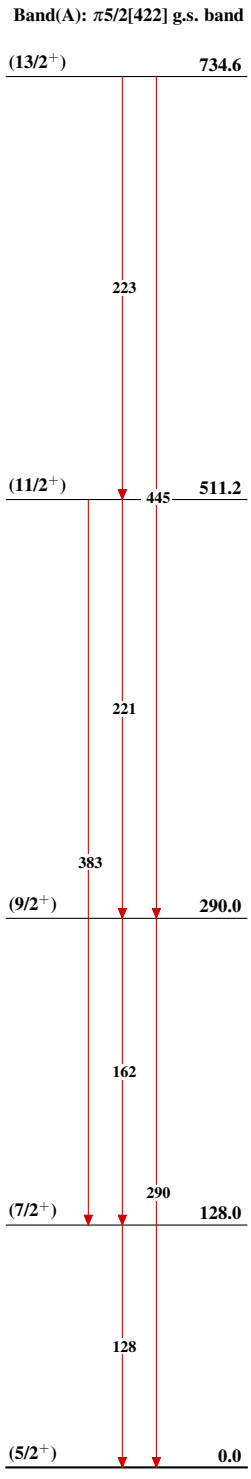

$^{105}_{41}Nb_{64}$