

$^9\text{Be}(^{238}\text{U},\text{X})$ **2014Na01**

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

2014Na01: Facility: GANIL; Beam: ^{238}U at 6.2 MeV/u; Target: 10 μm thick ^9Be ; Detectors: VAMOS++ at 20 deg., one MWPPAC, two drift chambers, one segmented ionization chamber, 40 Si, and EXOGAM array comprising 11 Compton-suppressed segmented HPGe detectors; Measured: ion position, energy loss, ToF, γ , HI- γ , E γ ; Deduced: A, q, Z, Doppler-corrected γ -ray spectra, ^{105}Zr level scheme.

 ^{105}Zr Levels

E(level) [†]	J $^\pi$ [‡]	Comments
0	(5/2 $^+$)	
124.0 <i>I</i>	(7/2 $^+$)	configuration: 5/2 $^+$ [413].
285.0 <i>I</i>	(9/2 $^+$)	
507.0 <i>I</i>	(11/2 $^+$)	
826?	(13/2 $^+$)	
1200?	(15/2 $^+$)	

[†] From E γ .[‡] From 2014Na01. $\gamma(^{105}\text{Zr})$

E $_\gamma$ [†]	E $_i$ (level)	J $^\pi_i$	E $_f$	J $^\pi_f$
^x 98 2				
124 <i>I</i>	124.0	(7/2 $^+$)	0	(5/2 $^+$)
161 <i>I</i>	285.0	(9/2 $^+$)	124.0	(7/2 $^+$)
222 <i>I</i>	507.0	(11/2 $^+$)	285.0	(9/2 $^+$)
319 [‡] <i>I</i>	826?	(13/2 $^+$)	507.0	(11/2 $^+$)
374 [‡] <i>I</i>	1200?	(15/2 $^+$)	826?	(13/2 $^+$)
^x 464 2				

[†] From 2014Na01.[‡] Placement of transition in the level scheme is uncertain.^x γ ray not placed in level scheme.

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Legend

- - - - - ► γ Decay (Uncertain)

