^{64}Ni(^{238}U,Xγ) 2011Di08

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 202,59 (2025)	25-Feb-2025

Adapted from the XUNDL dataset of 2011Di08, compiled by J. Choquette and B. Singh (McMaster) on August 2, 2011.

2011Di08: E=6.5 MeV/nucleon ^{238}U beam was produced at GANIL. Target was 1.5 mg/cm^2 ^{64}Ni followed by a 4.7 mg/cm^2 Mg degrader. Reaction products were identified and detected by VAMOS spectrometer, γ rays were detected by the EXOGAM Ge array. Measured Eγ, Iγ, $\gamma\gamma$-coin, recoil-distance Doppler-shift intensity ratios with a plunger of University of Cologne. Deduced $T_{1/2}$. See also 2011Di04.

^{65}Co Levels

E(level)†	J$^\pi$‡	$T_{1/2}$	Comments
0.0	7/2$^-$		
883?	(3/2$^-$)		
1479?	(9/2$^-$)	≤12.0 ps	J$^\pi$: (11/2)$^-$ in Adopted Levels. $T_{1/2}$: from Recoil-Distance Doppler-shift method (2011Di08).
2479?	(11/2$^-$)		

† From Eγ data.
‡ As given in 2011Di08.

γ(^{65}Co)

E$_\gamma$†	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	Mult.
883‡	883?	(3/2$^-$)	0.0	7/2$^-$	
1000‡	2479?	(11/2$^-$)	1479?	(9/2$^-$)	
1479	1479?	(9/2$^-$)	0.0	7/2$^-$	[E2]

† From FIG.3 of 2011Di08.
‡ Placement of transition in the level scheme is uncertain.

Legend

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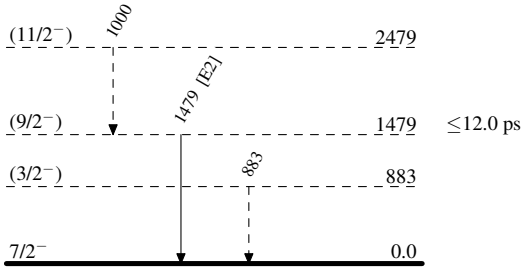
Level Scheme

γ Decay (Uncertain)



$^{65}_{27}Co_{38}$