^{238}U(^{64}Ni,Xγ) 2013Mo36

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 196,17 (2024)	30-Sep-2023

Adapted from the XUNDL dataset for 2013Mo36 compiled by B. Singh (McMaster) on October 24, 2013.

2013Mo36: E=460 MeV/nucleon ^{64}Ni beam was delivered by the Laboratori Nazionali di Legnaro (LNL) Tandem-ALPI accelerator complex. Target was 1.35 mg/cm^2 ^{238}U on 1.2 mg/cm^2 thick Ta. A 4.13 mg/cm^2 thick Nb foil was placed after the target and used as an energy degrader of recoiling ejectiles. γ rays were detected with the AGATA demonstrator consisting of four triple clusters of Ge detectors and projectile-like recoils were detected with the magnetic spectrometer PRISMA. Measured Eγ, Iγ, projectile-γ-coin. recoils distance. Deduced levels, J, π, lifetime, γ-ray transition strengths. Comparison with large-scale shell-model calculations.

^{63}Co Levels

E(level)[†]	J$^\pi$[‡]	T$_{1/2}$[#]
0	7/2$^-$	
1674	11/2$^-$	0.7 ps *2*

† From Eγ data.
‡ From Adopted Levels.
# From Recoil-distance Doppler-shift method (2013Mo36).

γ(^{63}Co)

E$_\gamma$[†]	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$
1674	1674	11/2$^-$	0	7/2$^-$

† From 2013Mo36.

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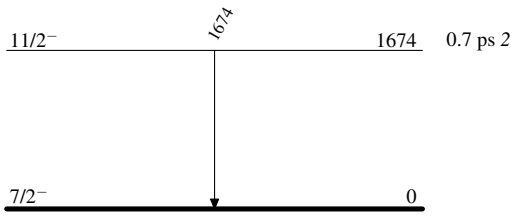
Level Scheme



$^{63}_{27}Co_{36}$