

$^{238}\text{U}(^{76}\text{Ge},\text{X}\gamma)$  2015Sa09

Type	Author	History
Full Evaluation	C. D. Nesaraja	Citation
		NDS 207,1 (2026)
		Literature Cutoff Date
		1-Apr-2023

No changes from XUNDL compiled dataset by J. Chen (NSCL, MSU), March 4, 2015.

**2015Sa09:** Neutron-rich Cu isotopes were populated via multinucleon transfer reactions using a E=577 MeV  $^{76}\text{Ge}$  beam from the Tandem-XTU and the ALPI superconducting LINAC accelerators at Laboratori Nazionali di Legnaro (LNL), bombarding a thin, metallic  $^{238}\text{U}$  target of 1.5 mg/cm<sup>2</sup> thickness evaporated onto a  $^{181}\text{Ta}$  backing of 1.4 mg/cm<sup>2</sup> thickness. Reaction products were separated according to the measured  $\Delta E$ -E matrix by the PRISMA magnetic spectrometer.  $\gamma$  rays were detected by the AGATA Demonstrator array of four triple clusters, each consisting of three 36-fold segmented HPGe detector. Measured  $E\gamma$ ,  $I\gamma$ , particle- $\gamma(t)$ . Deduced lifetime of 1711 level using the differential recoil-distance Doppler-shift method (RDDS), transition probabilities. Compared with shell-model calculations.

 $^{69}\text{Cu}$  Levels

E(level)	$J^\pi$ <sup>‡</sup>	$T_{1/2}$ <sup>†</sup>
0	$3/2^-$	
1711	$7/2^-$	26 ps 11

<sup>†</sup> From 2015Sa09 using the differential recoil distance Doppler-shift method (RDDS).

<sup>‡</sup> From 2015Sa09.

 $\gamma(^{69}\text{Cu})$ 

$E_\gamma$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult. <sup>†</sup>
1711	1711	$7/2^-$	0	$3/2^-$	E2

<sup>†</sup> From Adopted Gammas.

 $^{238}\text{U}(^{76}\text{Ge},\text{X}\gamma)$  2015Sa09Level Scheme