

⁸²Se(μ^- , $n\gamma$) [2019Zi01](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia		NDS 199,271 (2025)	1-Sep-2024

Adopted/Edited the XUNDL dataset compiled by J. Chen (NSCL, MSU), May 6, 2019.
[2019Zi01](#): Negative muon beams were produced from the μ E4 and μ E1 lines of the Paul Scherrer Institute (Ψ) in Switzerland.
Target was ⁸²Se. μ X rays and γ rays were detected with HPGe detectors. Measured $E\gamma$, $I\gamma$, $E(\mu$ X ray), $I(\mu$ X ray), $\gamma(t)$.
Deduced muon lifetime, partial capture rates to excited states.

⁸¹As Levels

Muon disappearance mean lifetime $\tau=208.2$ ns 68 (capture+decay), from which the total muon capture rate has been deduced to be $\lambda_{\text{cap}}=4.37\times10^6$ s⁻¹ 14 ([2019Zi01](#)).

<u>E(level)[†]</u>	<u>Jπ[‡]</u>
0	3/2 ⁻
336.0	(5/2) ⁻

[†] From $E\gamma$ data.
[‡] From Adopted Levels.

$\gamma(^{81}\text{As})$

<u>Eγ[†]</u>	<u>E_i(level)</u>	<u>Jπ_i</u>	<u>E_f</u>	<u>Jπ_f</u>
336.0	336.0	(5/2) ⁻	0	3/2 ⁻

[†] From [2019Zi01](#).

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Level Scheme

