⁸²Se(μ^- ,n γ) **2019Zi01**

Type Author 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 γ , I γ , E(μ X ray), I(μ X ray), γ (t). Deduced muon lifetime, partial capture rates to excited states.

⁸¹As Levels

Muon disappearance mean lifetime τ =208.2 ns 68 (capture+decay), from which the total muon capture rate has been deduced to be λ_{cap} =4.37×10⁶ s⁻¹ 14 (2019Zi01).

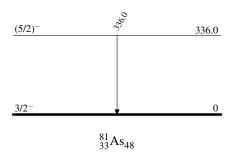
$$\frac{\text{E(level)}^{\dagger}}{0}$$
 $\frac{\text{J}^{\pi^{\ddagger}}}{3/2^{-}}$ 336.0 $(5/2)^{-}$

 $\gamma(^{81}As)$

$$\frac{{\rm E}_{\gamma}^{\dagger}}{336.0} \quad \frac{{\rm E}_{i}({\rm level})}{336.0} \quad \frac{{\rm J}_{i}^{\pi}}{(5/2)^{-}} \quad \frac{{\rm E}_{f}}{0} \quad \frac{{\rm J}_{f}^{\pi}}{3/2^{-}}$$

⁸²Se(μ^- ,nγ) 2019Zi01

Level Scheme



[†] From Eγ data.

[‡] From Adopted Levels.

[†] From 2019Zi01.