

^{89}Br β^- n decay 1981Ho07,1981Ho17

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan and A. A. Sonzogni		NDS 115, 135 (2014)	1-Nov-2013

Parent: ^{89}Br : $E=0.0$; $J^\pi=(3/2^-,5/2^-)$; $T_{1/2}=4.357$ s 22; $Q(\beta^-n)=3346$ 4; $\% \beta^-n$ decay=13.8 4

1981Ho07,1981Ho17: ^{89}Br activity produced in $^{235}\text{U}(n,F)$ and separated with the OSIRIS on-line mass separator. Measured E_γ , I_γ , $\gamma\gamma$ using two coaxial Ge(Li) detectors, $\beta\gamma$ using a SiLi detector, and I(n) using 30 parallel coupled ^3He detectors imbedded in paraffin.

1997Gr20: Delayed neutron spectrum measured in the range 30-1200 keV and relative intensities reported in different energy bins.

 ^{88}Kr Levels

<u>E(level)[†]</u>	<u>J^π[†]</u>
0	0 ⁺
775.32	2 ⁺
1577.42	2 ⁺
1643.76?	4 ⁺

[†] From the Adopted Levels.

 $\gamma(^{88}\text{Kr})$

<u>E_γ</u>	<u>I_γ[‡]#</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>
775.30 [†] 4	86 3	775.32	2 ⁺	0	0 ⁺
802.32 [†] 6	3.1 2	1577.42	2 ⁺	775.32	2 ⁺
(868.6)	<3	1643.76?	4 ⁺	775.32	2 ⁺
1577.4	0.8	1577.42	2 ⁺	0	0 ⁺

[†] From 1981Ho17.

[‡] Normalized to $I_\gamma(1098\gamma$ in $^{89}\text{Kr})=100$.

For absolute intensity per 100 decays, multiply by 0.159 5.

Delayed Neutrons (^{88}Kr)

<u>E(^{88}Kr)</u>	<u>I(n)[†]</u>
0	60 4
775.32	38 4
1577.42	1.8 4
1643.76?	<1.5

[†] For absolute intensity per 100 decays, multiply by 0.138 4.

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Decay Scheme

Legend

- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$
- - - - - γ Decay (Uncertain)

Intensities: I_γ per 100 parent decays

