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 $^{81}\text{Kr}$   $\varepsilon$  decay (13.10 s)    [1987Lo06,1987Da06](#)

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

Parent:  $^{81}\text{Kr}$ : E=190.53 4;  $J^\pi=1/2^-$ ;  $T_{1/2}=13.10$  s 2;  $Q(\varepsilon)=280.9$  5;  $\% \varepsilon$  decay=0.0025 4

$^{81}\text{Kr}$ -E, $J^\pi$ , $T_{1/2}$ : from  $^{81}\text{Se}$  Adopted Levels.

$^{81}\text{Kr}$ -Q( $\varepsilon$ ): from [2021Wa16](#).

$^{81}\text{Kr}$ - $\% \varepsilon$  decay: From measured  $I_\varepsilon$ .

Other: [1992Na21](#).

[1987Da06](#): high purity  $^{81}\text{Kr}$  (13 s) from  $^{81}\text{Rb}$ - $^{81}\text{Kr}$  (13 s) generator in plastic scintillator cell; Compton suppressed Si(Li).

[1987Lo06](#): mass separated  $^{81}\text{Kr}$  from  $^{81}\text{Rb}$  (4.6 h) decay, Si(Li) (240 eV resolution) and pilot B scintillator.

Other: [1980Be44](#) (superseded by [1987Lo06](#)):  $^{81}\text{Kr}$  (13 s) produced by (p,n), E=22 MeV, mass-separated, measured with Si(Li) (energy resolution 250 eV for 12.65-keV Kr ( $K\alpha$  x ray)) surrounded by pilot B scintillator.

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 $^{81}\text{Br}$  Levels

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| E(level) | $J^\pi$ <sup>†</sup> |
|----------|----------------------|
| 0        | $3/2^-$              |

<sup>†</sup> From Adopted Levels.

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 $\varepsilon$  radiations

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| E(decay)   | E(level) | $I_\varepsilon$ <sup>†</sup> | Log $ft$ | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------|----------|------------------------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (471.4 11) | 0        | 0.0025 4                     | 4.89 7   | $\varepsilon K=0.8742$ ; $\varepsilon L=0.1047$ ; $\varepsilon M+=0.02107$<br>$I_\varepsilon$ : from measured ratio of K x ray intensities from $^{81}\text{Kr}$ (13 s) and its $^{81}\text{Br}$ daughter.<br>Weighted average of $I_\varepsilon=2.26\times 10^{-3}\%$ 32 ( <a href="#">1987Lo06</a> ) and $3.14\times 10^{-3}\%$ 58 ( <a href="#">1987Da06</a> ). Other: $I_\varepsilon(K)=5.6\times 10^{-3}\%$ 14 ( <a href="#">1980Be44</a> ). |

<sup>†</sup> Absolute intensity per 100 decays.