

$^{208}\text{Bi}$   $\varepsilon$  decay

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. J. Martin	NDS 108,1583 (2007)	1-Jun-2007

Parent:  $^{208}\text{Bi}$ :  $E=0.0$ ;  $J^\pi=5^+$ ;  $T_{1/2}=3.68\times 10^5$  y 4;  $Q(\varepsilon)=2878.4$  20;  $\% \varepsilon + \% \beta^+$  decay=100.0

 $^{208}\text{Pb}$  Levels

E(level)	$J^\pi$
0.0	$0^+$
2614.5	$3^-$

 $\varepsilon, \beta^+$  radiations

E(decay)	E(level)	$I\varepsilon^\dagger$	Log $ft$	$I(\varepsilon + \beta^+)^\dagger$	Comments
(263.9 20)	2614.5	100	12.46 <sup>1u</sup> 2	100	$\varepsilon\text{K}=0.431$ 5; $\varepsilon\text{L}=0.406$ 3; $\varepsilon\text{M}+=0.1635$ 15 $\varepsilon\text{K}(\text{exp})=0.24$ 1 from K x ray/ $\gamma$ (1959Mi19) yields $Q+=2813$ 3 In disagreement with the adopted value of 2878.4 20.

$^\dagger$  Absolute intensity per 100 decays.

 $\gamma(^{208}\text{Pb})$ 

$I_\gamma$  normalization: from  $I(2610\gamma)=100$ .

$E_\gamma$	$I_\gamma^\dagger$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult.	$\alpha^\ddagger$	Comments
2614.5	100	2614.5	$3^-$	0.0	$0^+$	E3	0.00247	$E_\gamma$ : rounded-off value from Adopted Gammas.

$^\dagger$  For absolute intensity per 100 decays, multiply by 0.99785.

$^\ddagger$  Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on  $\gamma$ -ray energies, assigned multiplicities, and mixing ratios, unless otherwise specified.

$^{208}\text{Bi}$   $\epsilon$  decayDecay SchemeIntensities:  $I_{(\gamma+ce)}$  per 100 decays through this branch