

## Nuclear Decay Data Evaluation for $^{217}\text{Po}$

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**Abstract :** Evaluated nuclear decay data for the  $^{217}\text{Po}$  nuclide is presented in the present work. These data include recommended values for the half-life  $T_{1/2}$ ,  $\alpha$ -,  $\beta$ -, and  $\gamma$ -ray emission energies and probabilities. Decay data from  $^{221}\text{Rn}$   $\alpha$  and  $^{217}\text{Bi}$   $\beta$ -decays are presented.  $Q(\alpha)$  has been updated based on the recent published work of the Atomic Mass Evaluation AME2012. In addition, the  $\log ft$  values were calculated using the Logft program from the ENSDF evaluation package. Moreover, the total internal conversion electrons has been calculated using Bricc program. Meanwhile, recommendation values or the multi-polarities have been assigned based on recently measurement yield a better intensity balance at the 254 keV and 264 keV gamma transitions.

**Keywords :** nuclear decay data evaluation, mass evaluation, total conversion coefficients, atomic mass evaluation

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