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 $^{208}\text{Po}$   $\alpha$  decay [1966Ha29](#)

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| Type            | Author                        | History | Citation           | Literature Cutoff Date |
|-----------------|-------------------------------|---------|--------------------|------------------------|
| Full Evaluation | C. J. Chiara and F. G. Kondev |         | NDS 111,141 (2010) | 1-Oct-2009             |

Parent:  $^{208}\text{Po}$ :  $E=0.0$ ;  $J^\pi=0^+$ ;  $T_{1/2}=2.898$  y 2;  $Q(\alpha)=5215.3$  13; % $\alpha$  decay=99.9960 4

[1966Ha29](#): several-mCi  $^{208}\text{Po}$  source produced via  $^{209}\text{Bi}(p,2n)$ , 0.1-mCi source produced via N irradiation of Bi;  $\alpha$  singles and  $\alpha$ - $\gamma$  coin studied with NaI(Tl) and surface-barrier detectors; measured  $E\alpha$ ,  $I\alpha$ .

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 $^{204}\text{Pb}$  Levels

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| $E(\text{level})^\dagger$ | $J^\pi^\dagger$ |
|---------------------------|-----------------|
| 0.0                       | $0^+$           |
| 899.166 25                | $2^+$           |

<sup>†</sup> From Adopted Levels.

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 $\alpha$  radiations

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| $E\alpha$ | $E(\text{level})$ | $I\alpha^{\dagger\#}$ | $\text{HF}^\ddagger$ | Comments                                              |
|-----------|-------------------|-----------------------|----------------------|-------------------------------------------------------|
| 4220 15   | 899.166           | 0.00024 7             | 0.62 19              | $E\alpha, I\alpha$ : From <a href="#">1966Ha29</a> .  |
| 5114.9 14 | 0.0               | 99.99976 7            | 1.000                | $E\alpha$ : Recommended by <a href="#">1991Ry01</a> . |

<sup>†</sup>  $\alpha$  intensity per 100  $\alpha$  decays.

<sup>‡</sup>  $r_0(^{204}\text{Pb})=1.4297$  7 is calculated from  $\text{Hf}(5114.9\alpha)=1.0$ .

<sup>#</sup> For absolute intensity per 100 decays, multiply by 0.999960 4.