

$^{232}\text{Ra} \beta^-$ decay 1986Gi08

| Type | Author | History Citation | Literature Cutoff Date |
|-----------------|-----------|----------------------|------------------------|
| Full Evaluation | E. Browne | NDS 107, 2579 (2006) | 1-Nov-2004 |

Parent: ^{232}Ra : E=0; $J^\pi=0^+$; $T_{1/2}=250$ s 50; $Q(\beta^-)=1500$ SY; % β^- decay=100.0 ^{232}Ac Levels

| E(level) | J^π |
|----------|---------------------|
| 0 | (1 ⁺) |
| 7.5 | |
| 105.2 | (0 ⁻ ,1) |
| 478.5 | (0 ⁻ ,1) |

 β^- radiations

| E(decay) | E(level) | $I\beta^{-\dagger}$ | Log ft | Comments |
|-----------|----------|---------------------|---------------|--|
| (1492 SY) | 7.5 | ≈ 70 | ≈ 5.4 | av $E\beta= 513.4$ 4 |
| (1500 SY) | 0 | | | $I\beta^-$: sum of $I\beta$ to g.s. and 7.5-keV levels, from comparison of β and γ -ray intensities. |

† Absolute intensity per 100 decays.

 $\gamma(^{232}\text{Ac})$ I(K x ray)/I(470.9 γ)=3.05 50. The elevated x-ray intensity suggests the existence of highly converted γ rays (1986Gi08).

| E_γ | I_γ | $E_i(\text{level})$ | J_i^π | E_f | J_f^π |
|------------|------------|---------------------|---------------------|-------|---------------------|
| 7.5 | | 7.5 | | 0 | (1 ⁺) |
| 97.7 2 | 80 8 | 105.2 | (0 ⁻ ,1) | 7.5 | |
| 105.2 4 | 66 20 | 105.2 | (0 ⁻ ,1) | 0 | (1 ⁺) |
| 373.3 4 | 62 31 | 478.5 | (0 ⁻ ,1) | 105.2 | (0 ⁻ ,1) |
| 470.9 4 | 100 34 | 478.5 | (0 ⁻ ,1) | 7.5 | |
| 478.5 4 | 69 32 | 478.5 | (0 ⁻ ,1) | 0 | (1 ⁺) |

