

Adopted Levels

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

$Q(\beta^-) = -5.91 \times 10^3$ 7; $S(n) = 8.46 \times 10^3$ 8; $S(p) = 7. \times 10^1$ 8; $Q(\alpha) = 7.73 \times 10^3$ 5 [2012Wa38](#)

Note: Current evaluation has used the following Q record $-5700 \approx 8440$ 80 70 80 7730 50 [2003Au03](#).

$Q(\alpha)$: other: 7727 15 ([2002No01](#)).

$Q(\beta^-)$: estimated by the evaluator from data in [2003Au03](#).

Assignment: $^{175}\text{Lu}(^{40}\text{Ar}, 7n)$, $E = 5.2\text{-}5.6$ MeV/nucleon. P ^{204}Fr 7031 α for 95-ms state, and p ^{204}Fr 7013 α for the 25-ms state ([1994Le05](#)).

 ^{208}Ac LevelsCross Reference (XREF) Flags

A ^{212}Pa α decay

E(level)	J^π	$T_{1/2}$	XREF	Comments
0	(3 ⁺)	95 ms +24-16	A	$\% \alpha \approx 99$; $\% \epsilon \approx 1$ $\% \epsilon$: from gross β calculations of 1973Ta30 . J^π : HF ≈ 1.0 for branch to (3 ⁺) in ^{204}Fr .
506 26	(10 ⁻)	25 ms +9-5	A	$\% \alpha \approx 90$; $\% \epsilon \approx 10$ $\% \epsilon$, $\% \alpha$: gross β calculations of 1973Ta30 give $\% \epsilon \approx 1$. From an analogy to the E3 decay in ^{204}At , any isomeric decay to the expected 7 ⁺ state (see 1994Sc24 and 1992Hu04) is expected to be $< 10\%$. E(level): deduced from $E\alpha$ for the 95-ms and 25-ms states. J^π : HF ≈ 1.3 for branch to (10 ⁻) level in ^{204}Fr .