

^{268}Mt α decay

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	Y. A. Akovali	NDS 87, 309 (1999)	1-Nov-1998

Parent: ^{268}Mt : $E=0.0$; $T_{1/2}=0.07$ s $+10-3$; $Q(\alpha)=10695$ SY; % α decay <100.0

$Q(\alpha)(^{268}\text{Mt})=10695$ 150 is recommended by [1995Au04](#) from their $Q(\alpha)$ systematics.

The half-life of ^{268}Mt was measured by [1995Ho04](#) from α emission: $T_{1/2}(10240 \alpha)=71$ ms, $T_{1/2}(10097 \alpha)=171$ ms and $T_{1/2}(10240 \alpha)=72$ ms. The authors summarized their results as $T_{1/2}(^{268}\text{Mt})=70$ ms $+100-30$.

Only the α decay of ^{268}Mt has been observed; the branching for α decay has not been experimentally determined.

The theoretical calculations of [1997Mo25](#) give $T_{1/2}(\alpha)/T_{1/2}(\beta)=0.427$ s/5.63 s; partial half-life for spontaneous fission was calculated by [1985Lo17](#) as $\log T_{1/2}(\text{SF})\approx-12$ in years.

[Additional information 1.](#)

 ^{264}Bh Levels

$E(\text{level})^\dagger$

0.0
 ≈ 300
 ≈ 445

† Calculated from $Q(\alpha)(^{268}\text{mt})$ and the measured $E\alpha$'s.

 α radiations

<u>$E\alpha^\dagger$</u>	<u>$E(\text{level})$</u>
10097 20	≈ 445
10240 20	≈ 300

† Measured by [1995Ho04](#).