

$^{264}\text{Hs}$   $\alpha$  decay

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	Y. A. Akovali	NDS 87, 301 (1999)	1-Oct-1998

Parent:  $^{264}\text{Hs}$ :  $E=0.0$ ;  $J^\pi=0^+$ ;  $T_{1/2}\approx 0.8$  ms;  $Q(\alpha)=10591$  20;  $\% \alpha$  decay  $\approx 50.0$

$T_{1/2}(^{264}\text{Hs})\approx 0.8$  ms from the latest measurement by  $\alpha$  detection is adopted here because of the possibility of observation of a SF-decaying isomer. See ' $^{264}\text{Hs}$  Adopted Levels' for measured  $T_{1/2}$ 's by fission detection and for an earlier measurement by  $\alpha$  detection.

[1998HoZV](#) deduced  $\alpha$  and SF branchings as 50%; however, existence of a spontaneously fissioning isomeric state could not be ruled out ([1998HoZV](#)).

See ' $^{264}\text{Hs}$  Adopted Levels' for calculated partial half-lives for  $\alpha$ ,  $\beta$  and SF decays.

$Q(\alpha)(^{264}\text{Hs})=10591$  20 is calculated from  $E\alpha=10434$  20 for the  $\alpha$  transition to the  $^{260}\text{Sg}$  ground state.

 $^{260}\text{Sg}$  Levels

<u>E(level)</u>	<u><math>J^\pi</math></u>
0.0	$0^+$

 $\alpha$  radiations

<u><math>E\alpha</math></u>	<u>E(level)</u>	<u>Comments</u>
10434 20	0.0	$E\alpha$ : measurement of <a href="#">1998HoZV</a> . Only the escape peak was detected by <a href="#">1986Mu10</a> ; the full energy $\alpha$ peak could not be measured ( $\alpha$ escaped their detector).