

Adopted Levels

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	C. Morse	NDS 182, 130 (2022).	14-Sep-2021

$Q(\beta^-) = -3893$ SY; $S(n) = 7411$ SY; $S(p) = 2141$ SY; $Q(\alpha) = 9230$ SY [2021Wa16](#)

$\Delta Q(\beta^-) = 279$, $\Delta S(n) = 309$, $\Delta S(p) = 359$, $\Delta Q(\alpha) = 202$ ([2021WA16](#)).

$S(2n) = 13773$ SY [355](#), $S(2p) = 6195$ SY [345](#) ([2021WA16](#)).

^{267}Bh has been observed in the $^{249}\text{Bk}(^{22}\text{Ne}, 4n)$ reaction at LBNL ([2000WI15](#)) and at the Paul Scherrer Institute ([2000EI05](#)), and in the $^{248}\text{Cm}(^{23}\text{Na}, 4n)$ reaction at RIKEN ([2009MO12](#)). Events were identified by the observation of chains of α -decaying nuclei.

Comparison of the properties of these chains with previous studies allowed individual decays to be assigned to specific nuclei.

[2020HA27](#) raises the possibility that previous observations of ^{267}Bh actually correspond to ^{266}Bh , based on a revision of the decay properties of ^{266}Bh discussed in that work.

Half-lives, branching ratios, and α -decay energies in this evaluation have been computed from the individual events listed in the references above. Half-life uncertainties have been computed according to the method of [1984SC13](#). An additional 10 keV systematic uncertainty is assumed for the α -decay energies, which is added in quadrature to the averaged statistical uncertainty.

 ^{267}Bh Levels

<u>E(level)</u>	<u>$T_{1/2}$</u>	<u>Comments</u>
0	14 s $+6-3$	% α =100; %SF<8 E(level): Assumed ground state. $T_{1/2}$: From 11 events.