

Adopted Levels

Type	History		Literature Cutoff Date
	Author	Citation	
Full Evaluation	E. A. Mccutchan	ENSDF	1-May-2022

$Q(\beta^-) = -1.3 \times 10^4$  SY;  $S(n) = 1.43 \times 10^4$  SY;  $S(p) = -5. \times 10^2$  SY;  $Q(\alpha) = -1.7 \times 10^3$  SY [2021Wa16](#)

[2019Wi08](#):  $^{68}\text{Br}$  produced in fragmentation of secondary beams of  $^{70}\text{Br}$ ,  $^{70}\text{Kr}$ ,  $^{71}\text{Kr}$ , and  $^{72}\text{Kr}$  at 170 MeV/nucleon on  $^9\text{Be}$  targets. Secondary beams produced in fragmentation of  $^{78}\text{Kr}$  beam at 345 MeV/nucleon at RIKEN Nishina Center. Secondary beams analyzed with  $B\rho$ - $\Delta E$ -TOF method using the BigRIPS separator. Reaction products following the secondary fragmentation analyzed with the ZeroDegree Spectrometer. First identification of  $^{68}\text{Br}$ . Deduced  $T_{1/2}$  estimate from comparison of measured to expected yields.

 $^{68}\text{Br}$  Levels

<u>E(level)</u>	<u><math>T_{1/2}</math></u>	<u>Comments</u>
0.0	35 ns 5	E(level): assuming the observed events correspond to the ground state. Corrected yield of $^{68}\text{Br}$ was 14.7 50 (stat) 18 (syst) for $^{70}\text{Br}$ beam, 33 16 (stat) 4 (syst) for $^{70}\text{Kr}$ beam, 13.7 60 (stat) 12 (syst) for $^{71}\text{Kr}$ beam and 10 4 (stat) 2 (syst) for $^{72}\text{Kr}$ beam. $T_{1/2}$ : estimated by <a href="#">2019Wi08</a> based on measured versus expected yield, length of flight path to focal plane of the ZeroDegree Spectrometer and time dilation. Value is given here as average of $\tau = 51$ ns 6, 57 ns 7, 46 ns 6, and 51 ns 6 determined for the $^{70}\text{Br}$ , $^{70}\text{Kr}$ , $^{71}\text{Kr}$ , and $^{72}\text{Kr}$ beams, respectively.