

Adopted Levels

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	S. -c. Wu	NDS 108,1057 (2007)	1-Mar-2007

$Q(\beta^-)=4090$ 12; $S(n)=3846$ 19; $S(p)=5.83\times 10^3$ syst; $Q(\alpha)=5.00\times 10^3$ syst 2012Wa38

Note: Current evaluation has used the following Q record \$ 4090 11 3846 19 5890 syst 5100 syst 2003Au03.

$\Delta S(p)=410$, $\Delta Q(\alpha)=300$ from 2003Au03.

 ^{216}Bi Levels

<u>E(level)</u>	<u>J^π</u>	<u>$T_{1/2}$</u>	<u>Comments</u>
0.0	(6 ⁻ ,7 ⁻)	2.25 min 5	$\% \beta^- \leq 100$ J^π : from 2000Ku06. Calculation of $\pi 1h_{9/2} \otimes \nu 2g_{9/2}$ for even Bi isotopes lead to high-spin ground state of ^{216}Bi ($J^\pi=6^-$ or 7^-). According to 2000Ku06, this state decays mostly to the (8 ⁺) state of ^{216}Po . $T_{1/2}$: from 2000Ku06. Other: 3.6 min 4 (1990Ru02). $\% \beta^-$: β^- decay observed, α decay has not been observed.
x	(3)	6.6 min 21	$\% \beta^- \leq 100$ E(level): 24 19 (2012Au07) from mass measurement. $T_{1/2}$: from 1989Bu09. Others: 3.6 min 4 (1990Ru02). $\% \beta^-$: β^- decay observed, α decay has not been observed. J^π : daughter of ^{220}At α decay. $J^\pi(^{220}\text{At g.s.})=3$ from β^- decay of ^{220}Rn to ^{220}At . The α group from ^{220}At has an $\text{HF} \approx 4$; therefore, one expects it to feed a level with like configuration, <i>i.e.</i> with $J=3$.