

$^{216}\text{Bi} \beta^-$ decay (2.25 min+6.6 min) 1990Ru02

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

Parent: ^{216}Bi : E=0.0; $J^\pi=(6^-, 7^-)$; $T_{1/2}=2.25$ min 8; $Q(\beta^-)=4090$ 11; % β^- decay≤100.0Parent: ^{216}Bi : E=0.0+x; $J^\pi=(3^-)$; $T_{1/2}=6.6$ min 21; $Q(\beta^-)=4090$ 11; % β^- decay≤100.01990Ru02: ^{216}Bi from Th(p,X), E=200 MeV; measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin, X-ray spectra, β -gating. ^{216}Po Levels

$E(\text{level})^\dagger$	J^π
0.0	0^+
549.80 6	2^+
969.01 10	

† From $E\gamma$. $\gamma(^{216}\text{Po})$

E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [‡]	α^\ddagger	Comments
419.21 8	44 10	969.01		549.80	2^+	[E2]	0.0498	$\alpha(K)=0.0183$ 3; $\alpha(L)=0.00561$ 8; $\alpha(M)=0.001399$ 20;
549.80 6	100 9	549.80	2^+	0.0	0^+	(E2)	0.0257	$\alpha(N+..)=0.000440$ 7 $\alpha(N)=0.000359$ 5; $\alpha(O)=7.21\times10^{-5}$ 10; $\alpha(P)=8.05\times10^{-6}$ 12

† From adopted gammas.

‡ Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ -ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

$^{216}\text{Bi} \beta^-$ decay (2.25 min+6.6 min) 1990Ru02