

$^{210}\text{Bi} \beta^-$ decay (5.012 d) 1971Be01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia		NDS 121, 561 (2014)	31-Mar-2014

Parent: ^{210}Bi : E=0.0; $J^\pi=1^-$; $T_{1/2}=5.012$ d 5; $Q(\beta^-)=1162.2$ 8; % β^- decay=100.0

1971Be01: Measured internal bremsstrahlung (IBS) at 7 angles ($\theta=15^\circ$ to 120°) via (β)-(IBS) coin. Others: 1966Mu08, 1969Fl02, 1983El09.

1977Sc07: L_α x ray/ L_β x ray/ L_γ x ray exp=2.41 19/2.37 19/0.44 4; L x ray/Xb- exp= 5.1×10^{-4} 5, from L-shell autoionization in β^- decay. Other: 1954Bo01.

 ^{210}Po Levels

E(level)	J^π	$T_{1/2}$	
0.0	0^+	138.376 d 2	$J^\pi, T_{1/2}$: From Adopted Levels.

Comments

 β^- radiations

E(decay)	E(level)	$I\beta^-$ [†]	Log ft	
1161.5 15	0.0	100	8.0	av $E\beta=389.0$ 4 E(decay): from 1967Hs01; F-K, shape factor analyses; semi detector. Other values: 1155 5 (1954Pi30), 1160.5 5 (1962Da03); 1162.1 8 (1995Au04). see also 1939Fl02, 1940Ne04, 1949La06, 1953Ba80, 1955Li02, 1969Fl02. Measured longitudinal pol (-v/c)=0.718 24 for $E\beta=900$ keV (1977Po08); pol(-v/c)=0.70 7, 0.70 5, 0.71 5 for $E\beta=150$, 220- and 300 keV, respectively (1980Ri07). Others: 1958Ge34, 1958Bu09, 1959Al01, 1959We31, 1961Ui01, 1964Sc11, 1965Cu04. β shape factor and longitudinal pol data of others analyzed (1974Be23). β anisotropy via pol ^{210}Bi decay studied (1973NaYV). β transition proceeds from Configuration=((π 1h _{9/2}) (v 2g _{9/2})) to Configuration=(π 1h _{9/2}) ² predominantly.

[†] Absolute intensity per 100 decays.