

¹⁹³Bi α decay (63.6 s) [1985Co06](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	T. D. Johnson, Balraj Singh		NDS 142, 1 (2017)	15-Apr-2017

Parent: ¹⁹³Bi: E=0.0; J ^{π} =(9/2⁻); T_{1/2}=63.6 s 30; Q(α)=6307 5; % α decay=2.2 11

¹⁹³Bi-E,J ^{π} ,T_{1/2}: From ¹⁹³Bi Adopted Levels in the ENSDF database (cf. [2006Ac01](#) evaluation).

¹⁹³Bi-Q(α): From [2017Wa10](#).

¹⁹³Bi-% α decay: % α =2.2 11 ([2005De01](#)). Other: 3.5 15 (from [1990AnZR](#) as quoted in [1993An19](#), and also in [2006Ac01](#) evaluation).

Sources from ¹⁴N bombardments of Ir, ¹⁶O bombardments of Re, and ²⁰Ne bombardments of ¹⁸¹Tl; mass separation; measured E α , I α , time-sequential α and γ spectra. Others: [2000Sc46](#) (α (θ ,temp)); [1998Kr23](#), [1981Le23](#), [1974Le02](#).

¹⁸⁹Tl Levels

E(level)	J ^{π} [†]	T _{1/2}	Comments
0.0	(1/2 ⁺)		
281 7	(9/2 ⁻)	1.4 min 1	T _{1/2} : From Adopted Levels.

[†] From Adopted Levels.

α radiations

E α	E(level)	I α [‡]	HF [†]	Comments
5899 5	281	95.8 5	2.7 14	E α : other values: 5892 5 (1967Tr06), 5910 5 (1966Si11), 5900 10 (1972Ga27,1974Le02), and 5950 20 (1970Ta14).
6174 5	0.0	4.2 5	9.5×10 ² 50	E α : other value: 6180 20 (1972Ga27,1974Le02). Transition originally assigned to ¹⁹³ Bi α decay (3.2 s) and reassigned to this decay by 1985Co06 on the basis of half-life (90 s 48).

[†] r₀=1.506 10, from interpolation of radii for neighboring even-even nuclei.

[‡] For absolute intensity per 100 decays, multiply by 0.022 11.