^{215}At α decay 1982Bo04,1966Gr07

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan, C. M. Baglin, O. Gorbachenko, N. Todorovic	NDS 114, 661 (2013)	28-Feb-2013

Parent: ^{215}At: E=0.0; $J^\pi=9/2^-$; $T_{1/2}=0.10$ ms *2*; Q(α)=8178 *4*; %α decay=100.0
Other: 1951Me10.
All data are from 1966Gr07, unless otherwise noted.

^{211}Bi Levels

E(level)	J^π[†]	Comments
0.0	$9/2^-$	
408	$7/2^-$	E(level): from ΔQ(α).

[†] From Adopted Levels.

α radiations

Eα	E(level)	Iα[‡]	HF[†]	Comments
7610 *10*	408	0.05 *2*	4.4×10^2 *20*	Iα: from $\alpha\gamma$.
8026 *4*	0.0	99.95 *2*	3.3 *7*	Eα: from 1982Bo04, value recommended by 1991Ry01. Iα: value recommended by 1991Ry01.

[†] Using $r_0(^{211}Bi)=1.5522$ *7*; interpolated value deduced from $r_0(^{210}Pb)=1.5394$ *6*, $r_0(^{212}Po)=1.5649$ *8* (1998Ak04).
[‡] Absolute intensity per 100 decays.

$\gamma(^{211}Bi)$

Eγ	E$_i$(level)	J_i^π	E$_f$	J_f^π	Mult.[†]	δ[†]	α[‡]	Comments
≈404	408	$7/2^-$	0.0	$9/2^-$	M1+E2	−1.1 *1*	≈0.122	α(K)≈0.095; α(L)≈0.0208; α(M)≈0.00502; α(N+..)≈0.00157 α(N)≈0.00128; α(O)≈0.000256; α(P)≈2.81×10^{-5} Eγ: from $\alpha\gamma$.

[†] 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.

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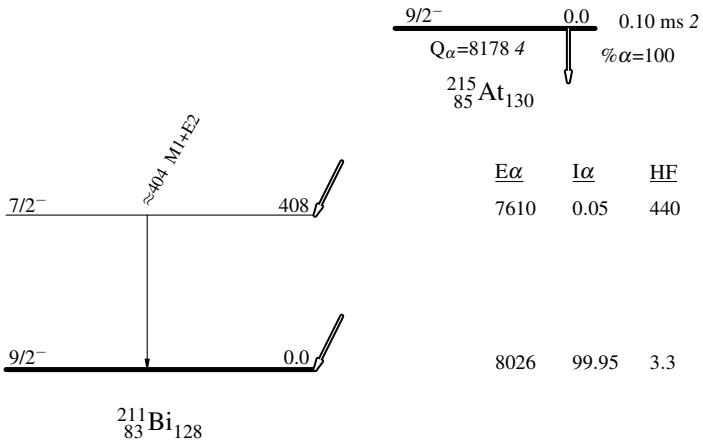
Decay Scheme



Eα	Iα	HF
7610	0.05	440
8026	99.95	3.3