$^{11}_{6}\mathrm{C}_{5}$

1 Decay Scheme

C-11 disintegrates by 99.750(13) % beta-plus, and 0.250(13)% by electron capture to the ground state of the stable nuclide B-11.
C-11 se désintègre à 99,750(13)% par émission beta-plus, et 0,250(13)% par capture électronique vers le niveau fondamental de B-11.

2 Nuclear Data

$T_{1/2}(^{11}\mathrm{C}\ )$: 20,361 (23) min
$Q^{+}(^{11}\mathrm{C}\ )$: 1982,5 (9) keV

2.1 β^{+} Transitions

	Energy keV	Probability × 100	Nature	lg ft
$\beta^{+}_{0,0}$	960,5 (9)	99,750 (13)	Allowed	3,592

2.2 Electron Capture Transitions

	Energy keV	Probability × 100	Nature	P_K	P_L
$\epsilon_{0,0}$	1982,5 (9)	0,250 (13)	Allowed	0,9174 (91)	0,0826 (91)

3 Electron Emissions

		Energy keV	Electrons per 100 disint.
$\beta^+_{0,0}$	max:	960,5 (9)	99,750 (13)
$\beta^+_{0,0}$	avg:	385,7 (4)	

4 Photon Emissions

4.1 Gamma Emissions

	Energy keV	Photons per 100 disint.
$\gamma^{\pm}$	511	199,500 (26)

5 Main Production Modes

C − 12(γ,n)C − 11
C − 12(d,t)C − 11
Li − 6(Li − 6,n)C − 11
Li − 7(Li − 6,2n)C − 11
B − 11(p,n)C − 11
B − 10(d,n)C − 11
N − 14(d,nα)C − 11
B − 10(α,t)C − 11
Be − 9(α,2n)C − 11
B − 10(p,γ)C − 11
B − 11(d,2n)C − 11
C − 12(p,pn)C − 11
C − 12(He − 3,α)C − 11
Be − 9(He − 3,n)C − 11
C − 13(p,p2n)C − 11
B − 10(He − 3,d)C − 11
C − 12(π_+,p)C − 11

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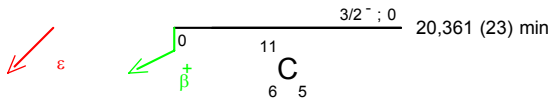
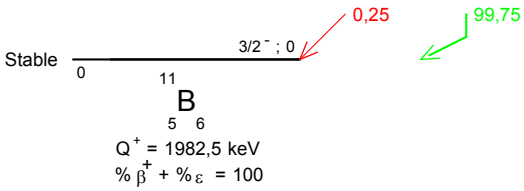

3/2⁻ ; 0
20,361 (23) min
ε
0
β+
11
C
6 5


0,25
99,75
Stable
3/2⁻ ; 0
0
11
B
5 6
Q+ = 1982,5 keV
% β+ + % ε = 100