

Results: 2 different decay possibilities were found

Dataset #1:

Author: C.J. Chiara and F.G. Kondev Citation: Nuclear Data Sheets 111,141 (2010)

Parent Nucleus	Parent E(level)	Parent J π	Parent T $_{1/2}$	Decay Mode	GS-GS Q-value (keV)	Daughter Nucleus	Decay Scheme	ENSDF file
$^{204}_{85}\text{At}$	587.3020	10-	108 ms 10	IT: 100 %		$^{204}_{85}\text{At}$		

Electrons:

	Energy (keV)	Intensity (%)	Dose (MeV/Bq-s)
Auger L	8.52	3.03 % 9	2.58E-4 8
Auger K	61.2	0.128 % 15	7.8E-5 9
CE K	491.57 20	3.75 %	0.0184
CE L	569.81 20	2.16 %	0.01233
CE M	582.98 20	0.566 %	0.00330
CE N	586.26 20	0.1471 %	8.63E-4
CE O	587.19 20	0.0299 %	1.76E-4
CE P	587.29 20	0.00351 %	2.06E-5

Gamma and X-ray radiation:

	Energy (keV)	Intensity (%)	Dose (MeV/Bq-s)
XR 1	11.4	2.16 % 9	2.46E-4 10
XR k α 2	78.948	1.046 % 23	8.26E-4 18
XR k α 1	81.517	1.73 % 3	0.00141 3
XR k β 3	91.73	0.209 % 4	1.92E-4 4
XR k β 1	92.315	0.401 % 8	3.70E-4 7
XR k β 2	94.9	0.149 % 3	1.41E-4 3
	587.3 2	93.3 %	0.548

Dataset #2:

Authors: F.G. Kondev, S. Lalkovski Citation: Nuclear Data Sheets 108,1471 (2007)

Parent Nucleus	Parent E(level)	Parent J π	Parent T $_{1/2}$	Decay Mode	GS-GS Q-value (keV)	Daughter Nucleus	Decay Scheme	ENSDF file
$^{204}_{85}\text{At}$	0	7+	9.22 m 13	α : 3.91 16 %	6069.8 15	$^{200}_{83}\text{Bi}$		

Alphas:

Energy (keV)	Intensity (%)	Dose (MeV/Bq-s)
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5950.3 13 3.91 % 0.233