

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
²⁰⁸ ₈₄ Po	0.0	0+	2.898 y 2	α : 99.9960 4 %	5215.3 13	²⁰⁴ ₈₂ Pb

[Decay Scheme](#) [ENSDF file](#)

Alphas:

Energy (keV)	Intensity (%)	Dose (MeV/Bq-s)
4220 15	2.4E-4 % 7	1.0E-5 3
5114.9 14	99.9958 % 4	5.1147 14

Dataset #2:

Author: M. J. Martin Citation: Nuclear Data Sheets 108,1583 (2007)

Parent Nucleus	Parent E(level)	Parent J π	Parent T _{1/2}	Decay Mode	GS-GS Q-value (keV)	Daughter Nucleus
²⁰⁸ ₈₄ Po	0.0	0+	2.898 y 2	ϵ : 0.0040 4 %	1400.5 24	²⁰⁸ ₈₃ Bi

[Decay Scheme](#) [ENSDF file](#)

Electrons:

	Energy (keV)	Intensity (%)	Dose (MeV/Bq-s)
Auger L	8.15	0.0045 % 3	3.68E-7 21
CE L	15.41 10	0.0013 % 3	2.0E-7 5
CE M	27.80 10	3.1E-4 % 8	8.5E-8 23
CE N	30.86 10	7.8E-5 % 21	2.4E-8 7
CE O	31.72 10	1.6E-5 % 4	5.0E-9 14
CE P	31.80 10	1.8E-6 % 5	5.7E-10 14
CE L	46.74 10	0.0020 % 3	9.4E-7 15
Auger K	58.2	1.42E-4 % 19	8.3E-8 11
CE M	59.13 10	4.8E-4 % 8	2.9E-7 5
CE N	62.19 10	1.23E-4 % 19	7.6E-8 12
CE O	63.05 10	2.5E-5 % 4	1.58E-8 25
CE P	63.13 10	2.9E-6 % 4	1.8E-9 3
CE K	201.28 5	7.5E-4 %	1.5E-6
CE L	275.42 5	1.45E-4 %	4.0E-7
CE M	287.81 5	3.49E-5 %	1.01E-7
CE N	290.87 5	8.9E-6 %	2.59E-8
CE O	291.73 5	1.79E-6 %	5.2E-9
CE P	291.81 5	2.04E-7 %	6.0E-10

CE K	447.86 8	4.0E-5 % 5	1.78E-7 23
CE K	479.60 7	9.4E-5 % 11	4.5E-7 5
CE K	510.99 7	6.3E-5 % 8	3.2E-7 4
CE L	522.00 8	6.8E-6 % 9	3.5E-8 4
CE M	534.39 8	1.58E-6 % 20	8.4E-9 11
CE N	537.45 8	4.0E-7 % 5	2.2E-9 3
CE O	538.31 8	8.3E-8 % 10	4.5E-10 6
CE P	538.39 8	9.9E-9 % 13	5.3E-11 7
CE L	553.74 7	1.59E-5 % 19	8.8E-8 11
CE M	566.13 7	3.7E-6 % 5	2.1E-8 3
CE N	569.19 7	9.5E-7 % 11	5.4E-9 7
CE O	570.05 7	1.95E-7 % 24	1.11E-9 13
CE P	570.13 7	2.3E-8 % 3	1.33E-10 16
CE L	585.13 7	1.06E-5 % 13	6.2E-8 7
CE M	597.52 7	2.5E-6 % 3	1.49E-8 18
CE N	600.58 7	6.4E-7 % 8	3.8E-9 5
CE O	601.44 7	1.30E-7 % 16	7.8E-10 9
CE P	601.52 7	1.56E-8 % 19	9.4E-11 11
CE K	771.29 8	5.4E-6 % 7	4.2E-8 5
CE K	834.58 13	4.5E-6 % 22	3.8E-8 18
CE L	845.43 8	1.16E-6 % 14	9.8E-9 12
CE M	857.82 8	2.8E-7 % 3	2.4E-9 3
CE N	860.88 8	7.1E-8 % 9	6.1E-10 8
CE O	861.74 8	1.42E-8 % 18	1.23E-10 15
CE P	861.82 8	1.56E-9 % 19	1.34E-11 17
CE L	908.72 13	1.0E-6 % 5	9E-9 5
CE M	921.11 13	2.5E-7 % 12	2.3E-9 11
CE N	924.17 13	6E-8 % 3	6E-10 3
CE O	925.03 13	1.3E-8 % 6	1.2E-10 6
CE P	925.11 13	1.5E-9 % 7	1.4E-11 7

Gamma and X-ray radiation:

	Energy (keV)	Intensity (%)	Dose (MeV/Bq-s)
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XR 1	10.8	0.00290 % 23	3.13E-7 25
	31.8 1	2.7E-5 % 4	8.5E-9 14
	63.13 10	3.4E-4 % 5	2.2E-7 3
XR k α 2	74.815	0.00109 % 9	8.2E-7 6
XR k α 1	77.107	0.00182 % 14	1.41E-6 11
XR k β 3	86.83	2.21E-4 % 17	1.92E-7 15
XR k β 1	87.349	4.2E-4 % 3	3.7E-7 3
XR k β 2	89.784	1.55E-4 % 12	1.39E-7 11
	291.81 5	0.00227 %	6.6E-6

538.39 8	5.0E-4 % 6	2.7E-6 3
570.13 7	0.00138 % 17	7.9E-6 9
601.52 7	0.00107 % 13	6.4E-6 8
861.82 8	7.4E-4 % 9	6.4E-6 8
925.11 13	5E-5 % 3	4.8E-7 24

Gamma Coincidence Data:

For each gamma, the list of gammas in coincidence is given. If experimentally known, an estimate of the average time interval (in seconds) between both gammas is given

E(γ) Coincidence

31.8 63.13, 291.81, 538.39, 601.52
63.13 31.8, 291.81, 538.39, 570.13, 861.82
291.81 31.8, 63.13, 538.39, 570.13, 601.52
538.39 31.8, 63.13, 291.81
570.13 63.13, 291.81
601.52 31.8, 291.81
861.82 63.13