RADIOACTIVE ELEMENTS

I. Uranium-Radium Series

Name of Element	Half-Time Value	Type of Rays	Atomic Weight
Uranium I	4.67×10^{9} Years	alpha	238.2
Uranium X_1	24.6 Days	beta-gamma	234
Uranium X_2	1.15 Minutes	beta-gamma	234
Uranium II	2×10^{6} Years	alpha	234
Uranium Y	25 Hours	beta	
Ionium	6.9×10^{4} Years	alpha	230
Radium	1690 Years	alpha-beta	225.97
Radon (Radium-emanation)	3.85 Days	alpha	222
Radium A	3 Minutes	alpha	218
Radium B	26.8 Minutes	beta-gamma	214
Radium C	19.5 Minutes	beta-gamma (alpha?)	214
Radium C_1	10^{-6} Seconds	alpha	214
Radium C_2	1.32 Minutes	beta	210
Radium D	16 Years	beta-gamma	210
Radium E	5 Days	beta-gamma	210
Radium F (Polonium)	136 Days	alpha	
Radium G (Radium-lead)	—	—	206
(ordinary lead)			207.2

II. Actinium Series

Name of Element	Half-Time Value	Type of Rays	Atomic Weight
Uranium Y	1.04 Days	beta	
Proactinium	1.2×10^{4} Years	alpha	approximately 230
Actinium	20 Years	(beta)	" 226
Radioactinium	19.5 Days	alpha-beta gamma	226
Actinium X	11.4 days	alpha	222
Actinon (Actinium-emanation)	3.92 Seconds	alpha	218
Actinium A	0.002 Seconds	alpha	214
Actinium B	36.1 Minutes	beta-gamma	210
Actinium C	2.15 Minutes	alpha-(beta)	210
Actinium C_1	0.005 Seconds	alpha	210
Actinium C_2	4.76 Minutes	beta-gamma	206
Actinium D (Actinium-lead)	—	—	206

III. Thorium Series

Name of Element	Half-Time Value	Type of Rays	Atomic Weight
Thorium	1.31×10^{10} Years	alpha	232.15
Mesothorium I	6.7 Years	(beta)	228
Mesothorium II	6.2 Hours	beta-gamma	228
Radiothorium	1.9 Years	alpha-beta	228
Thorium X	3.64 Days	alpha	224
Thoron (Thorium-emanation)	54.5 Seconds	alpha	220
Thorium A	0.14 Seconds	alpha	216
Thorium B	10.6 Hours	beta-gamma	212
Thorium C	60.8 Minutes	alpha-gamma	212
Thorium C_1	10^{-11} Seconds	alpha	212
Thorium C_2	3.1 Minutes	beta-gamma	208
Thorium D (Thorium-lead)	—	—	208