

RADON DECAY SERIES

NUCLIDE		HALF-LIFE	MAJOR RADIATION ENERGIES MeV			POTENTIAL α ENERGY MeV/ATOM	TOTAL α ENERGY MeV/100 pCi Rn	FRACTION OF TOTAL α ENERGY
			α	β	γ			
Radium	²²⁶ ₈₈ Ra	1602 y	4.60 (6%) 4.78 (95%)	—	0.186 (4%)	—	—	—
Radon	²²² ₈₆ Rn	3.823 d	5.49 (100%)	—	—	—	—	—
Radium A	²¹⁸ ₈₄ Po	3.05 m	6.00 (~100%)	—	—	13.69	0.134 x 10 ⁵	0.10
Radium B	²¹⁴ ₈₂ Pb	26.8 m	—	{ 0.65 (50%) 0.71 (40%) 0.98 (6%)	0.295 (19%) 0.352 (36%)	7.69	0.659 x 10 ⁵	0.52
Radium C	²¹⁴ ₈₃ Bi	19.7 m	—	{ 1.0 (23%) 1.51 (40%) 3.26 (19%)	0.609 (47%) 1.120 (17%) 1.764 (17%)	7.69	0.485 x 10 ⁵	0.38
Radium C'	²¹⁴ ₈₄ Po	164 μs	7.69 (100%)	—	—	7.69	0.000 x 10 ⁵	0.00
1 WORKING LEVEL (WL) = 1.3 x 10 ⁵ MeV/L = 2.08 x 10 ⁻⁵ J/m ³							~1.3 x 10 ⁵	1.00