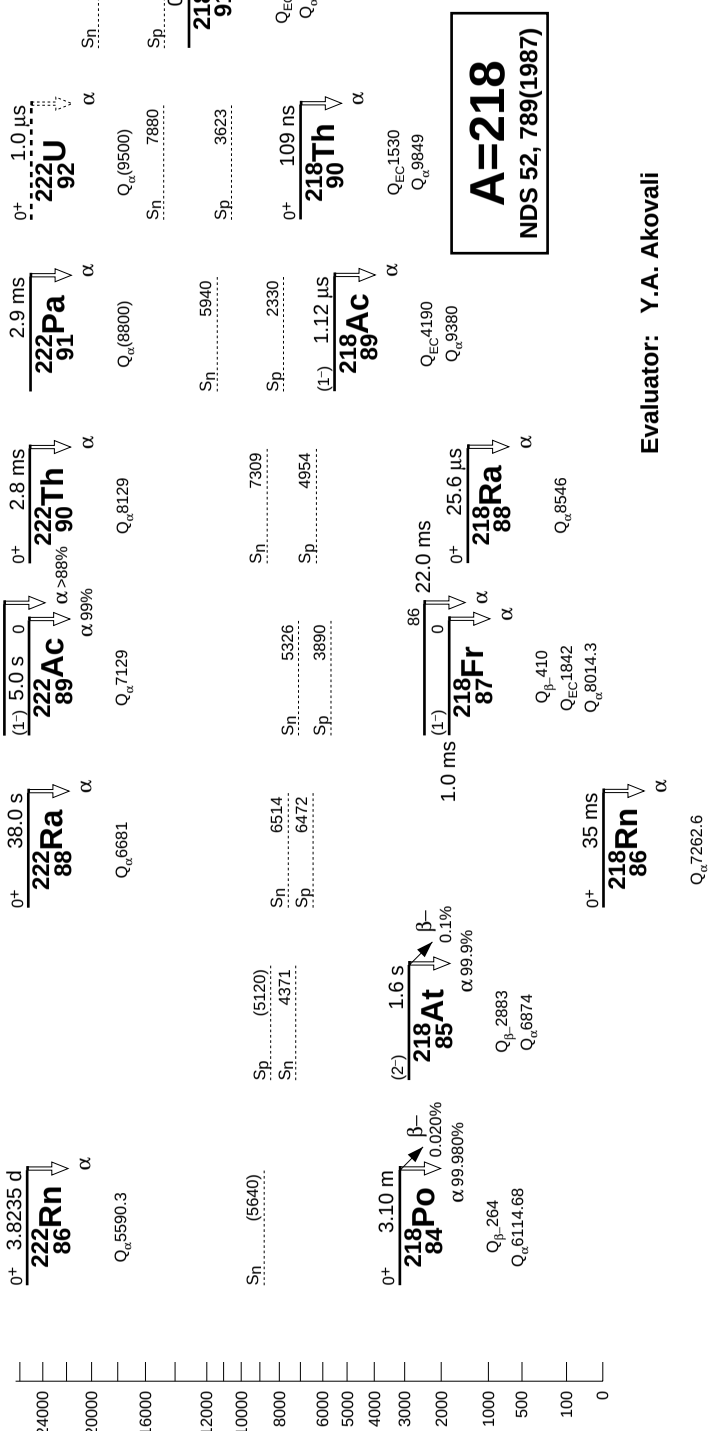


$^{218}_{84}$Po

Δ: 8351 *3* S_n: (5640) Q_{β^-}: 264 *12* Q_α: 6114.68 *9*

Populating Reactions and Decay Modes

^{222}Rn α decay (36Br05, 53Ba29, 56Ma28, 58Wa16, 63Ba62, 71Gr17, 79Ry03)

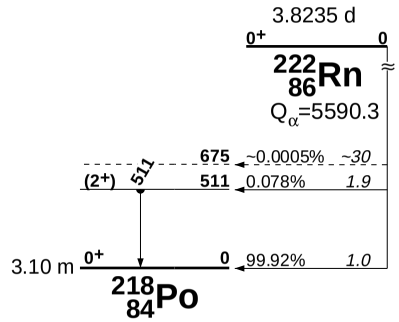
Levels and γ-ray branchings:

0, 0^+, 3.10 *1* m, %α=99.980 *2*, %β^-=0.020 *2*

511 *2*, (2^+) γ_0***511*** *2*

675 *5* (?)

α from ^{218}Po (3.10 m) α decay **<** *for Iα% multiply by 0.99980 2* **>** α_0***6002.40*** *9* (†99.9989), α_{837}***5181*** *2* (†0.0011).



$^{218}_{85}$At

Δ: 8087 *12* S_n: 4371 *14* S_p: (5120) Q_{β^-}: 2883 *12* Q_α: 6874 *3*

Populating Reactions and Decay Modes

^{218}Po β^- decay (36Br05, 53Ba29, 56Ma28, 58Wa16, 63Ba62, 71Gr17, 79Ry03)

Levels:

0, (2^-), 1.6 *4* s, %α=99.9, %β^-=0.1

α from ^{218}At (1.6 s) α decay **<** *for Iα% multiply by 0.999* **>** α_0***6746*** *5* (†3.6), α_{53}***6694*** *5* (†90), α_{95}***6653*** *5* (†6.4).

$^{218}_{86}$Rn

Δ: 5204 *4* S_n: 6514 *5* S_p: 6472 *8* Q_α: 7262.6 *20*

Populating Reactions and Decay Modes

A ^{218}At β^- decay (36Br05, 53Ba29, 56Ma28, 58Wa16, 63Ba62, 71Gr17, 79Ry03)

B ^{222}Ra α decay (56As38, 56Sm88, 60Be25, 60St20, 61Ru06, 63Le17, 69Pe17, 74Va28, 75VaZD, 76Ku08, 79Ry03)

Levels and γ-ray branchings:

0, 0^+, 35 *5* ms, *[B]*, %α=100

324.22 *5*, 2^+, <80 ps, *[B]* γ_0***324.22*** *5* E2

653.1 *3*, *[B]* γ_{324}***328.9*** *2*

796.7 *2*, *[B]* γ_{653}***144.0*** *5* ($\dagger_\gamma$2.7 *5*) γ_{324}***472.5*** *1* ($\dagger_\gamma$100 *5*)

839.9 *2*, *[B]* γ_{324}***515.6*** *1* ($\dagger_\gamma$60 *4*) γ_0***840.2*** *2* ($\dagger_\gamma$100 *8*)

γ(*^{214}Po*) from ^{218}Rn (35 ms) α decay **<** *for Iγ% multiply by 1.0* **>** ***609.31*** *6* ($\dagger_\gamma$0.124 *7*) E2.

α from ^{218}Rn (35 ms) α decay **<** *for Iα% multiply by 1.0* **>** α_0***7133*** *2* (†99.87 *1*), α_{609}***6535.4*** *21* (†0.126 *8*).

$^{218}_{87}$Fr

Δ: 7046 *5* S_n: 5326 *8* S_p: 3890 *6* Q_{β^-}: 410 *12* Q_{EC}: 1842 *5* Q_α: 8014.3 *20*

Populating Reactions and Decay Modes

A ^{222}Ac α decay (5.0 s) (64Mc21, 68Ha14, 72Es03, 73BoXL, 79Ry03)

B ^{222}Ac α decay (63 s) (72Es03)

Levels:

0, (1^-), 1.0 *6* ms, *[A]*, %α=100

47 *11*, *[A]*

86 *8*, 22.0 *5* ms, %α≤100, %IT=?

14+x *21*, *[B]*

45+x *21*, *[B]*

126+x *21*, *[B]*

177+x *21*, *[B]*

207+x *21*, *[B]*

269+x *21*, *[B]*

309+x *21*, *[B]*

564+x *21*, *[B]*