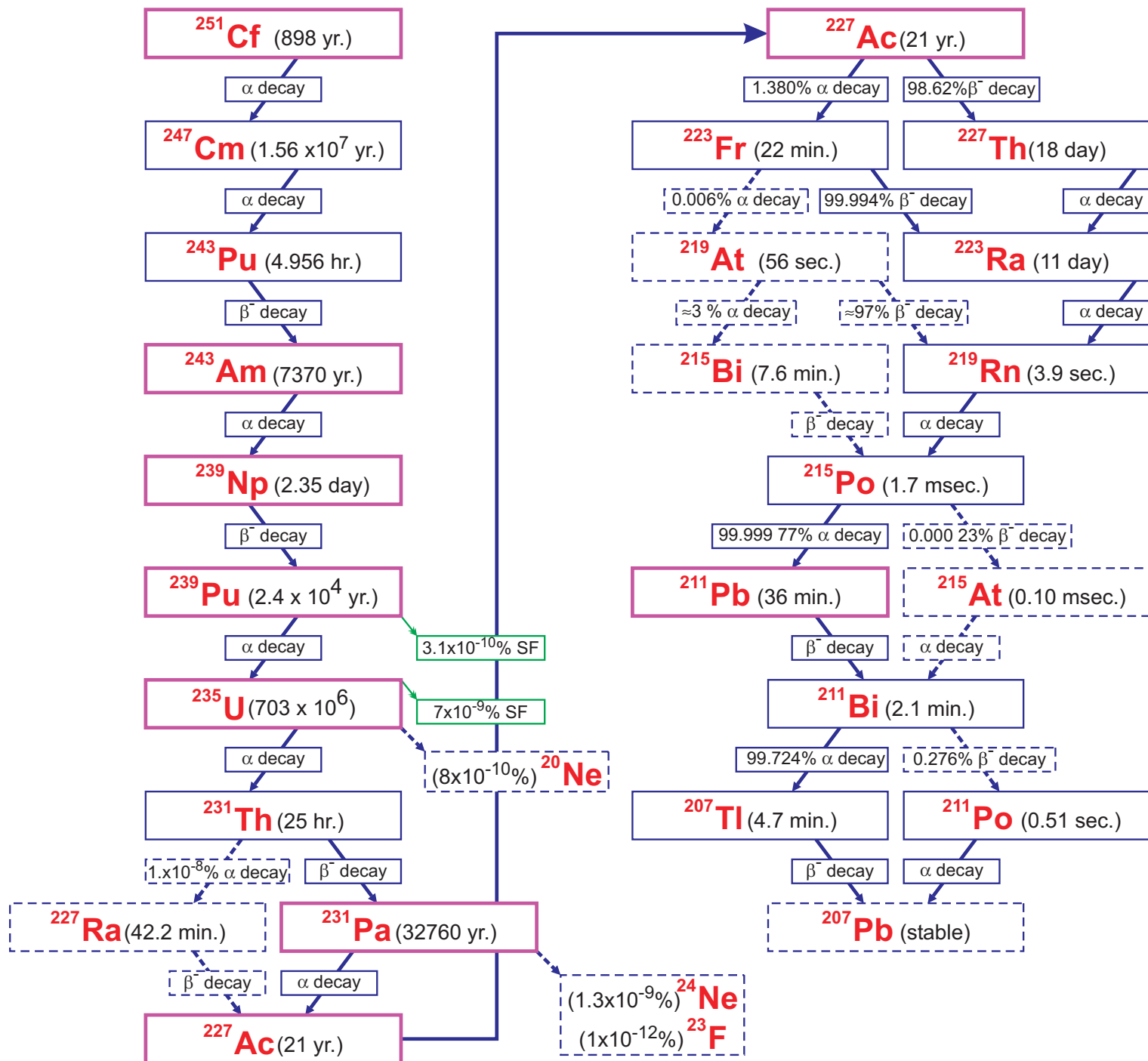
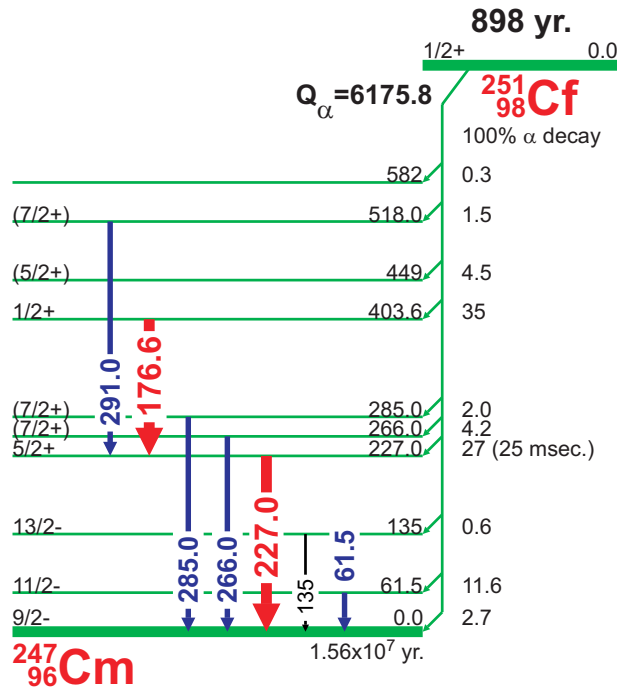


Simplified Decay Chain

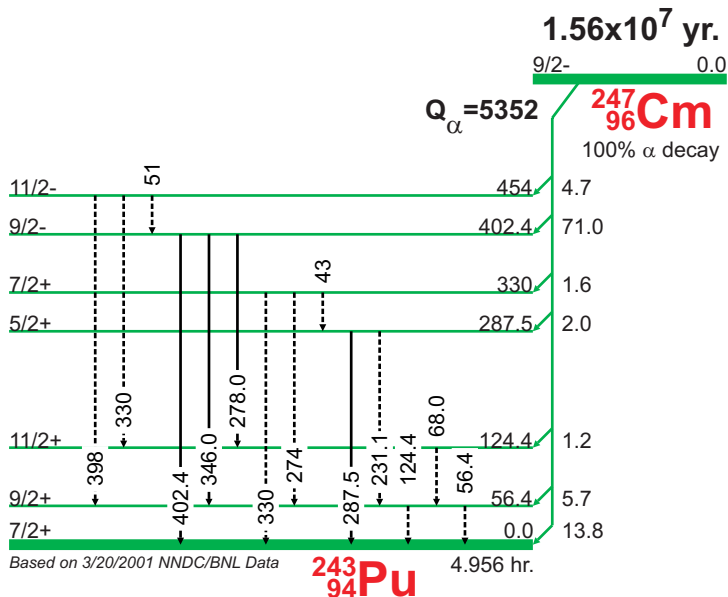


²⁵¹Cf (898 yr.) Decay Scheme



Based on 3/20/2001 NNDC/BNL Data

²⁴⁷Cm (1.56 x 10⁷ yr.) Decay Scheme



Based on 3/20/2001 NNDC/BNL Data

GAMMA-RAY ENERGIES AND INTENSITIES

Nuclide: ²⁵¹Cf Half Life: 898(44) yr

E _{γ} (keV)	σ E _{γ}	I_{γ}	σI_{γ}	Level	
61.5	0.3	0.56	0.22	61.5	α
68 ?		0.2	\approx		α
73 ?		0.3	\approx		α
83 ?		0.1	\approx		α
135		0.1	\approx	135	α
144 ?		0.1	\approx		α
154 ?		0.2	\approx		α
176.6	0.1	17.7	1.5	403.6	α
214		0.2	\approx		α
227.0	1.0	6.3	1.1	227.0	α
255 ?		0.2	\approx		α
262 ?		0.2	\approx		α
266.0	0.3	0.5	0.2	266.0	α
270 ?		0.2	\approx		α
285.0	0.2	1.4	0.3	285.0	α
291.0	0.3	0.4	0.2	518.0	α

E _{γ} , σ E _{γ} , I _{γ} , σI_{γ} , Levels from ENSDF Database as of March 20, 2001

① These I _{γ} are per 100 Decays of ²⁵¹Cf.

② Normalization factor is 1.0, and its uncertainty is taken to be 0.0.

GAMMA-RAY ENERGIES AND INTENSITIES

Nuclide: ²⁴⁷Cm Half Life: 1.56x10⁷(5) yr.

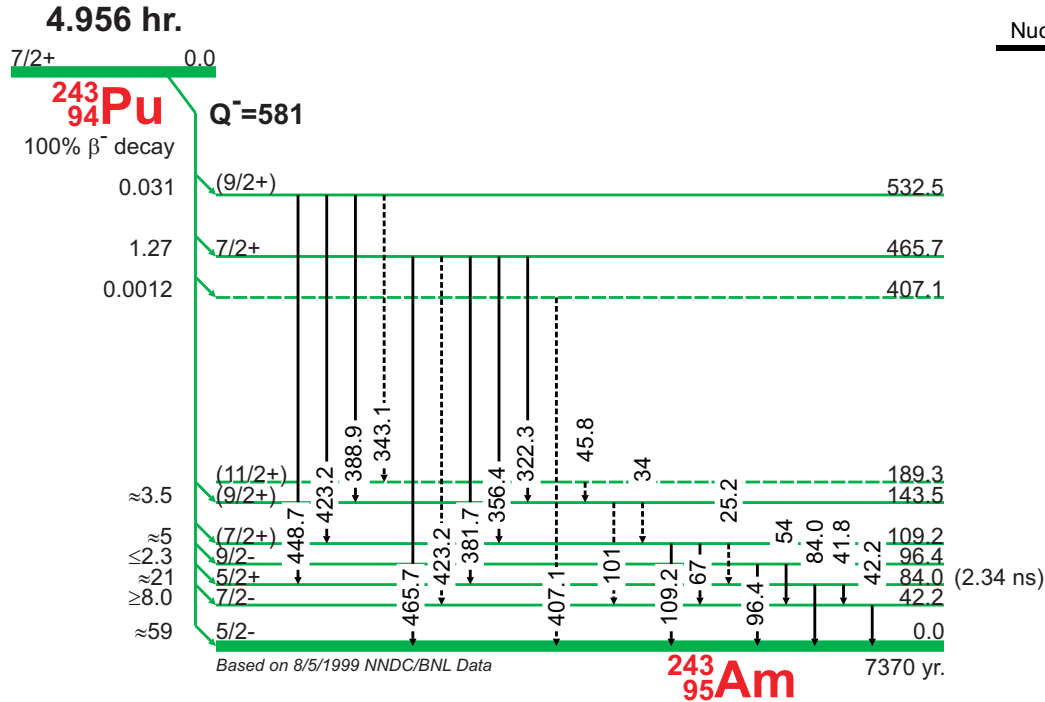
E _{γ} (keV)	σ E _{γ}	I_{γ}	σI_{γ}	Level	
43	6			330	α
51	7			454	α
56.4	1.0			56.4	α
68.0	1.2			124.4	α
124.4	1.0			124.4	α
231.1	1.3	0.036	0.010	287.5	α
274	6			330	α
278.0	0.8	3.4	0.7	402.4	α
287.5	0.7	2.0	0.3	287.5	α
330	6			330	α
330	7			454	α
346.0	0.8	1.3	\approx	402.4	α
398	7			454	α
402.4	0.5	72	6	402.4	α

E _{γ} , σ E _{γ} , I _{γ} , σI_{γ} , Levels from ENSDF Database as of March 20, 2001

① These I _{γ} are per 100 Decays of ²⁴⁷Cm.

② Normalization factor is 1.0, and its uncertainty is taken to be 0.0.

²⁴³Pu (4.956 hr.) Decay Scheme



GAMMA-RAY ENERGIES AND INTENSITIES

Nuclide: ²⁴³Pu

Half Life: 4.956(3) hr.

E_γ (keV)	σE_γ	I_γ	σI_γ	Level	
25.2	0.3			109.2	β^-
34	\approx			143.5	β^-
41.8	0.2	0.76	0.07	84.0	β^-
42.2	0.5	0.076	\approx	42.2	β^-
45.8				189.3?	β^-
54	1	0.02	\leq	96.4	β^-
67	1	0.23	0.12	109.2	β^-
84.0	0.2	23.0		84.0	β^-
96.4	0.4	0.014	0.002	96.4	β^-
101.3		0.025	0.021	143.5	β^-
109.2	0.2	0.161	0.016	109.2	β^-
322.3	0.3	0.028	0.002	465.7	β^-
343.1	0.5	0.001 50	\approx	532.5	β^-
356.4	0.3	0.133	0.012	465.7	β^-
381.7	0.3	0.564	0.046	465.7	β^-
388.9	0.3	0.004 8	0.000 7	532.5	β^-
407.1	0.5	0.001 2	0.000 5	407.1?	β^-
423.2	0.2			465.7	β^-
423.2	0.3	0.013 1	0.001 4	532.5	β^-
448.7	0.5	0.000 2	\approx	532.5	β^-
465.7	0.5	0.000 2	\leq	465.7	β^-

E_γ , σE_γ , I_γ , σI_γ , Levels from ENSDF Database as of March 20, 2001

① These I_γ are per 100 Decays of ²⁴³Pu.

② For total uncertainty add 8.7% systematic component in quadrature, based on the normalization factor 0.23(2)

