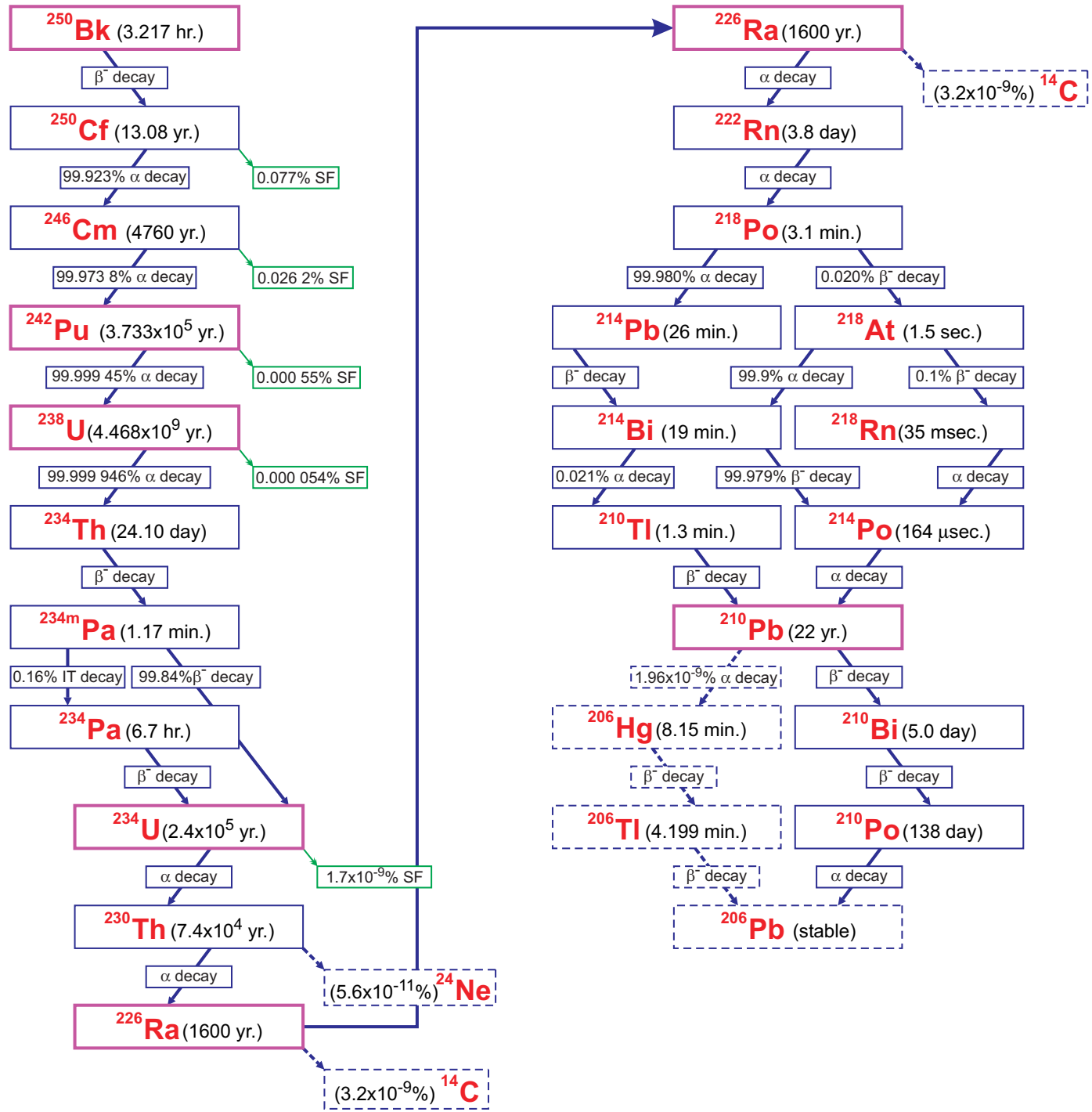
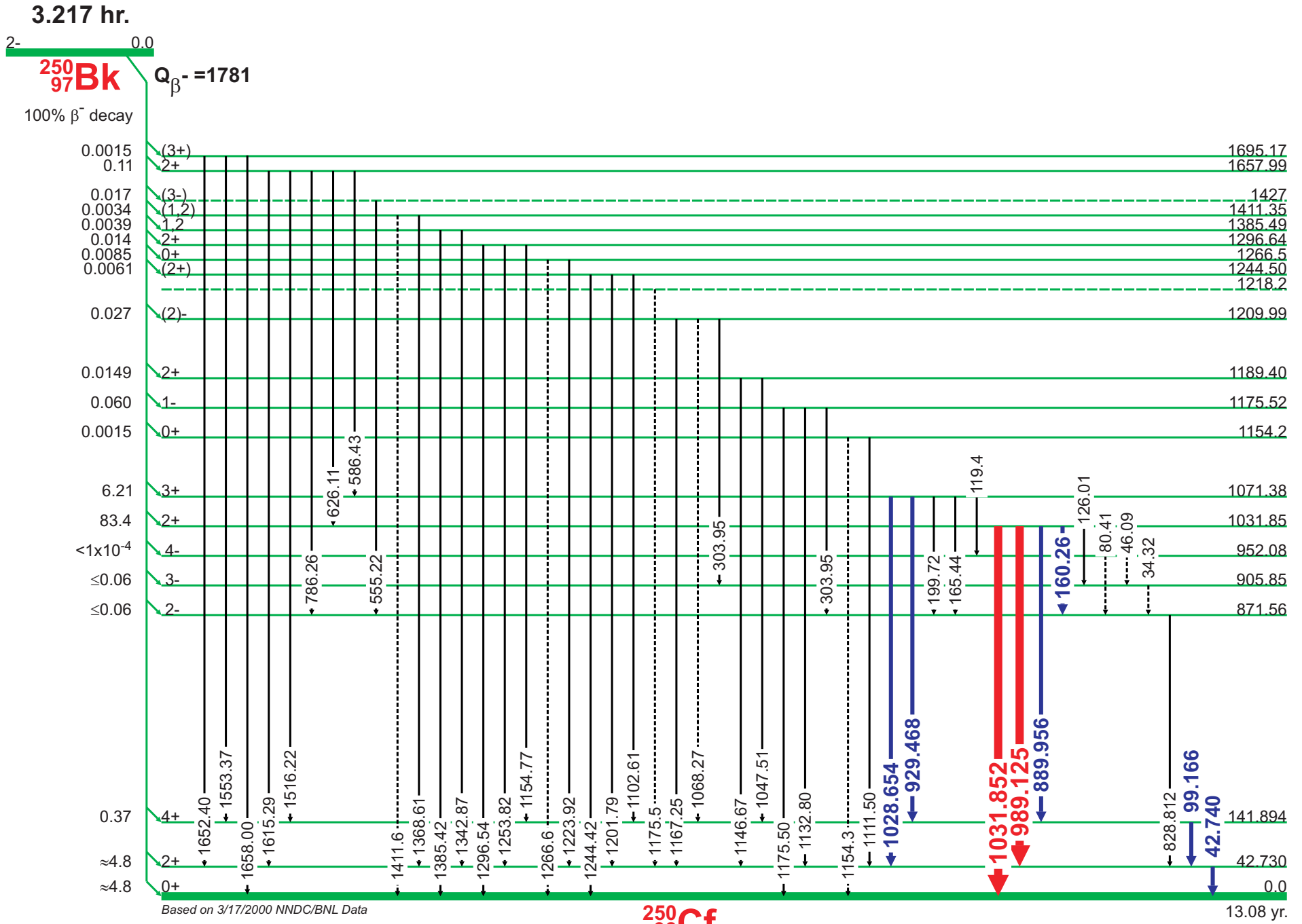


²⁵⁰Bk Decay Chain



²⁵⁰Bk (3.2 hr.) Decay Scheme



GAMMA-RAY ENERGIES AND INTENSITIES

Nuclide: **²⁵⁰Bk**E_γ σE_γ I_γ σI_γ Levels- from ENSDF Database as of March 17, 2000

Half Life: 3.217(5) hr.

E _γ (keV)	σ E _γ	① I _γ	② σ I _γ	Level	
34.32				905.85	β-
42.740	0.015	0.038	0.003	42.730	β-
46.09				952.08	β-
80.41				952.08	β-
99.166	0.009	0.128	0.007	141.894	β-
119.4	0.3	0.000 7	0.000 2	1,071.38	β-
126.01	0.03	0.006 3	0.000 5	1,031.85	β-
160.26	0.04	0.028	0.002	1,031.85	β-
165.44	0.15	0.001 4	0.000 2	1,071.38	β-
199.72	0.20	0.001 1	0.000 1	1,071.38	β-
303.95	0.20			1,209.99	β-
303.95	0.20	0.002 3	0.000 2	1,175.52	β-
555.22	0.10	0.006	0.000	1,427	β-
586.43	0.07	0.006	0.000	1,657.99	β-
626.11	0.04	0.023	0.001	1,657.99	β-
786.26	0.14	0.005	0.001	1,657.99	β-
828.812	0.025	0.117	0.006	871.56	β-
889.956	0.022	1.53	0.02	1,031.85	β-
929.468	0.022	1.23	0.02	1,071.38	β-
989.125	0.021	45		1,031.85	β-
1,028.654	0.025	4.9	0.1	1,071.38	β-
1,031.852	0.021	35.6	0.5	1,031.85	β-
1,047.51	0.05	0.002 3	0.000 2	1,189.40	β-
1,068.27	0.17	0.000 6	0.000 1	1,209.99	β-
1,098.36	0.16	0.000 5	0.000 1		β-
1,102.61	calculated	0.000 4	0.000 1	1,244.50	β-
1,103.5	≈	0.000 5	0.000 2		β-

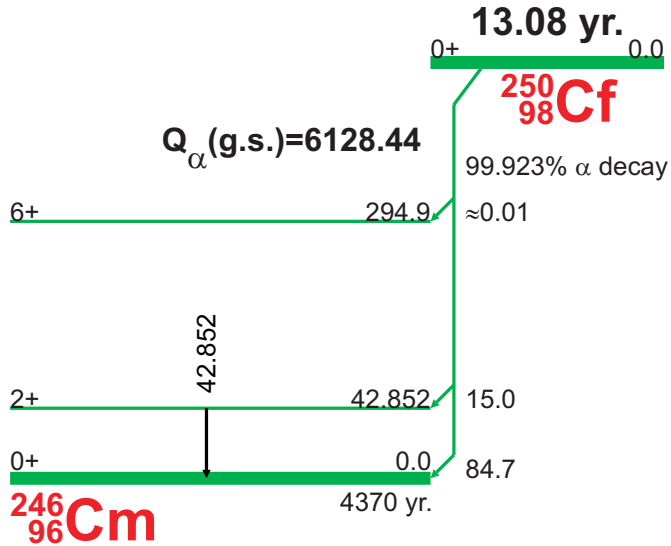
E _γ (keV)	σ E _γ	① I _γ	② σ I _γ	Level	
1,111.50	0.10	0.001 1	0.000 1	1,154.2	β-
1,132.80	0.03	0.019 4	0.001 0	1,175.52	β-
1,146.67	0.03	0.012 6	0.000 6	1,189.40	β-
1,154.3	0.2	E0		1,154.2	β-
1,154.77	0.03	0.007 2	0.000 4	1,296.64	β-
1,167.25	0.03	0.027	0.001	1,209.99	β-
1,175.5	≈	0.007	0.001	1,218.2	β-
1,175.50	0.03	0.035	0.002	1,175.52	β-
1,201.79	0.03	0.004 7	0.000 3	1,244.50	β-
1,223.92	0.04	0.002 8	0.000 2	1,266.5	β-
1,244.42	0.07	0.001 3	0.000 1	1,244.50	β-
1,253.82	0.07	0.001 7	0.000 1	1,296.64	β-
1,266.6	0.2	E0		1,266.5	β-
1,279.21	0.23	0.000 8	0.000 1		β-
1,296.54	0.13	0.000 7	0.000 1	1,296.64	β-
1,302.90	0.22	0.000 5	0.000 1		β-
1,312.95	0.06	0.001 5	0.000 1		β-
1,342.87	0.08	0.001 9	0.000 1	1,385.49	β-
1,368.61	0.05	0.003 2	0.000 2	1,411.35	β-
1,385.42	0.06	0.002 0	0.000 1	1,385.49	β-
1,411.6	0.4	0.000 6	0.000 1	1,411.35	β-
1,516.22	0.07	0.001 2	0.000 1	1,657.99	β-
1,553.37	0.18	0.000 5	0.000 1	1,695.17	β-
1,615.29	0.04	0.046	0.002	1,657.99	β-
1,633.18	0.24	0.000 5	0.000 1		β-
1,652.40	0.10	0.001 0	0.000 1	1,695.17	β-
1,658.00	0.04	0.027	0.001	1,657.99	β-

① These I_γ are per 100 Decays of ²⁵⁰Bk.

② For total uncertainty add systematic component of 1.78% in quadrature, based on the normalization factor 0.450(8)

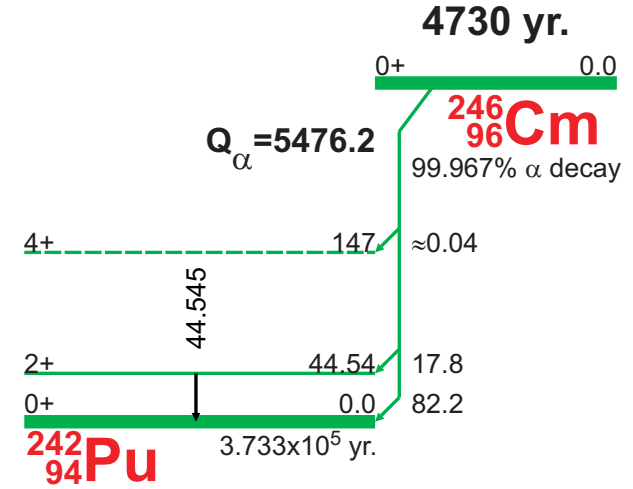


²⁵⁰Cf (13 yr.) Decay Scheme



Based on 3/17/2000 NNDC/BNL Data

²⁴⁶Cm (4730 yr.) Decay Scheme



Based on 3/17/2000 NNDC/BNL Data

GAMMA-RAY ENERGIES AND INTENSITIES

Nuclide: ²⁵⁰Cf Half Life: 13.08(9) yr.

E_γ (keV)	σE_γ	I_γ	σI_γ	Level	
42.852	0.005	0.014		42.852	α

E_γ , σE_γ , I_γ , σI_γ Levels from ENSDF Database as of March 17, 2000

① These I_γ are per 100 Decays of ²⁵⁰Cf.

② For total uncertainty add 0.003% systematic component in quadrature, based on the normalization factor 0.99923(3)

GAMMA-RAY ENERGIES AND INTENSITIES

Nuclide: ²⁴⁶Cm Half Life: 4760(40) yr.

E_γ (keV)	σE_γ	I_γ	σI_γ	Level	
44.545	0.009			44.54	α

E_γ , σE_γ , I_γ , σI_γ Levels from ENSDF Database as of March 17, 2000

① These I_γ are per 100 Decays of ²⁴⁶Cm.

② Normalization factor was not given, so it is taken to be 1.0(0).

