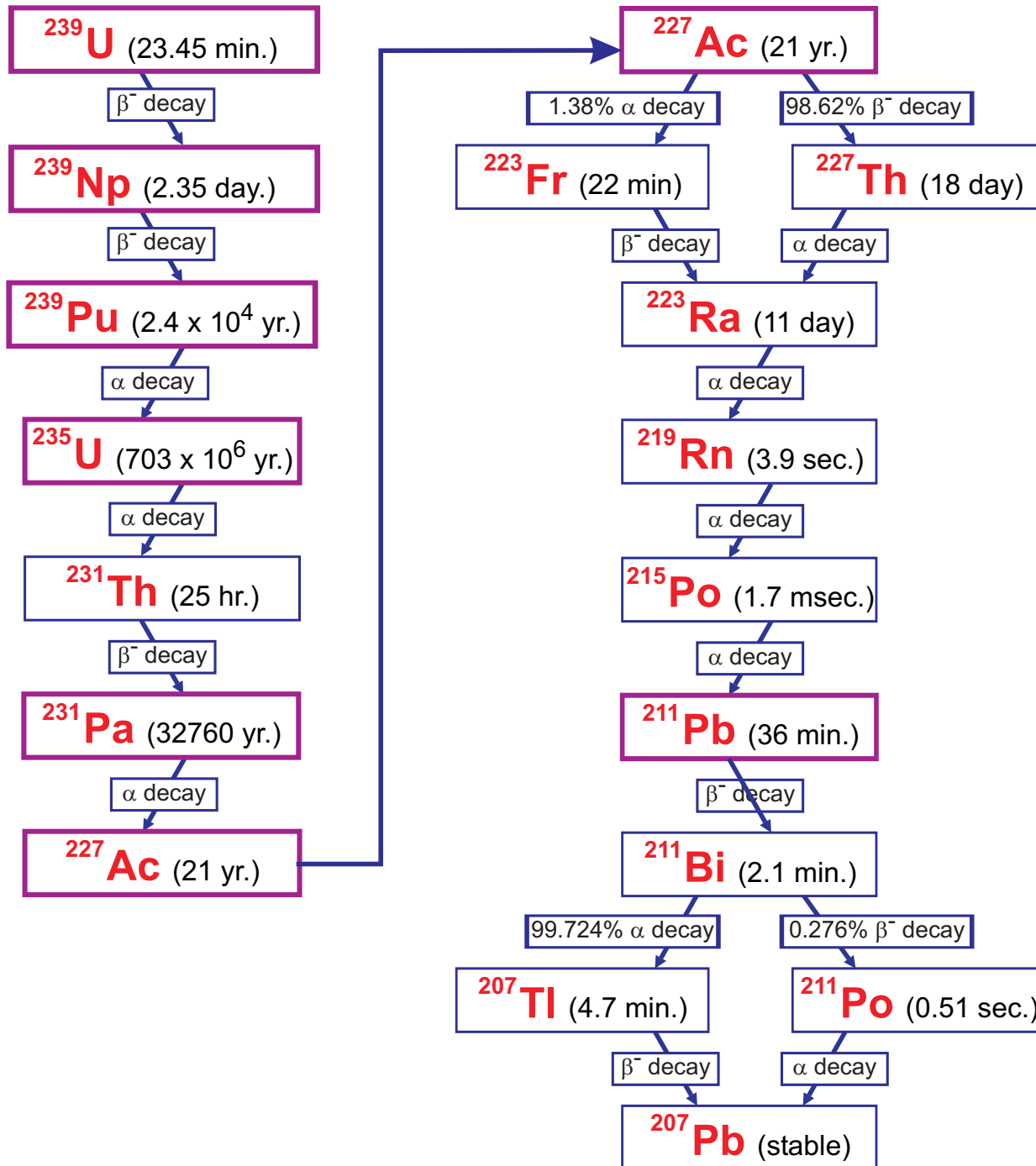
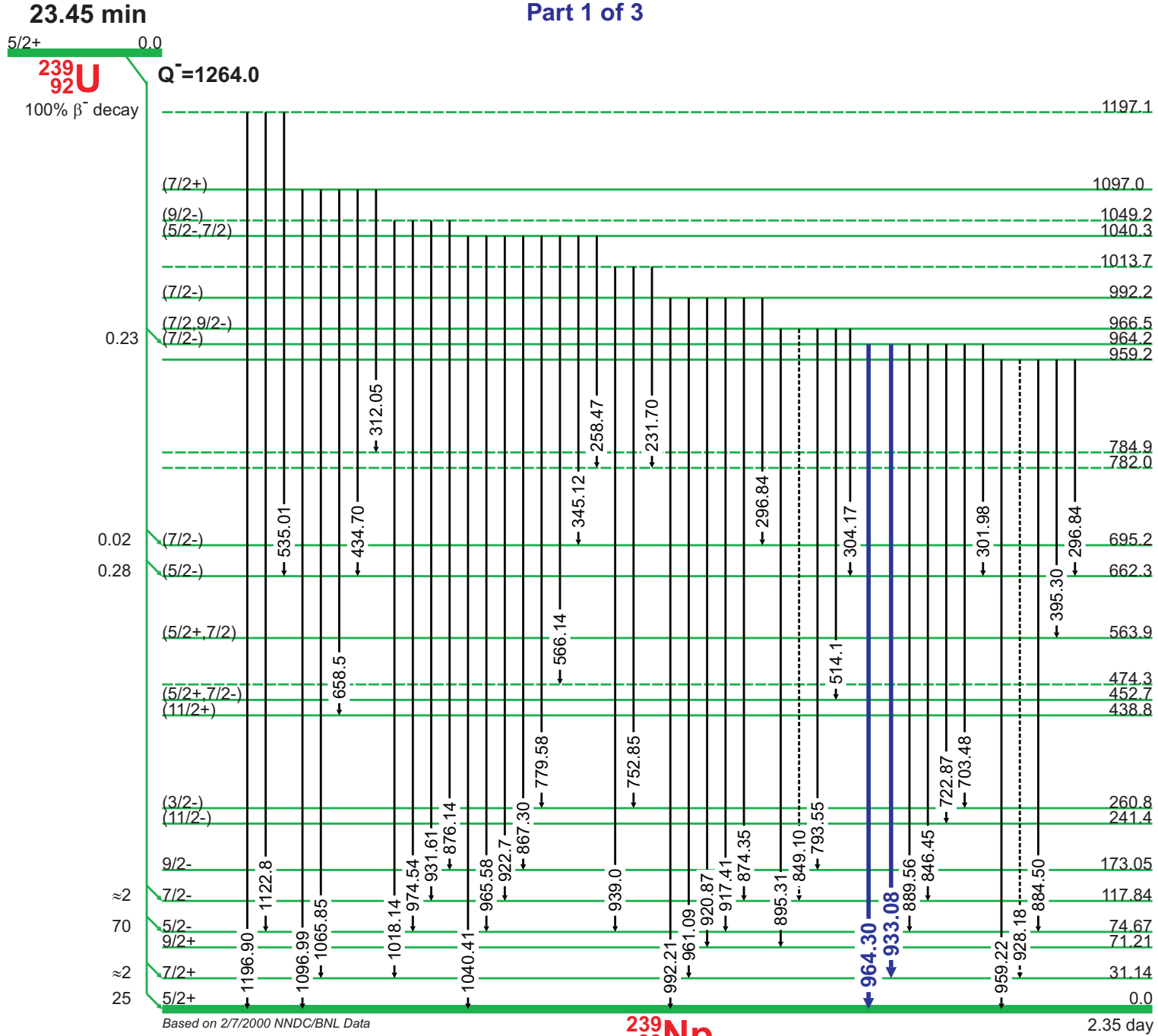


^{239}U Decay Chain

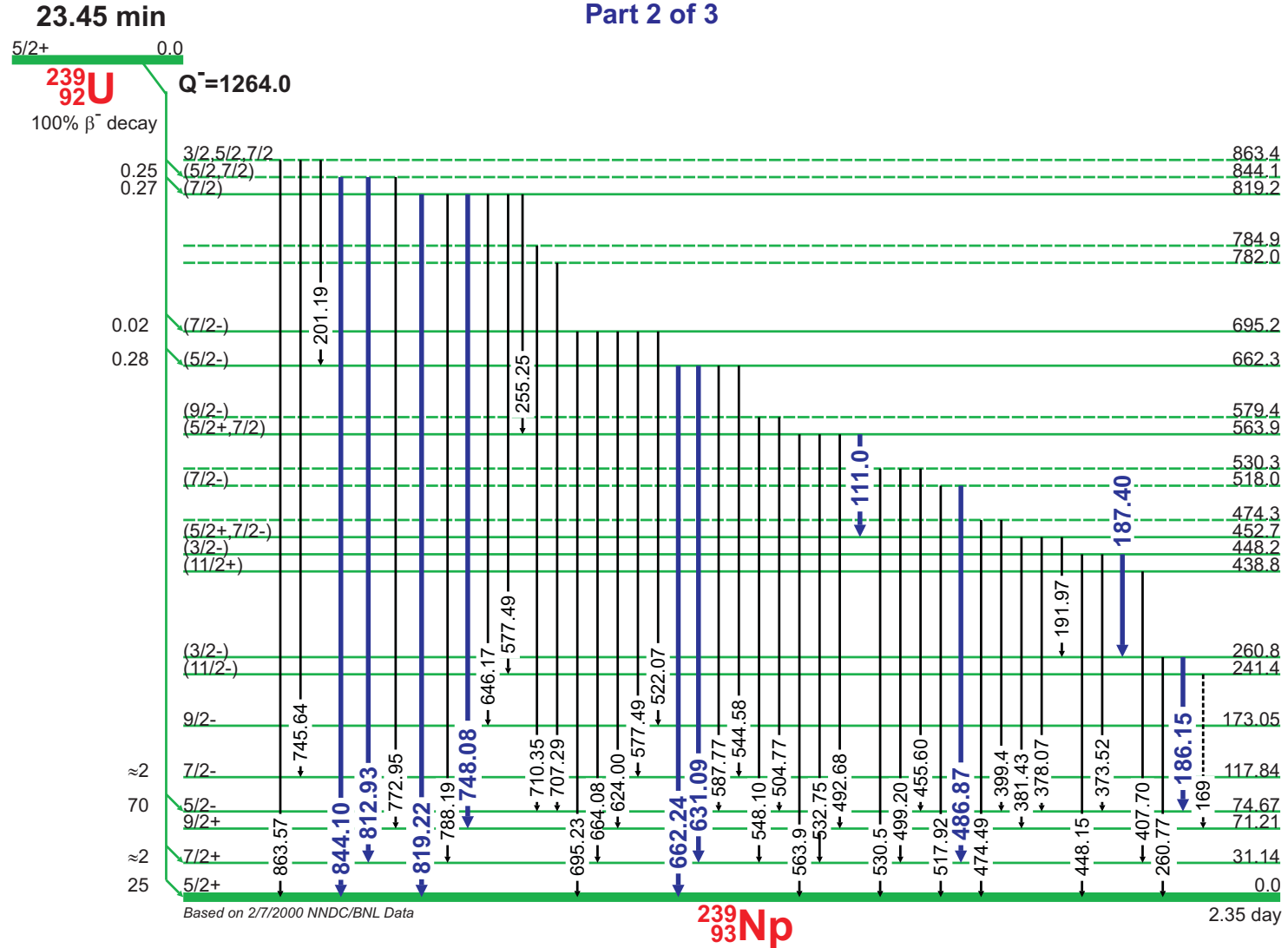
²³⁹U (23 min.) Decay Scheme

Part 1 of 3

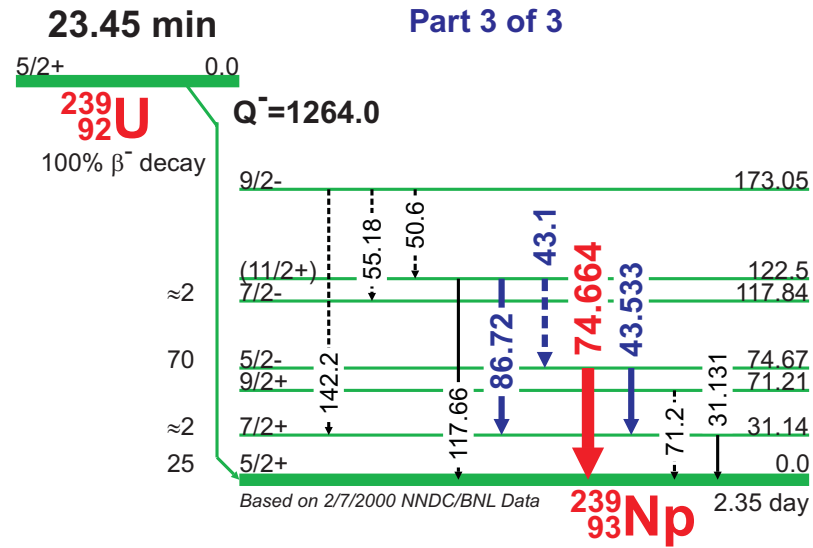


²³⁹U (23 min.) Decay Scheme

Part 2 of 3



²³⁹U (23 min.) Decay Scheme



GAMMA-RAY ENERGIES AND INTENSITIES (page 1 of 2)

Nuclide: **²³⁹U**E_γ σE_γ I_γ σI_γ Levels- from ENSDF Database as of February 7, 2000

Half Life: 23.45(2) min.

E _γ (keV)	σ E _γ	^① I _γ	^② σ I _γ	Level	
31.131	0.002	0.065	0.007	31.14	β-
43.1				117.84	β-
43.533	0.001	4.14	0.10	74.67	β-
50.6				173.05	β-
55.18		0.000 082	calculated	173.05	β-
71.2				71.21	β-
74.664	0.001	48.1		74.67	β-
86.72	0.07	0.052	0.006	117.84	β-
111.0	0.2	0.020		563.9	β-
117.66	0.03	0.13	0.04	117.84	β-
142.2	0.2			173.05	β-
169				241.4	β-
186.15	0.02	0.031 7		260.8	β-
187.40	0.04	0.006 49		448.2	β-
191.97	0.06	0.002 69		452.7	β-
196.85	0.10	0.002 12			β-
201.19	0.07	0.001 97		863.4	β-
231.70	0.10	0.002 98		1,013.7	β-
255.25	0.10	0.002 69		819.2	β-
258.47	0.05	0.002 50		1,040.3	β-
260.77	0.06	0.002 21		260.8	β-
296.84	0.08	0.001 54	≤	992.2	β-
296.84	0.08	0.001 54	≤	959.2	β-
301.98	0.07	0.001 44		964.2	β-
304.17	0.10	0.001 68		966.5	β-
312.05	0.03	0.005 29		1,097	β-
321.71	0.15	0.001 15			β-
343.74	0.10	0.001 88			β-
345.12	0.04	0.002 98		1,040.3	β-
363.1	0.2	0.000 82			β-
373.52	0.02	0.020 2		448.2	β-
378.07	0.02	0.010 6		452.7	β-
381.43	0.12	0.001 44		452.7	β-
395.30	0.07	0.001 44		959.2	β-
399.4	0.2	0.000 48		474.3	β-

E _γ (keV)	σ E _γ	^① I _γ	^② σ I _γ	Level	
407.70	0.05	0.003 42		438.8	β-
434.70	0.03	0.004 28		1,097	β-
448.15	0.03	0.008 2		448.2	β-
455.60	0.06	0.003 08		530.3	β-
474.49	0.08	0.003 42		474.3	β-
486.87	0.02	0.058		518	β-
492.68	0.04	0.004 47		563.9	β-
499.20	0.12	0.001 44		530.3	β-
504.77	0.04	0.004 23		579.4	β-
514.1	0.3	0.000 67		966.5	β-
517.92	0.09	0.002 93		518	β-
522.07	0.07	0.002 26		695.2	β-
530.5	0.2	0.001 15		530.3	β-
532.75	0.07	0.002 02		563.9	β-
535.01	0.14	0.001 30		1,197.1	β-
544.58	0.06	0.003 42		662.3	β-
548.10	0.09	0.001 97		579.4	β-
563.9	0.2	0.001 20		563.9	β-
566.14	0.10	0.001 97		1,040.3	β-
577.49	0.09	0.001 68	≤	695.2	β-
577.49		0.001 68	≤	819.2	β-
587.77	0.04	0.022 6		662.3	β-
602.68	0.04	0.004 71			β-
624.00	0.04	0.006 7		695.2	β-
631.09	0.03	0.072		662.3	β-
646.17	0.08	0.002 26		819.2	β-
658.5	0.4	0.000 58		1,097	β-
662.24	0.03	0.178		662.3	β-
664.08	0.06	0.009 1		695.2	β-
695.23	0.04	0.004 23		695.2	β-
700.93	0.08	0.002 02			β-
703.48	0.10	0.002 69		964.2	β-
707.29	0.06	0.002 84		782	β-
710.35	0.15	0.001 20		784.9	β-
714.09	0.07	0.003 90			β-

① These I_γ are per 100 Decays of ²³⁹U.

② For total uncertainty add systematic component of 2% in quadrature, based on the normalization factor 0.481(10)

GAMMA-RAY ENERGIES AND INTENSITIES (page 2 of 2)

Nuclide: **²³⁹U**E_γ, σE_γ, I_γ, σI_γ, Levels- from ENSDF Database as of February 7, 2000

Half Life: 23.45(2) min.

E _γ (keV)	σ E _γ	I _γ	σ I _γ	Level	
722.87	0.04	0.026 9		964.2	β-
730.92	0.04	0.012 0			β-
745.64	0.10	0.003 80		863.4	β-
748.08	0.04	0.101		819.2	β-
752.85	0.10	0.001 44		1,013.7	β-
772.95	0.05	0.003 42		844.1	β-
774.73	0.04	0.016 4			β-
779.58	0.10	0.001 15		1,040.3	β-
788.19	0.06	0.005 34		819.2	β-
791.3		0.008 7			β-
793.55	0.08	0.002 93		966.5	β-
812.93	0.04	0.077		844.1	β-
819.22	0.04	0.144		819.2	β-
831.86	0.04	0.003 42			β-
840.3	0.3	0.004 47			β-
844.10	0.04	0.159		844.1	β-
846.45	0.04	0.037 5		964.2	β-
849.10	0.08	0.001 64		966.5	β-
863.57	0.12	0.000 72		863.4	β-
867.30	0.10	0.001 54		1,040.3	β-
874.35	0.05	0.003 80		992.2	β-
876.14	0.07	0.001 97		1,049.2	β-
884.50	0.04	0.012 0		959.2	β-
889.56	0.04	0.022 6		964.2	β-

E _γ (keV)	σ E _γ	I _γ	σ I _γ	Level	
895.31	0.05	0.001 78		966.5	β-
917.41	0.07	0.003 08		992.2	β-
920.87	0.08	0.002 84		992.2	β-
922.7	0.2	0.001 15		1,040.3	β-
928.18	0.04	0.005 8		959.2	β-
931.61	0.07	0.004 71		1,049.2	β-
933.08	0.04	0.035 6		964.2	β-
939.0	0.3	0.000 38		1,013.7	β-
959.22	0.05	0.006 7		959.2	β-
961.09	0.04	0.017 3		992.2	β-
964.30	0.04	0.087		964.2	β-
965.58	0.10	0.002 12		1,040.3	β-
974.54	0.04	0.003 90		1,049.2	β-
992.21	0.04	0.003 08		992.2	β-
1,018.14	0.13	0.001 06	≤	1,049.2	β-
1,040.41	0.15	0.001 06		1,040.3	β-
1,065.85	0.15	0.000 67		1,097	β-
1,078.88	0.15	0.001 54			β-
1,096.99	0.08	0.002 60		1,097	β-
1,122.8	0.3	0.000 67		1,197.1	β-
1,161.4	0.2	0.000 96			β-
1,196.90	0.15	0.000 91		1,197.1	β-
1,204.9	0.2	0.001 54			β-

① These I_γ are per 100 Decays of ²³⁹U.

② For total uncertainty add systematic component of 2% in quadrature, based on the normalization factor 0.481(10)

