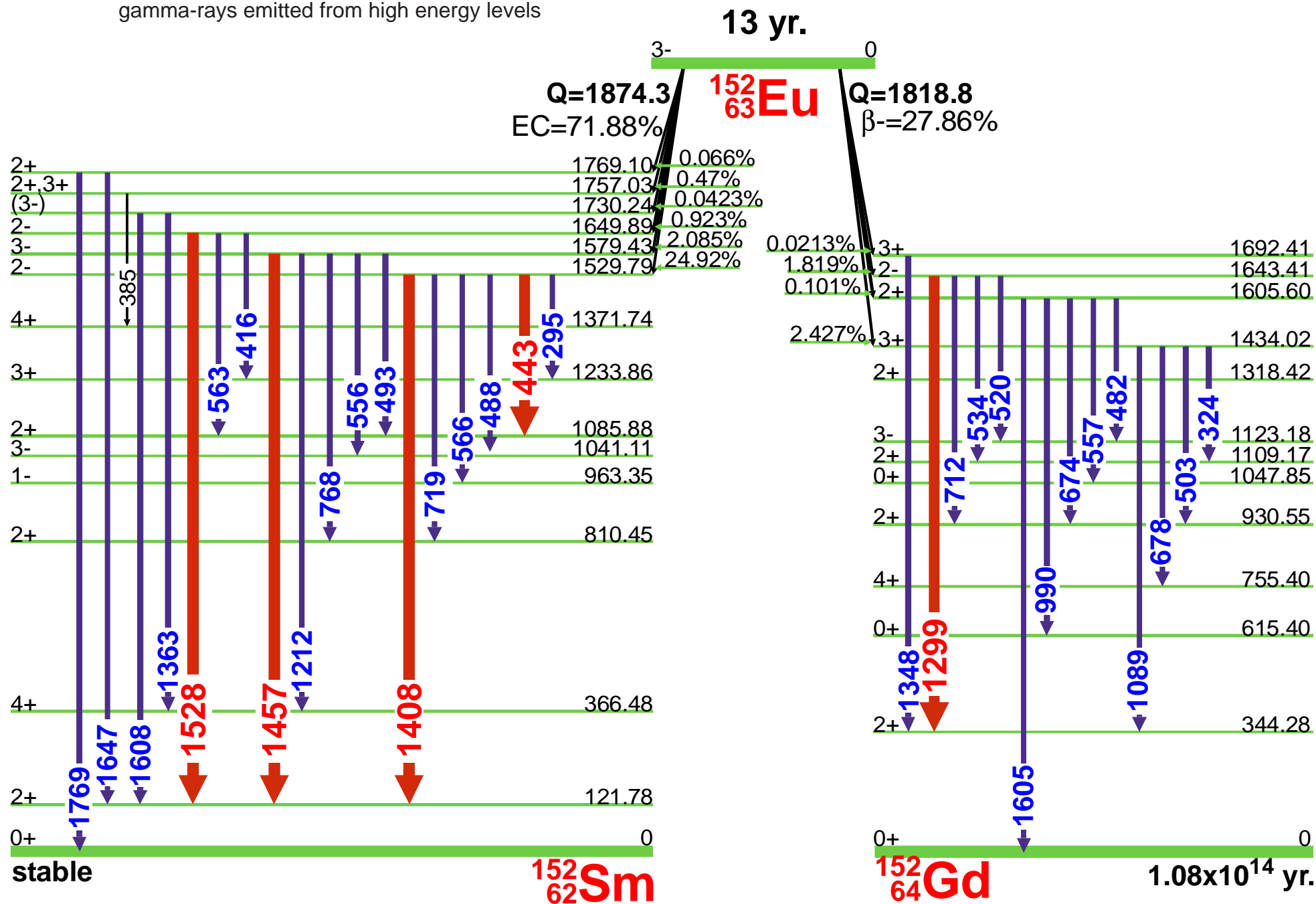




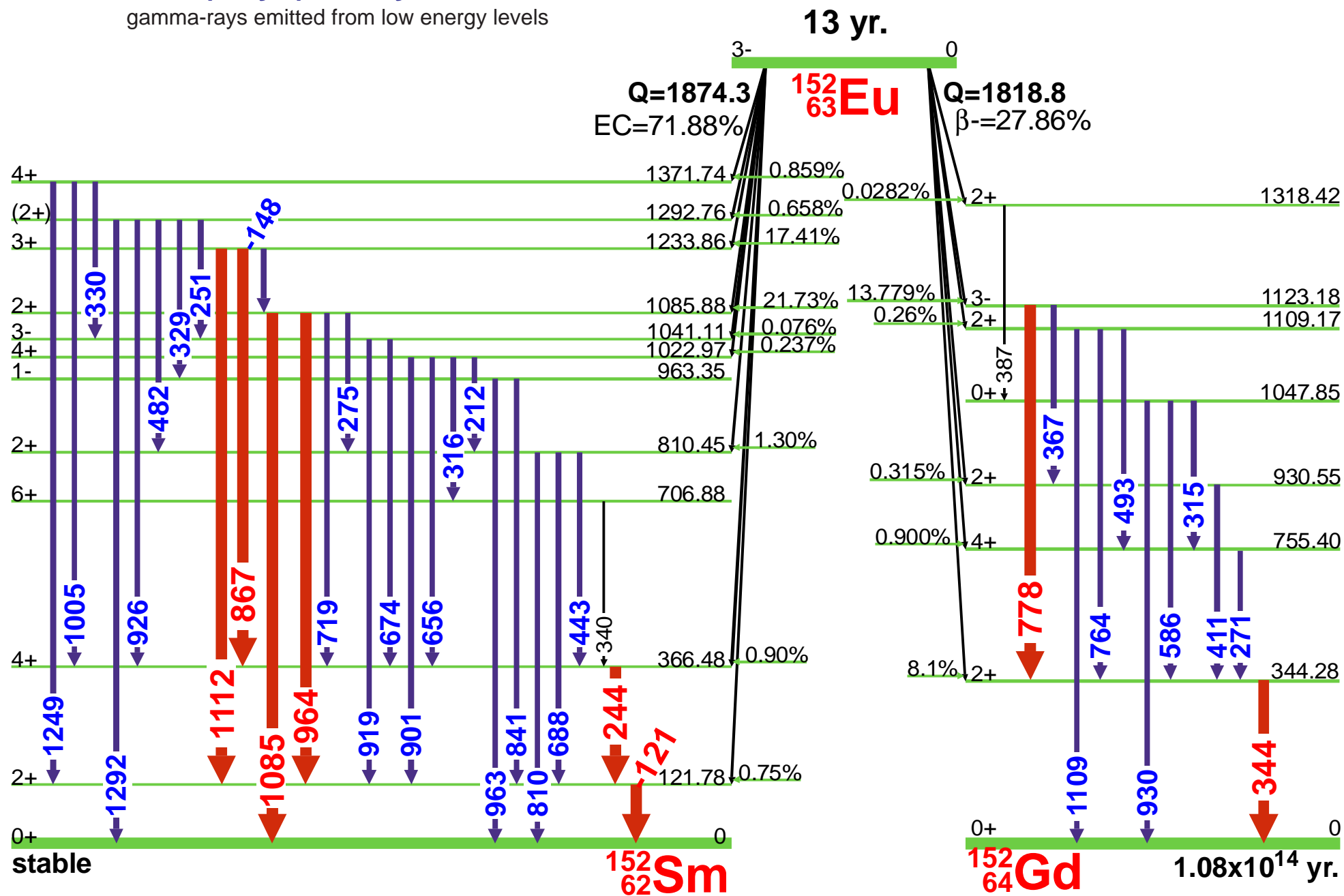
^{152}Eu (13 yr.) Decay Scheme

gamma-rays emitted from high energy levels



^{152}Eu (13 yr.) Decay Scheme

gamma-rays emitted from low energy levels



GAMMA-RAY ENERGIES AND INTENSITIES (page 1 of 3)

Nuclide: ^{152}Eu E_γ , σE_γ , I_γ , σI_γ - 1998 ENSDF Data

Half Life: 13.537(6) yr.

Detector: 65 cm³ coaxial Ge (Li)Method of Production: $^{151}\text{Eu}(n,\gamma)$

E_γ (keV)	σE_γ	I_γ (rel)	I_γ (%)	σI_γ	S
121.782		100.	39.76	0.12	1
125.69	0.13		0.022	0.007	4
148.010	0.017	0.06	0.052	0.006	4
173.17	0.15		0.029	0.010	4
175.18			0.0056	0.0015	4
192.60	0.04		0.0244	0.0008	4
195.05	0.24		0.022	0.005	4
202.74	0.13		0.0071	0.0015	4
207.6	0.3		0.0082	0.0009	4
209.1					4
209.41	0.13		0.0196	0.0017	4
212.568	0.015	0.25	0.0276	0.0007	4
237.31	0.05		0.0130	0.0019	4
239.42	0.17		0.0063	0.0026	4
244.697	0.001	27.9	10.55	0.03	1
251.630	0.007	0.29	0.100	0.004	4
269.86	0.06		0.0115	0.0011	4
271.131	0.008	0.31	0.262	0.008	4
275.449	0.015	0.12	0.046	0.003	4
285.98	0.03		0.0138	0.0011	4
295.939	0.002	1.67	0.622	0.007	3
315.174	0.017	0.19	0.182	0.005	4
316.20	0.20		0.0030	0.0019	
320.03	0.15		0.0022	0.0007	4
324.83	0.03	0.33	0.259	0.012	4
329.425	0.021	0.40	0.179	0.011	4
330.540	0.100		0.0082	0.0022	
340.40	0.14		0.051	0.004	4
344.279	0.001	97.9	95.2	1.5	1
351.66	0.04		0.033	0.005	4
357.26	0.05		0.0056	0.0011	4
358.13					4
367.789	0.002	3.30	3.089	0.018	3

E_γ (keV)	σE_γ	I_γ (rel)	I_γ (%)	σI_γ	S
379.37	0.06		0.0012	0.0003	4
385.69	0.20		0.0071	0.0011	4
387.90	0.08		0.0041	0.0003	4
387.90	0.08		0.0105	0.0008	
389.07	0.11		0.0048	0.0019	4
391.32	0.14		0.0018	0.0003	4
395.75	0.19		0.011	0.004	4
406.74	0.15		0.0012	0.0003	4
411.116	0.001	8.42	8.019	0.018	2
416.048	0.008	0.44	0.1531	0.0026	4
423.45	0.04		0.0045	0.0009	4
440.86	0.10		0.0186	0.0022	4
440.86	0.10		0.048	0.006	4
441.0					4
443.965	0.003	11.40	0.454	0.026	1
443.965	0.003		3.925	0.027	
482.31	0.03	0.11	0.0050	0.0022	4
482.31	0.03		0.041	0.003	
482.43					
488.679	0.002	1.54	0.5828	0.0046	3
493.508	0.020	0.25	0.035	0.004	4
493.508	0.020		0.041	0.003	
496.39	0.03		0.0071	0.0011	4
496.39	0.03		0.0152	0.0015	4
503.474	0.005	0.59	0.533	0.029	4
511.006			0.028		4
520.227	0.005	0.22	0.187	0.014	4
523.13	0.05		0.0209	0.0022	4
526.881	0.020		0.0471	0.0023	4
534.245	0.007	0.25	0.153	0.004	4
536.23					4
538.29	0.06		0.0054	0.0008	4

GAMMA-RAY ENERGIES AND INTENSITIES (page 2 of 3)

Nuclide: ^{152}Eu E_γ , σE_γ , I_γ , σI_γ - 1998 ENSDF Data

Half Life: 13.537(6) yr.

Detector: 65 cm³ coaxial Ge (Li)Method of Production: $^{151}\text{Eu}(n,\gamma)$

	E_γ (keV)	σE_γ	I_γ (rel)	I_γ (%)	σI_γ	S
D	556.56	0.03	0.08	0.0257	0.0019	4
	557.91	0.17		0.016	0.007	
	561.2	0.5		0.0015	0.0003	4
	562.930	0.020		0.0037	0.0019	4
	563.990	0.007	1.91	0.681	0.009	3
	566.439	0.005	0.55	0.1795	0.0026	4
	571.83	0.08		0.0067	0.0011	4
	586.265	0.002	1.99	1.649	0.019	3
	595.61	0.12		0.045	0.015	4
	615.40	0.10				4
	616.05	0.03		0.0127	0.0011	4
	644.37	0.05		0.0086	0.0011	4
	656.487	0.005	0.76	0.2015	0.0026	4
	664.78	0.05		0.023	0.003	4
	671.155	0.017		0.0272	0.0022	4
D	674.675	0.003	0.61	0.0609	0.006	4
	674.675	0.003		0.240	0.006	
	678.623	0.005	1.94	1.692	0.015	3
	683.32	0.11		0.0045	0.0011	4
	686.61	0.05		0.0268	0.0022	4
	688.670	0.005	3.24	1.192	0.012	3
	696.87	0.19		0.022	0.011	4
	702.96					4
	703.25	0.06		0.0057	0.0019	4
	703.25	0.06		0.0124	0.0029	
	712.843	0.006	0.43	0.333	0.029	4
D	719.349	0.004	1.35	0.082	0.011	4
	719.349	0.004		0.387	0.011	
	727.99	0.14		0.0156	0.0011	4
	735.40	0.10		0.0082	0.0015	4
	756.12	0.09				4
	764.900	0.009	0.98	0.77	0.09	4
	768.944	0.009	0.45	0.130	0.006	4

	E_γ (keV)	σE_γ	I_γ (rel)	I_γ (%)	σI_γ	S
	778.904	0.002	48.0	46.45	0.09	1
	794.81	0.03	0.18	0.094	0.008	4
	805.70	0.07		0.0171	0.0015	4
	810.451	0.005	1.08	0.445	0.004	3
	839.36	0.04		0.0223	0.0015	4
	841.570	0.005	0.80	0.231	0.003	4
	867.373	0.003	15.5	5.906	0.029	1
	896.58	0.09		0.093	0.003	4
	901.181	0.011	0.43	0.120	0.006	4
	906.01	0.06		0.0227	0.0022	4
	919.330	0.003	1.85	0.594	0.008	3
	926.317	0.015	1.44	0.386	0.007	3
	930.580	0.015	0.49	0.262	0.007	4
	937.05	0.15		0.012	0.005	4
	958.63	0.05		0.030	0.003	4
D	963.390	0.012	53.5	0.188	0.004	1
	964.079	0.018		20.32	0.05	
	968.0			0.005	0.003	4
	974.09	0.04		0.0505	0.0029	4
	990.19	0.03	(0.30)	0.112	0.005	4
	1001.1	0.3		0.0063	0.0011	4
	1005.272	0.017	3.10	0.898	0.007	3
D	1084.0	1.0	38.85	0.343	0.011	1
	1085.869	0.024		14.20	0.04	
	1089.737	0.005	6.82	6.200	0.024	2
	1109.174	0.012		0.666	0.029	4
	1112.069	0.003	49.75	18.98	0.05	1
	1139.0	1.0		0.0018	0.0001	4
	1170.93	0.11		0.051	0.004	4
	1206.11	0.15		0.050	0.004	4
	1212.948	0.011	5.75	1.978	0.010	2
	1249.938	0.013	1.05	0.262	0.005	3
	1261.343	0.023		0.120	0.005	4

GAMMA-RAY ENERGIES AND INTENSITIES (page 3 of 3)

Nuclide: ^{152}Eu E_γ , σE_γ , I_γ , σI_γ - 1998 ENSDF Data

Half Life: 13.537(6) yr.

Detector: 65 cm³ coaxial Ge (Li)Method of Production: $^{151}\text{Eu}(n,\gamma)$

E_γ (keV)	σE_γ	I_γ (rel)	I_γ (%)	σI_γ	S
1292.778	0.019	0.48	0.146	0.008	3
1299.140	0.009	6.15	5.826	0.029	1
1314.70	0.20		0.018	0.004	4
1315.31	0.23		0.0101	0.0022	4
1348.10	0.07	0.10	0.064	0.004	4
1363.77	0.05	0.10	0.0358	0.0015	4
1390.36	0.16		0.0067	0.0011	4
1408.006	0.003	78.10	29.22	0.07	1
1457.643	0.011	1.78	0.698	0.006	1

E_γ (keV)	σE_γ	I_γ (rel)	I_γ (%)	σI_γ	S
1485.9	0.3		0.008	0.003	4
1528.103	0.018	1.00	0.391	0.006	1
1605.61	0.07	0.03	0.0293	0.0017	4
1608.36	0.08	0.02	0.0074	0.0005	4
1635.2	0.5		0.0002	0.0001	4
1647.41	0.14	0.03	0.0088	0.0008	4
1674.30	0.06		0.0086	0.0011	4
1698.1	0.4		0.0082	0.0026	4
1769.09	0.05	0.04	0.0133	0.0005	4

