Pure Appl. Chem., Vol. 73, No. 7, pp. 1225–1227, 2001.

Errata:

Spontaneous fission half-lives for ground-state nuclides. IUPAC Technical Report (N. E. Holden and D. C. Hoffman). *Pure Appl. Chem.* **72**, 1525–1562 (2000).

As originally published, the following tables contained errors:

Table LX Spontaneous fission half-life of ^{258}Fm.

Reference Author (Year)	As Reported $t_{1/2}$ / μs	Comments
Hulet[142] (1971)	380. ± 60.	Fission tracks in mica; 3 standard deviation
Hulet[143] (1986)	360. ± 20.	Time correlation meas.; 1 standard deviation
Recommended value	$t_{1/2}$ = 0.37 ± 0.02 ms	Weighted average

Table XCIV Spontaneous fission half-life of ^{253}Rf.

Reference Author (Year)	As Reported $t_{1/2}$ / μs	Comments
Flerov[175] (1976)	$\approx 3.6 \times 10^6$	$\lambda_f / \lambda_{tot} \approx 0.50$
Hessberger[176] (1997)	48. (+ 17. / – 10.)	$\lambda_f / \lambda_{tot} \approx 1.0$
Recommended value	$t_{1/2} \approx$ 48. μs	Selected value

Table XCV Spontaneous fission half-life of ^{254}Rf.

Reference Author (Year)	As Reported $t_{1/2}$ / μs	Comments
Oganessian[177] (1975)	< 3000.	Production not detected
Ter-Akopyan[127] (1975)	500. ± 200.	$\lambda_f / \lambda_\alpha > 8.$
Hessberger[176] (1997)	23. ± 3.	$\lambda_f / \lambda_{tot} > 0.985$
Recommended value	$t_{1/2}$ = 23. ± 3. μs	Selected value

Table CXXVI Recommended spontaneous fission and total half-lives and uncertainties.

Nuclide	SF $t_{1/2}$(a)	Tot $t_{1/2}$(a)	Nuclide	SF $t_{1/2}$(a)	Tot $t_{1/2}$(a)	Nuclide	SF $t_{1/2}$(a)	Tot $t_{1/2}$(a)
^{208}Pb	$\geq 2 \times 10^{19}$		^{230}Th	$> 2. \times 10^{18}$	$7.54(10)^{4}$	^{232}Th	$(1.2 \pm 0.4) \times 10^{21}$	$1.4(10)^{10}$
^{231}Pa	$> 2. \times 10^{17}$	$3.25(10)^{4}$	^{230}U	$> 4. \times 10^{10}$	20.8 d	^{232}U	$> 6.8 \times 10^{15}$	68.9
^{233}U	$> 2.7 \times 10^{17}$	$1.59(10)^{5}$	^{234}U	$(1.5 \pm 0.2) \times 10^{16}$	$2.45(10)^{5}$	^{235}U	$(1.0 \pm 0.3) \times 10^{19}$	$7.04(10)^{8}$
^{236}U	$(2.5 \pm 0.1) \times 10^{16}$	$2.34(10)^{7}$	^{238}U	$(8.2 \pm 0.1) \times 10^{15}$	$4.46(10)^{9}$	^{237}Np	$> 1. \times 10^{18}$	$2.14(10)^{6}$
^{236}Pu	$(1.5 \pm 0.3) \times 10^{9}$	2.87	^{238}Pu	$(4.75 \pm 0.09) \times 10^{10}$	87.74	^{239}Pu	$(8. \pm 2.) \times 10^{15}$	$2.411(10)^{4}$
^{240}Pu	$(1.14 \pm 0.01) \times 10^{11}$	6537.	^{241}Pu	$< 6. \times 10^{16}$	14.4	^{242}Pu	$(6.77 \pm 0.07) \times 10^{10}$	$3.75(10)^{5}$
^{244}Pu	$(6.6 \pm 0.2) \times 10^{10}$	$8.00(10)^{7}$	^{241}Am	$(1.2 \pm 0.3) \times 10^{14}$	432.7	^{242m}Am	$> 3. \times 10^{12}$	141.
^{243}Am	$(2.0 \pm 0.5) \times 10^{14}$	$7.37(10)^{3}$	^{240}Cm	$(1.9 \pm 0.4) \times 10^{6}$	27. d	^{242}Cm	$(7.0 \pm 0.2) \times 10^{6}$	162.8 d
^{243}Cm	$(5.5 \pm 0.9) \times 10^{11}$	29.1	^{244}Cm	$(1.32 \pm 0.02) \times 10^{7}$	18.1	^{245}Cm	$(1.4 \pm 0.2) \times 10^{12}$	$8.48(10)^{3}$
^{246}Cm	$(1.81 \pm 0.02) \times 10^{7}$	$4.76(10)^{3}$	^{248}Cm	$(4.15 \pm 0.03) \times 10^{6}$	$3.48(10)^{3}$	^{250}Cm	$(1.13 \pm 0.05) \times 10^{4}$	$\approx 9.7(10)^{3}$
^{249}Bk	$(1.8 \pm 0.1) \times 10^{9}$	320 d	^{237}Cf	≈ 21 s	2.1 s	^{238}Cf	21 ± 2 ms	21 ms
^{240}Cf	≈ 53 min	1.1 min	^{242}Cf	≥ 17. d	3.5 min	^{246}Cf	$(1.8 \pm 0.6) \times 10^{3}$	1.49 d
^{248}Cf	$(3.2 \pm 0.3) \times 10^{4}$	334 d	^{249}Cf	$(8. \pm 1.) \times 10^{10}$	351.	^{250}Cf	$(1.7 \pm 0.1) \times 10^{4}$	13.1
^{252}Cf	86. ± 1.	2.65	^{254}Cf	60.9 ± 0.9 d	60.5 d	^{256}Cf	12. ± 1. min	12 min
^{253}Es	$(6.3 \pm 0.2) \times 10^{5}$	20.47 d	^{254}Es	$> 2.5 \times 10^{7}$	276. d	^{254m}Es	> 10.	1.64 d
^{255}Es	$(2.6 \pm 0.1) \times 10^{3}$	40. d	^{242}Fm	0.8 ± 0.2 ms	0.8 ms	^{243}Fm	≥ 50. s	0.2 s
^{244}Fm	3.3 ± 0.5 ms	3.7 ms	^{245}Fm	> 1.1 h	4. s	^{246}Fm	8 ± 3 s	1.2 s
^{248}Fm	10 ± 5 h	36. s	^{250}Fm	0.8 ± 0.2	30 min	^{250m}Fm	≥ 0.07	1.8 s
^{252}Fm	125 ± 8	1.058 d	^{254}Fm	228 ± 1 d	3.240 h	^{255}Fm	$(1.0 \pm 0.6) \times 10^{4}$	20.1 h
^{256}Fm	2.9 ± 0.1 h	2.63 h	^{257}Fm	131. ± 3.	100.5 d	^{258}Fm	0.37 ± 0.02 ms	0.37 ms
^{259}Fm	1.5 ± 0.2 s	1.5 s	^{260}Fm	≈ 4 ms	≈ 4. ms	^{245}Md	0.9 ± 0.3 ms	0.9 ms
^{247}Md	≈ 0.2 s	1.1 s	^{248}Md	≥ 3.9 h	7. s	^{255}Md	≥ 12.5 d	27. min
^{256}Md	> 1.9 d	1.30 h	^{257}Md	≥ 23. d	5.5 h	^{258}Md	$\geq 4.7 \times 10^{3}$	51.5 d
^{258m}Md	≥ 190 min	57. min	^{259}Md	< 1.62 ± 0.06 h	1.6 h	^{260}Md	27.8-38.1 d	27.8 d
^{250}No	0.25 ± 0.05 ms	0.25 ms	^{251}No	≥ 10. s	0.8 s	^{252}No	9. ± 1. s	2.3 s
^{254}No	8. ± 2. h	55. s	^{254m}No	≥ 2.3 min	0.28 s	^{256}No	9. ± 1. min	2.9 s
^{257}No	> 28. min	25. s	^{258}No	1.2 ± 0.2 ms	≈1.2 ms	^{259}No	> 10. h	58. min
^{260}No	106. ± 8. ms	106. ms	^{262}No	≈ 5. ms	≈ 8. ms	^{252}Lr	≥ 100. s	1. s
^{253}Lr	≥ 2.2 min	1.3 s	^{254}Lr	≥ 3.6 h	13. s	^{255}Lr	≥ 6. h	22. s
^{256}Lr	≥ 1. d	28. s	^{257}Lr	≥ 0.55 h	0.65 s	^{258}Lr	> 78. s	3.9 s
^{259}Lr	31. ± 4. s	6.1 s	^{261}Lr	39 ± 12 min	40. min	^{262}Lr	> 1.5 d	3.6 h
^{253}Rf	≈ 48.µs	≈ 48 µs	^{254}Rf	23. ± 3. µs	23. µs	^{255}Rf	2.9 ± 0.4 s	1.7 s
^{256}Rf	6.2 ± 0.2 ms	6.2 ms	^{257}Rf	> 5.6 min	4.7 s	^{258}Rf	14. ± 2. ms	12. ms

Table continued on next page

Table CXXVI *continued*

Nuclide	SF $t_{1/2}$(a)	Tot $t_{1/2}$(a)	Nuclide	SF $t_{1/2}$(a)	Tot $t_{1/2}$(a)	Nuclide	SF $t_{1/2}$(a)	Tot $t_{1/2}$(a)
^{259}Rf	0.7 ± 0.4 min	3.4 s	^{260}Rf	20. ± 1. ms	20. ms	^{261}Rf	≥ 11. min	1.1 min
^{262}Rf	2.1 ± 0.2 s	2.1 s	^{255}Db	≈8 s	≈1.5 s	^{256}Db	≥ 6.5 s	2.6 s
^{257}Db	8. ± 6. s	1.5 s	^{258}Db	≥ 13 s	4.2 s	^{260}Db	16. ± 2. s	1.5 s
^{261}Db	> 10. s	1.8 s	^{262}Db	≥ 1.7 min	34. s	^{263}Db	0.8 ± 0.2 min	0.45 min
^{258}Sg	≈ 2.9 ms	≈ 2.9 ms	^{259}Sg	> 2.4 s	0.5 s	^{260}Sg	7. ± 4. ms	4. ms
^{261}Sg	> 2.6 s	0.26 s	^{263}Sg	> 2.7 s	0.8 s	^{265}Sg	≥ 13. s	7.4 s
^{266}Sg	≥ 11. s	≈ 21. s	^{261}Bh	> 0.12 s	12. ms	^{262}Bh	> 0.9 s	102. ms
^{262m}Bh	> 0.07 s	8. ms	^{264}Hs	≈ 2. ms	≈ 1. ms	^{265}Hs	> 4.8 ms	1.6 ms
^{267}Hs	≥ 0.1 s	19. ms	^{266}Mt	> 5.3 ms	1.7 ms			