Errata

Inside front cover
Because of a printer’s error, the Marcus theory equations are incorrect. The correct versions are given in the text, eqs. (3.6.10a) and (3.6.10b).

Chapter 1

Chapter 2
p. 56 Caption of Figure 2.2.2 "interaction"

Chapter 3
p. 116, Figure 3.6.1. The lower “Homogeneous Electron Transfer” should be “Heterogeneous Electron Transfer.”

Chapter 4

Chapter 5
p. 171 equation (5.3.2a) should be $i_{ss} = …$

p. 197 top lines, "sampling times longer than 0.1 s, $\lambda^o > 2 \ldots$ Sampling times between 0.1 s and 250 µs…”

Chapter 6
In problem 6.12a, "ferro cene" should be "ferrocene".

Chapter 7

Chapter 8
Problem 8.3. Although the problem can be solved correctly as formulated, the mercury pool electrode area would be unreasonably large. The currents should be in µA, not mA.

page 309, in the sentence above equation (8.2.12). Reference should be to (8.2.10) instead of (8.2.8).

Chapter 9

Chapter 10
Problem 10.4. The frequency should be $\omega (s^{-1})$, not f (Hz).

Problem 10.11, line 4, "127th element representing $\omega/2\pi = 12700$ Hz…”

In caption of Figure 10.9.1, "A" should be a lower case "a" in the statement “In circuit A…”

Chapter 11
In problem 11.5, on page 467, "e" should be "e" in the table for the $I_3$ reduction.

Chapter 12
Page 493, Figure 12.3.7, the curves are mislabelled. The values of K from left to right (top curve to bottom) should be 10, 1, 0, 1, 10^{-2}...

In Problem 12.6, one needs the transform for
\[ \frac{1}{s \sqrt{s + a}} \]
which is not listed in Table A.1.1 and does not have a trivial inverse. It can be obtained from
\[ \frac{1}{(s + a) \sqrt{s + b}} \Leftrightarrow \frac{1}{\sqrt{b - a}} \exp[-at] \text{erf}(\sqrt{b - a}t) \]

In problem 12.4, \((I_d)_{\text{max}}\) should be \((I)_{\text{max}}\).

**Chapter 13**

Page 568, 4th line: \(\beta C_i \ll 1\) should be \(\beta C_i \ll 1\)

**Chapter 14**

**Chapter 15**

p. 651 Figure 15.7.1 The polarity of the operational amplifiers is reversed. The signal should be into the inverting inputs of both.

Page 652, 4 lines from bottom, "below 1 ps/point at 14-bit resolution" should be "below 50 ps/point at 8 bit resolution."

**Chapter 16**

Page 671 equation (16.4.2). The right side in brackets should be raised to the -1 power, i.e., should read
\[ I_T(L) = [0.292 + 1.5151/L + 0.6553 \exp(-2.4035/L)]^{-1} \]

In the caption of Figure 16.2.5, part (A), 25 nm should be 25 nA.

In Figure 16.4.3, the label on the y axis should be \(I_T(L)\).

In the definition of \(m_0\) in the equation below equation (16.4.4) 78377 should be 0.78377.

**Chapter 17**

**Chapter 18**

On page 751, footnote 5, "ideally polarized semiconductor" should be "ideally polarized semiconductor".

**Appendix A**

**Appendix B**
Appendix C

Inside back cover

Figure E.1 The potential listed for the Hg/HgO,NaOH(0.1 M) reference electrode is incorrect. What is listed is the potential of the electrode vs. a hydrogen electrode in the same medium, i.e. the potential of the cell Hg/HgO, NaOH(0.1M)/H₂/Pt (independent of NaOH concentration). The E° of the Hg/HgO, NaOH vs. NHE is 0.0977 V, as shown in Appendix C, so the reference electrode shown has a potential of 0.165 V vs. NHE or -0.076 V vs. SCE. A convenient reference electrode is Hg/HgO/Ba(OH)₂ (sat’d) which has a potential of 0.1462 V vs. NHE or -0.0984 V vs. SCE.