

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 $i_{ss} = \dots$

p. 197 top lines, "sampling times longer than 0.1 s, $\lambda^0 > 2 \dots$ Sampling times between 0.1 s and 250 $\mu\text{s} \dots$ "

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 ω (s^{-1}), not f (Hz).

Problem 10.11, line 4, "127th element representing $\omega/2\pi = 12700 \text{ Hz} \dots$ "

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

$$\frac{1}{(s+a)\sqrt{s+b}} \Leftrightarrow \frac{1}{\sqrt{b-a}} \exp[-at] \operatorname{erf}(\sqrt{(b-a)t})$$

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

Chapter 13

Page 568, 4th line: $\beta C_i \ll 1$ should be $\beta_i C_i \ll 1$

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 E⁰ 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.