ERRATA

Author's note: Despite our best efforts, *Quantum Nanoelectronics: An Introduction to Electronic Nanotechnology and Quantum Computing (Wiley-VCH 2009)* is not free of errors. Below, we correct a few that we have found. We will be grateful to readers who bring additional errors to our attention (via Wiley-VCH, or email to ewolf@poly.edu).

Text book corrections Nanoelectronics E. L. Wolf 12/9/13

p. 14 Eq. (1.12) Reads: "$\lambda=h/p=h/(2mV)^{1/2}$,,"

Should read "$\lambda=h/p=h/(2meV)^{1/2}$,,"

p. 17 Eq. (1.16) Reads : " =hc/2e=", Should read: "=h/2e="

p. 26 Eq. (1.30) Reads : " =hc/2e=", Should read: "=h/2e="

p 31 Line above Eq. (1.40), Reads: "A) is"

Should read: "A) is, here adopting cgs units (set c = 1 for SI units)"

p. 32 Line after Eq. (1.42) Reads: "where n is an integer."

Should read: "where n is an integer, with c entering in cgs units."

p. 58 Eq. (2.41) Reads: " $v_g = \partial\omega /k$ "

Should read: "$v_g = \partial\omega / \partial k$ "

p. 99 Eq. (3.37) Reads: "….$(\nabla_1^2 + \nabla_1^2)$…."

Should read: "….$(\nabla_1^2 + \nabla_2^2)$…."

p. 100 Eq. (3.43), Reads: "… $\varphi_a(x^2)\,\varphi_b(x_1)$…"

Should read: "… $\varphi_a(x_2)\,\varphi_b(x_1)$…"

p. 139, line 10 Reads: "condition cos ka = cos αa"

Should read: "condition cos ka = cos qa"

p. 147, Eq. (4.29) Reads:

"$N_e = \int_{Ec} C(E-EC)^{1/2} \exp[-(E-E_F)/k_BT]dE = C_e \exp[-(E_g - E_F)/k_BT] \int_0^\infty x^{1/2}e^{-x}dx.$ (4.29)"

Should read:

"$N_e = \int_{Ec} C_e(E-E_C)^{1/2}\exp[-(E-E_F)/k_BT]dE = C_e(k_BT)^{3/2}\exp[-(E_C - E_F)/k_BT] \int_0^\infty x^{1/2}e^{-x}dx.$ (4.29)"

p. 150 line directly after Eq. (4.33)

Reads: ",V_B – V is the energy shift of the bands.."

Should read: ",V_B – V is the voltage shift of the bands.."

p. 150 last line (in Fig. Caption), Reads: " interpretation see Fig. 4.9."

Should read: " interpretation see Fig. 4.10."

p. 164, line 6, reads "energy density $\mu_0 B^2/2$"
Should read: "energy density $B^2/2\mu_0$"

p. 164, Eq. 4.43, reads "$B = B_{app}(1+\chi_m) = \kappa m\, B_{app}$ (4.43)"
Should read : "$B = B_{app}(1+\chi_m) = \kappa_m B_{app}$ (4.43)"

p. 201, line 6, Reads: "Equations 4.56 and 4.57"

Should read: "Equations 4.5 and 4.6"

p. 280, line 8, reads "multiple of $\Phi_0 = hc/2e = 2.07 \times 10^{-15}$ W"

Should read "multiple of $\Phi_0 = h/2e = 2.07 \times 10^{-15}$ W"

p. 280, line 9, reads "h is Planck's constant, c the speed of light, e the electron charge,"
Should read: "h is Planck's constant, e the electron charge,"

p. 282 bottom line, Reads: "dj/dt = (2e/ ħ) V(t)" Should read: "dφ/dt = (2e/ ħ) V(t)"

p. 291 Eq. (9.2) Reads: "$U(n_s, n_d) = (C_s C_d V^2 + Q^2)/C_{tot} + eV(C_{snd} + C_{dns})/ C_{tot}$"

Should read: "$U(n_s, n_d) = (C_s C_d V^2 + Q^2)/2C_{tot} + eV(C_s n_d + C_d n_s)/ C_{tot}$"

p.291 Eq. (9.5) Reads: " $\Delta U_{s,d} = (e^2/2C_{tot}) \mp eV C_{d,s} / C_{tot}$"

Should read: " $\Delta U_{s,d} = -(e^2/2C_{tot}) \mp eV C_{d,s} / C_{tot}$"

(insert minus sign).

p. 292 Eq. (9.7) Reads: "$\Delta I = e/C_{tot}Rt$"

Should read: "$\Delta I = e/C_{tot}R_t$ "

p. 313, 5th line of Sect. 10.2, Reads: "effective mass, see (4.22c))"

Should read: "effective mass, see (4.25))"

p. 314, 3d line above Eq. (10.2): Reads: "Sections 4.1.1 and 4.4.1)"

Should read: "Sections 4.1.1 and 4.5.6)"

p. 368, line 7 and line 10, Read: " ….= Ge (W + …"

Should read (both cases): " ….= - Ge (W + …"

(Insert minus sign before G in each case, line 7 and line 10.)

p. 443 (9th line from the bottom) reads "flux quantum, hc/2e"

should read "flux quantum, h/2e"