Errata for Quantum Transport Atom to Transistor(2006) by Supriyo Datta
Prepared by Seokmin Hong

p.31, in Fig. E.1.3 caption, p-type should be n-type and n-type should be p-type.
p.37, in eq.(2.1.17), "+k" in the second equation should be "-k".
p.42, in the 1st eq. and the left-hand side in the 3rd eq., "t_0" should be "-t_0".
p.57, in eq.(3.2.1), "del^2" is meant to be "del_1^2+del_2^2".
p.61, in eq.(3.2.11), parethesis) after U_H should be a bigger one.
p.85, in the 2nd and 3rd eq. of eq.(4.1.14), "R_0" shodlbe "R".
p.91, the 1st line after eq.(4.2.8b), "Eq. (4.2.5)" should be "Eq. (4.2.4)".
p.92, in eq.(4.2.11b), summation index should be "n,m" instead of "i,j".
p.95, in the 2nd eq., after [V]*_(r,alpha), "=" is missing.
p.103, in E.4.3.(b), H_op should have overall minus sign in the right-hand side.
p.105, in the 2nd line of second paragraph, "Chapter 1" should be "Chapter 2".
p.108, in the 2nd line of eq.(5.1.7), H_(n,n-1) has "E_ss prime" instead of "E_ss".
p.117, in the 2nd line, "(x-y)*a/2" should be added.
p.118, in eq.(5.3.3), the last three elements of row number |Y_c> are "0, 4E_(s*apc)g*_3, 0".
p.125, in V^bar matrix, bars in "|Z^bar_a>" and "|Z^bar_c>" should be removed.
p.131, in the 7th line, "less than" should be "more than".
p.133, in the eq. between eq.(6.1.4) and eq.(6.1.5), "k_x*a=pi" should be "k_x*a=+/-pi".
p.146, in the inline eq. before eq.(6.3.3), hbar in the denominator is missing.
p.147, in the 5th line from the bottom, "Fig.6.3.2" should be "Fig.6.3.3".
p.153, in eq.(6.4.11), the right-hand side should be multiplied by pi and there should be "abs(del E/del k)" instead of "del E/del k".
p.159, in eq.(7.1.5), "2*m_c" should be "2".
p.160, in the 3rd matrix which is non-hermitian, (2,1) component should be "-t_0" instead of "-t_1".
p.178, in the 4th line after eq.(7.4.5), "Fig.7.4.2" should be "Fig.7.4.3".
p.195, in the 3rd line after eq.(8.2.13), "Eq.(8.2.10)" should be "Eq. (8.2.13)".
p.196, in the last matrix in eq.(8.2.14), "I" in (2,2) component should be "I_R".
p.198, in the 11th line, "-0.1eV at one end to +0.1eV" should be "-0.05eV at one end to +0.05eV"
p.199, in the fig. 8.2.6 (a) and (c), x-axis should be "D(E) (/eV)" instead of "x (m)"
p.200, in eq after eq.(8.3.1), "Exp[+iEt/hbar]" should be "Exp[-iEt/hbar]".
p.201, in the 4th line, the lower integral limit should be "zero" instead of "-infinity".
p.214, in the 6th line from the bottom, "k_n=n*pi/a" should be "k_n=n*pi/Na".

p.225, in eq.(9.2.11), the right-hand side of the eq. should be multiplied by 2*pi.

p.239, in the 2nd line above eq.(9.4.10), summation index should be j instead of q.

p.240, in the 3rd eq. expressing Gamma_i*A, "Gamma" is missing in the numerator of the right-hand side.

p.259, in eq.(10,1,11), (1,2) component of H_(N,N+1) matrix should be zero instead of "K*sqrt(N+1)".

p.260, in eq.(10.1.12a) and (10.1.12b), the right-hand sides should be divided by sqrt(N+1) and sqrt(N) respectively.

p.265, in eq.(10.2.4b) and the one above eq.(10.2.6), theta integration range should be 0 to pi instead of -pi to pi.

p.272, in eq.(10.3.3), summation index should be "r" and "s" instead of "p'" and "q'" .

p.273, in eq.(10.3.6), the left-hand side of the eq. should be multiplied by 2*pi.

p.320, Equation (A.1.1a) and (A.1.1b) should be swapped.

p.330, in eq.(A.3.3), there should be negative sign in front of (1/ihbar).

matlab codes part

p.376, in the 2nd line, "A(1);" should be "A(1)/(2*pi);".

p.380, in the 2nd line, "(T12+T23)" should be "(T13+T23)".

p.381, in the 16th line, "(T12+T23)" should be "(T13+T23)".