Errata for Introduction to Solid State Physics by Charles Kittel, 8th Edition

- p. 12 – Figure 14 caption – one of the (100)'s should be $(\bar{1}00)$.
- p. 30 - Figure 6 - The phase factor under the outgoing beam should be $e^{ik'\cdot r}$ -- the prime is missing on k.
- p. 36 – The text between eq (30) and eq (31) - "We have, using (28)," should be "We have, using (29),".
- p. 42 - Equation (50) - the last "=" sign should be deleted; sin(Gr)/Gr is part of the integrand.
- p. 58, Fig. 3-6 (LJ potential). In the 7th edition, the vertical axis was labeled U(R)/4ε and the minimum value was -0.25, which is correct. In the 8th edition, they changed the axis label to U(R)/ε (which would make the minimum value -1.0), but forgot to actually multiply the curve by a factor of 4. Therefore the y-axis label should be U(R)/4ε.
- p. 61, Figure 8, lower right corner - change "Cohesive energy" to "Lattice energy".
- p. 62, Eq. (17). A prime is used on the Σ without explanation. Where he says "where the summation includes all ions except j=i" he means, "where the prime on the Σ indicates that the summation includes all ions except j=i".
- p. 73, Line 5 - Change "a=4.16 Å" to "a=5.88 Å". (Note from Dr. Colton: I haven't verified this one.)
- p. 80, Eq. (51). The left-most variable should be C_{44}, not C_{14}.
- p. 98, Equation (21), the upper right matrix entry should be $-C(1+e^{-ika})$; the minus sign is missing in the exponent.
- p. 104, the minus sign between ω^2/ω_0^2 and the sine-squared term should be an equals sign; also, below the summation sign, p-1 should be p=1.
- p. 128: Problem 5-1, Singularity in density of states. In the last sentence, change the word "discontinuous" to "continuous, but has a kink."
- p. 142, Equation (24a) - the closing bracket in the denominator should follow the T, not the 1: …/k_BT] + 1
- p. 205 - Equation (37) should be density of states per volume, not just density of states.
- P. 206 - In Equation (42), the integral should go from $-\infty$ to E_v, not to E_c, and should have $(E_v-\mu)$ in the exponential, not $(E_c-\mu)$.
- p. 258 - The Appendices' page numbers should be H: 665; I: 667; J: 671.