Errata

Erratum: Studies of the potential-curve-crossing problem. II. General theory and a model for close crossings [Phys. Rev. A 6, 728 (1972)]

J. B. Delos and W. R. Thorson

Equations (57) are incorrect. They should be either

$$\Phi^D = \Gamma^D_{1+} + \Gamma^D_{2+} = -\int_0^{\tau_x} (\epsilon_b - \epsilon_a)\, d\tau + \gamma ,$$

$$\Gamma^D_{1+} = \int_0^{\tau_x} (V_{11} - \epsilon_b)\, d\tau + \int_{\tau_x}^{\infty} (V_{11} - \epsilon_a)\, d\tau ,$$

$$\gamma = \arg\Gamma(iT_0/2) + (T_0/2) - (T_0/2)\ln(T_0/2) + \pi/4$$

or the "equivalent" forms

$$\Gamma^A_{2+} = \int_0^{\tau_x} (\epsilon_b - \epsilon_a)\, d\tau - \pi ,$$

$$\Gamma^A_{1+} = -\gamma .$$

Calculations using these forms will be presented in a forthcoming paper. These are in agreement with the results of M. S. Child [Mol. Phys. 20, 171 (1971)], and we thank him for communications.

Erratum: Microscopic theory of Rayleigh scattering [Phys. Rev. A 8, 963 (1973)]

G. J. Gabriel

(i) On p. 974, immediately above Eq. (61) of *Theorem 2*, delete the phrase: "provided the first m derivatives are statistically independent of $\vec{R}(t, \sigma)$ at simultaneous time." Insert this phrase into *Corollary 2. 1* on the same page to read: "*Corollary 2. 1*: Conditional expectation and temporal differentiation are commutative operations, provided the first m derivatives are statistically independent of $\vec{R}(t, \sigma)$ at simultaneous time."

(ii) On p. 980, line 13 after Eq. (105), delete "energy."

(iii) On p. 989, change the heading of Appendix B to read: "DERIVATION OF EQ. (60)."

Erratum: Electron excitation of the calcium 4227-Å resonance line [Phys. Rev. A 7, 1573 (1973)]

V. J. Ehlers and A. Gallagher

At the time this article was prepared, no Born or Bethe cross-section calculations were available for the Ca $4\,^1S_0 \rightarrow 4\,^1P_1$ excitation cross section. Consequently it was necessary to normalize the data at high energies to the Bethe form $QE = A + B\log E$, where B was known from the optical oscillator strength but A was unknown. Owing to the finite energy range of the data, this normalization procedure was uncertain by several percent. Three Born calculations have now been completed,[1-3] two of which utilized very sophisticated atomic wave functions.[2,3] The Born cross sections from Refs. 2 and 3 agree within 1% at 1500 eV and are 4% greater than the value inferred by the present authors from our normalization procedure. Our experimental result should be renormalized to agree with this information by multiplying the reported cross section by 1.04.

Also, the captions on Figs. 6 and 7 are reversed.

[1] P. Simsic and W. Williamson Jr., J. Chem. Phys. 57, 4617 (1972).
[2] Y. K. Kim and P. S. Bagus, Phys. Rev. A 8, 1739 (1973).
[3] W. D. Robb, J. Phys. B (to be published).