Errata

Erratum: Inner-shell Coulomb excitation in the collisions of few-electron F with H_2 and H_2 [Phys. Rev. A 14, 1634 (1976)]

F. Hopkins, A. Little, and N. Cue

The normalization value of 0.28 indicated for F^{9+} in He on p. 1635, left column, line 17 and in Fig. 2 should be replaced by the value 0.11. The paper is otherwise unchanged, as the capture curves in Fig. 2 and in Fig. 4 were computed using the latter correct scaling.

Erratum: Electron scattering from atoms in the presence of a laser field. II. [Phys. Rev. A 14, 1338 (1976)]

Marvin H. Mittleman

Equation (2.21) should read

$$\frac{P_+}{P_-} = \frac{w_-}{w_+} = e^{+4\mu}$$

which leads to a change in Eq. (2.23) which should be

$$P_{\pm} = \frac{1}{2}e^{\pm 2\mu}/\cosh 2\mu$$
 .

Equations (3.17)–(3.19) are also changed, respectively, to

$$\begin{split} \frac{d\overline{\sigma}_{0}^{(\pm)}}{d\Omega} &= \frac{\beta^{\,\prime\,2}}{(2\pi)^{\,2}} \left(\left| \left\langle \stackrel{\star}{\mathbf{p}_{f}} , 0 \right| V(1\pm X_{12}) \right| \stackrel{\star}{\mathbf{p}_{i}} , 0 \right\rangle \, \left|^{2} \left(\frac{1}{\beta^{\,\prime\,2}} - 1 \right) + \sum_{m} \, \left| \left\langle \stackrel{\star}{\mathbf{p}_{f}} , m \right| V(1\pm X_{12}) \right| \stackrel{\star}{\mathbf{p}_{i}} , 1 \right\rangle \, \left|^{2} \right) \, , \\ \frac{d\overline{\sigma}_{1}^{\,(\pm)}}{d\Omega} &= \frac{\beta^{\,\prime\,2}}{(2\pi)^{\,2}} \left(1 + \frac{\omega}{p_{i}^{\,2}} \right)^{1/2} \left| \left\langle \stackrel{\star}{\mathbf{p}_{f}} , 0 \right| V(1\pm X_{12}) \right| \stackrel{\star}{\mathbf{p}_{i}} , 0 \right\rangle \, \right|^{2} \, , \\ \frac{d\overline{\sigma}_{-1}^{\,(\pm)}}{d\Omega} &= \frac{1}{(2\pi)^{\,2}} \left(1 - \beta^{\,\prime\,2} \right) \left(1 - \frac{\omega}{p_{i}^{\,2}} \right)^{1/2} \sum_{m} \left| \left\langle \stackrel{\star}{\mathbf{p}_{f}} , m \right| V(1\pm X_{12}) \left| \stackrel{\star}{\mathbf{p}_{i}} , 0 \right\rangle \, \right|^{2} \, , \end{split}$$

where now

$$\beta'^2 = (2 \cosh 2\mu)^{-1}$$
.

This gives the correct behavior when the laser decouples from the atom, i.e., in the limit $\mu \to \pm \infty$.