ERRATA

Electron Excitation Functions of Mercury, Richard J. Anderson, Edward T. P. Lee, and Chun C. Lin [Phys. Rev. 157, 31 (1967)]. The spectral lines λ 6716 and λ 6072 Å were taken as the transitions 8^1P_1–7^1S_0 and 8^1P_1–7^3S_1, respectively, in accordance with the assignment reported by Burns and Adams.[1] Dr. L. J. Kieffer has kindly informed us that a reassignment by Fowles[2] placed 8^1P_1-7^1S_0 and 8^1P_1-7^3S_1 at 7728 and 6888 Å, and that the two lines at 6716 and 6072 Å were ascribed to $(6p')$ $\times P_1$-7^1S_0 and $(6p')^1P_1$-7^3S_1, respectively. We have accordingly measured the optical excitation cross sections of the 8^1P_1-7^1S_0 (7728 Å) line obtaining $(4.3\pm1.6)\times10^{-19}$ and $(13\pm3)\times10^{-19}$ cm^2 at electron energies of 15 and 50 eV, respectively. The intensity of the 6888 Å was below the sensitivity limit of our apparatus for accurate measurements. The cross sections of the 8^1P_1-7^3S_1 line are, therefore, assumed to be smaller than those of 8^1P_1-7^1S_1. The new values of the cross sections are used to revise the cascade analysis in Sec. VII. The 6716 and 6072 Å should still be included in the cascade to the 7^1S_0 and 7^3S_1 states, respectively, although no attempt was made to extrapolate to the higher members of the $(np')^1P_1$ series. As the result of the 8^1P_1 term reassignment, the following changes should be made in the text of our paper: (1) in Tables II and III and Fig. 5 the designations "8^1P_1-7^1S_0" and "8^1P_1-7^3S_0" should read "$(6p')^1P_1$-7^1S_0" and "$(6p')^1P_1$-7^3S_0," respectively; (2) the two rows of entries associated with "8^1P_1-7^1S_0" and "8^1P_1-7^3S_1" in Table IV should be deleted; (3) the quantity $\sum_{n\geq8}Q(n^1P_1, 7^1S_0)$ in Sec. VII A now becomes $(1.3\pm0.4)\times10^{-18}$ cm^2 instead of $(1.8\pm0.4)\times10^{-18}$ cm^2; (4) the direct excitation cross section (experimental) $Q(7^1S_0)$ at 15 eV which appears at the end of Sec. VII A and in Table V is revised to be $(5.1\pm2.8)\times10^{-18}$ cm^2. These changes do not alter the content of Sec. VIII and the general conclusions of this paper.

Dr. Kieffer further pointed out that the assignment of the λ5821 Å line to the 9^3P_2–7^3S_1 transition adopted in our paper is in disagreement with the energy-level values reported by Moore.[3] There exists some doubt as to the true classification of this line.[4] However, the cross section of this line is so small that a change of assignment would not affect quantitatively the cascade analysis and evaluation of the direct-excitation cross sections presented in Sec. VIII.

[1]K. Burns and K. B. Adams, J. Opt. Soc. Am. 42, 56 (1952).
[2]G. R. Fowles, J. Opt. Soc. Am. 44, 760 (1954).
[3]C. E. Moore, Atomic Energy Levels, Nat. Bur. Std. Circ. No. 467 (Government Printing Office, Washington, D. C., 1958), Vol. III, p. 192.
[4]F. Paschen, Ann. Physik 30, 746 (1909).

Excitation of 3914 Å N_2^+ Radiation in Collisions of Heavy Ions with N_2, L. Kurzweg, H. H. Lo, R. T. Brachkmann, and W. L. Fite [Phys. Rev. 179, 55 (1969)]. The velocity scale in Figs. 3 and 4 should be multiplied by 1.17. The energy scale in Fig. 3 is correct as it stands, and the energy scale in Fig. 4 is correct if read as energy per electron charge of the Ba^{++}.

Equilibrium Theory of a Partially Ionized Plasma, Julius L. Jackson and Lewis S. Klein [Phys. Rev. 177, 352 (1969)]. The magnitude of the electronic charge e should multiply both ϕ_+ and ϕ_- in the exponents in both Eqs. (17) and (19). Between Eqs. (28) and (31) the equation numbers referred to in the text are incorrect. There are two citations each of Eq. (23) and Eq. (25) which should read Eq. (27) and Eq. (29), respectively. The factor $(2m)^{-1}$ was omitted in the exponent on the right-hand side of Eq. (35). Eq. (45) is written incorrectly. It should read

$$\frac{N_e N_p}{N_A} = \frac{V}{h^3}\left(\frac{2\pi m_e m_p kT}{m_e + m_p}\right)^{3/2} \frac{e^{\beta e^2\kappa}}{e^{\beta|E_0|}} . \qquad (45)$$

Dissociation of H_2^+ Ions in Collision with H Atoms: 3 to 115 keV, G. W. McClure [Phys. Rev. 153, 182 (1967)]. The values of cross section $\sigma_{H^+}(1)$ should read 1.68×10^{-17} and 1.61×10^{-17} cm^2 for energies 100 and 115 keV, respectively.

Classical Ion Motion in Electrostatic Dipole Fields, T. Chandrasekaran and T. D. Wilkerson [Phys. Rev. 181, 329 (1969)]. The authors are indebted