Muonium I. Muonium Formation and Larmor Precession, Vernon W. Hughes, Douglas W. McColm, Klaus Ziock and Richard Prepost. [Phys. Rev. A 1, 595 (1970)].

Because of errors in composition, a slightly incorrect version of Fig. 3 was published, and the associations of figures with figure captions 11, 12, 13, and 14 were incorrect. The correct figures and associated figure captions are given below.

The following correct typographical errors and clarify formulas:

(1) On p. 596, 4 lines above Eq. (2.3): μ_B^μ is the muon magneton $(e\hbar/2m_\mu c)$;

(2) On p. 596, 4 lines below Eq. (2.3): the weak-field quantum numbers (F, M_F)

(3) On p. 597, Eq. (2.6): $\mu_{1/2\pm1/2,0}=\mp(x/2)/(1+x^2)^{1/2}(g_J\mu_B^e-g_\mu\mu_B^\mu)$;

(4) On p. 604, in the equation for G, the lower limit on the second integral should be t_D;

(5) On p. 616, Ref. 24: "Ref. 17" should be replaced by "Ref. 16";

(6) On p. 617, Ref. 76: "147" should be replaced by "148".

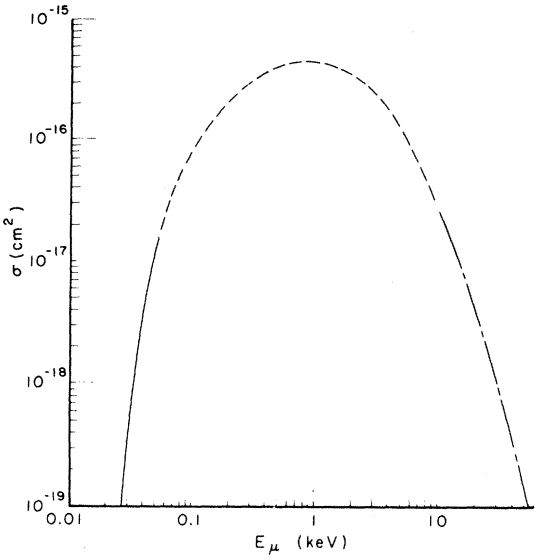

FIG. 3. Calculated capture cross section for the reaction $\mu^+ + \mathrm{He} \rightarrow M + \mathrm{He}^+$, in which muonium M is formed in its ground state by electron capture from helium, as a function of muon kinetic energy E_μ. The three portions of the theoretical curve are based on the following theoretical approximations: (1) solid curve at low energy E_μ, the adiabatic approximation or the PSS method; (2) dotted curve, at intermediate energy E_μ, an impact-parameter method; (3) dot-dash curve, at high energy E_μ, a Born approximation.

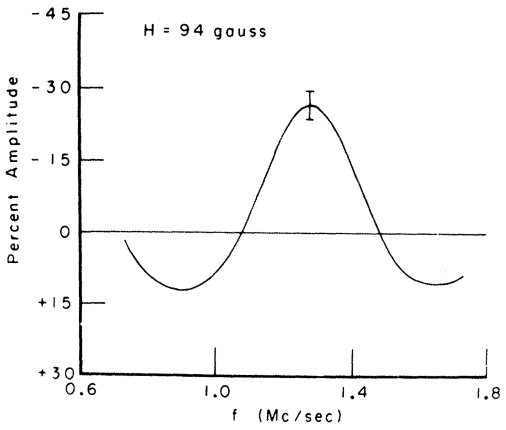

FIG. 11. Frequency analysis, illustrating the precession of positive muons stopped in aluminum with $H=94$ G. The percent amplitude of a frequency component r is plotted versus frequency.

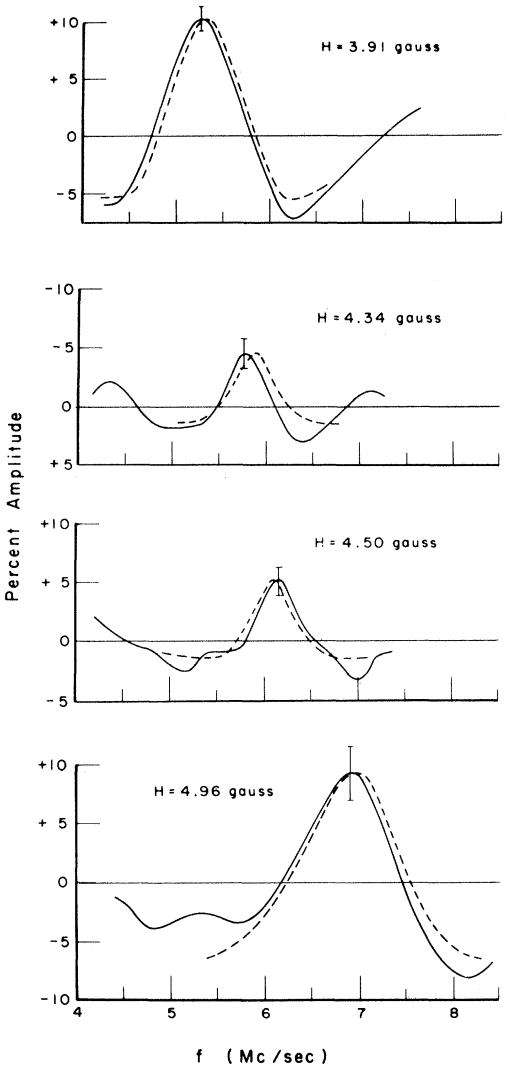

FIG. 12. Frequency analysis, illustrating the precession of muonium when polarized muons are stopped in argon gas for several magnetic-field values H. The percent amplitude of a frequency component ν is plotted versus frequency.

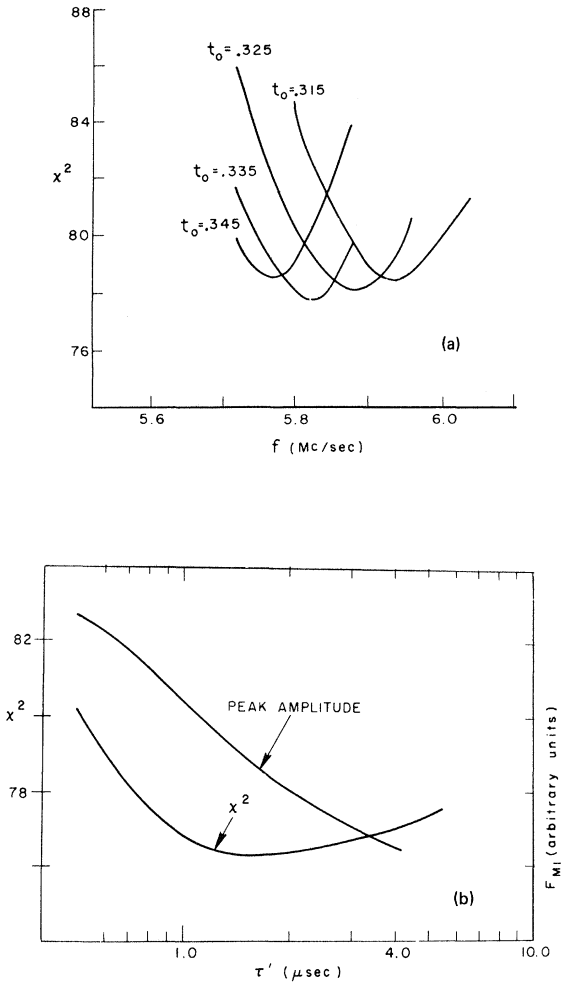

FIG. 13. (a) Values of χ^2 versus frequency f for various values of t_0, obtained from the least-squares fit to the data with polarized muons and $H = 4.34$ G (t_0 in μ sec). (b) Values of χ^2 and peak amplitude F_{M1} versus the parameter τ', obtained from the least-squares fit to the data with polarized muons and $H = 4.34$ G.

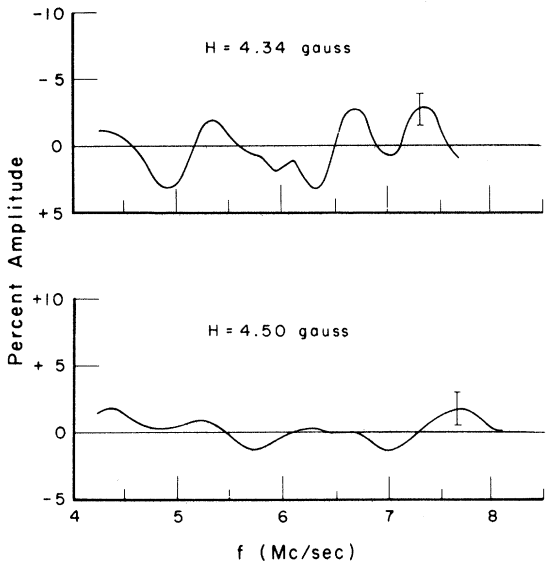

FIG. 14. Frequency analysis of data obtained when pions are stopped in argon gas for several magnetic field values H. The percent amplitude of a frequency component, r, is plotted versus frequency.