

Errata

Landau Damping to All Orders, DAVID MONTGOMERY AND DAVID GORMAN [Phys. Rev. **124**, 1309 (1961)]. We should like to note the following typographical errors, none of which alters the conclusion of the paper, but one of which (iii) is essential to reaching it.

(i) In the fifth line after Eq. (11), for " $t \rightarrow \sigma_0$ ", read " $t \rightarrow \infty$."

(ii) In Eq. (17),

$$\text{for } \int_{-\infty}^{\sigma+i\infty} dp', \text{ read } \int_{\sigma-i\infty}^{\sigma+i\infty} dp'.$$

(iii) In Eq. (23), for

$$p = p_j(k') + p_{n-j}(k'),$$

read

$$p = p_j(k') + p_{n-j}(k - k').$$

(iv) In Eq. (28) delete the symbol "e" appearing before the second integral.

Finally, we should note that in Sec. III, the normalization of the function $F(v)$ has been incorrectly stated; $F(v)$ should be given by $(m/KTN_0)vf_0(v)$. The remaining equations are correct, however.

Ferrimagnetic Resonance in Rare-Earth Doped Yttrium Iron Garnet. II. Terbium Substitution, J. F. DILLON, JR., AND L. R. WALKER [Phys. Rev. **124**, 1401 (1961)]. In the Appendix, $\nu_0' = -6300.9$ should read $\nu_0' = 4791.7$; $\nu_2' = 28\ 850.5$ should read $\nu_2' = -909.5$; $\nu_4' = 909.5$ should read $\nu_4' = 28\ 850.6$; $\nu_6' = 4791.7$ should read $\nu_6' = -6300.9$; $L_0 = 1.2376 \times 10^{-8}$ cm should read 1.2376×10^{-7} cm.

In Eq. (8a), $U_2^0 = 2m^2 - 42$ should read

$$U_2^0 = 3m^2 - 42.$$

Equation (8b) should read

$$U_4^0 = 35m^4 - 1235m^2 + 5040,$$

$$U_4^4 = \frac{1}{2}[J_+^4 + \text{c.c.}].$$

Equation (8c) should read

$$U_6^2 = \frac{1}{2}J_+^2[\dots] + \text{c.c.},$$

$$U_6^4 = \frac{1}{2}J_+^4[\dots] + \text{c.c.},$$

$$U_6^6 = \frac{1}{2}[J_+^6 + \dots].$$

The axes for the crystal field were chosen in the following way. The basic dodecahedral site is that for which the displacements of the neighboring oxygens are $\frac{1}{8} - x, \frac{1}{4} - z, -y; \frac{1}{8} - x, -\frac{1}{4} + z, y; \frac{1}{8} - z, \frac{1}{4} - y, -x; \frac{1}{8} - z, -\frac{1}{4} + y, x; -\frac{1}{8} + x, -y, \frac{1}{4} - z; -\frac{1}{8} + x, y, -\frac{1}{4} + z; -\frac{1}{8} + z, -x, \frac{1}{4} - y; -\frac{1}{8} + z, x, -\frac{1}{4} + y$, where x, y , and z are the oxygen parameters. The

new coordinates x, y, z (as used in the expressions for V) are related to the X, Y, Z referred to the crystal axes by

$$x = X, \quad y = 2^{-\frac{1}{2}}(Y + Z), \quad z = 2^{-\frac{1}{2}}(-Y + Z).$$

The caption of Fig. 15 should read $\dots, \lambda = 0.37, \dots$.

A numerical error has been detected in the coefficient of one of the sixth-order terms used in the calculation. The curves of Figs. 15 and 16 have been run again with no greater change than a 0.5% variation in the height of one peak. The conclusions of the paper are not affected in any way.

Cyclotron Resonance in Aluminum, T. W. MOORE AND F. W. SPONG [Phys. Rev. **125**, 846 (1962)].

Through an error in interpretation of x-ray orientation data, the $\langle 100 \rangle$ and $\langle 110 \rangle$ axes of the aluminum single crystal were interchanged. On both Fig. 3 and Fig. 4, the labels $\langle 100 \rangle$ and $\langle 110 \rangle$ should be interchanged and the label $\langle 111 \rangle$ moved to the $35\frac{1}{4}^\circ$ position. The abscissa angle θ should now be interpreted throughout as the angle between the magnetic field and the $\langle 110 \rangle$ axis, rather than the $\langle 100 \rangle$ axis. In Fig. 4 the dashed theoretical curve should be reversed along with the axes.

The low-field, low-mass anisotropy as shown in Fig. 3 is now consistent with the interpretation that both curves are associated with orbits around the maximum portions of the "arms" of the third-zone Fermi surface. This interpretation is satisfying in that it removes the disturbing failure to observe the orbits labeled H in Fig. 1, for the field in a $\langle 110 \rangle$ direction. The curve labeled A in Fig. 3 obviously corresponds to such H orbits. Note that the curves A and B intersect exactly in the $\langle 111 \rangle$ direction as they must by symmetry, for in that direction the two orbits become equivalent. The minimum of the curve B should occur where it does, namely at $35\frac{1}{4}^\circ$ from a $\langle 100 \rangle$ direction, and not, as erroneously stated, along the $\langle 111 \rangle$ direction.

The tentative assignment of curves C and D of Fig. 4 to orbits around the inner and outer surfaces of four contacting arms in the third zone is now incorrect. Very little can be said at present regarding contact between arms in the third zone. The interpretation of masses tentatively assigned to orbits in the second zone is uncertain in a number of respects, and clarification must await further data now being obtained with additional samples and more flexible control of the directions of microwave polarization and field tipping.

Relativistic Lee Model, MARIAN GÜNTHER [Phys. Rev. **125**, 1061 (1962)]. The right-hand side of the formula (3.2), instead of

$$g_0 e Z^{-\frac{1}{2}} [\mathbf{m}_V \mathbf{m}_N]^{\frac{1}{2}} [2\Omega]^{-\frac{1}{2}} [\omega_N(\mathbf{p} - \mathbf{k}) \omega_\theta(\mathbf{k}) \omega_V(\mathbf{p})]^{-\frac{1}{2}} \\ \times \{i(\mathbf{p} - \mathbf{k}) + m_N\}^{-1} u_N(\mathbf{p} - \mathbf{k}) \beta Q_0 u_V(\mathbf{p}),$$

should read

$$g_0 \epsilon Z^{-1} [\mathbf{m}_V m_N]^{1/2} [2\Omega]^{-1/2} [\omega_N(\mathbf{p}-\mathbf{k}) \omega_\theta(\mathbf{k}) \omega_V(\mathbf{p})]^{-1/2} \\ \times u_N(\mathbf{p}-\mathbf{k}) \{i(\mathbf{p}-\mathbf{k}) + m_N\}^{-1} \beta Q_0 u_V(\mathbf{p}).$$

Momentum Distributions for Protons in Li^6 in the Cluster Model, J. STERNAD [Phys. Rev. **125**, 1639 (1962)]. Owing to a calculational mistake the main conclusion of the paper, i.e., that the absence of a dip in the momentum distribution for the least bound protons in Li^6 at zero momentum transfer can be explained in the cluster model, is invalid. In fact, the cluster model as well as the shell model does give the dip for zero momentum transfer for the least bound protons. Thanks are due to Dr. G. Jacob and Dr. P. Said for pointing this out to the author.

3d Band Structure of Cr, M. ASDENTE AND J. FRIEDEL [Phys. Rev. **124**, 384 (1961)]. In this paper, energies in the theoretical calculations are given in Rydberg instead of in atomic units as would have been correct.

Consequently, units should be changed in Figs. 2, 3, 4, 5, 7. Only Fig. 7(b) needs to be modified

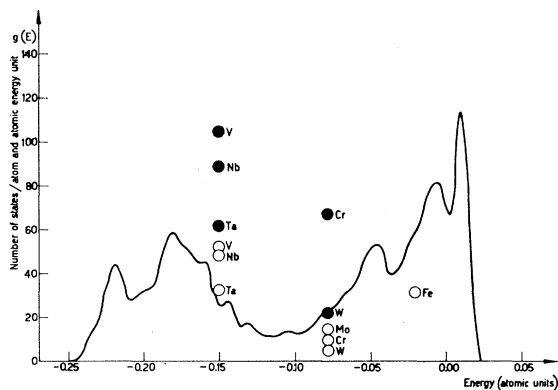


FIG. 7(b). Density of states curves $g(E)$. Open circles: $g(E_F)$ deduced from experimental values of C_v ; solid points: $g(E_F)$ deduced from experimental values of χ .

and is given here again; the general conclusions are unaffected, however.

Neutron Coherent Scattering Amplitudes for Cd and Eu, G. ARNOLD AND N. NERESON [Phys. Rev. **124**, 1848 (1961)]. Errors have been discovered in

the measured transmissions of the Eu_2O_3 and CdO samples which were used to determine the neutron coherent scattering amplitudes of Eu and Cd. A first indication that the reported values of f_{Eu} might be in error was a confirmative experiment using EuO which yielded a value for f_{Eu} in disagreement with that obtained from Eu_2O_3 . Subsequently, repeated transmission measurements made in the direct beam from the Pb monochromating crystal were found to be in error for some of the oxide samples. These transmission measurements are now made in the scattered beam from the nickel standard set to a diffraction peak. This method reduces background effects associated with an impure neutron beam and gives measured transmissions in good agreement with calculated values.

The corrected values of F^2 in the two separate measurements on CdO are shown in Fig. 1. The

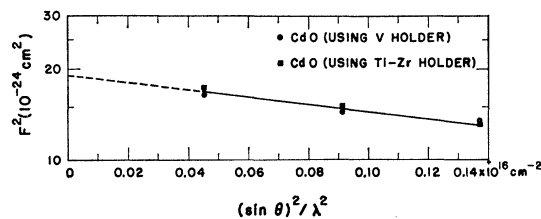


FIG. 1. Graph of square of intensity structure factors vs $(\sin\theta/\lambda)^2$ for CdO .

averaged extrapolated value of F^2 at 0° scattering angle is $(19 \pm 1.5) \times 10^{-24} \text{ cm}^2$. Using $0.58 \times 10^{-12} \text{ cm}$ as the scattering amplitude for oxygen, one obtains a value of $f_0(\text{Cd}) = (0.71 \pm 0.04) \times 10^{-12} \text{ cm}$ for the nonresonant coherent scattering length of Cd; the absolute value of the scattering amplitude at $\lambda = 1.391 \text{ \AA}$ is $|f_{\text{Cd}}| = (0.51 \pm 0.03) \times 10^{-12} \text{ cm}$. This value is still in some disagreement with that obtained by Peterson and Smith¹ from their single-crystal work on CdI_2 which gives a value of $|f_{\text{Cd}}| = 0.42$ at $\lambda = 1.39 \text{ \AA}$.²

Corrected scattering amplitudes from the Eu_2O_3 measurements are $f_0(\text{Eu}) = (0.85 \pm 0.05) \times 10^{-12} \text{ cm}$ and $|f_{\text{Eu}}| = (0.60 \pm 0.04) \times 10^{-12} \text{ cm}$ at $\lambda = 1.391 \text{ \AA}$. Recent measurements from the compound EuO give $f_0(\text{Eu}) = (0.88 \pm 0.04) \times 10^{-12} \text{ cm}$ and $|f_{\text{Eu}}| = (0.63 \pm 0.03) \times 10^{-12} \text{ cm}$.

¹ S. W. Peterson and H. G. Smith, Phys. Rev. Letters **6**, 7 (1961).

² S. W. Peterson (private communication).