ERRATA

I. Article by L. D. Filatova and V. M. Tsukernik, "Some Features of Threshold Absorption of High-frequency Magnetic Field by a Uniaxial Antiferromagnet," Vol. 30, p. 273 (1970).

In this article (henceforth cited as I), the authors calculated the high-frequency magnetic susceptibility of a uniaxial ferromagnet when the constant magnetic field and the homogeneous-alternating field are directed perpendicular to the easy axis and are parallel to each other. Threshold processes were considered, wherein the photon decays into two spin waves in first-order perturbation theory.

The authors are grateful to V. G. Bar'yakhtar and V. A. Popov, who called their attention to the fact that when account is taken in the interaction Hamiltonian of terms that are triple in the Bose operators, second order perturbation theory makes a contribution of the same order of magnitude to the high-frequency susceptibility, as that accounted for in I. When this contribution is included, the expression for the absorption coefficient $\kappa(\omega)$ takes the form

$$\varkappa(\omega)=\frac{16\mu^2(\alpha S)^2}{JS\pi^2\hbar^2}\operatorname{cth}\frac{\beta\hbar\omega}{2}\frac{\sin^2\theta}{\{\cos 2\theta\,[\omega_0^2(\theta)-\omega^2]\}^{1/2}}\cdot$$

$$\times\left\{F^2(\varkappa_1)\int\limits_{x=x_1}\frac{dS_{\mathbf{k}}}{|\partial x/\partial\mathbf{k}|}+F^2(\varkappa_2)\int\limits_{x=x_2}\frac{dS_{\mathbf{k}}}{|\partial x/\partial\mathbf{k}|}\right\},$$

where

$$F(\varkappa)=\frac{[2JS(3-x)+\alpha S]\,[6JS+\alpha S+\alpha S+(2\cos^2\theta-\sin^2\theta)\,(2JSx+\alpha S)]}{4\varepsilon_1^2(x)-\varepsilon_1^2(x)}.$$

The remaining symbols are the same as in I.

All the results pertaining to the behavior of the system near the edges of the absorption band, remain the same as in I apart from constant coefficients.

II. Article by T. Ya. Popova, A. K. Popov, S. G. Rautian, and R. I. Sokolovskiĭ, "Nonlinear Interference Effects in Emission, Absorption, and Generation Spectra," Vol. 30, 466 (1970).

1. The article contains an incorrect interpretation of the work of Feld and Javan[4]. The two sentences in lines 14–17 in the first paragraph of the article (p. 466) must therefore read as follows:

According to Feld and Javan[4], for example, no splitting can take place here at all. This result, however, is the consequence of the assumed purely spontaneous relaxation (see the discussion of formula (3.4)).

Footnote 1 on p. 468 should read:

In[4], the relaxation is assumed to be purely spontaneous. The radicand is then a perfect square and the radical is always real.

The authors express their apologies to M. S. Feld and A. Javan.

2. The paragraph following formula (3.3) on p. 467 should end with the phrase:

In addition, $N_n - N_j$ should be multiplied by

$$\left[1-\frac{k_\mu}{k}\left(1-\frac{k_\mu}{k}\right)\frac{\Gamma_-^2-Z^2}{(\Gamma_-^2+Z^2)^2}|G|^2\right].$$

3. When $k_\mu < k$, formulas (4.3), (4.6), and (4.7) are valid only if

$$|N_g-N_n|\,\frac{k-k_\mu}{k}\ll\frac{\Gamma_+}{\Gamma_-}|N_n-N_m|.$$

In the opposite case it is necessary to add to formula (4.3) the term

$$-\frac{k_\mu}{k}\left(1-\frac{k_\mu}{k}\right)(N_g-N_n)\,\frac{\Gamma_+^2-(\Omega_\mu-k_\mu\Omega/k)^2}{[\Gamma_+^2+(\Omega_\mu-k_\mu\Omega/k^2)]^2}|G|^2.$$

Appropriate changes should be made also in formulas (4.6), (4.7), and (4.9).

III. Article by V. S. Starunov, "Certain Problems in the Theory of Stimulated Molecular Scattering of Light," Vol. 30, 553 (1970).

1. In formulas (5) and (10), read $(\partial\epsilon/\partial T)_\rho$ in place of $(\partial\epsilon/\partial T)_p$, and $\gamma\chi$ in place of γ.

2. Formula (16) should read

$$g_{MB}=\left(\frac{|\mathbf{k}_1|\,Y^2\Omega_{MB}\beta_s}{32\pi n^2}\,\frac{\delta\omega_0+\delta\Omega_{MB}}{(\Omega-\Omega_{MB})^2+(\delta\omega_0+\delta\Omega_{MB})^2}\right.$$

$$\left.+\frac{1}{2}B_T\,\frac{\Omega_{MB}-\Omega}{(\Omega-\Omega_{MB})^2+(\delta\omega_0+\delta\Omega_{MB})^2}\right)|E_0^m|^2.$$

3. The first phrase in the first full paragraph following Eq. (16) and the note added in proof on p. 558 should be omitted.