G. G. Shel' deshova.** The role of day-length in the control of generation number and diapause of the apple-worm *Laspeyresia pomonella* L. 480

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Abstract

Full Text

ECOLOGY

BIOCHEMISTRY

PLANT ANATOMY

PLANT PHYSIOLOGY

PHYTOPATHOLOGY

ZOOLOGY

PHYSIOLOGY

LETTER TO THE EDITOR

In my article (N. N. Sirota, "On the temperature dependence of the electrical conductivity of solids"), published in *DAN*, vol. 143, No. 3, 1962, in the original formula (2), unfortunately, the coefficients a_T and a_C were omitted before the mean-square displacements $\overline{u^2_{S,T}}$ and $\overline{u^2_{S,C}}$. These coefficients are connected with the cross sections for scattering of electrons by phonons and impurities and with the densities of dynamic and static inhomogeneities. Their proper allowance changes some of the temperature dependences given in the text for the case of their constancy, and changes the explanation of the temperature minimum of the resistance of Ag and Au. In particular, the quantity a_T is proportional to the energy of the thermal motion of the lattice referred to the temperature,

$$a_T \sim \frac{c}{3RT}\int_0^T c_v\, dT.$$

Formulas (5), (6), (7) must contain the factor $a'_T = a_T + c_1$. Formula (8) must have the form:

$$\rho = \rho_{c_0} + \frac{m^*}{n_0 e^2}\left[a_T\overline{u^2_{S,T}} + a_C\overline{u^2_{S,C}}\right]\frac{B}{1+\dfrac{n_{01}m^*}{n_1 m_1^*}e^{-\Delta E/2kT}} =$$

$$= \rho_{c_0} + \frac{m^*}{n_0 e^2}\left\{\left[\frac{\hbar^2\cdot 3}{kM\theta}\left(\frac{\Phi(\chi)}{\chi}+\frac{1}{4}\right)\right]a_T + a_C\overline{u^2_{S,C}}\right\}\frac{B}{1+\dfrac{n_{01}m^*}{n_0 m_1^*}e^{-\Delta E/2kT}}.$$

N. N. Sirota

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Note: Figure translations are in progress. See original paper for figures.