

Artsimovich began his teaching activities at an early date and gave much effort to the preparation and training of young physicists. He lectured at the Leningrad State University, the Moscow Engineering Physics Institute, and Moscow State University.

Artsimovich's scientific excellence was held in high esteem by the community and the government. He was elected a corresponding member of the USSR Academy of Sciences in 1946 and an active member in 1953. Artsimovich was a Hero of Socialist Labor, held a number of Orders of the Soviet Union, and was a Lenin and State Prize Laureate.

Artsimovich was an ardent proponent of international collaboration between scientists in solution of the most significant scientific problems. Clearly recognizing the responsibility of the world scientific community in a nuclear century, he took an active part in the Pugwash movement as a prominent member of its International Committee.

Artsimovich lived brilliantly, leaving his mark clearly chiselled into one of the cornerstones of Twentieth-Century physics—the problem of controlled thermonuclear fusion.

Perhaps more than anyone else, he recognized at the start not only the magnificence of a solution to this problem, but also the limitless difficulties on the path to that solution, as reflected in his aphorism: "The hope for a quick solution to the problem of controlled thermonuclear fusion is like the hope of a sinner of reaching Paradise without passing through Purgatory." He himself traveled far along this thorny path, and the acknowledged success of the "Tokamak" program was his crowning scientific achievement.

The brilliant mind and irresistible personal charm of Lev Andreevich Artsimovich will always be remembered by his friends and colleagues and all others who had the opportunity to associate with him.

Translated by R. W. Bowers

ERRATUM

Article by F. V. Bunkin et al., "Interaction of Intense Optical Radiation with Free Electrons (Nonrelativistic Case)," Vol. 15, No. 4, p. 416.

In the calculation of the coefficient of light absorption by an electron beam propagating along the electric-field polarization vector, the averaging over the phase shift was carried out in error (formula (2.31) and Fig. 2a). In the general case this averaging is quite complicated. The weak-field approximation $\zeta \ll 1$ (first formula of (2.30)) has been correctly treated in the review. For the strong-field asymptotic form at $\zeta \gg 1$ we obtain in place of (2.31) the result

$$\alpha = \frac{16\pi Z^2 e^3 N_i N_e \omega}{c E_0^3} \left\{ \frac{1}{3} + i \bar{L} \ln \left[\frac{2\zeta}{(Ze^2 \omega / m c^3)^{1/3}} \right] \right\},$$

Where \bar{L} is the Coulomb logarithm $L(\psi)$ averaged over the phase ψ . It follows from this expression that in a strong field the absorption coefficient is positive, whereas in a weak field it is negative. The absorption coefficient reverses sign (in the region $\zeta \sim 1$), having at least two extrema, and decreases like E_0^{-3} at $\zeta \gg 1$.

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