

Erratum: *Colloquium*: Momentum of an electromagnetic wave in dielectric media [Rev. Mod. Phys. 79, 1197 (2007)]

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On page 1208, Eq. (44) and the surrounding text should be amended to read “... However, under the Abraham tensor the electromagnetic momentum density within the material is only \mathbf{g}_f and hence it must be accompanied by a material momentum of $(n_g - 1)\mathbf{g}_f$. Identifying this with the corresponding term in Eq. (41), and substituting for \mathbf{g}_f the free space momentum density $\mathbf{E} \times \mathbf{H}/c^2$, we obtain

$$\mathbf{g}_{\text{mat,Abr}} = \rho_0 \mathbf{v} = (n_g - 1) \frac{\mathbf{E} \times \mathbf{H}}{c^2}. \quad (44)$$

This expression holds for both dispersive and nondispersive media. It is trivial to show ...”

On page 1209, in the first paragraph, “... we obtain via Eq. (53) a flux of $(\mu_0/\mu)n_\phi \mathbf{g}_f$, which is in accordance with experiment—existing experiments have been insufficiently sensitive to detect a μ_0/μ term.” should be amended to “... we obtain via Eq. (53) flux of $n_\phi \mathbf{g}_f$, which is in accordance with experiment.”

On page 1210, in the second paragraph of Sec. VIII.C.1, “... up to a factor of $(\mu_0/\mu) n_g/n_\phi$ ” should be replaced with “... up to a factor of n_g/n_ϕ ”

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