Yang, J., **Zhou, H.,** On the Effect of the Electric Field in the Free Space Surrounding a Finite Piezoelectric Body, IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 53, no. 9, 2006, pp. 1557-1559

Abstract

This note shows that a widely used approximation in analyzing motions of a finite piezoelectric body (i.e., the normal component of the electric displacement vector at an unelectroded material-air interface can be taken to be zero when the dielectric constant of the material is much larger than the electric permittivity of the free space) may lead to inaccurate results.

Keywords

Electric field, Motion, Piezoelectric body