

Abstract Submitted
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Orientation dependence of Casimir force between uniaxial crystals MARK ROMANOWSKY, FEDERICO CAPASSO, Harvard University — We present calculations showing that the Casimir force between uniaxial crystals depends on the orientation of the optical axes. For strongly anisotropic crystals, the Casimir force can be substantially different when the optical axes are perpendicular to the crystal surfaces versus the case in which they are parallel to the surfaces. We compute the force numerically for cases of experimental interest, and discuss the prospects for observing this effect.

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