

Direct Measurements of the Electrocaloric Effect in Solid Ferroelectric Materials via Thermoreflectance

Authors : Layla Farhat, Mathieu Bardoux, Stéphane Longuemart, Ziad Herro, Abdelhak Hadj Sahraoui

Abstract : Electrocaloric (EC) effect refers to the isothermal entropy or adiabatic temperature changes of a dielectric material induced by an external electric field. This phenomenon has been largely ignored for application because only modest EC effects (2.6

Keywords : electrocaloric effect, thermoreflectance, ferroelectricity, cooling system

Conference Title : ICMES 2021 : International Conference on Materials for Electronic Systems

Conference Location : New York, United States

Conference Dates : December 09-10, 2021