عنوان مقاله:

Analysis of a class of frictional contact problem for elastic-viscoplastic piezoelectric thermal materials

نویسنده:

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خلاصه مقاله:

We consider a quasistatic frictional contact problem with a subdifferential boundary condition for general thermo-electro-elastic-viscoplastic materials. The frictional contact is modeled by a general velocity-dependent dissipation function. We derive a weak formulation of the system and then prove the existence of a unique weak solution to the problem. The proof is based on arguments of evolutionary variational inequalities, parabolic equations, the variational equation, differential equations, and the fixed-point theorem. Finally, we describe a number of concrete contact and friction conditions to which our results apply.

کلمات کلیدی:

thermo-electro-elastic-viscoplastic, quasistatic, subdifferential boundary condition, Evolutionary variational inequalities, differential equations, Fixed point

لینک ثابت مقاله در پایگاه سیویلیکا:

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