

**Bitsadze, L.****Interface crack problem for electroelastic body.** (English) Zbl 0966.74022  
Georgian Math. J. 7, No. 2, 231-244 (2000).

Summary: A two-dimensional crack problem in the Comninou formulation is investigated for a piecewise-homogeneous plane. Applying a special integral representation formula for the displacement vector, we reduce the problem to a system of singular integral equations. Its solvability is proved using the potential method and the theory of singular integral equations.

**MSC:**

- 74F15 Electromagnetic effects in solid mechanics
- 74R10 Brittle fracture
- 74M15 Contact in solid mechanics
- 74G25 Global existence of solutions for equilibrium problems in solid mechanics (MSC2010)

**Keywords:**

stress intensity; coefficient; two-dimensional crack problem; Comninou formulation; piecewise-homogeneous plane; integral representation formula; displacement vector; system of singular integral equations; solvability; potential method

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