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ASYMPTOTICS OF SOLUTIONS OF MIXED BOUNDARY VALUE PROBLEMS OF ELECTROELASTICITY NEAR THE CUSPIDAL EDGES

The asymptotics of solutions of spatial mixed boundary value problems of statics of the electroelasticity theory is established for anisotropic homogeneous media in domains having boundaries with closed cuspidal edges (dihedral angle is equal to 2π).

In this case we take into account the piezoelectric effect.

The complete asymptotics of solutions are considered near the cuspidal edge.

The properties of exponent of the first term of asymptotic expansion of solutions are established in the special class of the transversally-isotropic piezoelectric bodies.