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THE WEIGHTED FINITE ELEMENT METHOD FOR THE LAME SYSTEM IN TWO-DIMENSIONAL DOMAIN WITH A CRACK

The notion of R_ν -generalized solution in a special weighted functional set was introduced for the Lamé system posed in two-dimensional domain with a crack. The weighted finite element method (FEM) was built. Numerical analysis of the model problem showed advantages of the suggested method over the classic FEM.

Keywords: elasticity problem with a crack, weighted finite element method, R_ν -generalized solution.

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