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Application of a second order accurate finite-difference method to problems of diffraction of elastic waves by gradient layers

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Abstract

© Published under licence by IOP Publishing Ltd. A generalized statement is formulated for the boundary-value problem describing diffraction of elastic waves by gradient isotropic and transversely isotropic layers. Numerical experiments are conducted for various types of materials filling the layer. A conclusion is drawn that the obtained finite-difference scheme is second-order accurate, when distributions of elastic parameters in the layer are described by smooth curves.

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