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An improved rotated staggered-grid finite-difference method with fourth-order temporal accuracy for elastic-wave modeling in anisotropic media

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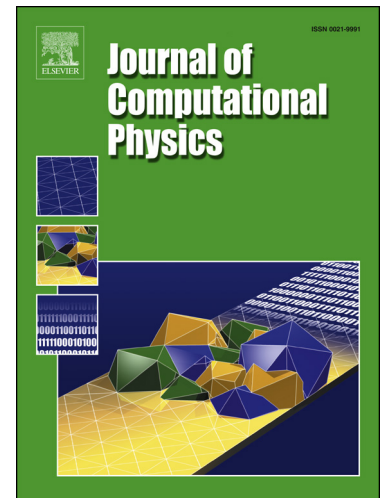
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Highlights

- Our improved RSG scheme has fourth-order temporal accuracy, and therefore the temporal dispersion associated with prolonged wave propagation or a large temporal step size is very low.
- The high-order temporal accuracy is achieved by including high-order temporal derivatives, and we convert these high-order temporal derivatives to high-order spatial derivatives to reduce computational cost.
- Our improved RSG scheme can serve as an efficient tool for prolonged modeling of elastic-wave propagation in 2D anisotropic media.

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