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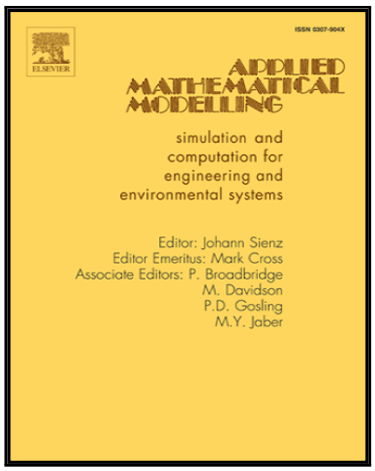

A modified singular boundary method for three-dimensional high frequency acoustic wave problems

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Highlights

- A modified fundamental solution of Helmholtz equation is proposed.
- The modified singular boundary method only needs 2-3 source points in one wavelength per direction.
- The modified singular boundary method has similar condition number to the boundary element method.
- Three-dimensional Helmholtz equation with up to wavenumber 440 has successfully been simulated.

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