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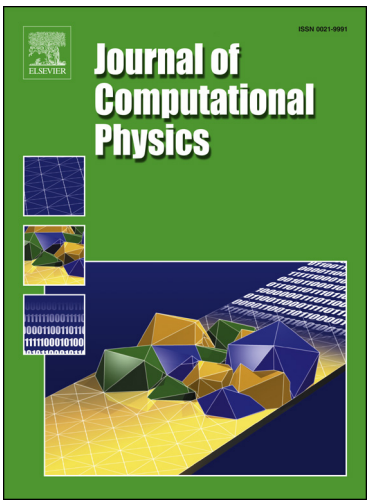

Prediction of transmission, reflection and absorption coefficients of periodic structures using a hybrid Wave Based - Finite Element unit cell method

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Highlights

- The acoustic performance of (complex) planar periodic structures is considered.
- A hybrid Wave Based – Finite Element unit cell method is presented.
- The FEM is used to model the unit cell allowing for complex structures.
- The WBM is used to model the semi-infinite acoustic pressure fields.
- A powerful tool is obtained to evaluate ever more complex vibro-acoustic treatments.