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Microstructural topology optimization of viscoelastic materials of damped structures subjected to dynamic loads

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Highlights

• Microstructural topology optimization of viscoelastic materials of damped structures is presented.

- Transient response analysis is performed in time domain.
- An adjoint variable sensitivity analysis scheme is developed.
- Optimized microstructures of viscoelastic materials effectively attenuate transient responses of the damped structures.

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