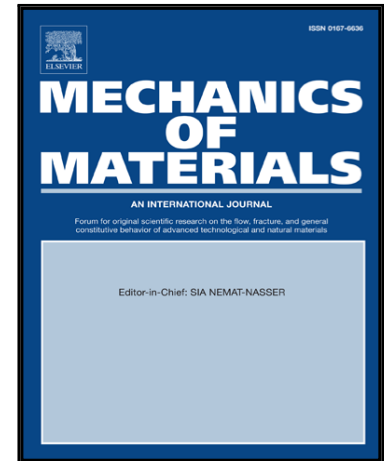


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Cascade Continuum Micromechanics model for the effective permeability of solids with distributed microcracks: Comparison with numerical homogenization

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Highlights

- Permeability of microcracked materials is determined using analytical and computational models
- Numerical computations confirm validity of the Cascade Continuum Micromechanics model
- Both models predict a physically consistent effective permeability with a percolation threshold
- Percolation characteristics strongly depends on the permeability of the matrix material

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