
Fracture of soft composites: modeling and experiments

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Abstract

We present theory and simulations of fracture of soft staggered composites (1) based on the generalization and finite element implementation of the material sink approach (2). Results of the simulations are compared to experiments with 3D-printed soft composites (3,4). In addition, the experiments allow an assessment of the stress-based versus energy-based failure criteria (5). Results of the assessment are intriguing.

References

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