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Micromechanical analysis of the stress transfer in single-fiber composite: the influence of the uniform and graded interphase with finite-thickness

Pei-Liang Bian, Hai Qing, Cun-Fa Gao

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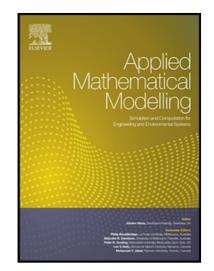
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Highlights

- A new theoretical model is developed to analyze the stress transfer between fiber and matrix.
- The interphase is assumed to be homogeneous or power-graded variation with radial location.
- The present model is verified through a finite element model.
- Stress distribution in composites are obtained under different conditions.

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