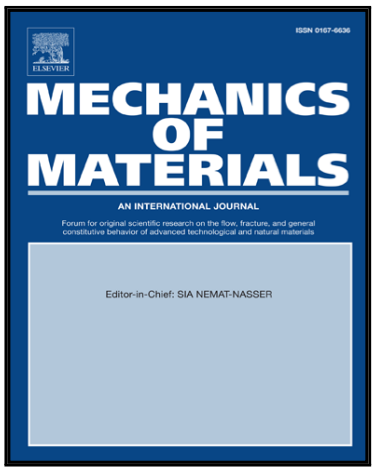

Materials based design of structures: computational modeling of the mechanical behavior of gold-polymer nanocomposites

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Highlights

- A crystal plasticity-viscoplasticity gold-polymer composite modeling framework
- Investigation of the influence of the gold content, ligament size and connectivity
- Separate parameter identification for gold and epoxy resin constituents
- Captured characteristics of the response curves, gained stability with impregnation