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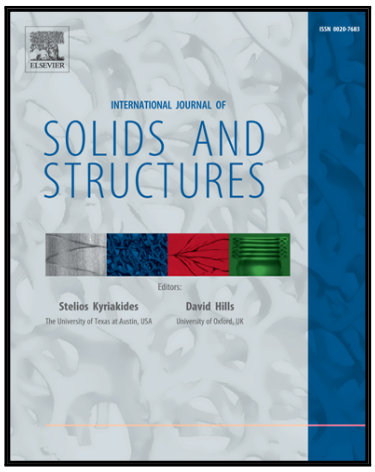

Mechanics of polycarbonate in biaxial impact loading

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Highlights

- Biaxial impact of Polycarbonate plates is investigated numerically and experimentally
- A thermomechanical constitutive model to predict PC dynamic response is proposed
- In biaxial impact, high hydrostatic stresses at low triaxiality levels are developed
- Effective plastic stretch is the invariant that best represents ductile failure
- An extension for criteria modeling ductile/brittle failure competition is proposed

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