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Coupling digital image correlation and finite element analysis to determine constitutive parameters in necking tensile specimens

Daniel Gerbig , Allan Bower , Vesna Savic , Louis G. Hector Jr.

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Highlights:

- Analytically combines digital image correlation and finite element analysis
- Applicable to arbitrary constitutive model
- Tested and verified with simulated tensile experiments
- Applied to measure flow behavior beyond 60% strain from necking tensile experiments

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