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Finite element analysis of the Advanced Combat Helmet under various ballistic impacts

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### ACCEPTED MANUSCRIPT

## Highlights:

- Created nonlinear finite element model of the Advanced Combat Helmet (ACH)
- Evaluated the ballistic performance of ACH under various ballistic impacts.
- Compared simulation results with NIJ standard tests and the V50 ballistic limit tests
- Found good agreement between simulation results and test data
- Evaluated the ACH performance under rifle bullet impacts.



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