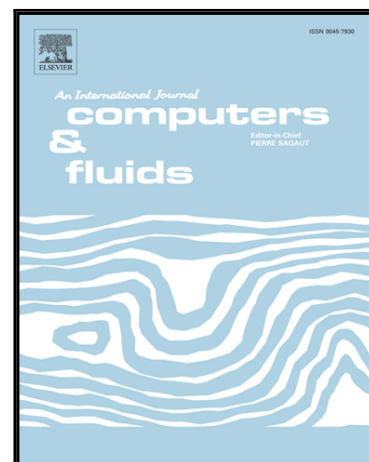


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A GPU based compressible multiphase hydrocode for modelling violent hydrodynamic impact problems

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Highlights

- A versatile compressible multiphase hydrocode for marine engineering impact problems.
- Non-physical pressure oscillation near the material interface is successfully avoided.
- It can accurately model violent hydrodynamic slamming problems by properly dealing the crucial compressibility effects of fluid.
- It can also model complex hull cavitation problems in addition to incipient cavitation.
- The hydrocode is successfully accelerated on the GPU by a speed up over 60x.

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