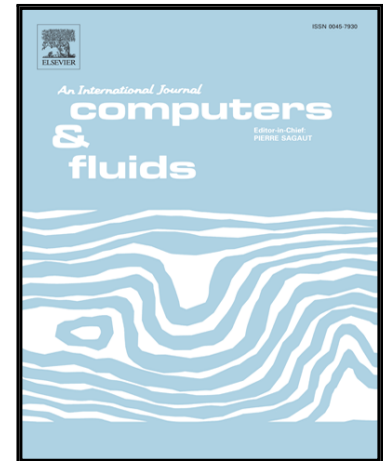


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Numerical Study on Rarefied Unsteady Jet Flow Expanding into Vacuum Using Gas-kinetic Unified Algorithm

Jun-Lin Wu , Zhi-Hui Li , Ao-Ping Peng , Xing-Cai Pi ,
Zhong-Hua Li

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Highlights:

Gas-Kinetic Unified Algorithm is developed for unsteady jet flows into vacuum

Supersonic jet flow is solved with Knudsen number 100-0.1 by Boltzmann model equation

Time-splitting explicit scheme and multi-block patched grid system are constructed

Convective term of Boltzmann model equation dominates kernel region of jet flow

Unsteady flow process with startup, steady state and shutting down is simulated

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