



Lattice Boltzmann Simulations of Thermocapillary Motion of Droplets in Microfluidic Channels

preview

Jonathan Li, Haihu Liu, Nikolaos Ioannou, Yonghao Zhang and Jason M. Reese

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Abstract

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Unified Gas Kinetic Scheme and Direct Simulation Monte Carlo Computations of High-Speed Lid-Driven Microcavity Flows

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Vishnu Venugopal and Sharath S. Girimaji

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References
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Response and Recovery Times of Elastic and Viscoelastic Capsules in Shear Flow

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References
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Comparison of Simulations of Convective Flows

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Pierre Lallemand and François Dubois

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References



Numerical Simulation of Rarefied Gas Flows with Specified Heat Flux Boundary Conditions

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Jianping Meng, Yonghao Zhang and Jason M. Reese

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References
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Numerical Simulation of Melting with Natural Convection Based on Lattice Boltzmann Method and Performed with CUDA Enabled GPU

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Wei Gong, Kévyng Johannes and Frédéric Kuznik

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References
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L_2 Convergence of the Lattice Boltzmann Method for One Dimensional Convection-Diffusion-Reaction Equations

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Michael Junk and Zhaoxia Yang

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References
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A Fast and Rigorously Parallel Surface Voxelization Technique for GPU-Accelerated CFD Simulations

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References
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Three-Dimensional Simulation of Balloon Dynamics by the Immersed Boundary Method Coupled to the Multiple-Relaxation-Time Lattice Boltzmann Method

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Jiayang Wu, Yongguang Cheng, Chunze Zhang and Wei Diao

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References
(59 KB)



The Rupture of Thin Liquid Films Placed on Solid and Liquid Substrates in Gravity Body Forces

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A. L. Kupershtokh, E. V. Ermanyuk and N. V. Gavrilov

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References
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Efficient Preconditioners for a Shock Capturing Space-Time Discontinuous Galerkin Method for Systems of Conservation Laws

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Andreas Hildebrand and Siddhartha Mishra

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References
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