Crouzeix-Raviart MsFEM with Bubble Functions for Diffusion and Advection-Diffusion in Perforated Media

preview

Pierre Degond, Alexei Lozinski, Bagus Putra Muljadi and Jacek Narski

Abstract | **PDF** (17.442 MB) | References (30 KB)

A Localized Mass-Conserving Lattice Boltzmann Approach for Non-Newtonian Fluid Flows

preview

Liang Wang, Jianchun Mi, Xuhui Meng and Zhaoli Guo

Abstract | **PDF** (197 KB) | References (37 KB)

Simulation of Acoustic Behavior of Bubbly Liquids with Hybrid Lattice Boltzmann and Homogeneous Equilibrium Models

preview

Xiao-Peng Chen and Ming Liu

Abstract | **PDF** (0 KB) | References (34 KB)

Effects of Reynolds and Prandtl Numbers on Heat Transfer Around a Circular Cylinder by the Simplified Thermal Lattice Boltzmann Model

preview

Qing Chen, Xiaobing Zhang and Junfeng Zhang

Multi-GPU Based Lattice Boltzmann Method for Hemodynamic Simulation in Patient-Specific Cerebral Aneurysm

preview

Changsheng Huang, Baochang Shi, Zhaoli Guo and Zhenhua Chai

Efficient Stabilization of Advection Terms Involved in Separated Representations of Boltzmann and Fokker-Planck Equations

preview

F. Chinesta, E. Abisset-Chavanne, A. Ammar and E. Cueto

A Finite-Difference Lattice Boltzmann Approach for Gas Microflows

preview

G. P. Ghiroldi and L. Gibelli

Pore-Scale Study of the Non-Linear Mixing of Fluids with Viscous Fingering in Anisotropic Porous Media

preview

Gaojie Liu and Zhaoli Guo

Abstract   **PDF** (1.536 MB)   References (47 KB)

Lattice Boltzmann Modeling of Thermal Conduction in Composites with Thermal Contact Resistance

preview

Chiyu Xie, Jinku Wang, Dong Wang, Ning Pan and Moran Wang

Abstract   **PDF** (905 KB)   References (69 KB)

Lattice Boltzmann Simulation of Droplet Formation in Non-Newtonian Fluids

preview

Y. Shi and G. H. Tang

Abstract   **PDF** (0 KB)   References (38 KB)

Computational Modeling of Membrane Viscosity of Red Blood Cells

preview

John Gounley and Yan Peng

Abstract   **PDF** (761 KB)   References (46 KB)

Lattice Boltzmann Schemes with Relative Velocities

preview

François Dubois, Tony Fevrier and Benjamin Graille

Abstract | **PDF**
(207 KB) | References
(26 KB)