SÃ©bastien Leclaire

List of Publications by Year
in descending order

		623734	552781
28	970	14	26
papers	citations	h-index	g-index
28	28	28	685
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Simple lattice Boltzmann method algorithm with low memory usage. Journal of Computational Science, 2022, , 101723.	2.9	0
2	Palabos: Parallel Lattice Boltzmann Solver. Computers and Mathematics With Applications, 2021, 81, 334-350.	2.7	193
3	An interpolation-based lattice Boltzmann method for non-conforming orthogonal meshes. Computers and Mathematics With Applications, 2021, 100, 152-166.	2.7	1
4	Investigations of water droplet impact and freezing on a cold substrate with the Lattice Boltzmann method. International Journal of Thermofluids, 2021, 12, 100109.	7.8	4
5	Validation of the pressure drop–flow rate relationship predicted by lattice Boltzmann simulations for immiscible liquid–liquid flows through SMX static mixers. Chemical Engineering Research and Design, 2020, 153, 350-368.	5.6	9
6	Characterization of Transport-Enhanced Phase Separation in Porous Media Using a Lattice-Boltzmann Method. Geofluids, 2019, 2019, 1-13.	0.7	4
7	Comparison of multiphase SPH and LBM approaches for the simulation of intermittent flows. Computational Particle Mechanics, 2019, 6, 695-720.	3.0	13
8	Multiscale simulation of ink seepage into paper: A mesoscopic variational model. Computer Physics Communications, 2019, 239, 1-13.	7.5	3
9	Multiphase periodic pressure difference boundary condition enhanced by a proportional–integral–derivative controller for the lattice Boltzmann method. International Journal for Numerical Methods in Fluids, 2018, 88, 434-446.	1.6	4
10	Three-dimensional lattice Boltzmann method benchmarks between color-gradient and pseudo-potential immiscible multi-component models. International Journal of Modern Physics C, 2017, 28, 1750085.	1.7	19
11	Solving incompressible fluid flows on unstructured meshes with the lattice Boltzmann flux solver. Engineering Applications of Computational Fluid Mechanics, 2017, 11, 310-327.	3.1	11
12	Generalized three-dimensional lattice Boltzmann color-gradient method for immiscible two-phase pore-scale imbibition and drainage in porous media. Physical Review E, 2017, 95, 033306.	2.1	115
13	The mechanics of shallow magma reservoir outgassing. Geochemistry, Geophysics, Geosystems, 2017, 18, 2887-2905.	2.5	69
14	Modeling of static contact angles with curved boundaries using a multiphase lattice Boltzmann method with variable density and viscosity ratios. International Journal for Numerical Methods in Fluids, 2016, 82, 451-470.	1.6	35
15	A multiphase lattice Boltzmann method for simulating immiscible liquid-liquid interface dynamics. Applied Mathematical Modelling, 2016, 40, 6376-6394.	4.2	29
16	Forward and backward finite differences for isotropic gradients on a square lattice derived from a rectangular lattice formulation. International Journal of Computer Mathematics, 2015, 92, 1078-1085.	1.8	2
17	An approach to control the spurious currents in a multiphase lattice Boltzmann method and to improve the implementation of initial condition. International Journal for Numerical Methods in Fluids, 2015, 77, 732-746.	1.6	21
18	Unstable two-phase flow rate in micro-channels and cracks under imposed pressure difference. International Journal of Multiphase Flow, 2015, 77, 131-141.	3.4	14

#	Article	IF	Citations
19	An implementation of the Spalartâ€"Allmaras turbulence model in a multi-domain lattice Boltzmann method for solving turbulent airfoil flows. Computers and Mathematics With Applications, 2015, 70, 3001-3018.	2.7	17
20	High Order Spatial Generalization of 2D and 3D Isotropic Discrete Gradient Operators with Fast Evaluation on GPUs. Journal of Scientific Computing, 2014, 59, 545-573.	2.3	22
21	Unsteady immiscible multiphase flow validation of a multiple-relaxation-time lattice Boltzmann method. Journal of Physics A: Mathematical and Theoretical, 2014, 47, 105501.	2.1	35
22	Equilibrium distributions for straight, curved, and immersed boundary conditions in the lattice Boltzmann method. Computers and Fluids, 2014, 101, 126-135.	2.5	10
23	Multiphase flow modeling of spinodal decomposition based on the cascaded lattice Boltzmann method. Physica A: Statistical Mechanics and Its Applications, 2014, 406, 307-319.	2.6	14
24	Progress and investigation on lattice Boltzmann modeling of multiple immiscible fluids or components with variable density and viscosity ratios. Journal of Computational Physics, 2013, 246, 318-342.	3.8	97
25	Enhanced equilibrium distribution functions for simulating immiscible multiphase flows with variable density ratios in a class of lattice Boltzmann models. International Journal of Multiphase Flow, 2013, 57, 159-168.	3.4	49
26	Numerical evaluation of two recoloring operators for an immiscible two-phase flow lattice Boltzmann model. Applied Mathematical Modelling, 2012, 36, 2237-2252.	4.2	106
27	Isotropic color gradient for simulating very high-density ratios with a two-phase flow lattice Boltzmann model. Computers and Fluids, 2011, 48, 98-112.	2.5	70
28	Convolution Kernel for Fast CPU/GPU Computation of 2D/3D Isotropic Gradients on a Square/Cubic Lattice. , 0, , .		4