

# Irina Ginzburg

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3669450/publications.pdf>

Version: 2024-02-01

34  
papers

3,745  
citations

361045

20  
h-index

377514

34  
g-index

34  
all docs

34  
docs citations

34  
times ranked

1944  
citing authors

#	ARTICLE	IF	CITATIONS
1	Spurious interface and boundary behaviour beyond physical solutions in lattice Boltzmann schemes. Journal of Computational Physics, 2021, 431, 109986.	1.9	8
2	Enhanced single-node lattice Boltzmann boundary condition for fluid flows. Physical Review E, 2021, 103, 053308.	0.8	11
3	Mass-balance and locality versus accuracy with the new boundary and interface-conjugate approaches in advection-diffusion lattice Boltzmann method. Physics of Fluids, 2021, 33, 057104.	1.6	10
4	Steady-state two-relaxation-time lattice Boltzmann formulation for transport and flow, closed with the compact multi-reflection boundary and interface-conjugate schemes. Journal of Computational Science, 2021, 54, 101215.	1.5	13
5	Reviving the local second-order boundary approach within the two-relaxation-time lattice Boltzmann modelling. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190404.	1.6	10
6	Determination of the diffusivity, dispersion, skewness and kurtosis in heterogeneous porous flow. Part I: Analytical solutions with the extended method of moments.. Advances in Water Resources, 2018, 115, 60-87.	1.7	6
7	Determination of the diffusivity, dispersion, skewness and kurtosis in heterogeneous porous flow. Part II: Lattice Boltzmann schemes with implicit interface. Advances in Water Resources, 2018, 118, 49-82.	1.7	6
8	Low- and high-order accurate boundary conditions: From Stokes to Darcy porous flow modeled with standard and improved Brinkman lattice Boltzmann schemes. Journal of Computational Physics, 2017, 335, 50-83.	1.9	27
9	Prediction of the moments in advection-diffusion lattice Boltzmann method. I. Truncation dispersion, skewness, and kurtosis. Physical Review E, 2017, 95, 013304.	0.8	17
10	Prediction of the moments in advection-diffusion lattice Boltzmann method. II. Attenuation of the boundary layers via double-bounce-back flux scheme. Physical Review E, 2017, 95, 013305.	0.8	21
11	Comment on "An improved gray Lattice Boltzmann model for simulating fluid flow in multi-scale porous media": Intrinsic links between LBE Brinkman schemes. Advances in Water Resources, 2016, 88, 241-249.	1.7	27
12	Stokes-Brinkman-Darcy Solutions of Bimodal Porous Flow Across Periodic Array of Permeable Cylindrical Inclusions: Cell Model, Lubrication Theory and LBM/FEM Numerical Simulations. Transport in Porous Media, 2016, 111, 795-825.	1.2	16
13	Analysis and improvement of Brinkman lattice Boltzmann schemes: Bulk, boundary, interface. Similarity and distinctness with finite elements in heterogeneous porous media. Physical Review E, 2015, 91, 023307.	0.8	49
14	Truncation effect on Taylor-Aris dispersion in lattice Boltzmann schemes: Accuracy towards stability. Journal of Computational Physics, 2015, 299, 974-1003.	1.9	26
15	The permeability and quality of velocity field in a square array of solid and permeable cylindrical obstacles with the TRT-LBM and FEM Brinkman schemes. Comptes Rendus - Mecanique, 2015, 343, 545-558.	2.1	12
16	Local boundary reflections in lattice Boltzmann schemes: Spurious boundary layers and their impact on the velocity, diffusion and dispersion. Comptes Rendus - Mecanique, 2015, 343, 518-532.	2.1	19
17	Coarse- and fine-grid numerical behavior of MRT/TRT lattice-Boltzmann schemes in regular and random sphere packings. Journal of Computational Physics, 2015, 281, 708-742.	1.9	109
18	Taylor dispersion in heterogeneous porous media: Extended method of moments, theory, and modelling with two-relaxation-times lattice Boltzmann scheme. Physics of Fluids, 2014, 26, .	1.6	31

#	ARTICLE	IF	CITATIONS
19	Multiple anisotropic collisions for advection-diffusion Lattice Boltzmann schemes. <i>Advances in Water Resources</i> , 2013, 51, 381-404.	1.7	48
20	Truncation Errors, Exact And Heuristic Stability Analysis Of Two-Relaxation-Times Lattice Boltzmann Schemes For Anisotropic Advection-Diffusion Equation. <i>Communications in Computational Physics</i> , 2012, 11, 1439-1502.	0.7	84
21	Optimal Stability of Advection-Diffusion Lattice Boltzmann Models with Two Relaxation Times for Positive/Negative Equilibrium. <i>Journal of Statistical Physics</i> , 2010, 139, 1090-1143.	0.5	150
22	Viscosity independent numerical errors for Lattice Boltzmann models: From recurrence equations to collision numbers. <i>Computers and Mathematics With Applications</i> , 2009, 58, 823-840.	1.4	163
23	Consistent lattice Boltzmann schemes for the Brinkman model of porous flow and infinite Chapman-Enskog expansion. <i>Physical Review E</i> , 2008, 77, 066704.	0.8	63
24	Field-scale modeling of subsurface tile-drained soils using an equivalent-medium approach. <i>Journal of Hydrology</i> , 2007, 341, 105-115.	2.3	21
25	Lattice Boltzmann and analytical modeling of flow processes in anisotropic and heterogeneous stratified aquifers. <i>Advances in Water Resources</i> , 2007, 30, 2202-2234.	1.7	47
26	Lattice Boltzmann modeling with discontinuous collision components: Hydrodynamic and Advection-Diffusion Equations. <i>Journal of Statistical Physics</i> , 2007, 126, 157-206.	0.5	74
27	Variably saturated flow described with the anisotropic Lattice Boltzmann methods. <i>Computers and Fluids</i> , 2006, 35, 831-848.	1.3	72
28	Equilibrium-type and link-type lattice Boltzmann models for generic advection and anisotropic-dispersion equation. <i>Advances in Water Resources</i> , 2005, 28, 1171-1195.	1.7	367
29	Generic boundary conditions for lattice Boltzmann models and their application to advection and anisotropic dispersion equations. <i>Advances in Water Resources</i> , 2005, 28, 1196-1216.	1.7	149
30	Lattice Boltzmann approach to Richards' equation. <i>Developments in Water Science</i> , 2004, , 583-595.	0.1	8
31	Lattice Boltzmann model for free-surface flow and its application to filling process in casting. <i>Journal of Computational Physics</i> , 2003, 185, 61-99.	1.9	110
32	Multireflection boundary conditions for lattice Boltzmann models. <i>Physical Review E</i> , 2003, 68, 066614.	0.8	418
33	Multiple-relaxation-time lattice Boltzmann models in three dimensions. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2002, 360, 437-451.	1.6	1,494
34	A free-surface lattice Boltzmann method for modelling the filling of expanding cavities by Bingham fluids. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2002, 360, 453-466.	1.6	59