Gerasim Krivovichev

List of Publications by Year
in descending order

42 papers	111 citations	1684188 5 h-index	1588992 8 g-index
48 all docs	48 docs citations	48 times ranked	79 citing authors

#	Article	IF	Citations
1	Stability analysis of body force action models used in the single-relaxation-time single-phase lattice Boltzmann method. Applied Mathematics and Computation, 2019, 348, 25-41.	2.2	13
2	On the Stability of Multi-Step Finite-Difference-Based Lattice Boltzmann Schemes. International Journal of Computational Methods, 2019, 16, 1850087.	1.3	12
3	Computer modelling of ciliary motility. Acta of Bioengineering and Biomechanics, 2008, 10, 61-4.	0.4	7
4	Computational analysis of one-dimensional models for simulation of blood flow in vascular networks. Journal of Computational Science, 2022, 62, 101705.	2.9	7
5	A computational approach to the modeling of the glaciation of sea offshore gas pipeline. International Journal of Heat and Mass Transfer, 2017, 115, 1132-1148.	4.8	6
6	Parametric schemes for the simulation of the advection process in finite-difference-based single-relaxation-time lattice Boltzmann methods. Journal of Computational Science, 2020, 44, 101151.	2.9	6
7	On the finite-element-based lattice Boltzmann scheme. Applied Mathematical Sciences, 0, 8, 1605-1620.	0.1	6
8	On the stability of lattice boltzmann equations for one-dimensional diffusion equation. International Journal of Modeling, Simulation, and Scientific Computing, 2017, 08, 1750013.	1.4	5
9	Comparison of Non-Newtonian Models of One-Dimensional Hemodynamics. Mathematics, 2021, 9, 2459.	2.2	5
10	Comparison of inviscid and viscid one-dimensional models of blood flow in arteries. Applied Mathematics and Computation, 2022, 418, 126856.	2.2	5
11	Linear Bhatnagarâ€"Grossâ€"Krook equations for simulation of linear diffusion equation by lattice Boltzmann method. Applied Mathematics and Computation, 2018, 325, 102-119.	2.2	4
12	Analysis of the parametric models of passive scalar transport used in the lattice Boltzmann method. Computers and Mathematics With Applications, 2020, 79, 1503-1524.	2.7	4
13	Optimized low-dispersion and low-dissipation two-derivative Rungeâ€"Kutta method for wave equations. Journal of Applied Mathematics and Computing, 2020, 63, 787-811.	2.5	4
14	Stability analysis of schemes with upwind differences for the solution of the system of kinetic equations for the modelling of semi-compressible gas. , 2015, , .		3
15	On the parametrical Lattice Boltzmann equations. Applied Mathematical Sciences, 0, 8, 5003-5014.	0.1	3
16	Modification of the lattice Boltzmann method for the computations of viscid incompressible fluid flows. Computer Research and Modeling, 2014, 6, 365-381.	0.3	3
17	On the modification of lattice Boltzmann method. Applied Mathematical Sciences, 0, 10, 947-958.	0.1	3
18	Stability analysis of two-step finite-difference schemes for the system of kinetic equations. , 2014, , .		2

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19	Predictor-corrector finite-difference lattice Boltzmann schemes. Applied Mathematical Sciences, 0, 9, 4191-4199.	0.1	2
20	Parallel realization of the computational algorithm based on the implicit lattice Boltzmann equations. Journal of Physics: Conference Series, 2018, 1038, 012041.	0.4	2
21	Analytical solutions of the problems for equations of one-dimensional hemodynamics. Journal of Physics: Conference Series, 2019, 1400, 044031.	0.4	2
22	On the splitting method for the numerical solution of Boltzmann and lattice Boltzmann equations for gas flows in microsystems. , 2016, , .		1
23	Analysis of parametric finite-difference schemes for the system of linear advection equations. Journal of Physics: Conference Series, 2017, 929, 012033.	0.4	1
24	On the second order finite-difference scheme for the solution of the system of one-dimensional equations of hemodynamics. Journal of Physics: Conference Series, 2018, 1135, 012023.	0.4	1
25	Stability analysis of the lattice Boltzmann schemes with body force action. Journal of Physics: Conference Series, 2018, 1038, 012040.	0.4	1
26	The approach to optimization of finite-difference schemes for the advective stage of finite-difference-based lattice Boltzmann method. International Journal of Modeling, Simulation, and Scientific Computing, 2020, 11, 2050002.	1.4	1
27	Steady-state solutions of one-dimensional equations of non-Newtonian hemodynamics. International Journal of Biomathematics, 2022, 15, .	2.9	1
28	On the modification of lattice boltzmann method for the modelling of viscous incompressible flows. , 2014, , .		0
29	On the finite-element-based lattice boltzmann scheme for the computations of viscous flows on unstructured meshes. , 2014, , .		0
30	Mathematical modelling of biological mobility. , 2014, , .		0
31	Numerical analysis of two-step finite-difference-based lattice Boltzmann scheme. , 2014, , .		0
32	Mathematical modeling of two case of biological mobility. , 2014, , .		0
33	On the numerical viscosity of finite-difference schemes for the solution of the system of kinetic equations for modelling of semi-compressible gas. , 2015, , .		0
34	Stability analysis of finite-difference scheme for the system of kinetic equations. , 2015, , .		0
35	Optimization of dispersive and dissipative characteristics of finite-difference schemes for advection equation. , 2017, , .		0
36	Stability investigation of implicit parametrical schemes for the systems of kinetic equations. Journal of Physics: Conference Series, 2017, 929, 012032.	0.4	0

3

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37	The coefficient smoothing method application to the problem of gas pipeline glaciation. Journal of Physics: Conference Series, 2017, 929, 012036.	0.4	0
38	Stability analysis of the solutions of kinetic equations for modelling of gas flow at arbitrary heat ratio. Journal of Physics: Conference Series, 2018, 1135, 012022.	0.4	0
39	The one-dimensional model of non-Newtonian hemodynamics. Journal of Physics: Conference Series, 2019, 1400, 044022.	0.4	0
40	Characteristic-based finite-difference schemes for the simulation of convection–diffusion equation by the finite-difference-based lattice Boltzmann methods. International Journal of Computer Mathematics, 2021, 98, 1991-2007.	1.8	0
41	Kinetic equations for modelling of diffusion processes by lattice Boltzmann method. Computer Research and Modeling, 2017, 9, 919-936.	0.3	0
42	The initial-boundary problem for the system of 1D equations of non-Newtonian hemodynamics. Journal of Physics: Conference Series, 2020, 1697, 012075.	0.4	0