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	Comparison of inviscid and viscid one-dimensional models of blood flow in arteries. Applied Mathematics and Computation, 2022, 418, 126856.	2.2	5
2	Steady-state solutions of one-dimensional equations of non-Newtonian hemodynamics. International Journal of Biomathematics, 2022, 15, .	2.9	1
3	Computational analysis of one-dimensional models for simulation of blood flow in vascular networks. Journal of Computational Science, 2022, 62, 101705.	2.9	7
4	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
5	Comparison of Non-Newtonian Models of One-Dimensional Hemodynamics. Mathematics, 2021, 9, 2459.	2.2	5
6	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
7	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
8	Optimized low-dispersion and low-dissipation two-derivative Runge–Kutta method for wave equations. Journal of Applied Mathematics and Computing, 2020, 63, 787-811.	2.5	4
9	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
10	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
11	Analytical solutions of the problems for equations of one-dimensional hemodynamics. Journal of Physics: Conference Series, 2019, 1400, 044031.	0.4	2
12	The one-dimensional model of non-Newtonian hemodynamics. Journal of Physics: Conference Series, 2019, 1400, 044022.	0.4	0
13	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
14	On the Stability of Multi-Step Finite-Difference-Based Lattice Boltzmann Schemes. International Journal of Computational Methods, 2019, 16, 1850087.	1.3	12
15	Linear Bhatnagar–Gross–Krook equations for simulation of linear diffusion equation by lattice Boltzmann method. Applied Mathematics and Computation, 2018, 325, 102-119.	2.2	4
16	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
17	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
18	Parallel realization of the computational algorithm based on the implicit lattice Boltzmann equations. Journal of Physics: Conference Series, 2018, 1038, 012041.	0.4	2

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19	Stability analysis of the lattice Boltzmann schemes with body force action. Journal of Physics: Conference Series, 2018, 1038, 012040.	0.4	1
20	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
21	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
22	Optimization of dispersive and dissipative characteristics of finite-difference schemes for advection equation. , 2017, , .		0
23	Stability investigation of implicit parametrical schemes for the systems of kinetic equations. Journal of Physics: Conference Series, 2017, 929, 012032.	0.4	0
24	Analysis of parametric finite-difference schemes for the system of linear advection equations. Journal of Physics: Conference Series, 2017, 929, 012033.	0.4	1
25	The coefficient smoothing method application to the problem of gas pipeline glaciation. Journal of Physics: Conference Series, 2017, 929, 012036.	0.4	0
26	Kinetic equations for modelling of diffusion processes by lattice Boltzmann method. Computer Research and Modeling, 2017, 9, 919-936.	0.3	0
27	On the splitting method for the numerical solution of Boltzmann and lattice Boltzmann equations for gas flows in microsystems. , 2016, , .		1
28	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
29	Stability analysis of finite-difference scheme for the system of kinetic equations. , 2015, , .		0
30	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
31	On the modification of lattice boltzmann method for the modelling of viscous incompressible flows. , 2014, , .		0
32	Stability analysis of two-step finite-difference schemes for the system of kinetic equations. , 2014, , .		2
33	On the finite-element-based lattice boltzmann scheme for the computations of viscous flows on unstructured meshes. , 2014, , .		0
34	Mathematical modelling of biological mobility. , 2014, , .		0
35	Numerical analysis of two-step finite-difference-based lattice Boltzmann scheme. , 2014, , .		0
36	Mathematical modeling of two case of biological mobility. , 2014, , .		0

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37	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
38	Computer modelling of ciliary motility. Acta of Bioengineering and Biomechanics, 2008, 10, 61-4.	0.4	7
39	Predictor-corrector finite-difference lattice Boltzmann schemes. Applied Mathematical Sciences, 0, 9, 4191-4199.	0.1	2
40	On the finite-element-based lattice Boltzmann scheme. Applied Mathematical Sciences, 0, 8, 1605-1620.	0.1	6
41	On the parametrical Lattice Boltzmann equations. Applied Mathematical Sciences, 0, 8, 5003-5014.	0.1	3
42	On the modification of lattice Boltzmann method. Applied Mathematical Sciences, 0, 10, 947-958.	0.1	3