Boris V Rogov

List of Publications by Year
in descending order

55 papers	502 citations	623734 14 h-index	713466 21 g-index
57 all docs	57 docs citations	57 times ranked	97 citing authors

#	Article	IF	Citations
1	Monotone compact running schemes for systems of hyperbolic equations. Computational Mathematics and Mathematical Physics, 2012, 52, 578-600.	0.8	47
2	Fourth-order accurate bicompact schemes for hyperbolic equations. Doklady Mathematics, 2010, 81, 146-150.	0.6	35
3	Dispersive and dissipative properties of the fully discrete bicompact schemes of the fourth order of spatial approximation for hyperbolic equations. Applied Numerical Mathematics, 2019, 139, 136-155.	2.1	29
4	High-order accurate monotone compact running scheme for multidimensional hyperbolic equations. Computational Mathematics and Mathematical Physics, 2013, 53, 205-214.	0.8	25
5	High-order accurate monotone compact running scheme for multidimensional hyperbolic equations. Applied Numerical Mathematics, 2015, 93, 150-163.	2.1	23
6	Ion saturation currents to spherical and cylindrical electrostatic probes in collisional plasmas. Journal of Applied Physics, 1991, 70, 6726-6731.	2.5	22
7	Conservative limiting method for high-order bicompact schemes as applied to systems of hyperbolic equations. Applied Numerical Mathematics, 2020, 151, 229-245.	2.1	22
8	Minimal dissipation hybrid bicompact schemes for hyperbolic equations. Computational Mathematics and Mathematical Physics, 2016, 56, 947-961.	0.8	21
9	Effect of bulk viscosity in supersonic flow past spacecraft. Applied Numerical Mathematics, 2015, 93, 47-60.	2.1	20
10	Dispersive and dissipative properties of the fully discrete bicompact schemes of the fourth order of spatial approximation for hyperbolic equations. Keldysh Institute Preprints, 2018, , 1-30.	0.2	19
11	Monotone bicompact schemes for a linear advection equation. Doklady Mathematics, 2011, 83, 121-125.	0.6	18
12	On exact dimensional splitting for a multidimensional scalar quasilinear hyperbolic conservation law. Doklady Mathematics, 2016, 94, 382-386.	0.6	17
13	Family of central bicompact schemes with spectral resolution property for hyperbolic equations. Applied Numerical Mathematics, 2019, 142, 151-170.	2.1	16
14	Nonequilibrium boundary layer of potassium-seeded combustion products. Combustion and Flame, 1994, 98, 313-325.	5.2	15
15	CO behavior in laminar boundary layer of combustion product flow. Combustion and Flame, 1999, 119, 161-173.	5.2	14
16	Monotone high-order accurate compact scheme for quasilinear hyperbolic equations. Doklady Mathematics, 2011, 84, 747-752.	0.6	12
17	Bicompact scheme for the multidimensional stationary linear transport equation. Applied Numerical Mathematics, 2015, 93, 3-14.	2.1	12
18	Continuum models of rarefied gas flows in problems of hypersonic aerothermodynamics. Prikladnaya Matematika I Mekhanika, 2006, 70, 888-911.	0.4	10

#	Article	IF	Citations
19	Optimal monotonization of a high-order accurate bicompact scheme for the nonstationary multidimensional transport equation. Computational Mathematics and Mathematical Physics, 2016, 56, 962-976.	0.8	10
20	Iterative Approximate Factorization of Difference Operators of High-Order Accurate Bicompact Schemes for Multidimensional Nonhomogeneous Quasilinear Hyperbolic Systems. Computational Mathematics and Mathematical Physics, 2018, 58, 295-306.	0.8	10
21	High-order accurate running compact scheme for multidimensional hyperbolic equations. Doklady Mathematics, 2012, 86, 582-586.	0.6	9
22	Modeling of diffuse current transfer in a near-electrode layer of the high-pressure molecular plasma. IEEE Transactions on Plasma Science, 1995, 23, 742-749.	1.3	8
23	Iterative approximate factorization for difference operators of high-order bicompact schemes for multidimensional nonhomogeneous hyperbolic systems. Doklady Mathematics, 2017, 95, 140-143.	0.6	8
24	On spectral-like resolution properties of fourth-order accurate symmetric bicompact schemes. Doklady Mathematics, 2017, 96, 339-343.	0.6	8
25	On the Accuracy of Bicompact Schemes as Applied to Computation of Unsteady Shock Waves. Computational Mathematics and Mathematical Physics, 2020, 60, 864-878.	0.8	7
26	Combined Monotone Bicompact Scheme of Higher Order Accuracy in Domains of Influence of Nonstationary Shock Waves. Doklady Mathematics, 2020, 101, 239-243.	0.6	7
27	High-order accurate bicompact schemes for solving the multidimensional inhomogeneous transport equation and their efficient parallel implementation. Doklady Mathematics, 2016, 94, 517-522.	0.6	6
28	The applicability of continuum models in the transitional regime of hypersonic flow over blunt bodies. Prikladnaya Matematika I Mekhanika, 2009, 73, 502-513.	0.4	5
29	Monotone bicompact scheme for quasilinear hyperbolic equations. Doklady Mathematics, 2012, 86, 715-719.	0.6	5
30	Family of symmetric bicompact schemes with spectral resolution property for hyperbolic equations. Keldysh Institute Preprints, 2018, , 1-28.	0.2	5
31	A new hybrid scheme for computing discontinuous solutions of hyperbolic equations. Keldysh Institute Preprints, 2016, , 1-22.	0.2	4
32	A conservative limiting method for bicompact schemes. Keldysh Institute Preprints, 2019, , 1-26.	0.2	4
33	Hyperbolic Approximation of the Navier-Stokes Equations for Viscous Mixed Flows. Fluid Dynamics, 2002, 37, 377-395.	0.9	3
34	The effect of surface curvature on the boundary conditions in the viscous shock layer model for hypersonic rarefied gas flow. Prikladnaya Matematika I Mekhanika, 2012, 76, 677-687.	0.4	3
35	A comparative analysis of approaches for investigating hypersonic flow over blunt bodies in a transitional regime. Prikladnaya Matematika I Mekhanika, 2013, 77, 9-16.	0.4	3
36	A sixth-order bicompact scheme with spectral-like resolution for hyperbolic equations. Doklady Mathematics, 2017, 96, 480-485.	0.6	3

#	ARTICLE	IF	CITATIONS
37	High-Order Bicompact Schemes for Shock-Capturing Computations of Detonation Waves. Computational Mathematics and Mathematical Physics, 2019, 59, 1314-1323.	0.8	3
38	On the convergence of the method of iterative approximate factorization of difference operators of high-order accurate bicompact scheme for nonstationary three-dimensional hyperbolic equations. Keldysh Institute Preprints, 2018, , 1-16.	0.2	3
39	Hybrid running schemes with upwind and bicompact symmetric differencing for hyperbolic equations. Computational Mathematics and Mathematical Physics, 2015, 55, 1177-1187.	0.8	2
40	Optimized Symmetric Bicompact Scheme of the Sixth Order of Approximation with Low Dispersion for Hyperbolic Equations. Doklady Mathematics, 2018, 97, 90-94.	0.6	2
41	An efficient method for calculating viscous flows with a pronounced streamline curvature. Doklady Physics, 2000, 45, 481-484.	0.7	1
42	A hyperbolic model for viscous mixed flows. Doklady Physics, 2001, 46, 429-433.	0.7	1
43	Uniqueness of a high-order accurate bicompact scheme for quasilinear hyperbolic equations. Computational Mathematics and Mathematical Physics, 2014, 54, 831-836.	0.8	1
44	On the convergence of the method of iterative approximate factorization of difference operators of high-order accurate bicompact scheme for nonstationary three-dimensional hyperbolic equations. Keldysh Institute Preprints, 2018, , 1-16.	0.2	1
45	A conservative limiting method for bicompact schemes. Keldysh Institute Preprints, 2019, , 1-25.	0.2	1
46	Investigation of the singularities of distribution of cesium atoms in the boundary layer of the flow of combustion products. High Temperature, 2000, 38, 62-68.	1.0	0
47	Relaxation of the composition of combustion products in cylindrical channels. High Temperature, 2000, 38, 590-598.	1.0	0
48	Investigation of distribution of lithium atoms in the boundary layer of the flow of combustion products. High Temperature, 2000, 38, 742-747.	1.0	0
49	Two variants of parallel implementation of high-order accurate bicompact schemes for multi-dimensional inhomogeneous transport equation. Keldysh Institute Preprints, 2018, , 1-24.	0.2	0
50	Family of symmetric bicompact schemes with spectral resolution property for hyperbolic equations. Keldysh Institute Preprints, 2018, , 1-27.	0.2	0
51	Dispersive and dissipative properties of the fully discrete bicompact schemes of the fourth order of spatial approximation for hyperbolic equations. Keldysh Institute Preprints, 2018, , 1-30.	0.2	0
52	Two variants of parallel implementation of high-order accurate bicompact schemes for multi-dimensional inhomogeneous transport equation. Keldysh Institute Preprints, 2018, , 1-24.	0.2	0
53	Bicompact schemes for multidimensional hyperbolic equations on Cartesian meshes with solution-based AMR. Keldysh Institute Preprints, 2019, , 1-27.	0.2	0
54	Bicompact schemes for multidimensional hyperbolic equations on Cartesian meshes with solution-based AMR. Keldysh Institute Preprints, 2019, , 1-26.	0.2	0

#	Article	IF	Citations
55	Bicompact interpolation-characteristic scheme of the third order of approximation for the linear transport equation. Keldysh Institute Preprints, 2020, , 1-20.	0.2	0