

Sergey Utyuzhnikov

List of Publications by Year in descending order

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citing authors

#	ARTICLE	IF	CITATIONS
1	Optimized nonlocal active sound control in frequency domain. <i>Applied Acoustics</i> , 2022, 187, 108506.	3.3	0
2	Application of higher order dynamic mode decomposition to modal analysis and prediction of power systems with renewable sources of energy. <i>International Journal of Electrical Power and Energy Systems</i> , 2022, 138, 107925.	5.5	12
3	Real-time active noise control with preservation of desired sound. <i>Applied Acoustics</i> , 2020, 157, 106971.	3.3	2
4	Unsteady interface boundary conditions for near-wall turbulence modeling. <i>Computers and Mathematics With Applications</i> , 2020, 79, 1483-1502.	2.7	4
5	On extension of near-wall domain decomposition to turbulent compressible flows. <i>Computers and Fluids</i> , 2020, 210, 104629.	2.5	5
6	Non-overlapping domain decomposition for modeling essentially unsteady near-wall turbulent flows. <i>Computers and Fluids</i> , 2020, 202, 104506.	2.5	4
7	Study of the nonlocal active sound control with preservation of desired field in time domain. <i>Journal of the Acoustical Society of America</i> , 2020, 148, 3886-3899.	1.1	1
8	Near-Wall Domain Decomposition for Modelling Turbulent Flows: Opportunities and Challenges. , 2020, , 367-373.		0
9	On Extension of Near-Wall Non-overlapping Domain Decomposition to Essentially Unsteady Turbulent Flows. <i>Smart Innovation, Systems and Technologies</i> , 2019, , 199-209.	0.6	3
10	Proper orthogonal decomposition and dynamic mode decomposition of jet in channel crossflow. <i>Nuclear Engineering and Design</i> , 2019, 344, 54-68.	1.7	41
11	Exact non-overlapping domain decomposition for near-wall turbulence modeling. <i>Computers and Fluids</i> , 2019, 181, 283-291.	2.5	3
12	Developments of the method of difference potentials for linear elastic fracture mechanics problems. <i>International Journal for Numerical Methods in Engineering</i> , 2018, 115, 75-98.	2.8	1
13	A modified rotation strategy for directed search domain algorithm in multiobjective engineering optimization. <i>Structural and Multidisciplinary Optimization</i> , 2018, 57, 877-890.	3.5	1
14	Towards the development of analytical tornado-like models. <i>AIP Advances</i> , 2018, 8, 125106.	1.3	0
15	FlowModellium Software Package for Calculating High-Speed Flows of Compressible Fluid. <i>Computational Mathematics and Mathematical Physics</i> , 2018, 58, 1865-1886.	0.8	16
16	A Fuzzy Trade-Off Ranking Method for Multi-Criteria Decision-Making. <i>Axioms</i> , 2018, 7, 1.	1.9	43
17	Parallel Versions of Implicit LU-SGS Method. <i>Lobachevskii Journal of Mathematics</i> , 2018, 39, 503-512.	0.9	11
18	Reprint of: A practical algorithm for real-time active sound control with preservation of interior sound. <i>Computers and Fluids</i> , 2018, 169, 373-379.	2.5	0

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19	Efficient computation of turbulent flow in ribbed passages using a non-overlapping near-wall domain decomposition method. <i>Computer Physics Communications</i> , 2017, 217, 1-10.	7.5	11
20	Modeling the influence of the Chelyabinsk meteorite's bow shock wave on the Earth's surface. <i>Mathematical Models and Computer Simulations</i> , 2017, 9, 133-141.	0.5	3
21	Trade-off ranking method for multi-criteria decision analysis. <i>Journal of Multi-Criteria Decision Analysis</i> , 2017, 24, e1600.	1.9	10
22	A practical algorithm for real-time active sound control with preservation of interior sound. <i>Computers and Fluids</i> , 2017, 157, 175-181.	2.5	5
23	A multithreaded OpenMP implementation of the LU-SGS method using the multilevel decomposition of the unstructured computational mesh. <i>Computational Mathematics and Mathematical Physics</i> , 2017, 57, 1856-1865.	0.8	11
24	An extension of the directed search domain algorithm to bilevel optimization. <i>Engineering Optimization</i> , 2017, 49, 1420-1440.	2.6	1
25	OpenMP + MPI parallel implementation of a numerical method for solving a kinetic equation. <i>Computational Mathematics and Mathematical Physics</i> , 2016, 56, 1919-1928.	0.8	17
26	Non-overlapping domain decomposition for near-wall turbulence modeling. <i>AIP Conference Proceedings</i> , 2016, , .	0.4	0
27	A near-wall domain decomposition approach in application to turbulent flow in a diffuser. <i>Applied Mathematical Modelling</i> , 2016, 40, 329-342.	4.2	12
28	On the application of the method of difference potentials to linear elastic fracture mechanics. <i>International Journal for Numerical Methods in Engineering</i> , 2015, 103, 703-736.	2.8	4
29	Application of a near-wall domain decomposition method to turbulent flows with heat transfer. <i>Computers and Fluids</i> , 2015, 119, 87-100.	2.5	13
30	An algorithm of the method of difference potentials for domains with cuts. <i>Applied Numerical Mathematics</i> , 2015, 93, 254-261.	2.1	4
31	Active sound control in composite regions. <i>Applied Numerical Mathematics</i> , 2015, 93, 242-253.	2.1	5
32	High-order accurate monotone compact running scheme for multidimensional hyperbolic equations. <i>Applied Numerical Mathematics</i> , 2015, 93, 150-163.	2.1	23
33	Effect of bulk viscosity in supersonic flow past spacecraft. <i>Applied Numerical Mathematics</i> , 2015, 93, 47-60.	2.1	20
34	Real-time active wave control with preservation of wanted field. <i>IMA Journal of Applied Mathematics</i> , 2014, 79, 1126-1138.	1.6	5
35	Potential-based methodology for active sound control in three dimensional settings. <i>Journal of the Acoustical Society of America</i> , 2014, 136, 1101-1111.	1.1	11
36	Implementation of near-wall boundary conditions for modeling boundary layers with free-stream turbulence. <i>Applied Mathematical Modelling</i> , 2014, 38, 3591-3606.	4.2	11

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37	Rarefied gas flow through a diverging conical pipe into vacuum. <i>Vacuum</i> , 2014, 101, 10-17.	3.5	22
38	Construction and comparison of parallel implicit kinetic solvers in three spatial dimensions. <i>Journal of Computational Physics</i> , 2014, 256, 17-33.	3.8	62
39	Variational method for untangling and optimization of spatial meshes. <i>Journal of Computational and Applied Mathematics</i> , 2014, 269, 24-41.	2.0	34
40	Experimental study of the laminar-turbulent transition on a blunt cone. <i>Journal of Applied Mechanics and Technical Physics</i> , 2014, 55, 375-385.	0.5	20
41	Towards development of unsteady near-wall interface boundary conditions for turbulence modeling. <i>Computer Physics Communications</i> , 2014, 185, 2879-2884.	7.5	11
42	Numerical simulation of the effect of local volume energy supply on high-speed boundary layer stability. <i>Computers and Fluids</i> , 2014, 100, 130-137.	2.5	2
43	Active sound control in 3D bounded regions. <i>Wave Motion</i> , 2014, 51, 284-295.	2.0	8
44	A modified directed search domain algorithm for multiobjective engineering and design optimization. <i>Structural and Multidisciplinary Optimization</i> , 2013, 48, 1129-1141.	3.5	19
45	Implicit multiblock method for solving a kinetic equation on unstructured meshes. <i>Computational Mathematics and Mathematical Physics</i> , 2013, 53, 601-615.	0.8	3
46	Rarefied gas flow through a pipe of variable square cross section into vacuum. <i>Computational Mathematics and Mathematical Physics</i> , 2013, 53, 1221-1230.	0.8	13
47	A comparative analysis of approaches for investigating hypersonic flow over blunt bodies in a transitional regime. <i>Prikladnaya Matematika I Mekhanika</i> , 2013, 77, 9-16.	0.4	3
48	Receptivity of a high-speed boundary layer to temperature spottiness. <i>Journal of Fluid Mechanics</i> , 2013, 722, 533-553.	3.4	38
49	Stabilization of a Hypersonic Boundary Layer Using a Wavy Surface. <i>AIAA Journal</i> , 2013, 51, 1203-1210.	2.6	82
50	Optimisation of multiple encapsulated electrode plasma actuator. <i>Aerospace Science and Technology</i> , 2013, 26, 120-127.	4.8	47
51	Numerical and laboratory prediction of smoke lofting in the atmosphere over large area fires. <i>Applied Mathematical Modelling</i> , 2013, 37, 876-887.	4.2	1
52	Interface boundary conditions in near-wall turbulence modeling. <i>Computers and Fluids</i> , 2012, 68, 186-191.	2.5	20
53	Analysis of gas-surface scattering models based on computational molecular dynamics. <i>Chemical Physics Letters</i> , 2012, 554, 225-230.	2.6	26
54	Control of robust design in multiobjective optimization under uncertainties. <i>Structural and Multidisciplinary Optimization</i> , 2012, 45, 247-256.	3.5	31

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55	Directed search domain: a method for even generation of the Pareto frontier in multiobjective optimization. <i>Engineering Optimization</i> , 2011, 43, 467-484.	2.6	104
56	Multi-domain active sound control and noise shielding. <i>Journal of the Acoustical Society of America</i> , 2011, 129, 717-725.	1.1	14
57	Non-stationary problem of active sound control in bounded domains. <i>Journal of Computational and Applied Mathematics</i> , 2010, 234, 1725-1731.	2.0	12
58	Nonlinear problem of active sound control. <i>Journal of Computational and Applied Mathematics</i> , 2010, 234, 215-223.	2.0	13
59	Experimental Validation of the Active Noise Control Methodology Based on Difference Potentials. <i>AIAA Journal</i> , 2009, 47, 874-884.	2.6	26
60	Domain decomposition for near-wall turbulent flows. <i>Computers and Fluids</i> , 2009, 38, 1710-1717.	2.5	21
61	Active control of sound with variable degree of cancellation. <i>Applied Mathematics Letters</i> , 2009, 22, 1846-1851.	2.7	17
62	A method for generating a well-distributed Pareto set in nonlinear multiobjective optimization. <i>Journal of Computational and Applied Mathematics</i> , 2009, 223, 820-841.	2.0	59
63	Active wave control and generalized surface potentials. <i>Advances in Applied Mathematics</i> , 2009, 43, 101-112.	0.7	12
64	Difference problem of noise suppression and other problems of active control of single-frequency sound on a composite domain. <i>Doklady Mathematics</i> , 2009, 79, 240-242.	0.6	3
65	On the application of difference potential theory to active noise control. <i>Advances in Applied Mathematics</i> , 2008, 40, 194-211.	0.7	14
66	Robin-type wall functions and their numerical implementation. <i>Applied Numerical Mathematics</i> , 2008, 58, 1521-1533.	2.1	40
67	Local Pareto approximation for multi-objective optimization. <i>Engineering Optimization</i> , 2008, 40, 821-847.	2.6	8
68	Differential and finite-difference problems of active shielding. <i>Applied Numerical Mathematics</i> , 2007, 57, 374-382.	2.1	17
69	Inverse source problem and active shielding for composite domains. <i>Applied Mathematics Letters</i> , 2007, 20, 511-515.	2.7	33
70	The method of boundary condition transfer in application to modeling near-wall turbulent flows. <i>Computers and Fluids</i> , 2006, 35, 1193-1204.	2.5	29
71	The differential problem of active noise shielding. <i>Doklady Mathematics</i> , 2006, 73, 357-359.	0.6	0
72	The problem of active noise shielding in composite domains. <i>Doklady Mathematics</i> , 2006, 74, 812-814.	0.6	5

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73	Active shielding model for hyperbolic equations. IMA Journal of Applied Mathematics, 2006, 71, 924-939.	1.6	18
74	Some new approaches to building and implementation of wall-functions for modeling of near-wall turbulent flows. Computers and Fluids, 2005, 34, 771-784.	2.5	23
75	Simulation of Subsonic and Supersonic Flows in Inductive Plasmatrons. AIAA Journal, 2004, 42, 1871-1877.	2.6	14
76	Numerical Modeling of Combustion of Fuel-Droplet-Vapour Releases in the Atmosphere. Flow, Turbulence and Combustion, 2002, 68, 137-152.	2.6	17
77	Motion of a Body Through Large-Scale Inhomogeneity in the Stratified Atmosphere. AIAA Journal, 1997, 35, 1224-1226.	2.6	0
78	Spatial supersonic motion of a body through a large-scale inhomogeneity in a stratified atmosphere. Prikladnaya Matematika I Mekhanika, 1996, 60, 607-613.	0.4	0
79	Numerical investigation of thermal and chemical nonequilibrium flows past slender blunted cones. Journal of Thermophysics and Heat Transfer, 1996, 10, 137-147.	1.6	11
80	The motion of a body through a large-scale inhomogeneity in a stratified atmosphere. Prikladnaya Matematika I Mekhanika, 1995, 59, 409-414.	0.4	1
81	Numerical Algorithms on Moving Adaptive Grids for Modelling of Penetration in to the Atmosphere of a Planet. , 1995, , 1810-1815.		0
82	Efficient numerical method for simulation of supersonic viscous flow past a blunted body at a small angle of attack. Computers and Fluids, 1994, 23, 103-114.	2.5	11
83	Numerical simulation of the flow over a body flying through a thermal in a stratified atmosphere. Computers and Fluids, 1994, 23, 295-304.	2.5	4
84	A thermally non-equilibrium viscous shock layer past slender blunted cones. Prikladnaya Matematika I Mekhanika, 1994, 58, 493-505.	0.4	1
85	Comparison of gas-dynamic models for hypersonic flow past bodies. Prikladnaya Matematika I Mekhanika, 1992, 56, 939-944.	0.4	1
86	A numerical method for solving the equations of a viscous shock layer. USSR Computational Mathematics and Mathematical Physics, 1987, 27, 64-71.	0.0	6