Valeria Krzhizhanovskaya

List of Publications by Year
in descending order

| 87 papers | 1,012 citations | 516215 16 h-index | 552369 26 g-index |

| 104 all docs | 104 docs citations | 104 times ranked | 892 citing authors |

#	Article	IF	Citations
1	Flood early warning system: design, implementation and computational modules. Procedia Computer Science, 2011, 4, 106-115.	1.2	117
2	Anomaly detection in earth dam and levee passive seismic data using support vector machines and automatic feature selection. Journal of Computational Science, 2017, 20, 143-153.	1.5	74
3	Dynamic workload balancing of parallel applications with user-level scheduling on the Grid. Future Generation Computer Systems, 2009, 25, 28-34.	4.9	44
4	Crack Detection in Earth Dam and Levee Passive Seismic Data Using Support Vector Machines. Procedia Computer Science, 2016, 80, 577-586.	1.2	40
5	Time-Frequency Methods for Structural Health Monitoring. Sensors, 2014, 14, 5147-5173.	2.1	29
6	Analysis of publication activity of computational science society in 2001â€"2017 using topic modelling and graph theory. Journal of Computational Science, 2018, 26, 193-204.	1.5	24
7	Supplemented Alkaline Phosphatase Supports the Immune Response in Patients Undergoing Cardiac Surgery: Clinical and Computational Evidence. Frontiers in Immunology, 2018, 9, 2342.	2.2	24
8	Distributed Simulation of City Inundation by Coupled Surface and Subsurface Porous Flow for Urban Flood Decision Support System. Procedia Computer Science, 2013, 18, 1046-1056.	1.2	23
9	Russian-Dutch double-degree Masterâ€™s programme in computational science in the age of global education. Journal of Computational Science, 2015, 10, 288-298.	1.5	23
10	Free-surface flow simulations for discharge-based operation of hydraulic structure gates. Journal of Hydroinformatics, 2014, 16, 189-206.	1.1	20
11	Reducing cross-flow vibrations of underflow gates: Experiments and numerical studies. Journal of Fluids and Structures, 2014, 50, 25-48.	1.5	19
12	A Grid-based Virtual Reactor: Parallel performance and adaptive load balancing. Journal of Parallel and Distributed Computing, 2008, 68, 596-608.	2.7	18
13	Virtual Dike: multiscale simulation of dike stability. Procedia Computer Science, 2011, 4, 791-800.	1.2	18
14	How to Speed up Optimization? Opposite-center Learning and Its Application to Differential Evolution. Procedia Computer Science, 2015, 51, 805-814.	1.2	17
15	Models of Pedestrian Adaptive Behaviour in Hot Outdoor Public Spaces. Procedia Computer Science, 2017, 108, 185-194.	1.2	17
16	The User-Level Scheduling of Divisible Load Parallel Applications With Resource Selection and Adaptive Workload Balancing on the Grid. IEEE Systems Journal, 2009, 3, 121-130.	2.9	16
17	Analysis of Computational Science Papers from ICCS 2001-2016 using Topic Modeling and Graph Theory. Procedia Computer Science, 2017, 108, 7-17.	1.2	15
18	System dynamics of human body thermal regulation in outdoor environments. Building and Environment, 2018, 143, 760-769.	3.0	15

#	Article	IF	Citations
19	Artificial intelligence and finite element modelling for monitoring flood defence structures. , 2011, , .		14
20	An Approach for Real-time Levee Health Monitoring Using Signal Processing Methods. Procedia Computer Science, 2013, 18, 2357-2366.	1.2	14
21	Modeling earthen dikes using real-time sensor data. Journal of Hydrology, 2013, 496, 154-165.	2.3	14
22	Data-driven Travel Demand Modelling and Agent-based Traffic Simulation in Amsterdam Urban Area. Procedia Computer Science, 2016, 80, 2030-2041.	1.2	14
23	Differential evolution for system identification of self-excited vibrations. Journal of Computational Science, 2015, 10, 360-369.	1.5	13
24	Identification of risk factors for patients with diabetes: diabetic polyneuropathy case study. BMC Medical Informatics and Decision Making, 2020, 20, 201.	1.5	13
25	The impact of pace of life on pedestrian heat stress: A computational modelling approach.. Environmental Research, 2020, 186, 109397.	3.7	13
26	The relationship between cognitive functioning and psychopathology in patients with psychiatric disorders: a transdiagnostic network analysis. Psychological Medicine, 2021, , 1-10.	2.7	13
27	Behavioural thermal regulation explains pedestrian path choices in hot urban environments. Scientific Reports, 2022, 12, 2441.	1.6	13
28	Double-degree Master's Program in Computational Science: Experiences of ITMO University and University of Amsterdam. Procedia Computer Science, 2014, 29, 1433-1445.	1.2	12
29	Data-driven Modeling of Transportation Systems and Traffic Data Analysis During a Major Power Outage in the Netherlands. Procedia Computer Science, 2015, 66, 336-345.	1.2	12
30	Digital Transformation and Global Society. Communications in Computer and Information Science, 2016, , .	0.4	12
31	Signal analysis and anomaly detection for flood early warning systems. Journal of Hydroinformatics, 2014, 16, 1025-1043.	1.1	11
32	Combining Data-Driven Methods with Finite Element Analysis for Flood Early Warning Systems. Procedia Computer Science, 2015, 51, 2347-2356.	1.2	11
33	Game of neutrophils: modeling the balance between apoptosis and necrosis. BMC Bioinformatics, 2019, 20, 475.	1.2	11
34	Multiscale modelling in real-time flood forecasting systems: From sand grain to dike failure and inundation. Procedia Computer Science, 2010, 1, 809.	1.2	10
35	Anomaly Detection in Clinical Data of Patients Undergoing Heart Surgery. Procedia Computer Science, 2017, 108, 99-108.	1.2	10
36	A unifying model to estimate the effect of heat stress in the human innate immunity during physical activities. Scientific Reports, 2021, 11, 16688.	1.6	10

#	Article	IF	Citations
37	Uncertainty quantification of a three-dimensional in-stent restenosis model with surrogate modelling. Journal of the Royal Society Interface, 2022, 19, 20210864.	1.5	10
38	Grid-Based Simulation of Industrial Thin-Film Production. Simulation, 2005, 81, 77-85.	1.1	9
39	Compensation of decreased ion energy by increased hydrogen dilution in plasma deposition of thin film silicon solar cells at low substrate temperatures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 159-160, 53-56.	1.7	9
40	Big Data Meets Computational Science, Preface for ICCS 2014. Procedia Computer Science, 2014, 29, 1-7.	1.2	9
41	Coupling Game Theory and Discrete-Event Simulation for Model-Based Ambulance Dispatching. Procedia Computer Science, 2018, 136, 398-407.	1.2	9
42	Immune System Model Calibration by Genetic Algorithm. Procedia Computer Science, 2016, 101, 161-171.	1.2	8
43	Special features of the growth of hydrogenated amorphous silicon in PECVD reactors. Technical Physics, 2000, 45, 1032-1041.	0.2	7
44	Multiscale Modelling and Simulation Workshop:12 Years of Inspiration. Procedia Computer Science, 2015, 51, 1082-1087.	1.2	7
45	Numerical prediction of the IJkDijk trial embankment failure. Proceedings of the Institution of Civil Engineers: Geotechnical Engineering, 2015, 168, 158-171.	0.9	7
46	Detecting Erosion Events in Earth Dam and Levee Passive Seismic Data with Clustering. , 2015, , .		7
47	On some localized waves described by the extended KdV equation. Comptes Rendus - Mecanique, 2005, 333, 528-533.	2.1	6
48	Experience of using FEM for real-time flood early warning systems: Monitoring and modeling Boston levee instability. Journal of Computational Science, 2015, 10, 13-25.	1.5	6
49	Uncertainty quantification patterns for multiscale models. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2021, 379, 20200072.	1.6	6
50	Distributed Simulation of Silicon-Based Film Growth. Lecture Notes in Computer Science, 2002, , 879-887.	1.0	6
51	Dynamic Load Balancing of Black-Box Applications with a Resource Selection Mechanism on Heterogeneous Resources of the Grid. Lecture Notes in Computer Science, 2007, , 245-260.	1.0	6
52	Dutch-Russian double degree master's program curricula in computational science and high performance computing. , 2014, , .		5
53	Computer Simulation Approach in Development of Propane-air Combustor Microreactor. Procedia Computer Science, 2016, 101, 76-85.	1.2	5
54	Simulating an Impact of Road Network Improvements on the Performance of Transportation Systems under Critical Load: Agent-based Approach. Procedia Computer Science, 2016, 101, 253-261.	1.2	5

#	Article	IF	Citations
55	Data through the Computational Lens, Preface for ICCS 2016. Procedia Computer Science, 2016, 80, 1-7.	1.2	5
56	Benchmarking and Adaptive Load Balancing of the Virtual Reactor Application on the Russian-Dutch Grid. Lecture Notes in Computer Science, 2006, , 530-538.	1.0	5
57	A 3D Virtual Reactor for Simulation of Silicon-Based Film Production. , 2004, , .		5
58	Identifying Self-excited Vibrations with Evolutionary Computing. Procedia Computer Science, 2014, 29, 637-647.	1.2	4
59	Young Researchers Advancing Computational Science: Perspectives of the Young Scientists Conference 2015. Procedia Computer Science, 2015, 66, 1-4.	1.2	4
60	Modeling chemical vapor deposition of silicon dioxide in microreactors at atmospheric pressure. Journal of Physics: Conference Series, 2015, 574, 012145.	0.3	4
61	Abnormally high oscillator strengths of the graphene nanoribbons electronic spectrum: quantum chemistry calculations. RSC Advances, 2016, 6, 75937-75942.	1.7	4
62	Computational Science in the Interconnected World: Selected papers from 2019 International Conference on Computational Science. Journal of Computational Science, 2020, 47, 101222.	1.5	4
63	Computational Engineering on the Grid: Crafting a Distributed Virtual Reactor. , 2006, , .		3
64	Simulation of Multiphysics Multiscale Systems: Introduction to the ICCS'2007 Workshop. Lecture Notes in Computer Science, 2007, , 755-761.	1.0	3
65	Application of clustering methods for detecting critical acute coronary syndrome patients. Procedia Computer Science, 2018, 136, 370-379.	1.2	3
66	Simulation of multiphysics multiscale systems, 7th international workshop. Procedia Computer Science, 2010, 1, 603-605.	1.2	2
67	A mathematical model and simulation results of plasma enhanced chemical vapor deposition of silicon nitride films. Journal of Physics: Conference Series, 2015, 574, 012144.	0.3	2
68	The Art of Computational Science, Bridging Gaps – Forming Alloys. Preface for ICCS 2017. Procedia Computer Science, 2017, 108, 1-6.	1.2	2
69	Anomaly Detection in Earth Dam and Levee Passive Seismic Data Using Multivariate Gaussian. , 2017, , .		2
70	Evolutionary Game Theory Can Explain the Choice Between Apoptotic and Necrotic Pathways in Neutrophils. , 2018, , .		2
71	A novel three-jet microreactor for localized metal-organic chemical vapour deposition of gallium arsenide: design and simulation. Journal of Physics: Conference Series, 2016, 741, 012018.	0.3	1
72	Reproducibility of Two Innate Immune System Models. Communications in Computer and Information Science, 2016, , 501-514.	0.4	1

#	Article	IF	Citations
73	Development and simulation of microfluidic Wheatstone bridge for high-precision sensor. Journal of Physics: Conference Series, 2016, 738, 012071.	0.3	1
74	Multiscale Modelling and Simulation, 13th International Workshop. Procedia Computer Science, 2016, 80, 1242-1243.	1.2	1
75	3D simulation and analytical model of chemical heating during silicon wet etching in microchannels. Journal of Physics: Conference Series, 2016, 681, 012035.	0.3	1
76	Detecting Critical Transitions in the Human Innate Immune System Post-cardiac Surgery. Lecture Notes in Computer Science, 2020, , 371-384.	1.0	1
77	Gas phase considerations for the deposition of thin film silicon solar cells by VHF-PECVD at low substrate temperatures. Conference Record of the IEEE Photovoltaic Specialists Conference, 2008, , .	0.0	0
78	SPECIAL SECTION:Papers from 5TH WORKSHOP ON SIMULATION OF MULTIPHYSICS MULTISCALE SYSTEMS: GOING NANO(Pages 1-38)Preface. International Journal for Multiscale Computational Engineering, 2009, 7, vii-viii.	0.8	0
79	Multiphysics Multi-Model Simulation of Large-Area Plasma Chemical Reactors. , 2009, , .		0
80	Computer Simulation of Laser Annealing of a Nanostructured Surface. , 2009, , .		0
81	Simulation of Surface Chemistry in CVD Technologies: A Detailed Deposition Model With Surface Diffusion. , 2010, , .		0
82	Numerical simulation of synthesis of fullerenes by the arc discharge method. Journal of Physics: Conference Series, 2013, 461, 012043.	0.3	0
83	Multiscale Modelling and Simulation, 14th International Workshop. Procedia Computer Science, 2017, 108, 1811-1812.	1.2	0
84	Novel approach to investigation of semiconductor MOCVD by microreactor technology. Journal of Physics: Conference Series, 2017, 917, 032011.	0.3	0
85	Modelling Neutrophilsâ€™ Response to Various Levels of Insults. Procedia Computer Science, 2018, 136, 390-397.	1.2	0
86	Numerical Modeling of Heat and Mass Transfer Processes in PECVD Reactors for Growing Silicon Films under the Conditions of Intense Formation of Higher Silanes in the Gas Phase. Heat Transfer Research, 2007, 38, 71-84.	0.9	0
87	Simulation of Multiphysics Multiscale Systems, 5th International Workshop. Lecture Notes in Computer Science, 2008, , 165-166.	1.0	0