Natalya N Kizilova

List of Publications by Year
in descending order

54	251	1162367	1058022
papers	citations	8	14
		h-index	g-index

57	57	57	151
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Flow Field Patterns for Proton Exchange Membrane Fuel Cells. Frontiers in Energy Research, 2020, 8, .	1.2	78
2	Computational Approach to Optimal Transport Network Construction in Biomechanics. Lecture Notes in Computer Science, 2004, , 476-485.	1.0	17
3	Long-distance liquid transport in plants. Proceedings of the Estonian Academy of Sciences, 2008, 57, 179.	0.9	15
4	Seeking minimum entropy production for a tree-like flow-field in a fuel cell. Physical Chemistry Chemical Physics, 2020, 22, 6993-7003.	1.3	15
5	Scaling factors for channel width variations in tree-like flow field patterns for polymer electrolyte membrane fuel cells - An experimental study. International Journal of Hydrogen Energy, 2021, 46, 19554-19568.	3.8	14
6	Studies on the structure of human coronary vasculature. Biophysics (Russian Federation), 2007, 52, 499-503.	0.2	10
7	Fractal-Like Flow-Fields with Minimum Entropy Production for Polymer Electrolyte Membrane Fuel Cells. Entropy, 2020, 22, 176.	1.1	10
8	Pulse wave reflections in branching arterial networks and pulse diagnosis methods. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers,Series A/Chung-kuo Kung Ch'eng Hsuch K'an, 2003, 26, 869-880.	0.6	8
9	Pressure wave propagation in liquid-filled tubes of viscoelastic material. Fluid Dynamics, 2006, 41, 434-446.	0.2	8
10	Suppression of absolute instabilities in the flow inside a compliant tube. Communications in Numerical Methods in Engineering, 2009, 25, 505-531.	1.3	7
11	Mathematical modeling of transport-growth processes in multiphase biological continua. Fluid Dynamics, 2012, 47, 1-9.	0.2	6
12	Energy efficiency of respiration in mature and newborn reindeer. Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology, 2020, 190, 509-520.	0.7	6
13	Hydraulic Properties of Branching Pipelines with Permeable Walls. International Journal of Fluid Mechanics Research, 2005, 32, 98-109.	0.4	5
14	Construction principles and control over transport systems organization in biological tissues. , 0, , .		4
15	<i>(Invited) </i>Modelling Electrochemical Cells with Porous Electrodes. The Proton Exchange Membrane Fuel Cell. ECS Transactions, 2019, 92, 279-292.	0.3	4
16	Maghetohydrodynamic flows of micro/nano fluids through thin capillaries. Bulletin of Taras Shevchenko National University of Kyiv Series Physics and Mathematics, 2019, , 32-36.	0.1	4
17	Finite element method (FEM) analysis of the force systems produced by asymmetric inner headgear bows. Australian Orthodontic Journal, 2011, 27, 125-31.	0.3	4
18	Reflection of Pulse Waves and Resonance Characteristics of Arterial Beds. Fluid Dynamics, 2003, 38, 772-781.	0.2	3

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19	ÐŸÑ–Ð´Ñ…Ñ–Ð´ ÑÐ¸ÑÑ‚ÐµÐ¼Ð½Ð¾Ñ— Ð´Ð¸Ð½Ð°Ð¼Ñ–ÐºÐ¸ Ð´Ð¾ ÐºÐ¾Ð½Ñ‚Ñ€Ð¾Ð»ÑŽ Ð·Ð° ÑÐºÑ–ÑÑ‚ÑŽ.Ð²Ð¾Ð´Ð¸ Ð½Ð¾	
20	Stability of erythrocyte sedimentation in a constant magnetic field. Fluid Dynamics, 1990, 24, 878-881.	0.2	2
21	Effect of radial motion of erythrocytes on their sedimentation in a tube in an external magnetic field. Fluid Dynamics, 1992, 26, 737-744.	0.2	2
22	Flow Interaction With Composite Wall. , 2006, , 1457.		2
23	Modeling of Pulse Wave Propagation and Reflection Along Human Aorta. Advances in Intelligent Systems and Computing, 2019, , 23-35.	0.5	2
24	Wave Propagation and Reflection in Systems of Compliant. International Journal of Fluid Mechanics Research, 2004, 31, 608-620.	0.4	2
25	Flow in Compliant Tubes: Control and Stabilization by Multilayered Coatings. International Journal of Flow Control, 2009, 1, 199-211.	0.4	2
26	Quasi-regular and Chaotic Dynamics of Postural Sway in Human. Springer Proceedings in Mathematics and Statistics, 2014, , 103-114.	0.1	2
27	Diagnostics of Coronary Stenosis: Analysis of Arterial Blood Pressure and Mathematical Modeling. Communications in Computer and Information Science, 2015, , 299-312.	0.4	2
28	Three-Chamber Model of Human Vascular System for Explanation the Quasi-Regular and Chaotic Dynamics of the Blood Pressure and Flow Oscillations. Springer Proceedings in Mathematics and Statistics, 2016, , 209-220.	0.1	2
29	On hyperbolicity and solution properties of the continual models of micro/nanoparticle aggregation and sedimentation in concentrated suspensions. Bulletin of Taras Shevchenko National University of Kyiv Series Physics and Mathematics, 2019, , 60-63.	0.1	2
30	Stability analysis of blood flow in multilayered viscoelastic tubes. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 165-166.	0.9	1
31	Modeling of intraorgan arterial vasculature. I. Steady flow at low Reynolds numbers. Biophysics (Russian Federation), 2006, 51, 654-658.	0.2	1
32	Modeling of intraorgan arterial vasculature. II. Propagation of pressure waves. Biophysics (Russian) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.2	1
33	Ð†Ð½Ñ„Ð¾Ñ€Ð¼Ð°Ñ†Ñ–Ð¹Ð½Ðµ ÑÑƒÐ¿Ñ€Ð¾Ð²Ð¾Ð´Ð¶ÐµÐ½Ð½•Ð¸ÑÑ‚ÐµÐ¼ Ð¼ÐµÐ½ÐµÐ´Ð¶Ð¼ÐµÐ½Ñ‚Ñƒ Ð²Ð¾Ð	
34	Liquid Filtration in a Microcirculatory Cell of the Plant Leaf: A Lumped Parameter Model. International Journal of Fluid Mechanics Research, 2007, 34, 572-588.	0.4	1
35	Features of heat and mass exchange in laminar flows of micro and nanofluids in tubes and channels. Bulletin of Taras Shevchenko National University of Kyiv Series Physics and Mathematics, 2018, , 62-67.	0.1	1
36	Modeling of blood microcirculation, heat and mass transfer in human tissues. Bulletin of Taras Shevchenko National University of Kyiv Series Physics and Mathematics, 2018, , 58-61.	0.1	1

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37	Mathematical modelling of particle aggregation and sedimentation in the inclined tubes. Bulletin of Taras Shevchenko National University of Kyiv Series Physics and Mathematics, 2018, , 52-57.	0.1	1
38	Investigation of the periodic axisymmetric flow of a viscoelastic fluid through a cylindrical tube. Bulletin of Taras Shevchenko National University of Kyiv Series Physics and Mathematics, 2020, , 49-52.	0.1	1
39	Generalization of the Lighthill problem for the viscous fluid filled tubes with complicated wall rheology. Bulletin of Taras Shevchenko National University of Kyiv Series Physics and Mathematics, 2020, , 67-70.	0.1	1
40	Flow distribution and wave propagation in arterial systems with anastomoses. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 163-164.	0.9	0
41	A membrane model for wave flow in the blood vessels. Journal of Biomechanics, 2006, 39, S608.	0.9	0
42	Pulse wave propagation in the intraorgan arterial beds and diagnostic analysis of pressure and flow curves. Journal of Biomechanics, 2006, 39, S608.	0.9	0
43	Novel methods of pulse wave diagnostics based on compression of a superficial artery. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 4020019-4020020.	0.2	0
44	Optimal long-distance transport systems in nature: control and applications (Poster Presentation). Proceedings in Applied Mathematics and Mechanics, 2007, 7, 2020131-2020132.	0.2	0
45	Control and stability of the complex inverted pendulum models in application to postural sway analysis of the vertical human stance. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10183-10184.	0.2	0
46	Assessment of Protein Fractions of RBCs in Stroke under Influence of Nanodiamonds in vitro. , 2018, , .		0
47	Biomedical Applications of Nanodiamonds and Nanotoxicity Problems. , 2021, , .		0
48	Investigation of Pressure - Flow Relations and the Parameters of the Forward and Backward Pressure Waves in Arterial Beds. International Journal of Fluid Mechanics Research, 2006, 33, 537-552.	0.4	0
49	Система автоматичного реєстрації, зберігання даних[...]		
50	INVESTIGATION OF FLOWS OF BINGHAM FLUIDS THROUGH THE MICROCHANNELS. Cherkasy University Bulletin Applied Mathematics Informatics, 2020, , 4-10.	0.0	0
51	Probabilistic models of water resources management on urbanized areas. Bulletin of Taras Shevchenko National University of Kyiv Series Physics and Mathematics, 2020, , 22-27.	0.1	0
52	Monitoring system of biophysical properties of the red blood cells of patients for medical diagnosis purposes. Системи обробки інформації, 2020, , 13-20.	0.1	0
53	SALINATION OF RIVER WATERS UNDER THE CONDITIONS OF URBOLANDSCAPE GEOSYSTEMS AND CLIMATE WARMING. Transactions of Kremenchuk Mykhailo Ostrohradskyi National University, 2021, , 67-74.	0.1	0
54	Mathematical modeling of influence of strong winds on technical and plant structures on urban areas. Bulletin of Taras Shevchenko National University of Kyiv Series Physics and Mathematics, 2021, , 39-45.	0.1	0