

Victoria Timchenko

List of Publications by Year in descending order

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111
papers

1,878
citations

236612

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docs citations

111
times ranked

1572
citing authors

#	ARTICLE	IF	CITATIONS
1	Three-Dimensional Simulation of Vapor Bubble Growth in Superheated Water Due to the Convective Action by an Interface Tracking Method. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2022, 144, .	0.8	2
2	Nano-Enhanced Phase Change Materials for Thermal Energy Storage: A Bibliometric Analysis. <i>Energies</i> , 2022, 15, 3426.	1.6	15
3	Manifold configurations for uniform flow via topology optimisation and flow visualisation. <i>Applied Thermal Engineering</i> , 2021, 183, 116227.	3.0	16
4	Heat Generation in Irradiated Gold Nanoparticle Solutions for Hyperthermia Applications. <i>Processes</i> , 2021, 9, 368.	1.3	4
5	Manifold microchannel heat sink topology optimisation. <i>International Journal of Heat and Mass Transfer</i> , 2021, 170, 121025.	2.5	44
6	Directivity of blade-tower interaction noise. <i>JASA Express Letters</i> , 2021, 1, .	0.5	3
7	Modelling Rayleigh-Bénard convection coupled with electro-vortex flow in liquid metal batteries. <i>Journal of Power Sources</i> , 2021, 501, 229988.	4.0	10
8	Modelling atmospheric emissions from wastewater treatment plants: Implications of land-to-water roughness change. <i>Science of the Total Environment</i> , 2021, 792, 148330.	3.9	4
9	Enabling contactless rapid on-demand debonding and rebonding using hysteresis heating of ferrimagnetic nanoparticles. <i>Materials and Design</i> , 2021, 210, 110076.	3.3	6
10	The Effect of Orientation on the Performance of Small Free-Convection Heat Sinks for Use With a Thermoelectric Cryotherapy Device. <i>Journal of Thermal Science and Engineering Applications</i> , 2021, 13, .	0.8	1
11	Preface: Advanced Thermal Strategies in Cancer Therapy and Diagnostics. <i>Critical Reviews in Biomedical Engineering</i> , 2020, 48, v-vii.	0.5	0
12	Real-time monitoring of heat transfer between gold nanoparticles and tethered bilayer lipid membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2020, 1862, 183334.	1.4	4
13	Transitional natural convection flow in a vertical channel: Impact of the external thermal stratification. <i>International Journal of Heat and Mass Transfer</i> , 2020, 151, 119476.	2.5	6
14	Mass Transport Optimization for Redox Flow Battery Design. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 2801.	1.3	10
15	Open manifold microchannel heat sink for high heat flux electronic cooling with a reduced pressure drop. <i>International Journal of Heat and Mass Transfer</i> , 2020, 163, 120395.	2.5	36
16	Tethered Bilayer Lipid Membranes to Monitor Heat Transfer between Gold Nanoparticles and Lipid Membranes. <i>Journal of Visualized Experiments</i> , 2020, , .	0.2	3
17	Validation Problems in Computational Modelling of Natural Convection. , 2020, , 689-718.		0
18	Optimal design of a natural convection heat sink for small thermoelectric cooling modules. <i>Applied Thermal Engineering</i> , 2019, 160, 114062.	3.0	39

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19	Enhanced Reactant Distribution in Redox Flow Cells. <i>Molecules</i> , 2019, 24, 3877.	1.7	7
20	Modeling the Response of Magnetorheological Fluid Dampers under Seismic Conditions. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 4189.	1.3	15
21	Detailed flow development and indicators of transition in a natural convection flow in a vertical channel. <i>International Journal of Heat and Mass Transfer</i> , 2019, 143, 118502.	2.5	10
22	Computational Study of Wet Steam Flow to Optimize Steam Ejector Efficiency for Potential Fire Suppression Application. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1486.	1.3	18
23	Effects of radiation on turbulent natural convection in channel flows. <i>International Journal of Heat and Fluid Flow</i> , 2019, 77, 122-133.	1.1	9
24	Experimental and numerical investigation of blade-tower interaction noise. <i>Journal of Sound and Vibration</i> , 2019, 443, 362-375.	2.1	15
25	Evaluation of an adaptive tutorial supporting the teaching of mathematics. <i>European Journal of Engineering Education</i> , 2019, 44, 787-804.	1.5	8
26	Gravity-Driven Bubble Rise Simulation. , 2019, , 1-37.		1
27	Impact of external temperature distribution on the convective mass flow rate in a vertical channel – A theoretical and experimental study. <i>International Journal of Heat and Mass Transfer</i> , 2018, 121, 1264-1272.	2.5	9
28	Heat transfer from nanoparticles for targeted destruction of infectious organisms. <i>International Journal of Hyperthermia</i> , 2018, 34, 157-167.	1.1	22
29	Bubble flow simulations using the intersection marker (ISM) interface tracking method. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2018, 28, 118-137.	1.6	8
30	Soft and Moldable Mg-Doped Liquid Metal for Conformable Skin Tumor Photothermal Therapy. <i>Advanced Healthcare Materials</i> , 2018, 7, e1800318.	3.9	116
31	Numerical study of fire spread using the level-set method with large eddy simulation incorporating detailed chemical kinetics gas-phase combustion model. <i>Journal of Computational Science</i> , 2018, 24, 8-23.	1.5	33
32	A critical review on liquid-gas mass transfer models for estimating gaseous emissions from passive liquid surfaces in wastewater treatment plants. <i>Water Research</i> , 2018, 130, 388-406.	5.3	30
33	Variable Porous Electrode Compression for Redox Flow Battery Systems. <i>Batteries</i> , 2018, 4, 53.	2.1	15
34	Thermal modelling of controlled scalp hypothermia using a thermoelectric cooling cap. <i>Journal of Thermal Biology</i> , 2018, 76, 8-20.	1.1	8
35	Study of Morphology and Optical Properties of Gold Nanoparticle Aggregates under Different pH Conditions. <i>Langmuir</i> , 2018, 34, 10340-10352.	1.6	14
36	Predicting the fire spread rate of a sloped pine needle board utilizing pyrolysis modelling with detailed gas-phase combustion. <i>International Journal of Heat and Mass Transfer</i> , 2018, 125, 310-322.	2.5	36

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37	Microchannel cooling of concentrator photovoltaics: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 90, 1041-1059.	8.2	114
38	The Effect of Gold Nanorods Clustering on Near-Infrared Radiation Absorption. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 1132.	1.3	21
39	ANALYSIS OF THE GROWTH OF SPHERICAL AIR BUBBLES IN WATER DUE TO THE INTERFACIAL MASS TRANSFER BY A 3D FRONT-TRACKING METHOD. , 2018, , .		3
40	IMPACT OF EXTERNAL TEMPERATURE DISTRIBUTION ON THE TURBULENT AND THERMAL FIELDS IN A VERTICAL UNIFORMLY HEATED CHANNEL. , 2018, , .		0
41	Numerical Modeling of Magnetic Nanoparticle and Carrier Fluid Interactions Under Static and Double-Shear Flows. <i>IEEE Nanotechnology Magazine</i> , 2017, 16, 798-805.	1.1	12
42	Comparison of detailed soot formation models for sooty and non-sooty flames in an under-ventilated ISO room. <i>International Journal of Heat and Mass Transfer</i> , 2017, 115, 717-729.	2.5	39
43	Numerical simulation of blade-passage noise. <i>Journal of the Acoustical Society of America</i> , 2017, 142, 1575-1586.	0.5	12
44	Wind friction parametrisation used in emission models for wastewater treatment plants: A critical review. <i>Water Research</i> , 2017, 124, 49-66.	5.3	8
45	On the influences of key modelling constants of large eddy simulations for large-scale compartment fires predictions. <i>International Journal of Computational Fluid Dynamics</i> , 2017, 31, 324-337.	0.5	32
46	Numerical investigation of formation and dissolution of CO ₂ bubbles within silicone oil in a cross-junction microchannel. <i>Microfluidics and Nanofluidics</i> , 2017, 21, 1.	1.0	10
47	The predominant effect of stroke length on velocity profiles at the exit of axisymmetric synthetic jet actuators. <i>International Journal of Heat and Fluid Flow</i> , 2017, 66, 197-208.	1.1	9
48	A CFD model for the coupling of multiphase, multicomponent and mass transfer physics for micro-scale simulations. <i>International Journal of Heat and Mass Transfer</i> , 2017, 113, 922-934.	2.5	13
49	Heat Generation in Gold Nanorods Solutions due to Absorption of Near-Infrared Radiation. , 2017, , .		2
50	NATURAL CONVECTIVE FLOW ANALYSIS IN VERTICAL CHANNEL. , 2017, , .		1
51	Unsteady Flow Physics of the Blade-Tower Interaction of a Pylon-Mounted Fan. , 2017, , .		2
52	Heat Generation in Gold Nanorods Solutions due to Absorption of Near-Infrared Radiation. , 2017, , .		0
53	The intersection marker method for 3D interface tracking of deformable surfaces in finite volumes. <i>International Journal for Numerical Methods in Fluids</i> , 2016, 81, 220-244.	0.9	9
54	Influence of the fetch parameter on results from empirical correlations for estimating odorous emissions at passive liquid surfaces. <i>Water Science and Technology</i> , 2016, 74, 2384-2391.	1.2	5

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55	Numerical modelling of magnetic nanoparticle and carrier fluid interactions. , 2016, , .		3
56	An algorithm to calculate interfacial area for multiphase mass transfer through the volume-of-fluid method. International Journal of Heat and Mass Transfer, 2016, 100, 573-581.	2.5	50
57	High order accurate dual-phase-lag numerical model for microscopic heating in multiple domains. International Communications in Heat and Mass Transfer, 2016, 78, 21-28.	2.9	5
58	Improved volume-of-fluid (VOF) model for predictions of velocity fields and droplet lengths in microchannels. Flow Measurement and Instrumentation, 2016, 51, 105-115.	1.0	23
59	Effect of heat loss on turbulent buoyancy-driven flow in a rectangular cavity using the large-eddy simulation. Numerical Heat Transfer; Part A: Applications, 2016, 70, 689-706.	1.2	5
60	Three-dimensional modeling of flow and deformation in idealized mild and moderate arterial vessels. Computer Methods in Biomechanics and Biomedical Engineering, 2016, 19, 1395-1408.	0.9	1
61	Importance of detailed chemical kinetics on combustion and soot modelling of ventilated and under-ventilated fires in compartment. International Journal of Heat and Mass Transfer, 2016, 96, 171-188.	2.5	48
62	Numerical investigation on the velocity fields during droplet formation in a microfluidic T-junction. Chemical Engineering Science, 2016, 139, 99-108.	1.9	50
63	On Computational Fluid Dynamics Study of Magnetic Drug Targeting. Journal of Computational Multiphase Flows, 2015, 7, 43-56.	0.8	12
64	Radiative heating of superficial human tissues with the use of water-filtered infrared-A radiation: A computational modeling. International Journal of Heat and Mass Transfer, 2015, 85, 311-320.	2.5	38
65	Heat and mass transfer model to predict the operational performance of a steam sterilisation autoclave including products. International Journal of Heat and Mass Transfer, 2015, 90, 800-811.	2.5	17
66	Large Eddy Simulation of turbulent buoyancy-driven flow with alternating staggered heating walls. Applied Thermal Engineering, 2015, 89, 558-568.	3.0	6
67	Numerical modelling of an industrial steam-air sterilisation process with experimental validation. Applied Thermal Engineering, 2015, 75, 122-134.	3.0	15
68	Effects of short-pulsed laser radiation on transient heating of superficial human tissues. International Journal of Heat and Mass Transfer, 2014, 78, 488-497.	2.5	26
69	Three-Dimensional Computational Study of Natural Convection in a Non-Uniformly Heated Vertical Open-Ended Channel. , 2014, , .		0
70	Absorption of Short-Pulsed Laser Radiation in Superficial Human Tissues: Transient vs Quasi-Steady Radiative Transfer. , 2014, , .		0
71	Heat and Mass Transfer Modelling of an Industrial Autoclave to Minimise Steam Consumption. , 2014, , .		0
72	Large-eddy simulation of turbulent buoyancy-driven flow in a rectangular cavity. International Journal of Heat and Fluid Flow, 2013, 39, 28-41.	1.1	9

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73	Plasmonic "pump-probe" method to study semi-transparent nanofluids. Applied Optics, 2013, 52, 6041.	0.9	60
74	Natural Convection in an Asymmetrically-Heated Open-Ended Channel: A Three-Dimensional Computational Study. , 2013, , .		2
75	EFFECT OF VARIABLE PROPERTIES ON HEAT TRANSFER IN A MICRO-CHANNEL WITH A SYNTHETIC JET. Computational Thermal Sciences, 2013, 5, 369-388.	0.5	5
76	SIMPLIFIED APPROACHES TO RADIATIVE TRANSFER SIMULATIONS IN LASER-INDUCED HYPERTHERMIA OF SUPERFICIAL TUMORS. Computational Thermal Sciences, 2013, 5, 521-530.	0.5	38
77	Computational Fluid Dynamics and Its Applications 2012. Modelling and Simulation in Engineering, 2012, 2012, 1-2.	0.4	2
78	A Simplified Model of Laser Hyperthermia of Superficial Tumors Including Variation of Human Tissue Optical Properties With Thermal Damage. , 2012, , .		1
79	Simulation of Blood Flow and Nanoparticle Transport in a Stenosed Carotid Bifurcation and Pseudo-Arteriole. Journal of Computational Multiphase Flows, 2012, 4, 85-101.	0.8	4
80	Forced Convection in Micro-Channel With Synthetic Jet: Effect of Operating Frequency. , 2012, , .		0
81	Heat transfer enhancement in micro-channel with multiple synthetic jets. Applied Thermal Engineering, 2012, 48, 275-288.	3.0	39
82	Flow structure generated by two synthetic jets in a channel: Effect of phase and frequency. Sensors and Actuators A: Physical, 2012, 184, 98-111.	2.0	21
83	Modelling of natural convection in vertical and tilted photovoltaic applications. Energy and Buildings, 2012, 55, 810-822.	3.1	49
84	Eddie Leonardi Memorial Lecture: "Natural Convection From Earth to Space". Journal of Heat Transfer, 2012, 134, .	1.2	3
85	Numerical and experimental studies of a channel flow with multiple circular synthetic jets. EPJ Web of Conferences, 2012, 25, 01094.	0.1	7
86	Three-dimensional modelling of fluid flow and heat transfer in micro-channels with synthetic jet. International Journal of Heat and Mass Transfer, 2012, 55, 198-213.	2.5	41
87	Indirect heating strategy for laser induced hyperthermia: An advanced thermal model. International Journal of Heat and Mass Transfer, 2012, 55, 4688-4700.	2.5	107
88	Numerical investigation of passive cooling in open vertical channels. Applied Thermal Engineering, 2012, 39, 121-131.	3.0	26
89	Large-eddy simulation of natural convection in an asymmetrically-heated vertical parallel-plate channel: Assessment of subgrid-scale models. Computers and Fluids, 2012, 59, 101-116.	1.3	34
90	NUMERICAL AND EXPERIMENTAL INVESTIGATION OF UNSTEADY NATURAL CONVECTION IN A VERTICAL OPEN-ENDED CHANNEL. Computational Thermal Sciences, 2012, 4, 443-456.	0.5	13

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91	LASER INDUCED HYPERTHERMIA OF SUPERFICIAL TUMORS: A TRANSIENT THERMAL MODEL FOR INDIRECT HEATING STRATEGY. Computational Thermal Sciences, 2012, 4, 457-475.	0.5	3
92	EFFECT OF CHANNEL PRESSURE DIFFERENCE IN HEAT TRANSFER ENHANCEMENT IN MICRO-CHANNEL WITH SYNTHETIC JET. , 2012, , .		0
93	LASER INDUCED HYPERTHERMIA OF SUPERFICIAL TUMORS: A TRANSIENT THERMAL MODEL FOR INDIRECT HEATING STRATEGY. , 2012, , .		0
94	NUMERICAL AND EXPERIMENTAL INVESTIGATION OF UNSTEADY NATURAL CONVECTION IN AN OPEN CHANNEL. , 2012, , .		0
95	Large-Eddy Simulation of Turbulent Natural Convection in Vertical Parallel-Plate Channels. Numerical Heat Transfer, Part B: Fundamentals, 2011, 59, 259-287.	0.6	25
96	Natural Convection in a PV-Integrated Double-Skin Façade using Large-Eddy Simulation. Procedia Engineering, 2011, 14, 3277-3284.	1.2	6
97	A combined transient thermal model for laser hyperthermia of tumors with embedded gold nanoshells. International Journal of Heat and Mass Transfer, 2011, 54, 5459-5469.	2.5	119
98	Numerical Computation and Investigation of the Characteristics of Microscale Synthetic Jets. Modelling and Simulation in Engineering, 2011, 2011, 1-8.	0.4	6
99	Advances in Computational Fluid Dynamics and Its Applications. Modelling and Simulation in Engineering, 2011, 2011, 1-3.	0.4	0
100	An Experimental Study of a Synthetic Jet in Cross Flow in a Microchannel. , 2010, , .		0
101	Vortical Intensification of Heat Transfer in Microchannels with Oval Dimples. Heat Transfer Research, 2010, 41, 413-424.	0.9	19
102	Eddie Leonardi Memorial Lecture: Natural Convection from Earth to Space. , 2010, , .		1
103	Three-Dimensional Modelling of Heat Transfer in Micro-Channels With Synthetic Jet. , 2010, , .		0
104	EFFECT OF OPERATING FREQUENCY ON HEAT TRANSFER IN A MICROCHANNEL WITH SYNTHETIC JET. Computational Thermal Sciences, 2009, 1, 361-383.	0.5	9
105	An Experimental and Numerical Study of a Micro-Synthetic Jet in a Shallow Cavity. , 2008, , .		1
106	An evaluation of synthetic jets for heat transfer enhancement in air cooled microchannels. International Journal of Numerical Methods for Heat and Fluid Flow, 2007, 17, 263-283.	1.6	43
107	Compressibility Effects in Micro Synthetic Jets. , 2004, , 273.		2
108	Modelling of binary alloy solidification in the MEPHISTO experiment. Comptes Rendus - Mecanique, 2004, 332, 403-411.	2.1	5

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109	RECONSTRUCTION AND ADVECTION OF A MOVING INTERFACE IN THREE DIMENSIONS ON A FIXED GRID. Numerical Heat Transfer, Part B: Fundamentals, 1998, 34, 121-138.	0.6	8
110	Controlling the clustering behavior of particulate colloidal systems using alternating and rotating magnetic fields. Computational Particle Mechanics, 0, , 1.	1.5	2
111	Numerical Investigation of Rising Vapour Bubble in Convective Boiling Using an Advanced 3D Hybrid Numerical Method. , 0, , .		0