Victoria Timchenko

List of Publications by Year
in descending order

111	1,878	236925 25	302126 39
papers	citations	h-index	g-index

111	111	111	1572
all docs	docs citations	times ranked	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. Journal of Fluids Engineering, Transactions of the ASME, 2022, 144, .	1.5	2
2	Nano-Enhanced Phase Change Materials for Thermal Energy Storage: A Bibliometric Analysis. Energies, 2022, 15, 3426.	3.1	15
3	Manifold configurations for uniform flow via topology optimisation and flow visualisation. Applied Thermal Engineering, 2021, 183, 116227.	6.0	16
4	Heat Generation in Irradiated Gold Nanoparticle Solutions for Hyperthermia Applications. Processes, 2021, 9, 368.	2.8	4
5	Manifold microchannel heat sink topology optimisation. International Journal of Heat and Mass Transfer, 2021, 170, 121025.	4.8	44
6	Directivity of blade-tower interaction noise. JASA Express Letters, 2021, 1, .	1.1	3
7	Modelling Rayleigh-BÃ©nard convection coupled with electro-vortex flow in liquid metal batteries. Journal of Power Sources, 2021, 501, 229988.	7.8	10
8	Modelling atmospheric emissions from wastewater treatment plants: Implications of land-to-water roughness change. Science of the Total Environment, 2021, 792, 148330.	8.0	4
9	Enabling contactless rapid on-demand debonding and rebonding using hysteresis heating of ferrimagnetic nanoparticles. Materials and Design, 2021, 210, 110076.	7.0	6
10	The Effect of Orientation on the Performance of Small Free-Convection Heat Sinks for Use With a Thermoelectric Cryotherapy Device. Journal of Thermal Science and Engineering Applications, 2021, 13, .	1.5	1
11	Preface: Advanced Thermal Strategies in Cancer Therapy and Diagnostics. Critical Reviews in Biomedical Engineering, 2020, 48, v-vii.	0.9	0
12	Real-time monitoring of heat transfer between gold nanoparticles and tethered bilayer lipid membranes. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183334.	2.6	4
13	Transitional natural convection flow in a vertical channel: Impact of the external thermal stratification. International Journal of Heat and Mass Transfer, 2020, 151, 119476.	4.8	6
14	Mass Transport Optimization for Redox Flow Battery Design. Applied Sciences (Switzerland), 2020, 10, 2801.	2.5	10
15	Open manifold microchannel heat sink for high heat flux electronic cooling with a reduced pressure drop. International Journal of Heat and Mass Transfer, 2020, 163, 120395.	4.8	36
16	Tethered Bilayer Lipid Membranes to Monitor Heat Transfer between Gold Nanoparticles and Lipid Membranes. Journal of Visualized Experiments, 2020, , .	0.3	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. Applied Thermal Engineering, 2019, 160, 114062.	6.0	39

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19	Enhanced Reactant Distribution in Redox Flow Cells. Molecules, 2019, 24, 3877.	3.8	7
20	Modeling the Response of Magnetorheological Fluid Dampers under Seismic Conditions. Applied Sciences (Switzerland), 2019, 9, 4189.	2.5	15
21	Detailed flow development and indicators of transition in a natural convection flow in a vertical channel. International Journal of Heat and Mass Transfer, 2019, 143, 118502.	4.8	10
22	Computational Study of Wet Steam Flow to Optimize Steam Ejector Efficiency for Potential Fire Suppression Application. Applied Sciences (Switzerland), 2019, 9, 1486.	2.5	18
23	Effects of radiation on turbulent natural convection in channel flows. International Journal of Heat and Fluid Flow, 2019, 77, 122-133.	2.4	9
24	Experimental and numerical investigation of bladeâ€“tower interaction noise. Journal of Sound and Vibration, 2019, 443, 362-375.	3.9	15
25	Evaluation of an adaptive tutorial supporting the teaching of mathematics. European Journal of Engineering Education, 2019, 44, 787-804.	2.3	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 â€“ A theoretical and experimental study. International Journal of Heat and Mass Transfer, 2018, 121, 1264-1272.	4.8	9
28	Heat transfer from nanoparticles for targeted destruction of infectious organisms. International Journal of Hyperthermia, 2018, 34, 157-167.	2.5	22
29	Bubble flow simulations using the intersection marker (ISM) interface tracking method. International Journal of Numerical Methods for Heat and Fluid Flow, 2018, 28, 118-137.	2.8	8
30	Soft and Moldable Mgâ€Doped Liquid Metal for Conformable Skin Tumor Photothermal Therapy. Advanced Healthcare Materials, 2018, 7, e1800318.	7.6	116
31	Numerical study of fire spread using the level-set method with large eddy simulation incorporating detailed chemical kinetics gas-phase combustion model. Journal of Computational Science, 2018, 24, 8-23.	2.9	33
32	A critical review on liquid-gas mass transfer models for estimating gaseous emissions from passive liquid surfaces in wastewater treatment plants. Water Research, 2018, 130, 388-406.	11.3	30
33	Variable Porous Electrode Compression for Redox Flow Battery Systems. Batteries, 2018, 4, 53.	4.5	15
34	Thermal modelling of controlled scalp hypothermia using a thermoelectric cooling cap. Journal of Thermal Biology, 2018, 76, 8-20.	2.5	8
35	Study of Morphology and Optical Properties of Gold Nanoparticle Aggregates under Different pH Conditions. Langmuir, 2018, 34, 10340-10352.	3.5	14
36	Predicting the fire spread rate of a sloped pine needle board utilizing pyrolysis modelling with detailed gas-phase combustion. International Journal of Heat and Mass Transfer, 2018, 125, 310-322.	4.8	36

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37	Microchannel cooling of concentrator photovoltaics: A review. Renewable and Sustainable Energy Reviews, 2018, 90, 1041-1059.	16.4	114
38	The Effect of Gold Nanorods Clustering on Near-Infrared Radiation Absorption. Applied Sciences (Switzerland), 2018, 8, 1132.	2.5	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. IEEE Nanotechnology Magazine, 2017, 16, 798-805.	2.0	12
42	Comparison of detailed soot formation models for sooty and non-sooty flames in an under-ventilated ISO room. International Journal of Heat and Mass Transfer, 2017, 115, 717-729.	4.8	39
43	Numerical simulation of blade-passage noise. Journal of the Acoustical Society of America, 2017, 142, 1575-1586.	1.1	12
44	Wind friction parametrisation used in emission models for wastewater treatment plants: A critical review. Water Research, 2017, 124, 49-66.	11.3	8
45	On the influences of key modelling constants of large eddy simulations forÂlarge-scale compartment fires predictions. International Journal of Computational Fluid Dynamics, 2017, 31, 324-337.	1.2	32
46	Numerical investigation of formation and dissolution of CO2 bubbles within silicone oil in a cross-junction microchannel. Microfluidics and Nanofluidics, 2017, 21, 1.	2.2	10
47	The predominant effect of stroke length on velocity profiles at the exit of axisymmetric synthetic jet actuators. International Journal of Heat and Fluid Flow, 2017, 66, 197-208.	2.4	9
48	A CFD model for the coupling of multiphase, multicomponent and mass transfer physics for micro-scale simulations. International Journal of Heat and Mass Transfer, 2017, 113, 922-934.	4.8	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. International Journal for Numerical Methods in Fluids, 2016, 81, 220-244.	1.6	9
54	Influence of the fetch parameter on results from empirical correlations for estimating odorous emissions at passive liquid surfaces. Water Science and Technology, 2016, 74, 2384-2391.	2.5	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.	4.8	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.	5.6	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.	2.0	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.	2.1	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.	1.6	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.	4.8	48
62	Numerical investigation on the velocity fields during droplet formation in a microfluidic T-junction. Chemical Engineering Science, 2016, 139, 99-108.	3.8	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.	4.8	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.	4.8	17
66	Large Eddy Simulation of turbulent buoyancy-driven flow withÂalternating staggered heating walls. Applied Thermal Engineering, 2015, 89, 558-568.	6.0	6
67	Numerical modelling of an industrial steamâ€“air sterilisation process with experimental validation. Applied Thermal Engineering, 2015, 75, 122-134.	6.0	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.	4.8	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.	2.4	9

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73	Plasmonic â€œpumpâ€“probeâ€•method to study semi-transparent nanofluids. Applied Optics, 2013, 52, 6041.	1.8	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.	0.9	5
76	SIMPLIFIED APPROACHES TO RADIATIVE TRANSFER SIMULATIONS IN LASER-INDUCED HYPERTHERMIA OF SUPERFICIAL TUMORS. Computational Thermal Sciences, 2013, 5, 521-530.	0.9	38
77	Computational Fluid Dynamics and Its Applications 2012. Modelling and Simulation in Engineering, 2012, 2012, 1-2.	0.7	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.	6.0	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.	4.1	21
83	Modelling of natural convection in vertical and tilted photovoltaic applications. Energy and Buildings, 2012, 55, 810-822.	6.7	49
84	Eddie Leonardi Memorial Lecture: â€œNatural Convection From Earth to Spaceâ€• Journal of Heat Transfer, 2012, 134, .	2.1	3
85	Numerical and experimental studies of a channel flow with multiple circular synthetic jets. EPJ Web of Conferences, 2012, 25, 01094.	0.3	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.	4.8	41
87	Indirect heating strategy for laser induced hyperthermia: An advanced thermal model. International Journal of Heat and Mass Transfer, 2012, 55, 4688-4700.	4.8	107
88	Numerical investigation of passive cooling in open vertical channels. Applied Thermal Engineering, 2012, 39, 121-131.	6.0	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.	2.5	34
90	NUMERICAL AND EXPERIMENTAL INVESTIGATION OF UNSTEADY NATURAL CONVECTION IN A VERTICAL OPEN-ENDED CHANNEL. Computational Thermal Sciences, 2012, 4, 443-456.	0.9	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.	0.9	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.	0.9	25
96	Natural Convection in a PV-Integrated Double-Skin FaÃ§ade 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.	4.8	119
98	Numerical Computation and Investigation of the Characteristics of Microscale Synthetic Jets. Modelling and Simulation in Engineering, 2011, 2011, 1-8.	0.7	6
99	Advances in Computational Fluid Dynamics and Its Applications. Modelling and Simulation in Engineering, 2011, 2011, 1-3.	0.7	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.	1.6	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.	0.9	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 microâ€channels. International Journal of Numerical Methods for Heat and Fluid Flow, 2007, 17, 263-283.	2.8	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.	0.9	8
110	Controlling the clustering behavior of particulate colloidal systems using alternating and rotating magnetic fields. Computational Particle Mechanics, 0, , 1.	3.0	2
111	Numerical Investigation of Rising Vapour Bubble in Convective Boiling Using an Advanced 3D Hybrid Numerical Method. , 0, , .		0