Wei-Tao Wu

List of Publications by Year
in descending order

63 papers	988 citations	430874 18 h-index	526287 27 g-index
63 all docs	63 docs citations	63 times ranked	787 citing authors

#	Article	IF	Citations
1	Three-dimensional thermal modeling of Li-ion battery cell and 50â€‹V Li-ion battery pack cooled by mini-channel cold plate. Applied Thermal Engineering, 2019, 147, 829-840.	6.0	100
2	Modeling of PEM fuel cell with thin MEA under low humidity operating condition. Applied Energy, 2019, 242, 1513-1527.	10.1	65
3	Time-variant prediction of flow over an airfoil using deep neural network. Physics of Fluids, 2020, 32, .	4.0	41
4	Study of blood flow in several benchmark micro-channels using a two-fluid approach. International Journal of Engineering Science, 2015, 95, 49-59.	5.0	37
5	Unsteady reduced-order model of flow over cylinders based on convolutional and deconvolutional neural network structure. Physics of Fluids, 2020, 32, .	4.0	37
6	A numerical study of blood flow using mixture theory. International Journal of Engineering Science, 2014, 76, 56-72.	5.0	35
7	Visualization and analysis of biomaterial-centered thrombus formation within a defined crevice under flow. Biomaterials, 2016, 96, 72-83.	11.4	32
8	On the Optimization of a Centrifugal Maglev Blood Pump Through Design Variations. Frontiers in Physiology, 2021, 12, 699891.	2.8	28
9	Natural convection and anisotropic heat transfer in a ferro-nanofluid under magnetic field. International Journal of Heat and Mass Transfer, 2019, 133, 581-595.	4.8	27
10	Deep reinforcement learning based synthetic jet control on disturbed flow over airfoil. Physics of Fluids, 2022, 34, .	4.0	26
11	Numerical Simulation of Nanofluid Suspensions in a Geothermal Heat Exchanger. Energies, 2018, 11, 919.	3.1	25
12	Steady Flow of a Cement Slurry. Energies, 2019, 12, 2604.	3.1	23
13	Geometry and boundary condition adaptive data-driven model of fluid flow based on deep convolutional neural networks. Physics of Fluids, 2021, 33, .	4.0	23
14	Simulation of thrombosis in a stenotic microchannel: The effects of vWF-enhanced shear activation of platelets. International Journal of Engineering Science, 2020, 147, 103206.	5.0	22
15	Active control for enhancing vortex induced vibration of a circular cylinder based on deep reinforcement learning. Physics of Fluids, 2021, 33, .	4.0	21
16	Combustion characteristics of inorganic kerosene gel droplet with fumed silica as gellant. Experimental Thermal and Fluid Science, 2019, 103, 377-384.	2.7	20
17	Development of a High-Throughput Magnetic Separation Device for Malaria-Infected Erythrocytes. Annals of Biomedical Engineering, 2017, 45, 2888-2898.	2.5	19
18	Data-driven modeling of geometry-adaptive steady heat conduction based on convolutional neural networks. Case Studies in Thermal Engineering, 2021, 28, 101651.	5.7	19

#	ARTICLE	IF	CITATIONS
19	On the coefficients of the interaction forces in a two-phase flow of a fluid infused with particles. International Journal of Non-Linear Mechanics, 2014, 59, 76-82.	2.6	18
20	Fully developed flow of a drilling fluid between two rotating cylinders. Applied Mathematics and Computation, 2016, 281, 266-277.	2.2	18
21	Transport of platelets induced by red blood cells based on mixture theory. International Journal of Engineering Science, 2017, 118, 16-27.	5.0	18
22	Heat Transfer and Dissipation Effects in the Flow of a Drilling Fluid. Fluids, 2016, 1, 4.	1.7	17
23	Role of vane configuration on the heat dissipation performance of ventilated brake discs. Applied Thermal Engineering, 2018, 136, 118-130.	6.0	16
24	The evolution of the initial flow structures of a highly under-expanded circular jet. Journal of Fluid Mechanics, 2019, 871, 305-331.	3.4	16
25	Recent Advances in Mechanics of Non-Newtonian Fluids. Fluids, 2020, 5, 10.	1.7	16
26	Data-Driven Modeling of Geometry-Adaptive Steady Heat Convection Based on Convolutional Neural Networks. Fluids, 2021, 6, 436.	1.7	15
27	Simulation of blood flow in a sudden expansion channel and a coronary artery. Journal of Computational and Applied Mathematics, 2020, 376, 112856.	2.0	14
28	Flow of granular materials modeled as a non-linear fluid. Mechanics Research Communications, 2013, 52, 62-68.	1.8	13
29	Effects of Anisotropic Thermal Conductivity and Lorentz Force on the Flow and Heat Transfer of a Ferro-Nanofluid in a Magnetic Field. Energies, 2017, 10, 1065.	3.1	13
30	Numerical analysis of Richtmyer–Meshkov instability of circular density interface in presence of transverse magnetic field. Physics of Fluids, 2020, 32, .	4.0	13
31	Numerical Simulation of Red Blood Cell-Induced Platelet Transport in Saccular Aneurysms. Applied Sciences (Switzerland), 2017, 7, 484.	2.5	11
32	Normal stress effects in the gravity driven flow of granular materials. International Journal of Non-Linear Mechanics, 2017, 92, 84-91.	2.6	10
33	A Continuum Model for the Unfolding of von Willebrand Factor. Annals of Biomedical Engineering, 2021, 49, 2646-2658.	2.5	10
34	Accelerating and improving deep reinforcement learning-based active flow control: Transfer training of policy network. Physics of Fluids, 2022, 34, .	4.0	10
35	Heat transfer and flow of a dense suspension between two cylinders. International Journal of Heat and Mass Transfer, 2017, 112, 597-606.	4.8	9
36	Heat Transfer and Flow of Nanofluids in a Y-Type Intersection Channel with Multiple Pulsations: A Numerical Study. Energies, 2017, 10, 492.	3.1	9

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37	Study on the Law of Pseudo-Cavitation on Superhydrophobic Surface in Turbulent Flow Field of Backward-Facing Step. Fluids, 2021, 6, 200.	1.7	9
38	Large eddy simulation as a fast and accurate engineering approach for the simulation of rotary blood pumps. International Journal of Artificial Organs, 2021, 44, 887-899.	1.4	9
39	Three-Dimensional Thermal Modeling of Internal Shorting Process in a 20Ah Lithium-Ion Polymer Battery. Energies, 2020, 13, 1013.	3.1	8
40	Heat transfer and flow of a slag-type non-linear fluid: Effects of variable thermal conductivity. Applied Mathematics and Computation, 2014, 227, 77-91.	2.2	7
41	Falling film flow of a viscoelastic fluid along a wall. Mathematical Methods in the Applied Sciences, 2014, 37, 2840-2853.	2.3	7
42	Three‐dimensional nonisothermal modeling of solid oxide fuel cell coupling electrochemical kinetics and species transport. International Journal of Energy Research, 2019, 43, 6907.	4.5	7
43	Numerical investigations on the oblique water entry of high-speed projectiles. Applied Mathematics and Computation, 2019, 362, 124547.	2.2	7
44	Natural Convection in a Non-Newtonian Fluid: Effects of Particle Concentration. Fluids, 2019, 4, 192.	1.7	7
45	A non-linear fluid suspension model for blood flow. International Journal of Non-Linear Mechanics, 2019, 109, 32-39.	2.6	7
46	Effects of Temperature on the Flow and Heat Transfer in Gel Fuels: A Numerical Study. Energies, 2020, 13, 821.	3.1	7
47	Investigation on the evaporation and dispersion of human respiratory droplets with COVID-19 virus. International Journal of Multiphase Flow, 2022, 147, 103904.	3.4	7
48	Heat Transfer in a Drilling Fluid with Geothermal Applications. Energies, 2017, 10, 1349.	3.1	6
49	Flow Characteristics of Water-HPC Gel in Converging Tubes and Tapered Injectors. Energies, 2019, 12, 1643.	3.1	6
50	Evaluation of the Performance of the Drag Force Model in Predicting Droplet Evaporation for R134a Single Droplet and Spray Characteristics for R134a Flashing Spray. Energies, 2019, 12, 4618.	3.1	6
51	Anisotropic heat transfer of ferro-nanofluid in partially heated rectangular enclosures under magnetic field. Case Studies in Thermal Engineering, 2021, 26, 101145.	5.7	6
52	Interaction of cylindrical converging shocks with an equilateral triangular SF6 cylinder. Physics of Fluids, 2019, 31, .	4.0	5
53	Numerical Investigations on the Water Entry of Cylindrical Projectiles with Different Initial Conditions. Applied Sciences (Switzerland), 2019, 9, 1858.	2.5	5
54	Influence of shear rate and surface chemistry on thrombus formation in micro-crevice. Journal of Biomechanics, 2021, 121, 110397.	2.1	4

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55	Flow of a fluid-solid mixture: Normal stress differences and slip boundary condition. International Journal of Non-Linear Mechanics, 2017, 90, 39-49.	2.6	3
56	Flow of a Dense Suspension Modeled as a Modified Second Grade Fluid. Fluids, 2018, 3, 55.	1.7	3
57	The effects of particle concentration and various fluxes on the flow of a fluid-solid suspension. Applied Mathematics and Computation, 2019, 358, 151-160.	2.2	3
58	Numerical Simulations of the Flow of a Dense Suspension Exhibiting Yield-Stress and Shear-Thinning Effects. Energies, 2020, 13, 6635.	3.1	3
59	Natural convection and anisotropic heat transfer of shear-thinning ferro-nanofluid in partially heated rectangular enclosures under magnetic field. Thermal Science and Engineering Progress, 2021, 25, 100992.	2.7	3
60	Secondary atomization of non-Newtonian kerosene gel at low Weber numbers: A numerical study. Aerospace Science and Technology, 2022, 120, 107280.	4.8	3
61	Active control for the flow around various geometries through deep reinforcement learning. Fluid Dynamics Research, 2022, 54, 015510.	1.3	3
62	Modeling on Effect of Particle Sediment on Fluid Flow and Heat Transfer of Solid–Fluid Suspension. Energies, 2021, 14, 487.	3.1	1
63	Heat transfer and flow of nanofluids: Effect of shear thinning viscosity. Canadian Journal of Physics, 2018, 96, 148-156.	1.1	0