Ioannis Sarris

List of Publications by Year
in descending order

110 papers	2,552 citations	186265 28 h-index	254184 43 g-index
110 all docs	110 docs citations	110 times ranked	1238 citing authors

#	Article	IF	Citations
1	Effect of electromagnetic field on the thermal performance of longitudinal trapezoidal porous fin using DTM–Pade approximant. Heat Transfer, 2022, 51, 3313-3333.	3.0	17
2	Effects of channel size, wall wettability, and electric field strength on ion removal from water in nanochannels. Scientific Reports, 2022, 12, 641.	3.3	8
3	An MHD Fluid Flow over a Porous Stretching/Shrinking Sheet with Slips and Mass Transpiration. Micromachines, 2022, 13, 116.	2.9	32
4	Activation Energy Impact on Flow of AA7072-AA7075/Water-Based Hybrid Nanofluid through a Cone, Wedge and Plate. Micromachines, 2022, 13, 302.	2.9	53
5	Exploration of Temperature Distribution through a Longitudinal Rectangular Fin with Linear and Exponential Temperature-Dependent Thermal Conductivity Using DTM-Pade Approximant. Symmetry, 2022, 14, 690.	2.2	22
6	Air Flow Study around Isolated Cubical Building in the City of Athens under Various Climate Conditions. Applied Sciences (Switzerland), 2022, 12, 3410.	2.5	5
7	Entropy Generation in the Magnetohydrodynamic Jeffrey Nanofluid Flow Over a Stretching Sheet with Wide Range of Engineering Application Parameters. International Journal of Applied and Computational Mathematics, 2022, 8, 1.	1.6	23
8	MHD Carreau nanoliquid flow over a nonlinear stretching surface. Heat Transfer, 2022, 51, 5262-5287.	3.0	4
9	Viscous coalescence of unequally sized spherical and cylindrical doublets. Soft Matter, 2022, 18, 4017-4029.	2.7	3
10	The Impact of Reduced Gravity on Oscillatory Mixed Convective Heat Transfer around a Non-Conducting Heated Circular Cylinder. Applied Sciences (Switzerland), 2022, 12, 5081.	2.5	11
11	Mixing of Fe3O4 nanoparticles under electromagnetic and shear conditions for wastewater treatment applications. Journal of Water Supply: Research and Technology - AQUA, 2022, 71, 671-681.	1.4	3
12	An Effect of Radiation and MHD Newtonian Fluid over a Stretching/Shrinking Sheet with CNTs and Mass Transpiration. Applied Sciences (Switzerland), 2022, 12, 5466.	2.5	25
13	Electroosmotic Peristaltic Pumping of Jeffrey Liquid with Variable Characteristics: An Application to Hemodynamic. International Journal of Applied and Computational Mathematics, 2022, 8, .	1.6	1
14	Blood flow and diameter effect in the navigation process of magnetic nanocarriers inside the carotid artery. Computer Methods and Programs in Biomedicine, 2022, 221, 106916.	4.7	3
15	Numerical Simulation of a Fire Accident in a Longitudinally Ventilated Railway Tunnel and Tenability Analysis. Applied Sciences (Switzerland), 2022, 12, 5667.	2.5	8
16	Mass Transfer Effects on the Mucus Fluid with Pulsatile Flow Influence of the Electromagnetic Field. Inventions, 2022, 7, 50.	2.5	4
17	Impact of thermophoretic particle deposition on heat transfer and nanofluid flow through different geometries: An application to solar energy. Chinese Journal of Physics, 2022, 80, 190-205.	3.9	15
18	On the magnetic aggregation of Fe3O4 nanoparticles. Computer Methods and Programs in Biomedicine, 2021, 198, 105778.	4.7	40

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19	Thermal and flow investigation of MHD natural convection in a nanofluid-saturated porous enclosure: an asymptotic analysis. Journal of Thermal Analysis and Calorimetry, 2021, 143, 751-765.	3.6	30
20	The interfacial nanolayer role on magnetohydrodynamic natural convection of an Al2O3-water nanofluid. Heat Transfer Engineering, 2021, 42, 89-105.	1.9	16
21	An Optimized Method for 3D Magnetic Navigation of Nanoparticles inside Human Arteries. Fluids, 2021, 6, 97.	1.7	7
22	Magneto-Bioconvection Flow of Williamson Nanofluid over an Inclined Plate with Gyrotactic Microorganisms and Entropy Generation. Fluids, 2021, 6, 109.	1.7	85
23	Analysis of magnetohydrodynamic channel flow through complex network analysis. Chaos, 2021, 31, 043123.	2.5	7
24	Impact of Binary Chemical Reaction and Activation Energy on Heat and Mass Transfer of Marangoni Driven Boundary Layer Flow of a Non-Newtonian Nanofluid. Processes, 2021, 9, 702.	2.8	186
25	Combined Effect of Radiation and Inclined MHD Flow of a Micropolar Fluid Over a Porous Stretching/Shrinking Sheet with Mass Transpiration. International Journal of Applied and Computational Mathematics, 2021, 7, 1.	1.6	25
26	A printed-circuit heat exchanger consideration by exploiting an Al2O3-water nanofluid: Effect of the nanoparticles interfacial layer on heat transfer. Thermal Science and Engineering Progress, 2021, 22, 100818.	2.7	35
27	Uncertainty quantification implementations in human hemodynamic flows. Computer Methods and Programs in Biomedicine, 2021, 203, 106021.	4.7	10
28	Large eddy simulation of dispersion of hazardous materials released from a fire accident around a cubical building. Environmental Science and Pollution Research, 2021, 28, 50363-50377.	5.3	7
29	Turbulence Intensity Modulation by Micropolar Fluids. Fluids, 2021, 6, 195.	1.7	2
30	Effect of micromagnetorotation on magnetohydrodynamic Poiseuille micropolar flow: analytical solutions and stability analysis. Journal of Fluid Mechanics, 2021, 920, .	3.4	23
31	A viscous sintering model for pore shrinkage in packings of cylinders. Rheologica Acta, 2021, 60, 397-408.	2.4	5
32	Effect of Magnetohydrodynamics on Heat Transfer Behaviour of a Non-Newtonian Fluid Flow over a Stretching Sheet under Local Thermal Non-Equilibrium Condition. Fluids, 2021, 6, 264.	1.7	121
33	Time Evolution Study of the Electric Field Distribution and Charge Density Due to Ion Movement in Salty Water. Water (Switzerland), 2021, 13, 2185.	2.7	8
34	Magnetohydrodynamic and radiation effects on the heat transfer of a continuously stretching/shrinking sheet with mass transpiration of the horizontal boundary. Chinese Journal of Physics, 2021, 72, 700-715.	3.9	13
35	Analysis of Transient Thermal Distribution in a Convective–Radiative Moving Rod Using Two-Dimensional Differential Transform Method with Multivariate Pade Approximant. Symmetry, 2021, 13, 1793.	2.2	34
36	Rheological Properties and Its Effect on the Lubrication Mechanism of PVP K30 and PVP 40-50 G as Artificial Synovial Fluids. Inventions, 2021, 6, 61.	2.5	2

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37	Microrotation viscosity effect on turbulent micropolar fluid channel flow. Physics of Fluids, 2021, 33, .	4.0	5
38	Effect of radius of toroidal square duct on the transition of electromagnetically driven liquid metal flow. International Journal of Heat and Fluid Flow, 2021, 91, 108858.	2.4	0
39	Improving the Electrical Efficiency of the PV Panel via Geothermal Heat Exchanger: Mathematical Model, Validation and Parametric Analysis. Energies, 2021, 14, 6415.	3.1	1
40	A Computational Study on Magnetic Nanoparticles Hyperthermia of Ellipsoidal Tumors. Applied Sciences (Switzerland), 2021, 11, 9526.	2.5	11
41	Simulation of magnetic nanoparticles crossing through a simplified blood-brain barrier model for Glioblastoma multiforme treatment. Computer Methods and Programs in Biomedicine, 2021, 212, 106477.	4.7	9
42	Impact of Electroosmosis and Wall Properties in Modelling Peristaltic Mechanism of a Jeffrey Liquid through a Microchannel with Variable Fluid Properties. Inventions, 2021, 6, 73.	2.5	13
43	Effect of micromagnetorotation on the heat transfer of micropolar Hartmann flow. Thermal Science and Engineering Progress, 2021, , 101129.	2.7	1
44	Convective Flow of Second Grade Fluid Over a Curved Stretching Sheet with Dufour and Soret Effects. International Journal of Applied and Computational Mathematics, 2021, 7, 1.	1.6	26
45	The Impact of Cattaneoâ€"Christov Double Diffusion on Oldroyd-B Fluid Flow over a Stretching Sheet with Thermophoretic Particle Deposition and Relaxation Chemical Reaction. Inventions, 2021, 6, 95.	2.5	21
46	Influence of Thermophoretic Particle Deposition on the 3D Flow of Sodium Alginate-Based Casson Nanofluid over a Stretching Sheet. Micromachines, 2021, 12, 1474.	2.9	39
47	Heavy Metal Adsorption Using Magnetic Nanoparticles for Water Purification: A Critical Review. Materials, 2021, 14, 7500.	2.9	33
48	Study of Non-Newtonian biomagnetic blood flow in a stenosed bifurcated artery having elastic walls. Scientific Reports, 2021, 11, 23835.	3.3	8
49	A theoretical model for salt ion drift due to electric field suitable to seawater desalination. Desalination, 2020, 473, 114163.	8.2	13
50	Carbon Nanoparticles as Sources for a Cost-Effective Water Purification Method: A Comprehensive Review. Fluids, 2020, 5, 230.	1.7	15
51	Heat transfer improvement by an Al2O3-water nanofluid coolant in printed-circuit heat exchangers of supercritical CO2 Brayton cycle. Thermal Science and Engineering Progress, 2020, 20, 100694.	2.7	24
52	Effect of Micropolar Fluid Properties on the Blood Flow in a Human Carotid Model. Fluids, 2020, 5, 125.	1.7	20
53	Molecular Dynamics Simulations of Ion Drift in Nanochannel Water Flow. Nanomaterials, 2020, 10, 2373.	4.1	6
54	Micromixing Nanoparticles and Contaminated Water Under Different Velocities for Optimum Heavy Metal Ions Adsorption. Environmental Sciences Proceedings, 2020, 2, 65.	0.3	4

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55	Electric field distribution and diffuse layer thickness study due to salt ion movement in water desalination. Desalination, 2020, 490, 114549.	8.2	9
56	Rheological properties of synovial fluid due to viscosupplements: A review for osteoarthritis remedy. Computer Methods and Programs in Biomedicine, 2020, 196, 105644.	4.7	29
57	Numerical study of magnetic particles mixing in waste water under an external magnetic field. Journal of Water Supply: Research and Technology - AQUA, 2020, 69, 266-275.	1.4	25
58	ENTROPY GENERATION AND IRREVERSIBILITY ANALYSIS ON FREE CONVECTIVE UNSTEADY MHD CASSON FLUID FLOW OVER A STRETCHING SHEET WITH SORET/DUFOUR IN POROUS MEDIA. Special Topics and Reviews in Porous Media, 2020, 11, 595-611.	1.1	17
59	Micromagnetorotation of MHD Micropolar Flows. Symmetry, 2020, 12, 148.	2.2	14
60	Numerical Analysis of Temperature Distribution in Ellipsoidal Tumors in Magnetic Fluid Hyperthermia. , 2020, , .		1
61	Micromixing Efficiency of Particles in Heavy Metal Removal Processes under Various Inlet Conditions. Water (Switzerland), 2019, 11, 1135.	2.7	42
62	Recurrence quantification analysis of MHD turbulent channel flow. Physica A: Statistical Mechanics and Its Applications, 2019, 531, 121741.	2.6	11
63	Effect of fractal-shaped outer boundary of glioblastoma multiforme on drug delivery. Computer Methods and Programs in Biomedicine, 2019, 178, 191-199.	4.7	14
64	Thermal analysis of the unsteady sheet stretching subject to slip and magnetohydrodynamic effects. Thermal Science and Engineering Progress, 2019, 13, 100367.	2.7	22
65	Crucial effect of aggregations in CNT-water nanofluid magnetohydrodynamic natural convection. Thermal Science and Engineering Progress, 2019, 11, 263-271.	2.7	81
66	Assessment of air flow distribution and hazardous release dispersion around a single obstacle using Reynolds-averaged Navier-Stokes equations. Heliyon, 2019, 5, e01482.	3.2	7
67	A theoretical model for the magnetohydrodynamic natural convection of a CNT-water nanofluid incorporating a renovated Hamilton-Crosser model. International Journal of Heat and Mass Transfer, 2019, 135, 548-560.	4.8	45
68	Development of a new theoretical model for blood-CNTs effective thermal conductivity pertaining to hyperthermia therapy of glioblastoma multiform. Computer Methods and Programs in Biomedicine, 2019, 172, 79-85.	4.7	30
69	Diesel Pool Fire Incident Inside an Urban Street Canyon. Lecture Notes in Mechanical Engineering, 2019, , 339-350.	0.4	0
70	Analytical study of the magnetohydrodynamic natural convection of a nanofluid filled horizontal shallow cavity with internal heat generation. International Journal of Heat and Mass Transfer, 2019, 130, 862-873.	4.8	52
71	Mixing of Particles in Micromixers under Different Angles and Velocities of the Incoming Water. Proceedings (mdpi), 2018, 2, 577.	0.2	8
72	Computational Assessment of the Hazardous Release Dispersion from a Diesel Pool Fire in a Complex Building's Area. Computation, 2018, 6, 65.	2.0	3

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73	Computational analysis of paramagnetic spherical Fe3O4 nanoparticles under permanent magnetic fields. Computational Materials Science, 2018, 154, 464-471.	3.0	24
74	Effect of radiation and Navier slip boundary of Walters' liquid B flow over a stretching sheet in a porous media. International Journal of Heat and Mass Transfer, 2018, 127, 1327-1337.	4.8	60
75	MHD liquid metal flow and heat transfer between vertical coaxial cylinders under horizontal magnetic field. International Journal of Heat and Fluid Flow, 2017, 65, 342-351.	2.4	31
76	A numerical model for aggregations formation and magnetic driving of spherical particles based on OpenFOAM®. Computer Methods and Programs in Biomedicine, 2017, 142, 21-30.	4.7	30
77	An MHD couple stress fluid due to a perforated sheet undergoing linear stretching with heat transfer. International Journal of Heat and Mass Transfer, 2017, 105, 157-167.	4.8	58
78	Two Dimensional Drug Diffusion Between Nanoparticles and Fractal Tumors. Journal of Physics: Conference Series, 2017, 931, 012034.	0.4	1
79	Computational study of the effect of gradient magnetic field in navigation of spherical particles. Journal of Physics: Conference Series, 2017, 931, 012014.	0.4	0
80	Computational Study of the Optimum Gradient Magnetic Field for the Navigation of the Spherical Particles in the Process of Cleaning the Water from Heavy Metals. Procedia Engineering, 2016, 162, 77-82.	1.2	1
81	Water Purification in Micromagnetofluidic Devices: Mixing in MHD Micromixers. Procedia Engineering, 2016, 162, 593-600.	1.2	4
82	The effect of anode bed geometry on the hydraulic behaviour of PEM fuel cells. Renewable Energy, 2016, 93, 269-279.	8.9	15
83	Computational study of the optimum gradient magnetic field for the navigation of spherical particles into targeted areas. Journal of Physics: Conference Series, 2015, 637, 012038.	0.4	2
84	Spatiotemporal Time Series Analysis Methods for the Study of Turbulent Magnetohydrodynamic Channel Flows. Environmental Processes, 2015, 2, 141-158.	3.5	2
85	Investigation of various nozzles configurations with respect to IFMIF and liquid walls concepts. Fusion Engineering and Design, 2015, 98-99, 1337-1340.	1.9	2
86	3D features in the calendering of thermoplastics: A computational investigation. Polymer Engineering and Science, 2014, 54, 1712-1722.	3.1	12
87	Magnetohydrodynamic Natural Convection of Liquid Metal Between Coaxial Isothermal Cylinders Due to Internal Heating. Numerical Heat Transfer; Part A: Applications, 2014, 65, 401-418.	2.1	5
88	Analytical and numerical study of MHD natural convection in a horizontal shallow cavity with heat generation. International Journal of Heat and Mass Transfer, 2014, 75, 19-30.	4.8	30
89	Transition of an electromagnetically driven liquid metal flow from laminar to turbulent in a toroidal square duct. Europhysics Letters, 2013, 101, 44005.	2.0	9
90	Buoyancy-assisted mixed convection in a vertical channel with spatially periodic wall temperature. International Journal of Thermal Sciences, 2013, 65, 28-38.	4.9	8

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91	Transient Laminar MHD Natural Convection Cooling in a Vertical Cylinder. Numerical Heat Transfer; Part A: Applications, 2012, 62, 531-546.	2.1	5
92	Transport and deposition of neutral particles in magnetohydrodynamic turbulent channel flows at low magnetic Reynolds numbers. International Journal of Heat and Fluid Flow, 2011, 32, 365-377.	2.4	4
93	Natural convection of liquid metal in a vertical annulus with lateral and volumetric heating in the presence of a horizontal magnetic field. International Journal of Heat and Mass Transfer, 2011, 54, 3347-3356.	4.8	40
94	Direct numerical simulation of dynamo transition for nonhelical MHD. Journal of Physics: Conference Series, 2010, 208, 012039.	0.4	0
95	Magnetic field effect on the cooling of a low-Pr fluid in a vertical cylinder. Physics of Fluids, 2010, 22, 017101.	4.0	3
96	MHD flow past a circular cylinder using the immersed boundary method. Computers and Fluids, 2010, 39, 345-358.	2.5	36
97	Laminar Free Convection in a Square Enclosure Driven by the Lorentz Force. Numerical Heat Transfer; Part A: Applications, 2010, 58, 923-942.	2.1	7
98	Magnetohydrodynamic natural convection in a vertical cylindrical cavity with sinusoidal upper wall temperature. International Journal of Heat and Mass Transfer, 2009, 52, 250-259.	4.8	60
99	DNS simulation of liquid metal flow in annuli under the effect of a magnetic field and volumetric heating. , 2009, , .		2
100	Dispersed-phase structural anisotropy in homogeneous magnetohydrodynamic turbulence at low magnetic Reynolds number. Physics of Fluids, 2008, 20, 025101.	4.0	9
101	Dynamo transition in low-dimensional models. Physical Review E, 2008, 78, 036409.	2.1	49
102	Box-size dependence and breaking of translational invariance in the velocity statistics computed from three-dimensional turbulent Kolmogorov flows. Physics of Fluids, 2007, 19, 095101.	4.0	15
103	Large-eddy simulations of the turbulent Hartmann flow close to the transitional regime. Physics of Fluids, 2007, 19, 085109.	4.0	25
104	Direct numerical simulation of a heat removal configuration for fusion blankets. Energy Conversion and Management, 2007, 48, 2775-2783.	9.2	18
105	On the Limits of Validity of the Low Magnetic Reynolds Number Approximation in MHD Natural-Convection Heat Transfer. Numerical Heat Transfer, Part B: Fundamentals, 2006, 50, 157-180.	0.9	109
106	A three-dimensional CFD model of direct ethanol fuel cells: Anode flow bed analysis. Solid State Ionics, 2006, 177, 2133-2138.	2.7	32
107	MHD natural convection in a laterally and volumetrically heated square cavity. International Journal of Heat and Mass Transfer, 2005, 48, 3443-3453.	4.8	80
108	Natural convection in rectangular tanks heated locally from below. International Journal of Heat and Mass Transfer, 2004, 47, 3549-3563.	4.8	55

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109	NATURAL CONVECTION IN A 2D ENCLOSURE WITH SINUSOIDAL UPPER WALL TEMPERATURE. Numerical Heat Transfer; Part A: Applications, 2002, 42, 513-530.	2.1	144
110	A computational tool for the estimation of the optimum gradient magnetic field for the magnetic driving of the spherical particles in the process of cleaning water. , 0, 99, 27-33.		13