Kambiz Vafai

List of Publications by Year
in descending order

247 papers	15,134 citations	25034 57 h-index	21540 114 g-index
249 all docs	249 docs citations	249 times ranked	6594 citing authors

#	Article	IF	Citations
1	Buoyancy-driven heat transfer enhancement in a two-dimensional enclosure utilizing nanofluids. International Journal of Heat and Mass Transfer, 2003, 46, 3639-3653.	4.8	2,440
2	A critical synthesis of thermophysical characteristics of nanofluids. International Journal of Heat and Mass Transfer, 2011, 54, 4410-4428.	4.8	917
3	The role of porous media in modeling flow and heat transfer in biological tissues. International Journal of Heat and Mass Transfer, 2003, 46, 4989-5003.	4.8	628
4	Convective flow and heat transfer in variable-porosity media. Journal of Fluid Mechanics, 1984, 147, 233.	3.4	466
5	Analysis of two-layered micro-channel heat sink concept in electronic cooling. International Journal of Heat and Mass Transfer, 1999, 42, 2287-2297.	4.8	346
6	Analytical characterization and conceptual assessment of solid and fluid temperature differentials in porous media. International Journal of Heat and Mass Transfer, 1999, 42, 423-435.	4.8	295
7	Constant wall heat flux boundary conditions in porous media under local thermal non-equilibrium conditions. International Journal of Heat and Mass Transfer, 2002, 45, 3071-3087.	4.8	292
8	A review on the applications of nanofluids in solar energy field. Renewable Energy, 2018, 123, 398-406.	8.9	283
9	A synthesis of fluid and thermal transport models for metal foam heat exchangers. International Journal of Heat and Mass Transfer, 2008, 51, 3701-3711.	4.8	263
10	Analysis of Energy and Momentum Transport for Fluid Flow Through a Porous Bed. Journal of Heat Transfer, 1990, 112, 690-699.	2.1	240
11	Investigation of Heat Transfer Enhancement in a Forward-Facing Contracting Channel Using FMWCNT Nanofluids. Numerical Heat Transfer; Part A: Applications, 2014, 66, 1321-1340.	2.1	220
12	An investigation of the thermal performance of cylindrical heat pipes using nanofluids. International Journal of Heat and Mass Transfer, 2010, 53, 376-383.	4.8	216
13	Series solutions of non-Newtonian nanofluids with Reynoldsâ€™ model and Vogelâ€™s model by means of the homotopy analysis method. Mathematical and Computer Modelling, 2012, 55, 1876-1891.	2.0	206
14	On boundary layer nano-ferroliquid flow under the influence of low oscillating stretchable rotating disk. Journal of Molecular Liquids, 2017, 229, 339-345.	4.9	196
15	Convective heat transfer of nanofluid in a wavy channel: Buongiorno's mathematical model. Journal of Molecular Liquids, 2016, 222, 446-455.	4.9	184
16	Modeling of low-density lipoprotein (LDL) transport in the arteryâ€"effects of hypertension. International Journal of Heat and Mass Transfer, 2006, 49, 850-867.	4.8	168
17	Analytical characterization of heat transport through biological media incorporating hyperthermia treatment. International Journal of Heat and Mass Transfer, 2009, 52, 1608-1618.	4.8	151
18	A coupling model for macromolecule transport in a stenosed arterial wall. International Journal of Heat and Mass Transfer, 2006, 49, 1568-1591.	4.8	150

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19	Thermal performance of flat-shaped heat pipes using nanofluids. International Journal of Heat and Mass Transfer, 2010, 53, 1438-1445.	4.8	150
20	Effects of heat and mass transfer on peristaltic flow in a non-uniform rectangular duct. International Journal of Heat and Mass Transfer, 2014, 71, 706-719.	4.8	144
21	The role of porous media in biomedical engineering as related to magnetic resonance imaging and drug delivery. Heat and Mass Transfer, 2006, 42, 939-953.	2.1	126
22	Analysis of single phase, discrete and mixture models, in predicting nanofluid transport. International Journal of Heat and Mass Transfer, 2017, 114, 225-237.	4.8	125
23	Applications of nanofluids in porous medium. Journal of Thermal Analysis and Calorimetry, 2019, 135, 1479-1492.	3.6	118
24	Analysis of Surface Enhancement by a Porous Substrate. Journal of Heat Transfer, 1990, 112, 700-706.	2.1	116
25	Convective flow and heat transfer in a channel containing multiple heated obstacles. International Journal of Heat and Mass Transfer, 1998, 41, 3279-3298.	4.8	116
26	Analysis of temperature gradient bifurcation in porous media â€" An exact solution. International Journal of Heat and Mass Transfer, 2010, 53, 4316-4325.	4.8	114
27	Convective and Radiative Heat Transfer in Porous Media. Advances in Applied Mechanics, 1989, 27, 225-281.	2.3	113
28	Thermal and hydraulic performance enhancement of microchannel heat sinks utilizing porous substrates. International Journal of Heat and Mass Transfer, 2018, 122, 1313-1326.	4.8	111
29	Convective cooling of a heated obstacle in a channel. International Journal of Heat and Mass Transfer, 1998, 41, 3131-3148.	4.8	106
30	EFFECT OF HEATED WALL POSITION ON MIXED CONVECTION IN A CHANNEL WITH AN OPEN CAVITY. Numerical Heat Transfer; Part A: Applications, 2003, 43, 259-282.	2.1	105
31	Numerical investigation and sensitivity analysis of effective parameters on combined heat transfer performance in a porous solar cavity receiver by response surface methodology. International Journal of Heat and Mass Transfer, 2017, 105, 811-825.	4.8	99
32	Analysis of flow and heat transfer in porous media imbedded inside various-shaped ducts. International Journal of Heat and Mass Transfer, 2004, 47, 1889-1905.	4.8	98
33	The effect of the slip condition on Stokes and Couette flows due to an oscillating wall: exact solutions. International Journal of Non-Linear Mechanics, 2004, 39, 795-809.	2.6	98
34	High sensitivity piezoresistive cantilever design and optimization for analyte-receptor binding. Journal of Micromechanics and Microengineering, 2003, 13, 864-872.	2.6	96
35	Critical assessment of arterial transport models. International Journal of Heat and Mass Transfer, 2008, 51, 807-822.	4.8	96
36	Analysis of non-Darcian effects on temperature differentials in porous media. International Journal of Heat and Mass Transfer, 2001, 44, 4401-4411.	4.8	92

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37	Heat transfer enhancement through control of thermal dispersion effects. International Journal of Heat and Mass Transfer, 2005, 48, 2172-2185.	4.8	92
38	Thermal performance analysis of phase change materials (PCMs) embedded in gradient porous metal foams. Applied Thermal Engineering, 2020, 179, 115731.	6.0	91
39	Thermal performance and operational attributes of the startup characteristics of flat-shaped heat pipes using nanofluids. International Journal of Heat and Mass Transfer, 2012, 55, 140-155.	4.8	81
40	A comparative analysis of innovative microchannel heat sinks for electronic cooling. International Communications in Heat and Mass Transfer, 2016, 76, 271-284.	5.6	81
41	Analysis of Variable Porosity, Thermal Dispersion, and Local Thermal Nonequilibrium on Free Surface Flows Through Porous Media. Journal of Heat Transfer, 2004, 126, 389-399.	2.1	74
42	The Blood Flow of Prandtl Fluid Through a Tapered Stenosed Arteries in Permeable Walls with Magnetic Field. Communications in Theoretical Physics, 2015, 63, 353-358.	2.5	71
43	Hydromagnetic squeezed flow and heat transfer over a sensor surface. International Journal of Engineering Science, 2004, 42, 509-519.	5.0	69
44	A COMPARATIVE ANALYSIS OF MULTIPHASE TRANSPORT MODELS IN POROUS MEDIA. Annual Review of Heat Transfer, 1990, 3, 145-162.	1.0	69
45	Analysis of heat and mass transfer between air and falling film in a cross flow configuration. International Journal of Heat and Mass Transfer, 2004, 47, 743-755.	4.8	68
46	A Mathematical Study of Non-Newtonian Micropolar Fluid in Arterial Blood Flow Through Composite Stenosis. Applied Mathematics and Information Sciences, 2014, 8, 1567-1573.	0.5	67
47	Effect of porous substrates on thermohydraulic performance enhancement of double layer microchannel heat sinks. International Journal of Heat and Mass Transfer, 2019, 131, 52-63.	4.8	67
48	Investigation of pollutant reduction by simulation of turbulent non-premixed pulverized coal combustion. Applied Thermal Engineering, 2014, 73, 1222-1235.	6.0	65
49	Analysis of heat flux bifurcation inside porous media incorporating inertial and dispersion effects â€" An exact solution. International Journal of Heat and Mass Transfer, 2011, 54, 5286-5297.	4.8	64
50	Restrictions on the Validity of the Thermal Conditions at the Porous-Fluid Interfaceâ€"An Exact Solution. Journal of Heat Transfer, 2011, 133, .	2.1	64
51	Analysis of critical thermal issues in 3D integrated circuits. International Journal of Heat and Mass Transfer, 2016, 97, 337-352.	4.8	64
52	Thermal and fluid flow instabilities in buoyancy-driven flows in open-ended cavities. International Journal of Heat and Mass Transfer, 1990, 33, 2329-2344.	4.8	63
53	Mixed convection heat transfer in two-dimensional open-ended enclosures. International Journal of Heat and Mass Transfer, 2002, 45, 5171-5190.	4.8	63
54	Combined effects of magnetic field and rheological properties on the peristaltic flow of a compressible fluid in a microfluidic channel. European Journal of Mechanics, B/Fluids, 2017, 65, 398-411.	2.5	63

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55	Low-density lipoprotein (LDL) transport in an artery â€“ A simplified analytical solution. International Journal of Heat and Mass Transfer, 2008, 51, 497-505.	4.8	62
56	Comparative study between parallel and counter flow configurations between air and falling film desiccant in the presence of nanoparticle suspensions. International Journal of Energy Research, 2003, 27, 725-745.	4.5	61
57	Experimental Investigation of Mixed Convection in a Channel With an Open Cavity. Experimental Heat Transfer, 2006, 19, 53-68.	3.2	60
58	Modelling study on heated couple stress fluid peristaltically conveying gold nanoparticles through coaxial tubes: A remedy for gland tumors and arthritis. Journal of Molecular Liquids, 2018, 268, 149-155.	4.9	60
59	Analytical considerations of flow/thermal coupling of nanofluids in foam metals with local thermal non-equilibrium (LTNE) phenomena and inhomogeneous nanoparticle distribution. International Journal of Heat and Fluid Flow, 2019, 77, 242-255.	2.4	60
60	Mixed convection heat transfer in a differentially heated cavity with two rotating cylinders. International Journal of Thermal Sciences, 2019, 135, 117-132.	4.9	60
61	Particulate suspension effect on peristaltically induced unsteady pulsatile flow in a narrow artery: Blood flow model. Mathematical Biosciences, 2017, 283, 91-105.	1.9	59
62	Analysis of thermally developing flow in porous media under local thermal non-equilibrium conditions. International Journal of Heat and Mass Transfer, 2013, 67, 768-775.	4.8	58
63	Interaction between compressibility and particulate suspension on peristaltically driven flow in planar channel. Applied Mathematics and Mechanics (English Edition), 2017, 38, 137-154.	3.6	58
64	A numerical and experimental investigation of stability of natural convective flows within a horizontal annulus. Journal of Fluid Mechanics, 1999, 381, 27-61.	3.4	55
65	Effect of the fluidâ€“structure interactions on low-density lipoprotein transport within a multi-layered arterial wall. Journal of Biomechanics, 2012, 45, 371-381.	2.1	55
66	Study of Fe3O4-water nanofluid with convective heat transfer in the presence of magnetic source. AEJ - Alexandria Engineering Journal, 2018, 57, 565-575.	6.4	55
67	The effects of sharp corners on buoyancy-driven flows with particular emphasis on outer boundaries. International Journal of Heat and Mass Transfer, 1990, 33, 2311-2328.	4.8	54
68	Peristaltic Flow of Couple Stress Fluid in a Non-Uniform Rectangular Duct Having Compliant Walls. Communications in Theoretical Physics, 2016, 65, 66-72.	2.5	54
69	An investigation of heat and mass transfer between air and desiccant film in an inclined parallel and counter flow channels. International Journal of Heat and Mass Transfer, 2004, 47, 1745-1760.	4.8	51
70	Analysis of flexible microchannel heat sink systems. International Journal of Heat and Mass Transfer, 2005, 48, 1739-1746.	4.8	49
71	Analysis of Bioheat Transport Through a Dual Layer Biological Media. Journal of Heat Transfer, 2010, 132, .	2.1	49
72	Analysis and analytical characterization of bioheat transfer during radiofrequency ablation. Journal of Biomechanics, 2015, 48, 930-940.	2.1	49

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73	Application of porous metal foam heat exchangers and the implications of particulate fouling for energy-intensive industries. Chemical Engineering Science, 2020, 228, 115968.	3.8	47
74	Phase-change materials for thermal management of electronic devices. Applied Thermal Engineering, 2022, 214, 118839.	6.0	45
75	A comprehensive analytical solution of macromolecular transport within an artery. International Journal of Heat and Mass Transfer, 2008, 51, 2905-2913.	4.8	44
76	Analysis and Characterization of Metal Foam-Filled Double-Pipe Heat Exchangers. Numerical Heat Transfer; Part A: Applications, 2015, 68, 1031-1049.	2.1	44
77	Effects of External and Internal Hyperthermia on LDL Transport and Accumulation Within an Arterial Wall in the Presence of a Stenosis. Annals of Biomedical Engineering, 2015, 43, 1585-1599.	2.5	44
78	A study of gravitational and magnetic effects on coupled stress bi-phase liquid suspended with crystal and Hafnium particles down in steep channel. Journal of Molecular Liquids, 2019, 286, 110898.	4.9	44
79	Electromagnetic field effects on biological materials. International Journal of Heat and Mass Transfer, 2013, 65, 389-399.	4.8	43
80	Low-density lipoprotein transport within a multi-layered arterial wallâ€"Effect of the atherosclerotic plaque/stenosis. Journal of Biomechanics, 2013, 46, 574-585.	2.1	43
81	Electromagnetic flow for two-layer immiscible fluids. Engineering Science and Technology, an International Journal, 2019, 22, 237-248.	3.2	43
82	An investigation of transient three-dimensional buoyancy-driven flow and heat transfer in a closed horizontal annulus. International Journal of Heat and Mass Transfer, 1991, 34, 2555-2570.	4.8	42
83	An Investigation of Stokes' Second Problem for Non-Newtonian Fluids. Numerical Heat Transfer; Part A: Applications, 2005, 47, 955-980.	2.1	42
84	Human Eye Response to Thermal Disturbances. Journal of Heat Transfer, 2011, 133, .	2.1	42
85	Analysis of non-Newtonian effects on Low-Density Lipoprotein accumulation in an artery. Journal of Biomechanics, 2016, 49, 1437-1446.	2.1	42
86	Low-density lipoprotein transport through an arterial wall under hyperthermia and hypertension conditions â€" An analytical solution. Journal of Biomechanics, 2016, 49, 193-204.	2.1	42
87	Transient Aspects of Heat Flux Bifurcation in Porous Media: An Exact Solution. Journal of Heat Transfer, 2011, 133, .	2.1	41
88	Mechanobiology of low-density lipoprotein transport within an arterial wallâ€"Impact of hyperthermia and coupling effects. Journal of Biomechanics, 2014, 47, 137-147.	2.1	41
89	Analysis of oscillating compressible flow through a packed bed. International Journal of Heat and Fluid Flow, 1991, 12, 130-136.	2.4	40
90	Analysis of Radiative Effect under Local Thermal Non-Equilibrium Conditions in Porous Media-Application to a Solar Air Receiver. Numerical Heat Transfer; Part A: Applications, 2014, 65, 931-948.	2.1	38

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91	Heat transfer characteristics and CHF prediction in nanofluid boiling. International Journal of Heat and Mass Transfer, 2015, 80, 256-265.	4.8	36
92	An investigation of thermal characteristics of eutectic molten salt-based nanofluids. International Communications in Heat and Mass Transfer, 2017, 87, 98-104.	5.6	36
93	Impact of induced magnetic field on synovial fluid with peristaltic flow in an asymmetric channel. Journal of Magnetism and Magnetic Materials, 2018, 446, 54-67.	2.3	36
94	Analysis of Natural Convection in Horizontal Concentric Annuli of Varying Inner Shape. Numerical Heat Transfer; Part A: Applications, 2015, 68, 1155-1174.	2.1	35
95	Heat transfer and fluid flow analysis of microchannel heat sinks with periodic vertical porous ribs. Applied Thermal Engineering, 2022, 205, 118059.	6.0	35
96	Thermal, thermodynamic and exergoeconomic investigation of a parabolic trough collector utilizing nanofluids. Applied Thermal Engineering, 2022, 206, 118117.	6.0	35
97	Analytical Characterization and Production of an Isothermal Surface for Biological and Electronic Applications. Journal of Heat Transfer, 2009, 131, .	2.1	34
98	Analysis of nanofluid transport through a wavy channel. Numerical Heat Transfer; Part A: Applications, 2017, 72, 869-890.	2.1	34
99	Rapid microfluidic thermal cycler for polymerase chain reaction nucleic acid amplification. International Journal of Heat and Mass Transfer, 2008, 51, 2109-2122.	4.8	33
100	Analysis of Low Density Lipoprotein (LDL) Transport Within a Curved Artery. Annals of Biomedical Engineering, 2015, 43, 1571-1584.	2.5	33
101	Analysis of particle deposition of nanofluid flow through porous media. International Journal of Heat and Mass Transfer, 2020, 161, 120227.	4.8	33
102	Heat transfer augmentation through convergence angles in a pipe. Numerical Heat Transfer; Part A: Applications, 2017, 72, 197-214.	2.1	32
103	An investigation of thermal performance improvement of a cylindrical heat pipe using Al2O3 nanofluid. Heat and Mass Transfer, 2017, 53, 973-983.	2.1	32
104	Analysis of non-Newtonian effects within an aorta-iliac bifurcation region. Journal of Biomechanics, 2017, 64, 153-163.	2.1	31
105	Modeling and simulation of ray tracing for compound parabolic thermal solar collector. International Communications in Heat and Mass Transfer, 2017, 87, 169-174.	5.6	31
106	Analysis of hotspots and cooling strategy for multilayer three-dimensional integrated circuits. Applied Thermal Engineering, 2021, 186, 116336.	6.0	31
107	Three-dimensional natural convective states in a narrow-gap horizontal annulus. Journal of Fluid Mechanics, 2001, 445, 1-36.	3.4	30
108	Experimental Investigation of Opposing Mixed Convection in a Channel with an open Cavity Below. Experimental Heat Transfer, 2008, 21, 99-114.	3.2	30

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109	Non-Darcian Effects on the Mixed Convection Heat Transfer in a Metallic Porous Block with a Confined Slot Jet. Numerical Heat Transfer; Part A: Applications, 2008, 54, 665-685.	2.1	30
110	A Note on Local Thermal Non-equilibrium in Porous Media and Heat Flux Bifurcation Phenomenon in Porous Media. Transport in Porous Media, 2013, 96, 169-172.	2.6	30
111	Analysis of collimated irradiation under local thermal non-equilibrium condition in a packed bed. International Journal of Heat and Mass Transfer, 2015, 80, 789-801.	4.8	30
112	Analytical characterization of gaseous slip flow and heat transport through a parallel-plate microchannel with a centered porous substrate. International Journal of Numerical Methods for Heat and Fluid Flow, 2016, 26, 854-878.	2.8	30
113	Analysis of porous filled heat exchangers for electronic cooling. International Journal of Heat and Mass Transfer, 2019, 133, 268-276.	4.8	30
114	Thermal management of transverse magnetic source effects on nanofluid natural convection in a wavy porous enclosure. Journal of Thermal Analysis and Calorimetry, 2021, 143, 2851-2865.	3.6	30
115	Thermal charging and discharging of sensible and latent heat storagepacked beds. Journal of Thermophysics and Heat Transfer, 1991, 5, 623-625.	1.6	29
116	Biofilm affected characteristics of porous structures. International Journal of Heat and Mass Transfer, 2009, 52, 574-581.	4.8	29
117	Mixed Convection in an Obstructed Open-Ended Cavity. Numerical Heat Transfer; Part A: Applications, 2010, 57, 709-729.	2.1	29
118	Computational biomedical simulations of hybrid nanoparticles (<mml:math) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 402 Td (xmlns:mml="	2.6	29
119	Analysis of flow and heat transfer inside oscillatory squeezed thin films subject to a varying clearance. International Journal of Heat and Mass Transfer, 2003, 46, 631-641.	4.8	28
120	Cooling augmentation using microchannels with rotatable separating plates. International Journal of Heat and Mass Transfer, 2011, 54, 3732-3739.	4.8	28
121	A critical investigation of the anomalous behavior of molten salt-based nanofluids. International Communications in Heat and Mass Transfer, 2015, 69, 51-58.	5.6	28
122	Analytical study of flow and heat transfer in an annular porous medium subject to asymmetrical heat fluxes. Heat and Mass Transfer, 2017, 53, 2663-2676.	2.1	28
123	Isothermal surface production and regulation for high heat flux applications utilizing porous inserts. International Journal of Heat and Mass Transfer, 2001, 44, 2933-2947.	4.8	27
124	Fluid-Structure Interactions in a Tissue during Hyperthermia. Numerical Heat Transfer; Part A: Applications, 2014, 66, 1-16.	2.1	27
125	Analysis of gaseous slip flow in a porous micro-annulus under local thermal non-equilibrium condition â€“ An exact solution. International Journal of Heat and Mass Transfer, 2015, 89, 1331-1341.	4.8	27
126	Analysis of particle-laden fluid flows, tortuosity and particle-fluid behaviour in metal foam heat exchangers. Chemical Engineering Science, 2017, 172, 677-687.	3.8	27

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127	Effects of gender-related geometrical characteristics of aortaâ€“iliac bifurcation on hemodynamics and macromolecule concentration distribution. International Journal of Heat and Mass Transfer, 2008, 51, 5542-5551.	4.8	25
128	An Investigation of Convective Cooling of an Array of Channel-Mounted Obstacles. Numerical Heat Transfer; Part A: Applications, 2009, 55, 967-982.	2.1	25
129	Amelioration of pool boiling thermal performance utilizing graphene-silver hybrid nanofluids. Powder Technology, 2022, 397, 117110.	4.2	25
130	Control of exit flow and thermal conditions using two-layered thin films supported by flexible complex seals. International Journal of Heat and Mass Transfer, 2004, 47, 1599-1611.	4.8	24
131	Effects of pressure on arterial failure. Journal of Biomechanics, 2012, 45, 2577-2588.	2.1	24
132	Electromagnetic field effects on transport through porous media. International Journal of Heat and Mass Transfer, 2012, 55, 325-335.	4.8	24
133	The Study of Peristaltic Motion of Third Grade Fluid under the Effects of Hall Current and Heat Transfer. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2015, 70, 281-293.	1.5	24
134	Analysis of double slip model for a partially filled porous microchannelâ€"An exact solution. European Journal of Mechanics, B/Fluids, 2018, 68, 1-9.	2.5	24
135	HYPO- AND HYPERTHERMIA EFFECTS ON LDL DEPOSITION IN A CURVED ARTERY. Computational Thermal Sciences, 2019, 11, 95-103.	0.9	24
136	Experimental study of boiling heat transfer for a novel type of GNP-Fe3O4 hybrid nanofluids blended with different nanoparticles. Powder Technology, 2022, 396, 92-112.	4.2	24
137	An Investigation of a Falling Film Desiccant Dehumidification/ Regeneration Cooling System. Heat Transfer Engineering, 2007, 28, 163-172.	1.9	23
138	Microchannel thermal performance optimization utilizing porous layer configurations. International Journal of Heat and Mass Transfer, 2019, 133, 62-72.	4.8	23
139	Analysis of Linear Encroachment in Two-Immiscible Fluid Systems in a Porous Medium. Journal of Fluids Engineering, Transactions of the ASME, 1994, 116, 135-139.	1.5	22
140	Flow and heat transfer inside thin films supported by soft seals in the presence of internal and external pressure pulsations. International Journal of Heat and Mass Transfer, 2002, 45, 5107-5115.	4.8	22
141	A study on the mixed convection boundary layer flow and heat transfer over a vertical slender cylinder. Thermal Science, 2014, 18, 1247-1258.	1.1	22
142	Forced convection gaseous slip flow in a porous circular microtube: An exact solution. International Journal of Thermal Sciences, 2015, 97, 152-162.	4.9	22
143	The porous media theory applied to radiofrequency catheter ablation. International Journal of Numerical Methods for Heat and Fluid Flow, 2020, 30, 2669-2681.	2.8	22
144	A mesoscopic model for thermalâ€“solutal problems of power-law fluids through porous media. Physics of Fluids, 2021, 33, .	4.0	22

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145	Analysis of Heat Transfer in Consecutive Variable Cross-Sectional Domains: Applications in Biological Media and Thermal Management. Journal of Heat Transfer, 2011, 133, .	2.1	21
146	Optimization modeling of analyte adhesion over an inclined microcantilever-based biosensor. Journal of Micromechanics and Microengineering, 2004, 14, 1220-1229.	2.6	20
147	Water diffusion in biomedical systems as related to magnetic resonance imaging. Magnetic Resonance Imaging, 2003, 21, 17-31.	1.8	19
148	Analysis of the effect of stent emplacement on LDL transport within an artery. International Journal of Heat and Mass Transfer, 2013, 64, 1031-1040.	4.8	19
149	Analysis of the anomalies in graphene thermal properties. International Journal of Heat and Mass Transfer, 2017, 104, 328-336.	4.8	19
150	Analysis of oscillatory flow disturbances and thermal characteristics inside fluidic cells due to fluid leakage and wall slip conditions. Journal of Biomechanics, 2004, 37, 721-729.	2.1	18
151	Effects of gravity modulation on convection in a horizontal annulus. International Journal of Heat and Mass Transfer, 2007, 50, 348-360.	4.8	18
152	Series solutions for magnetohydrodynamic flow of non-Newtonian nanofluid and heat transfer in coaxial porous cylinder with slip conditions. Proceedings of the Institution of Mechanical Engineers, Part N: Journal of Nanoengineering and Nanosystems, 2011, 225, 123-132.	0.1	18
153	Heat transfer enhancement by layering of two immiscible co-flows. International Journal of Heat and Mass Transfer, 2014, 68, 299-309.	4.8	18
154	Fluidâ€"structure interaction analysis of flow and heat transfer characteristics around a flexible microcantilever in a fluidic cell. International Communications in Heat and Mass Transfer, 2016, 75, 315-322.	5.6	18
155	On the presence of odd transverse convective rolls in narrow-gap horizontal annuli. Physics of Fluids, 2002, 14, 1291-1294.	4.0	17
156	Analysis of transport phenomena within PEM fuel cells â€" An analytical solution. International Journal of Heat and Mass Transfer, 2008, 51, 3712-3723.	4.8	17
157	Analysis of the volumetric phenomenon in porous beds subject to irradiation. Numerical Heat Transfer; Part A: Applications, 2016, 70, 567-580.	2.1	17
158	External and internal cloud condensation nuclei (CCN) mixtures: controlled laboratory studies of varying mixing states. Atmospheric Measurement Techniques, 2019, 12, 4277-4289.	3.1	17
159	Vibration induced mixed convection in an open-ended obstructed cavity. International Journal of Heat and Mass Transfer, 2010, 53, 2703-2714.	4.8	16
160	Optimal Positioning of Strips for Heat Transfer Reduction within an Enclosure. Numerical Heat Transfer; Part A: Applications, 2014, 66, 17-40.	2.1	16
161	Thermophysical and Geometrical Effects on the Thermal Performance and Optimization of a Three-Dimensional Integrated Circuit. Journal of Heat Transfer, 2016, 138, .	2.1	16
162	Forced Convection in a Bidisperse Porous Medium Embedded in a Circular Pipe. Journal of Heat Transfer, 2017, 139, .	2.1	16

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163	Effect of a circular cylinder and flexible wall on natural convective heat transfer characteristics in a cavity filled with a porous medium. Applied Thermal Engineering, 2020, 181, 115989.	6.0	16
164	Spatial optimization of an array of aligned microcantilever based sensors. Journal of Micromechanics and Microengineering, 2004, 14, 1328-1336.	2.6	15
165	Investigation of the Blockage Conditions in a Laminatedâ€Sheet Microchannel Reactor. Chemical Engineering and Technology, 2017, 40, 2283-2294.	1.5	15
166	Thermalâ€"Hydraulic Performance Analysis of a Convergent Double Pipe Heat Exchanger. Journal of Heat Transfer, 2019, 141, .	2.1	15
167	Experimental characterization on pore parameter and the irradiation absorption efficiency of a series SiC foam specimens. Energy Conversion and Management, 2020, 212, 112795.	9.2	15
168	Analysis of Heat Transfer and Fluid Flow Through a Spirally Fluted Tube Using a Porous Substrate Approach. Journal of Heat Transfer, 1994, 116, 543-551.	2.1	14
169	Nanofluids transport through a novel concave/convex convergent pipe. Numerical Heat Transfer; Part A: Applications, 2019, 75, 91-109.	2.1	14
170	Experimental and numerical study of buoyancy-induced flow and heat transfer in an open annular cavity. International Journal of Heat and Mass Transfer, 1996, 39, 2053-2066.	4.8	13
171	Geometrical and flow configurations for enhanced microcantilever detection within a fluidic cell. International Journal of Heat and Mass Transfer, 2005, 48, 2886-2895.	4.8	13
172	Synthesis of biofilm resistance characteristics against antibiotics. International Journal of Heat and Mass Transfer, 2010, 53, 2943-2950.	4.8	13
173	Boundary layer considerations in a multi-layer model for LDL accumulation. Computer Methods in Biomechanics and Biomedical Engineering, 2018, 21, 803-811.	1.6	13
174	Analysis of turbulent two-phase flow and heat transfer using nanofluid. International Communications in Heat and Mass Transfer, 2021, 124, 105219.	5.6	13
175	Combined Forced- and Natural-Convection Heat Transfer in Horizontally CounterRotating Eccentric and Concentric Cylinders. Numerical Heat Transfer; Part A: Applications, 2007, 51, 1167-1186.	2.1	12
176	A comparative study of refined and simplified thermo-viscoplastic modeling of a thrust chamber with regenerative cooling. International Communications in Heat and Mass Transfer, 2016, 78, 155-162.	5.6	12
177	Heat removal enhancement in a channel with a single or an array of metallic foam obstacles. International Journal of Thermal Sciences, 2020, 149, 106057.	4.9	12
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