Krishnaswamy Nandakumar

List of Publications by Year
in descending order

231	5,321	70961	143772
papers	citations	41	57
		h-index	g-index

233	233	233	3794
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Modeling and control of multivariable processes: Dynamic PLS approach. AICHE Journal, 1997, 43, 2307-2322.	1.8	143
2	Further contributions on the two-dimensional flow in a sudden expansion. Journal of Fluid Mechanics, 1997, 330, 169-188.	1.4	134
3	A comprehensive phenomenological model for erosion of materials in jet flow. Powder Technology, 2008, 187, 273-279.	2.1	129
4	Hydrodynamic Simulation of Horizontal Slurry Pipeline Flow Using ANSYS-CFX. Industrial & Engineering Chemistry Research, 2009, 48, 8159-8171.	1.8	128
5	An experimental and numerical study of the Dean problem: flow development towards two-dimensional multiple solutions. Journal of Fluid Mechanics, 1992, 244, 339.	1.4	114
6	Bifurcation in steady laminar flow through curved tubes. Journal of Fluid Mechanics, 1982, 119, 475-490.	1.4	110
7	Control relevant modeling of planer solid oxide fuel cell system. Journal of Power Sources, 2007, 163, 830-845.	4.0	105
8	A Study of Oil Displacement on Model Surfaces. Journal of Colloid and Interface Science, 1996, 182, 82-94.	5.0	81
9	Three-dimensional discrete particle model for gasâ€"solid fluidized beds on unstructured mesh. Chemical Engineering Journal, 2009, 152, 514-529.	6.6	79
10	CFD simulation of bubbly two-phase flow in horizontal pipes. Chemical Engineering Journal, 2008, 144, 277-288.	6.6	70
11	A fictitious domain/finite element method for particulate flows. Journal of Computational Physics, 2003, 192, 105-123.	1.9	64
12	Laminar flow past a permeable sphere. Canadian Journal of Chemical Engineering, 1982, 60, 202-211.	0.9	63
13	CFD modeling of flow patterns and hydraulics of commercial-scale sieve trays. AICHE Journal, 2003, 49, 910-924.	1.8	63
14	Geometrical modeling of microstructure of solid oxide fuel cell composite electrodes. Journal of Power Sources, 2008, 185, 961-966.	4.0	63
15	A Model for Detachment of a Partially Wetting Drop from a Solid Surface by Shear Flow. Journal of Colloid and Interface Science, 1997, 190, 253-257.	5.0	61
16	Influence of water-soluble and water-insoluble natural surface active components on the stability of water-in-toluene-diluted bitumen emulsion. Fuel, 2002, 81, 1859-1869.	3.4	60
17	A bifurcation study of viscous flow through a rotating curved duct. Journal of Fluid Mechanics, 1994, 262, 353-375.	1.4	59
18	Liquid holdup distribution in packed columns: gamma ray tomography and CFD simulation. Chemical Engineering and Processing: Process Intensification, 2002, 41, 473-483.	1.8	59

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19	Heat Transfer in Internally Finned Tubes. Journal of Heat Transfer, 1976, 98, 257-261.	1.2	58
20	Developing a Millifluidic Platform for the Synthesis of Ultrasmall Nanoclusters: Ultrasmall Copper Nanoclusters as a Case Study. Small, 2012, 8, 688-698.	5.2	58
21	A fictitious domain formulation for flows with rigid particles: A non-Lagrange multiplier version. Journal of Computational Physics, 2007, 224, 867-879.	1.9	55
22	Development and validation of a new drag law using mechanical energy balance approach for DEMâ€"CFD simulation of gasâ€"solid fluidized bed. Chemical Engineering Journal, 2016, 302, 395-405.	6.6	52
23	Identification of Hammerstein models using multivariate statistical tools. Chemical Engineering Science, 1995, 50, 3599-3613.	1.9	50
24	CFD Modeling of Mass-Transfer Processes in Randomly Packed Distillation Columns. Industrial & Engineering Chemistry Research, 2000, 39, 1369-1380.	1.8	50
25	Parallel algorithms for CFDâ€"DEM modeling of dense particulate flows. Chemical Engineering Science, 2014, 118, 221-244.	1.9	50
26	A planar microfluidic mixer based on logarithmic spirals. Journal of Micromechanics and Microengineering, 2012, 22, 055019.	1.5	49
27	Porosity distribution in random packed columns by gamma ray tomography. Chemical Engineering and Processing: Process Intensification, 2001, 40, 209-219.	1.8	48
28	Estimation and control of solid oxide fuel cell system. Computers and Chemical Engineering, 2010, 34, 96-111.	2.0	48
29	Gravity separation of bidisperse suspensions: Light and heavy particle species. Chemical Engineering Science, 1987, 42, 1527-1538.	1.9	47
30	Molecular dynamics simulation of a pressure-driven liquid transport process in a cylindrical nanopore using two self-adjusting plates. Journal of Chemical Physics, 2006, 124, 234701.	1.2	47
31	Bifurcation in steady laminar mixed convection flow in horizontal ducts. Journal of Fluid Mechanics, 1985, 152, 145-161.	1.4	46
32	Effect of charged colloidal particles on adsorption of surfactants at oilâ€"water interface. Journal of Colloid and Interface Science, 2004, 274, 625-630.	5.0	46
33	Steady laminar flow in a 90 degree planar branch. Computers and Fluids, 1989, 17, 537-553.	1.3	45
34	A finite element technique for multifluid incompressible flow using Eulerian grids. Journal of Computational Physics, 2003, 187, 255-273.	1.9	45
35	Bubble size in coalescence dominant regime of turbulent airâ€"water flow through horizontal pipes. International Journal of Multiphase Flow, 2003, 29, 1451-1471.	1.6	45
36	Numerical study on shape optimization of groove micromixers. Microfluidics and Nanofluidics, 2013, 15, 689-699.	1.0	45

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37	Computational Modeling of Multiphase Reactors. Annual Review of Chemical and Biomolecular Engineering, 2015, 6, 347-378.	3.3	45
38	Bubble generated turbulence and direct numerical simulations. Chemical Engineering Science, 2017, 157, 26-75.	1.9	45
39	Predicting geometrical properties of random packed beds from computer simulation. AICHE Journal, 1999, 45, 2286-2297.	1.8	43
40	Modelling and Simulation of Flow Maldistribution in Random Packed Columns with Gas-Liquid Countercurrent Flow. Chemical Engineering Research and Design, 2000, 78, 378-388.	2.7	43
41	CFD Simulation of Mass Transfer Efficiency and Pressure Drop in a Structured Packed Distillation Column. Chemical Engineering and Technology, 2007, 30, 854-861.	0.9	43
42	Attachment of individual particles to a stationary air bubble in model systems. International Journal of Mineral Processing, 2003, 68, 47-69.	2.6	41
43	A novel experimental technique to study single bubble–bitumen attachment in flotation. International Journal of Mineral Processing, 2004, 74, 15-29.	2.6	40
44	Oscillatory flows in coiled square ducts. Physics of Fluids, 1988, 31, 1348.	1.4	38
45	Computational fluid dynamics modelling and experimental study of erosion in slurry jet flows. International Journal of Computational Fluid Dynamics, 2009, 23, 155-172.	0.5	38
46	Instability and transitions of flow in a curved square duct: the development of two pairs of Dean vortices. Journal of Fluid Mechanics, 1996, 314, 227-246.	1.4	37
47	Control of the breakup process of viscous droplets by an external electric field inside a microfluidic device. Soft Matter, 2015, 11, 3884-3899.	1.2	37
48	Numerical simulation of a commercial FCC regenerator using Multiphase Particle-in-Cell methodology (MP-PIC). Advanced Powder Technology, 2017, 28, 2947-2960.	2.0	37
49	Efficient Micromixing Using Induced-Charge Electroosmosis. Journal of Microelectromechanical Systems, 2009, 18, 376-384.	1.7	36
50	Direct numerical simulation study of end effects and D/d ratio on mass transfer in packed beds. International Journal of Heat and Mass Transfer, 2018, 127, 234-244.	2.5	36
51	Model for Liquid Phase Flow on Sieve Trays. Chemical Engineering Research and Design, 1998, 76, 843-848.	2.7	35
52	Induced charge electro osmotic mixer: Obstacle shape optimization. Biomicrofluidics, 2009, 3, 22413.	1.2	35
53	Simulation of a Large-Scale FCC Riser Using a Combination of MP-PIC and Four-Lump Oil-Cracking Kinetic Models. Energy & Fuels, 2017, 31, 4758-4770.	2.5	35
54	Flow past a single stationary sphere, 2. Regime mapping and effect of external disturbances. Powder Technology, 2020, 365, 215-243.	2.1	34

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55	Bifurcation phenomena of generalized newtonian fluids in curved rectangular ducts. Journal of Non-Newtonian Fluid Mechanics, 1986, 22, 35-60.	1.0	33
56	Experimental studies of liquid flow maldistribution in a random packed column. Canadian Journal of Chemical Engineering, 2000, 78, 449-457.	0.9	33
57	Effect of cut-off distance used in molecular dynamics simulations on fluid properties. Molecular Simulation, 2010, 36, 856-864.	0.9	33
58	Onset of two‐dimensional cellular flow in finite curved channels of large aspect ratio. Physics of Fluids A, Fluid Dynamics, 1990, 2, 1163-1174.	1.6	32
59	Transient convection in saturated porous layers with internal heat sources. International Journal of Heat and Mass Transfer, 1990, 33, 151-161.	2.5	32
60	An induction time model for the attachment of an air bubble to a hydrophobic sphere in aqueous solutions. International Journal of Mineral Processing, 2005, 75, 69-82.	2.6	32
61	Fully developed viscous flow in internally finned tubes. The Chemical Engineering Journal, 1975, 10, 113-120.	0.4	31
62	A novel approach to study the structure versus performance relationship of SOFC electrodes. Journal of Power Sources, 2006, 161, 965-970.	4.0	31
63	Three-dimensional random resistor-network model for solid oxide fuel cell composite electrodes. Electrochimica Acta, 2010, 55, 3944-3950.	2.6	31
64	Geometric optimization of liquid–liquid slug flow in a flow-focusing millifluidic device for synthesis of nanomaterials. Chemical Engineering Journal, 2013, 217, 447-459.	6.6	31
65	Recent developments in experimental (PIV) and numerical (DNS) investigation of solid–liquid fluidized beds. Chemical Engineering Science, 2013, 92, 1-12.	1.9	31
66	Spatially resolved mass transfer coefficient for moderate Reynolds number flows in packed beds: Wall effects. International Journal of Heat and Mass Transfer, 2017, 110, 406-415.	2.5	31
67	Bifurcation study of flow through rotating curved ducts. Physics of Fluids, 1999, 11, 2030-2043.	1.6	30
68	Flow through rotating rectangular ducts. Physics of Fluids A, Fluid Dynamics, 1991, 3, 770-781.	1.6	29
69	Size Evolution of Gold Nanoparticles in a Millifluidic Reactor. ChemPhysChem, 2012, 13, 177-182.	1.0	29
70	Multiple Solutions for Buoyancy-Induced Flow in Saturated Porous Media for Large Peclet Numbers. Journal of Heat Transfer, 1986, 108, 866-871.	1.2	28
71	Enforcing mass conservation in DPM-CFD models of dense particulate flows. Chemical Engineering Journal, 2011, 174, 475-481.	6.6	28
72	Optimal patterning of heterogeneous surface charge for improved electrokinetic micromixing. Computers and Chemical Engineering, 2013, 49, 18-24.	2.0	28

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73	A discrete element method study of granular segregation in non-circular rotating drums. Powder Technology, 2015, 283, 549-560.	2.1	28
74	Flow past a single stationary sphere, 1. Experimental and numerical techniques. Powder Technology, 2020, 365, 115-148.	2.1	28
75	A bifurcation study of mixed-convection heat transfer in horizontal ducts. Journal of Fluid Mechanics, 1991, 231, 157-187.	1.4	26
76	Effect of calcium ion and montmorillonite clay on bitumen displacement by water on a glass surface. Fuel, 2004, 83, 17-22.	3.4	26
77	Secondary instability of flow in a curved duct of square cross-section. Journal of Fluid Mechanics, 1996, 323, 387-409.	1.4	25
78	A projection scheme for incompressible multiphase flow using adaptive Eulerian grid. International Journal for Numerical Methods in Fluids, 2004, 45, 1-19.	0.9	25
79	A phenomenological model for erosion of material in a horizontal slurry pipeline flow. Wear, 2010, 269, 190-196.	1.5	25
80	Computational investigations of the mixing performance inside liquid slugs generated by a microfluidic T-junction. Biomicrofluidics, 2014, 8, 054125.	1.2	25
81	Experimental study and CFD simulation of the multiphase flow conditions encountered in a Novel Down-flow bubble column. Chemical Engineering Journal, 2018, 350, 507-522.	6.6	25
82	Fully developed viscous flow and heat transfer in curved semicircular sectors. AICHE Journal, 1979, 25, 478-487.	1.8	24
83	Comparative study between continuum and atomistic approaches of liquid flow through a finite length cylindrical nanopore. Journal of Chemical Physics, 2007, 126, 224702.	1.2	24
84	Numerical simulation of unsteady flow in a multistage centrifugal pump using sliding mesh technique. Progress in Computational Fluid Dynamics, 2010, 10, 239.	0.1	24
85	Microfluidics and numerical simulation as methods for standardization of zebrafish sperm cell activation. Biomedical Microdevices, 2015, 17, 65.	1.4	24
86	CFD Simulation and Experimental Study of Liquid Dispersion in Randomly Packed Metal Pall Rings. Chemical Engineering Research and Design, 2002, 80, 135-144.	2.7	23
87	Steady Laminar Flow through Twisted Pipes: Fluid Flow in Square Tubes. Journal of Heat Transfer, 1981, 103, 785-790.	1.2	22
88	Natural convection with combined heat and mass transfer buoyancy effects in non-homogeneous porous medium. International Journal of Heat and Mass Transfer, 1987, 30, 2651-2656.	2.5	22
89	Continuous gravity separation of a bidisperse suspension in a vertical column. Chemical Engineering Science, 1988, 43, 3225-3234.	1.9	22
90	A bifurcation study of natural convection in porous media with internal heat sources: the non-Darcy effects. International Journal of Heat and Mass Transfer, 1998, 41, 383-392.	2.5	22

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91	Novel index for micromixing characterization and comparative analysis. Biomicrofluidics, 2010, 4, 031101.	1.2	22
92	A novel method for molecular dynamics simulation in the isothermal–isobaric ensemble. Molecular Physics, 2011, 109, 191-202.	0.8	22
93	Spray characteristics of liquid-liquid Pintle injector. Experimental Thermal and Fluid Science, 2018, 97, 324-340.	1.5	22
94	Study of a toroidal-helical pipe as an innovative static mixer in laminar flows. Chemical Engineering Journal, 2019, 359, 446-458.	6.6	22
95	Minimum reflux conditions, part I: Theory. AICHE Journal, 1981, 27, 450-460.	1.8	21
96	Computational fluid dynamics. , 2019, , 21-238.		21
97	Effect of surface mobility on the particle sliding along a bubble or a solid sphere. Journal of Colloid and Interface Science, 2003, 259, 81-88.	5.0	20
98	Investigation of entrance and exit effects on liquid transport through a cylindrical nanopore. Physical Chemistry Chemical Physics, 2008, 10, 186-192.	1.3	20
99	Insights into the physics of dominating frequency modes for flow past a stationary sphere: Direct numerical simulations. Physics of Fluids, 2019, 31, .	1.6	20
100	Sea Surface Oil Slick Light Component Vaporization and Heavy Residue Sinking: Binary Mixture Theory and Experimental Proof of Concept. Environmental Engineering Science, 2015, 32, 694-702.	0.8	19
101	Steady Laminar Flow through Twisted Pipes: Heat Transfer in Square Tubes. Journal of Heat Transfer, 1981, 103, 791-796.	1.2	18
102	Steady spatial oscillations in a curved duct of square cross-section. Physics of Fluids, 1996, 8, 3264-3270.	1.6	18
103	Effect of NaCl and MIBC/kerosene on bitumen displacement by water on a glass surface. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1998, 136, 71-80.	2.3	18
104	A comparative study of two-phase flow models relevant to bubble column dynamics. Journal of Fluid Mechanics, 1999, 394, 73-96.	1.4	18
105	Predicting liquid flow profile in randomly packed beds from computer simulation. AICHE Journal, 2001, 47, 1770-1779.	1.8	18
106	Investigation of the Melting Mechanism in a Twin-Screw Extruder Using a Pulse Method and Online Measurement. Industrial & Engineering Chemistry Research, 2004, 43, 6822-6831.	1.8	18
107	Microfluidics-Based Systems in Diagnosis of Alzheimer's Disease and Biomimetic Modeling. Micromachines, 2020, 11, 787.	1.4	18
108	A bifurcation study of convective heat transfer in porous media. Physics of Fluids A, Fluid Dynamics, 1990, 2, 912-921.	1.6	17

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109	Effect of Hydrophobic and Hydrophilic Clays on Bitumen Displacement by Water on a Glass Surface. Industrial & Engineering Chemistry Research, 1998, 37, 959-965.	1.8	17
110	Direct numerical simulations of a freely falling sphere using fictitious domain method: Breaking of axisymmetric wake. Chemical Engineering Science, 2010, 65, 2159-2171.	1.9	17
111	Direct numerical simulation of free falling sphere in creeping flow. International Journal of Computational Fluid Dynamics, 2010, 24, 109-120.	0.5	17
112	Mixing in oscillating columns: Experimental and numerical studies. Chemical Engineering Science, 2017, 168, 78-89.	1.9	17
113	Effect of Schmidt number and D/d ratio on mass transfer through gas-solid and liquid-solid packed beds: Direct numerical simulations. Powder Technology, 2019, 354, 529-539.	2.1	17
114	Settling behaviour of heavy and buoyant particles from a suspension in an inclined channel. Journal of Fluid Mechanics, 1988, 187, 301-318.	1.4	16
115	Model development for a SOFC button cell using H2S as fuel. Journal of Power Sources, 2006, 162, 400-414.	4.0	16
116	A numerical study on distributions during cryoprotectant loading caused by laminar flow in a microchannel. Biomicrofluidics, 2013, 7, 24104.	1.2	16
117	Bifurcation phenomena and cellular-pattern evolution in mixed-convection heat transfer. Journal of Fluid Mechanics, 1987, 177, 339-357.	1.4	15
118	A bifurcation study of chemically driven convection in a porous medium. Chemical Engineering Science, 1992, 47, 4107-4120.	1.9	15
119	Modeling of polymer melting, drop deformation, and breakup under shear flow. Polymer Engineering and Science, 2004, 44, 1258-1266.	1.5	15
120	Effect of Nonuniform Heating on Laminar Mixed Convection in Ducts. Journal of Heat Transfer, 1987, 109, 131-137.	1.2	14
121	Gravity separation of concentrated bidisperse suspensions in inclined plate settlers. International Journal of Multiphase Flow, 1988, 14, 519-532.	1.6	14
122	On bitumen liberation from oil sands. Canadian Journal of Chemical Engineering, 1997, 75, 476-479.	0.9	14
123	Nonisothermal modeling of heat transfer inside an internal batch mixer. AICHE Journal, 2011, 57, 2657-2669.	1.8	14
124	Behavior of particle swarms at low and moderate Reynolds numbers using computational fluid dynamicsâ€"Discrete element model. Physics of Fluids, 2020, 32, .	1.6	14
125	Nonspecular Reflection of Droplets. Small, 2021, 17, 2006695.	5.2	14
126	Symbolic Computation as a Tool for High-Order Long-Wave Stability Analysis of Thin Film Flows with Coupled Transport Processes. Journal of Computational Physics, 1999, 150, 1-16.	1.9	13

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127	CFD modeling of columns equipped with structured packings: I. Approach based on detailed packing geometry. Asia-Pacific Journal of Chemical Engineering, 2007, 2, 336-344.	0.8	13
128	Minimization of fines generation in size reduction of coals by impact crusher. Fuel Processing Technology, 2008, 89, 704-714.	3.7	13
129	An efficient chained-hash-table strategy for collision handling in hard-sphere discrete particle modeling. Powder Technology, 2010, 197, 58-67.	2.1	13
130	Monitoring of solid oxide fuel cell systems. Asia-Pacific Journal of Chemical Engineering, 2011, 6, 204-219.	0.8	13
131	Mixed convection heat transfer in porous media in the nonâ€darcy regime. Canadian Journal of Chemical Engineering, 1988, 66, 68-74.	0.9	12
132	Continuous separation of bidisperse suspensions in inclined channels. International Journal of Multiphase Flow, 1989, 15, 815-829.	1.6	11
133	Continuous gravity separation of concentrated bidisperse suspensions in a vertical column. Chemical Engineering Science, 1990, 45, 849-857.	1.9	11
134	Modelling heat transfer for a tubular micro-solid oxide fuel cell with experimental validation. Journal of Power Sources, 2013, 233, 190-201.	4.0	11
135	Numerical modelling of microwave heating of a porous catalyst bed. Journal of Microwave Power and Electromagnetic Energy, 2019, 53, 24-47.	0.4	11
136	Numerical investigation of pulsed fluidized bed using CFD-DEM: Insights on the dynamics. Powder Technology, 2020, 363, 745-756.	2.1	11
137	Bodyâ€Fitted Coordinates for Flow Under Sluice Gates. Journal of Hydraulic Engineering, 1985, 111, 922-933.	0.7	10
138	MIXED CONVECTION HEAT TRANSFER IN A TEE BRANCH. Numerical Heat Transfer; Part A: Applications, 1989, 16, 287-307.	1.2	10
139	Geometry-Based Model for Predicting Mass Transfer in Packed Columns. Industrial & Engineering Chemistry Research, 2003, 42, 5373-5382.	1.8	10
140	Mathematical modeling of a novel tubular micro-solid oxide fuel cell and experimental validation. Chemical Engineering Science, 2010, 65, 6001-6013.	1.9	10
141	Computational fluid dynamic simulations of regular bubble patterns in pulsed fluidized beds using a twoâ€fluid model. Canadian Journal of Chemical Engineering, 2022, 100, 405-422.	0.9	10
142	Multiple, twoâ€dimensional solutions to the Dean problem in curved triangular ducts. Physics of Fluids A, Fluid Dynamics, 1993, 5, 1182-1187.	1.6	9
143	A Theoretical Correction of the Ouchiyama and Tanaka Formula for Predicting Average Porosity of Packed Beds Consisting of Nonuniform Spheres. Industrial & Engineering Chemistry Research, 1998, 37, 3490-3496.	1.8	9
144	Continuous separation of suspensions containing light and heavy particle species. Canadian Journal of Chemical Engineering, 1999, 77, 1003-1012.	0.9	9

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145	Bubble Size Distributions for Dispersed Air &&num;0150; Water Flows in a 100 mm Horizontal Pipeline. Canadian Journal of Chemical Engineering, 2004, 82, 858-864.	0.9	9
146	Induced charge electro-osmotic concentration gradient generator. Biomicrofluidics, 2010, 4, 14110.	1.2	9
147	CFD investigations of particle segregation and dispersion mechanisms inside a polyolefin 8-leg loop reactor of industrial scale. Powder Technology, 2015, 284, 95-111.	2.1	9
148	Spray and atomization characteristics of gas-centered swirl coaxial injectors. International Journal of Spray and Combustion Dynamics, 2017, 9, 127-140.	0.4	9
149	On-line Visualization of PS/PP Melting Mechanisms in a Co-rotating Twin Screw Extruder. International Polymer Processing, 2004, 19, 342-349.	0.3	9
150	Discrete particle modeling of granular Rayleigh–Taylor instability. International Journal of Multiphase Flow, 2015, 77, 260-270.	1.6	8
151	Oil-material fractionation in Gulf deep water horizontal intrusion layer: Field data analysis with chemodynamic fate model for Macondo 252 oil spill. Marine Pollution Bulletin, 2016, 105, 110-119.	2.3	8
152	UWB Sensing Antenna, Reconfigurable Transceiver and Reconfigurable Antenna Based Cognitive Radio Test Bed. Wireless Personal Communications, 2017, 96, 3435-3462.	1.8	8
153	Effective Geometric Algorithms for Immersed Boundary Method Using Signed Distance Field. Journal of Fluids Engineering, Transactions of the ASME, 2019, 141, .	0.8	8
154	Microfluidic Applications in Drug Development: Fabrication of Drug Carriers and Drug Toxicity Screening. Micromachines, 2022, 13, 200.	1.4	8
155	Fluid flow and heat transfer in internally finned helical coils. Canadian Journal of Chemical Engineering, 1977, 55, 27-36.	0.9	7
156	A three–dimensional model for simulating the maldistribution of liquid flow in random packed beds. Canadian Journal of Chemical Engineering, 1998, 76, 161-166.	0.9	7
157	Erosion of polymer pellets during blending in a twin-screw extruder. AICHE Journal, 2006, 52, 1267-1270.	1.8	7
158	A scalable parallel algorithm for the direct numerical simulation of three-dimensional incompressible particulate flow. International Journal of Computational Fluid Dynamics, 2009, 23, 427-437.	0.5	7
159	Analysis of Electrokinetic Mixing Techniques Using Comparative Mixing Index. Micromachines, 2010, 1, 36-47.	1.4	7
160	A numerical study on the loading of cryoprotectant cocktails-on-a-chip, Part I: Interacting miscible viscous fluids. International Journal of Heat and Mass Transfer, 2014, 78, 1284-1291.	2.5	7
161	A bifurcation study of convective heat transfer in porous media. Part II: Effect of tilt on stationary and nonstationary solutions*. Physics of Fluids A, Fluid Dynamics, 1992, 4, 1945-1958.	1.6	6
162	Multiple, two–dimensional solutions in a rotating straight pipe. Physics of Fluids, 1995, 7, 1568-1575.	1.6	6

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163	THREE-DIMENSIONAL VISCOUS FLOW THROUGH A ROTATING CHANNEL: A PSEUDOSPECTRAL MATRIX METHOD APPROACH. International Journal for Numerical Methods in Fluids, 1996, 23, 379-396.	0.9	6
164	Characteristics of Sprays Formed by Impingement of a Pair of Liquid Jets. Journal of Propulsion and Power, 2004, 20, 76-82.	1.3	6
165	A New Device to Determine Bitumen Extraction from Oil Sands. Canadian Journal of Chemical Engineering, 2004, 82, 752-762.	0.9	6
166	Hydrogen and Oxygen Bubble Attachment to a Bitumen Drop. Canadian Journal of Chemical Engineering, 2008, 82, 846-849.	0.9	6
167	Study of Solid Wall–Liquid Interaction on Pressure-Driven Liquid Transport Through a Nanopore in a Membrane. Journal of Nanoscience and Nanotechnology, 2009, 9, 793-798.	0.9	6
168	Millifluidics: Developing a Millifluidic Platform for the Synthesis of Ultrasmall Nanoclusters: Ultrasmall Copper Nanoclusters as a Case Study (Small 5/2012). Small, 2012, 8, 687-687.	5.2	6
169	Effect of surfactant on the dynamics of a crude oil droplet in water column: Experimental and numerical investigation. Canadian Journal of Chemical Engineering, 2014, 92, 2098-2114.	0.9	6
170	Computational study on the effect of slug dynamics on the operation of a polyolefin 8-leg loop reactor of industrial scale. Powder Technology, 2017, 319, 452-462.	2.1	6
171	Anthropogenic spherules in Zuari estuary, south west coast of India. Marine Pollution Bulletin, 2019, 143, 1-5.	2.3	6
172	Preparation and properties of magnetic polymer microspheres. Polymer, 2020, 199, 122569.	1.8	6
173	Perspectives on Manufacturing Innovation in Chemical Process Industries. ACS Engineering Au, 2022, 2, 3-11.	2.3	6
174	A stochastic model for the simulation of the natural flow in random packed columns. Canadian Journal of Chemical Engineering, 1998, 76, 183-189.	0.9	5
175	Hydrodynamics in a gravity settling vessel: CFD modelling with LDA validation. Canadian Journal of Chemical Engineering, 2000, 78, 1046-1055.	0.9	5
176	Development of a Novel Vertical-Sheet Structured Packing. Chemical Engineering Research and Design, 2005, 83, 515-526.	2.7	5
177	An investigation of fuel composition and flow–rate effects in a H_2S fuelled sofc: Experiments and thermodynamic analysis. Canadian Journal of Chemical Engineering, 2012, 90, 1033-1042.	0.9	5
178	Computational fluid dynamics as a tool to understand the motility of microorganisms. Computers and Fluids, 2015, 114, 274-283.	1.3	5
179	Influence of unsteady mass transfer on dynamics of rising and sinking droplet in water: Experimental and CFD study. AICHE Journal, 2015, 61, 342-354.	1.8	5
180	Investigations about the effect of fractal distributors on the hydrodynamics of fractal packs of novel plate and frame designs. Chemical Engineering Science, 2018, 177, 195-209.	1.9	5

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181	Enhancement of Heat Transfer in Laminar Flows Using a Toroidal Helical Pipe. Industrial & Engineering Chemistry Research, 2020, 59, 3922-3933.	1.8	5
182	Flow Transition in Finned Tubes. Industrial & Engineering Chemistry Fundamentals, 1976, 15, 144-146.	0.7	4
183	Part II: Numerical solution. AICHE Journal, 1981, 27, 460-465.	1.8	4
184	STEADY LAMINAR FLOW THROUGH TWISTED PIPES: FLUID FLOW AND HEAT TRANSFER IN RECTANGULAR TUBES. Chemical Engineering Communications, 1983, 21, 151-173.	1.5	4
185	Continuous gravity separation of concentrated bidisperse suspensions in an inclined plate settler. International Journal of Multiphase Flow, 1990, 16, 909-919.	1.6	4
186	Development of three-dimensional, streamwise-periodic flows in mixed-convection heat transfer. Journal of Fluid Mechanics, 1993, 255, 683.	1.4	4
187	A Visual Study of High Grade Oil Sand Disintegration Process. Journal of Colloid and Interface Science, 1998, 205, 201-203.	5.0	4
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