

Krishnaswamy Nandakumar

List of Publications by Year in descending order

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231
papers

5,321
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docs citations

233
times ranked

3794
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Computational fluid dynamic simulations of regular bubble patterns in pulsed fluidized beds using a two-fluid model. Canadian Journal of Chemical Engineering, 2022, 100, 405-422. | 0.9 | 10 |
| 2 | Experimental and <scp>CFD</scp> study of sodium alginate droplets impacting onto immiscible deep liquid surface. Canadian Journal of Chemical Engineering, 2022, 100, . | 0.9 | 1 |
| 3 | Further contributions to the dynamics of a freely rotating elliptical particle in shear flow. Canadian Journal of Chemical Engineering, 2022, 100, 1359-1373. | 0.9 | 1 |
| 4 | Microfluidic Applications in Drug Development: Fabrication of Drug Carriers and Drug Toxicity Screening. Micromachines, 2022, 13, 200. | 1.4 | 8 |
| 5 | Perspectives on Manufacturing Innovation in Chemical Process Industries. ACS Engineering Au, 2022, 2, 3-11. | 2.3 | 6 |
| 6 | A perspective on <i>The Canadian Journal of Chemical Engineering</i> commemorating its 100th volume: 1929â€“2021. Canadian Journal of Chemical Engineering, 2022, 100, 1983-2010. | 0.9 | 3 |
| 7 | Chemical engineering at crossroads. Canadian Journal of Chemical Engineering, 2022, 100, 2011-2027. | 0.9 | 3 |
| 8 | Nonspecular Reflection of Droplets. Small, 2021, 17, 2006695. | 5.2 | 14 |
| 9 | Droplet Manipulations: Nonspecular Reflection of Droplets (Small 3/2021). Small, 2021, 17, 2170009. | 5.2 | 1 |
| 10 | Instabilities of a freely moving spherical particle in a Newtonian fluid: Direct Numerical Simulation. International Journal of Chemical Reactor Engineering, 2021, 19, 699-715. | 0.6 | 1 |
| 11 | Improved mass transfer performance of membrane units in a toroidal helical pipeâ€”Reduction of concentration polarization by secondary flows. Chemical Engineering and Processing: Process Intensification, 2021, , 108759. | 1.8 | 1 |
| 12 | Flow past a single stationary sphere, 1. Experimental and numerical techniques. Powder Technology, 2020, 365, 115-148. | 2.1 | 28 |
| 13 | Flow past a single stationary sphere, 2. Regime mapping and effect of external disturbances. Powder Technology, 2020, 365, 215-243. | 2.1 | 34 |
| 14 | Enhancement of Heat Transfer in Laminar Flows Using a Toroidal Helical Pipe. Industrial & Engineering Chemistry Research, 2020, 59, 3922-3933. | 1.8 | 5 |
| 15 | Microfluidics-Based Systems in Diagnosis of Alzheimerâ€™s Disease and Biomimetic Modeling. Micromachines, 2020, 11, 787. | 1.4 | 18 |
| 16 | Preparation and properties of magnetic polymer microspheres. Polymer, 2020, 199, 122569. | 1.8 | 6 |
| 17 | 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 |
| 18 | Heat Generation and Accumulation from Industrial Wastes in Landfills. , 2020, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
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| 19 | Numerical investigation of pulsed fluidized bed using CFD-DEM: Insights on the dynamics. Powder Technology, 2020, 363, 745-756. | 2.1 | 11 |
| 20 | Computational fluid dynamics. , 2019, , 21-238. | | 21 |
| 21 | 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 |
| 22 | Study of granular self-organization inside a cylinder driven by an orbital-shaker using discrete element method. Chemical Engineering Science, 2019, 209, 115194. | 1.9 | 1 |
| 23 | Anthropogenic spherules in Zuari estuary, south west coast of India. Marine Pollution Bulletin, 2019, 143, 1-5. | 2.3 | 6 |
| 24 | 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 |
| 25 | Numerical modelling of microwave heating of a porous catalyst bed. Journal of Microwave Power and Electromagnetic Energy, 2019, 53, 24-47. | 0.4 | 11 |
| 26 | Engineering a Bi-Conical Microchip as Vascular Stenosis Model. Micromachines, 2019, 10, 790. | 1.4 | 0 |
| 27 | Effective Geometric Algorithms for Immersed Boundary Method Using Signed Distance Field. Journal of Fluids Engineering, Transactions of the ASME, 2019, 141, . | 0.8 | 8 |
| 28 | Study of a toroidal-helical pipe as an innovative static mixer in laminar flows. Chemical Engineering Journal, 2019, 359, 446-458. | 6.6 | 22 |
| 29 | Spray characteristics of liquid-liquid Pintle injector. Experimental Thermal and Fluid Science, 2018, 97, 324-340. | 1.5 | 22 |
| 30 | Optimal Design of Bypass Line for an Industrial-Scale 8-Leg Polyolefin Loop Reactor to Manage Slurry Dispersion Using Hydraulic and CFD Simulations. Industrial & Engineering Chemistry Research, 2018, 57, 6068-6079. | 1.8 | 3 |
| 31 | 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 |
| 32 | 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 |
| 33 | Approaches to the Numerical Estimates of Grid Convergence of NSE in the Presence of Singularities. International Journal of Nonlinear Sciences and Numerical Simulation, 2018, 19, 281-287. | 0.4 | 0 |
| 34 | 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 |
| 35 | Axial flow in a two-dimensional microchannel induced by a travelling temperature wave imposed at the bottom wall. Journal of Fluid Mechanics, 2018, 848, 1040-1072. | 1.4 | 1 |
| 36 | Bubble generated turbulence and direct numerical simulations. Chemical Engineering Science, 2017, 157, 26-75. | 1.9 | 45 |

| # | ARTICLE | IF | CITATIONS |
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| 37 | Simulation of a Large-Scale FCC Riser Using a Combination of MP-PIC and Four-Lump Oil-Cracking Kinetic Models. <i>Energy & Fuels</i> , 2017, 31, 4758-4770. | 2.5 | 35 |
| 38 | Mixing in oscillating columns: Experimental and numerical studies. <i>Chemical Engineering Science</i> , 2017, 168, 78-89. | 1.9 | 17 |
| 39 | UWB Sensing Antenna, Reconfigurable Transceiver and Reconfigurable Antenna Based Cognitive Radio Test Bed. <i>Wireless Personal Communications</i> , 2017, 96, 3435-3462. | 1.8 | 8 |
| 40 | Spatially resolved mass transfer coefficient for moderate Reynolds number flows in packed beds: Wall effects. <i>International Journal of Heat and Mass Transfer</i> , 2017, 110, 406-415. | 2.5 | 31 |
| 41 | Controlling the Flow Structure in Fluidized Bed: A CFD-DEM Approach. <i>Springer Proceedings in Physics</i> , 2017, , 619-626. | 0.1 | 1 |
| 42 | Numerical simulation of a commercial FCC regenerator using Multiphase Particle-in-Cell methodology (MP-PIC). <i>Advanced Powder Technology</i> , 2017, 28, 2947-2960. | 2.0 | 37 |
| 43 | Computational study on the effect of slug dynamics on the operation of a polyolefin 8-leg loop reactor of industrial scale. <i>Powder Technology</i> , 2017, 319, 452-462. | 2.1 | 6 |
| 44 | Spray and atomization characteristics of gas-centered swirl coaxial injectors. <i>International Journal of Spray and Combustion Dynamics</i> , 2017, 9, 127-140. | 0.4 | 9 |
| 45 | CFD with population balance model to predict droplet size distribution in submerged turbulent multiphase jets. <i>Canadian Journal of Chemical Engineering</i> , 2016, 94, 2072-2085. | 0.9 | 1 |
| 46 | Development and validation of a new drag law using mechanical energy balance approach for DEM-CFD simulation of gas-solid fluidized bed. <i>Chemical Engineering Journal</i> , 2016, 302, 395-405. | 6.6 | 52 |
| 47 | Oil-material fractionation in Gulf deep water horizontal intrusion layer: Field data analysis with chemodynamic fate model for Macondo 252 oil spill. <i>Marine Pollution Bulletin</i> , 2016, 105, 110-119. | 2.3 | 8 |
| 48 | CFD investigations of particle segregation and dispersion mechanisms inside a polyolefin 8-leg loop reactor of industrial scale. <i>Powder Technology</i> , 2015, 284, 95-111. | 2.1 | 9 |
| 49 | Microfluidics and numerical simulation as methods for standardization of zebrafish sperm cell activation. <i>Biomedical Microdevices</i> , 2015, 17, 65. | 1.4 | 24 |
| 50 | Computational Modeling of Multiphase Reactors. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2015, 6, 347-378. | 3.3 | 45 |
| 51 | A discrete element method study of granular segregation in non-circular rotating drums. <i>Powder Technology</i> , 2015, 283, 549-560. | 2.1 | 28 |
| 52 | Computational fluid dynamics as a tool to understand the motility of microorganisms. <i>Computers and Fluids</i> , 2015, 114, 274-283. | 1.3 | 5 |
| 53 | Control of the breakup process of viscous droplets by an external electric field inside a microfluidic device. <i>Soft Matter</i> , 2015, 11, 3884-3899. | 1.2 | 37 |
| 54 | Sea Surface Oil Slick Light Component Vaporization and Heavy Residue Sinking: Binary Mixture Theory and Experimental Proof of Concept. <i>Environmental Engineering Science</i> , 2015, 32, 694-702. | 0.8 | 19 |

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| 55 | Discrete particle modeling of granular Rayleigh-Taylor instability. International Journal of Multiphase Flow, 2015, 77, 260-270. | 1.6 | 8 |
| 56 | 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 |
| 57 | On the transition to 3D modes for channel flow past a square cylinder. Canadian Journal of Chemical Engineering, 2014, 92, 2122-2137. | 0.9 | 3 |
| 58 | Computational investigations of the mixing performance inside liquid slugs generated by a microfluidic T-junction. Biomicrofluidics, 2014, 8, 054125. | 1.2 | 25 |
| 59 | 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 |
| 60 | A numerical study on the loading of cryoprotectant cocktails-on-a-chip. Part II: The cellular experience. International Journal of Heat and Mass Transfer, 2014, 78, 1292-1299. | 2.5 | 3 |
| 61 | 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 |
| 62 | Parallel algorithms for CFD-DEM modeling of dense particulate flows. Chemical Engineering Science, 2014, 118, 221-244. | 1.9 | 50 |
| 63 | Special issue section commemorating Professor J. B. Joshi. Canadian Journal of Chemical Engineering, 2014, 92, 2011-2012. | 0.9 | 1 |
| 64 | Numerical study on shape optimization of groove micromixers. Microfluidics and Nanofluidics, 2013, 15, 689-699. | 1.0 | 45 |
| 65 | Optimal patterning of heterogeneous surface charge for improved electrokinetic micromixing. Computers and Chemical Engineering, 2013, 49, 18-24. | 2.0 | 28 |
| 66 | 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 |
| 67 | 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 |
| 68 | Recent developments in experimental (PIV) and numerical (DNS) investigation of solid-liquid fluidized beds. Chemical Engineering Science, 2013, 92, 1-12. | 1.9 | 31 |
| 69 | A numerical study on distributions during cryoprotectant loading caused by laminar flow in a microchannel. Biomicrofluidics, 2013, 7, 24104. | 1.2 | 16 |
| 70 | The Activation of Zebrafish Sperm Cells in a Micromixer. , 2013, , . | | 0 |
| 71 | Distributions During Cryoprotective Agent Loading in a Microchannel. , 2013, , . | | 0 |
| 72 | A Planar Micromixer Based on Sequential Logarithmic Spirals. , 2012, , . | | 2 |

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| 73 | Numerical Simulation of Cell Motility at Low Reynolds Number. , 2012, , . | | 0 |
| 74 | A planar microfluidic mixer based on logarithmic spirals. Journal of Micromechanics and Microengineering, 2012, 22, 055019. | 1.5 | 49 |
| 75 | 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 |
| 76 | 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 |
| 77 | An investigation of fuel composition and flow rate effects in a H_2 fuelled SOFC: Experiments and thermodynamic analysis. Canadian Journal of Chemical Engineering, 2012, 90, 1033-1042. | 0.9 | 5 |
| 78 | Size Evolution of Gold Nanoparticles in a Millifluidic Reactor. ChemPhysChem, 2012, 13, 177-182. | 1.0 | 29 |
| 79 | A novel method for molecular dynamics simulation in the isothermal-isobaric ensemble. Molecular Physics, 2011, 109, 191-202. | 0.8 | 22 |
| 80 | Enforcing mass conservation in DPM-CFD models of dense particulate flows. Chemical Engineering Journal, 2011, 174, 475-481. | 6.6 | 28 |
| 81 | Nonisothermal modeling of heat transfer inside an internal batch mixer. AIChE Journal, 2011, 57, 2657-2669. | 1.8 | 14 |
| 82 | Monitoring of solid oxide fuel cell systems. Asia-Pacific Journal of Chemical Engineering, 2011, 6, 204-219. | 0.8 | 13 |
| 83 | An efficient chained-hash-table strategy for collision handling in hard-sphere discrete particle modeling. Powder Technology, 2010, 197, 58-67. | 2.1 | 13 |
| 84 | Three-dimensional random resistor-network model for solid oxide fuel cell composite electrodes. Electrochimica Acta, 2010, 55, 3944-3950. | 2.6 | 31 |
| 85 | A phenomenological model for erosion of material in a horizontal slurry pipeline flow. Wear, 2010, 269, 190-196. | 1.5 | 25 |
| 86 | 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 |
| 87 | Mathematical modeling of a novel tubular micro-solid oxide fuel cell and experimental validation. Chemical Engineering Science, 2010, 65, 6001-6013. | 1.9 | 10 |
| 88 | Estimation and control of solid oxide fuel cell system. Computers and Chemical Engineering, 2010, 34, 96-111. | 2.0 | 48 |
| 89 | Analysis of Electrokinetic Mixing Techniques Using Comparative Mixing Index. Micromachines, 2010, 1, 36-47. | 1.4 | 7 |
| 90 | Induced charge electro-osmotic concentration gradient generator. Biomicrofluidics, 2010, 4, 14110. | 1.2 | 9 |

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| 91 | Novel index for micromixing characterization and comparative analysis. <i>Biomicrofluidics</i> , 2010, 4, 031101. | 1.2 | 22 |
| 92 | A Fully Coupled Multiphysics Model for a H ₂ SOFC. <i>Journal of the Electrochemical Society</i> , 2010, 157, B542. | 1.3 | 4 |
| 93 | Numerical simulation of unsteady flow in a multistage centrifugal pump using sliding mesh technique. <i>Progress in Computational Fluid Dynamics</i> , 2010, 10, 239. | 0.1 | 24 |
| 94 | Direct numerical simulation of free falling sphere in creeping flow. <i>International Journal of Computational Fluid Dynamics</i> , 2010, 24, 109-120. | 0.5 | 17 |
| 95 | Effect of cut-off distance used in molecular dynamics simulations on fluid properties. <i>Molecular Simulation</i> , 2010, 36, 856-864. | 0.9 | 33 |
| 96 | A scalable parallel algorithm for the direct numerical simulation of three-dimensional incompressible particulate flow. <i>International Journal of Computational Fluid Dynamics</i> , 2009, 23, 427-437. | 0.5 | 7 |
| 97 | Three-dimensional discrete particle model for gas-solid fluidized beds on unstructured mesh. <i>Chemical Engineering Journal</i> , 2009, 152, 514-529. | 6.6 | 79 |
| 98 | Collision modeling between two non-Brownian particles in multiphase flow. <i>International Journal of Thermal Sciences</i> , 2009, 48, 226-233. | 2.6 | 3 |
| 99 | Computational fluid dynamics modelling and experimental study of erosion in slurry jet flows. <i>International Journal of Computational Fluid Dynamics</i> , 2009, 23, 155-172. | 0.5 | 38 |
| 100 | Efficient Micromixing Using Induced-Charge Electroosmosis. <i>Journal of Microelectromechanical Systems</i> , 2009, 18, 376-384. | 1.7 | 36 |
| 101 | Hydrodynamic Simulation of Horizontal Slurry Pipeline Flow Using ANSYS-CFX. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 8159-8171. | 1.8 | 128 |
| 102 | Induced charge electro osmotic mixer: Obstacle shape optimization. <i>Biomicrofluidics</i> , 2009, 3, 22413. | 1.2 | 35 |
| 103 | Study of Solid Wall-Liquid Interaction on Pressure-Driven Liquid Transport Through a Nanopore in a Membrane. <i>Journal of Nanoscience and Nanotechnology</i> , 2009, 9, 793-798. | 0.9 | 6 |
| 104 | ON THE EFFICIENCY OF DISCRETE PARTICLE MODELING OF GAS-SOLID FLUIDIZED BED REACTOR. , 2009, , . | | 0 |
| 105 | Geometrical modeling of microstructure of solid oxide fuel cell composite electrodes. <i>Journal of Power Sources</i> , 2008, 185, 961-966. | 4.0 | 63 |
| 106 | CFD simulation of bubbly two-phase flow in horizontal pipes. <i>Chemical Engineering Journal</i> , 2008, 144, 277-288. | 6.6 | 70 |
| 107 | Hydrogen and Oxygen Bubble Attachment to a Bitumen Drop. <i>Canadian Journal of Chemical Engineering</i> , 2008, 82, 846-849. | 0.9 | 6 |
| 108 | A comprehensive phenomenological model for erosion of materials in jet flow. <i>Powder Technology</i> , 2008, 187, 273-279. | 2.1 | 129 |

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| 109 | Minimization of fines generation in size reduction of coals by impact crusher. Fuel Processing Technology, 2008, 89, 704-714. | 3.7 | 13 |
| 110 | Investigation of entrance and exit effects on liquid transport through a cylindrical nanopore. Physical Chemistry Chemical Physics, 2008, 10, 186-192. | 1.3 | 20 |
| 111 | Numerical Analysis of a Two-Phase Flow and Mixing Process in a Stirred Tank. International Journal of Chemical Reactor Engineering, 2008, 6, . | 0.6 | 1 |
| 112 | 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 |
| 113 | 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 |
| 114 | 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 |
| 115 | Control relevant modeling of planer solid oxide fuel cell system. Journal of Power Sources, 2007, 163, 830-845. | 4.0 | 105 |
| 116 | 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 |
| 117 | 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 |
| 118 | A novel approach to study the structure versus performance relationship of SOFC electrodes. Journal of Power Sources, 2006, 161, 965-970. | 4.0 | 31 |
| 119 | Model development for a SOFC button cell using H ₂ S as fuel. Journal of Power Sources, 2006, 162, 400-414. | 4.0 | 16 |
| 120 | Erosion of polymer pellets during blending in a twin-screw extruder. AIChE Journal, 2006, 52, 1267-1270. | 1.8 | 7 |
| 121 | A Fictitious Domain Method for Particle Sedimentation. Lecture Notes in Computer Science, 2006, , 544-551. | 1.0 | 2 |
| 122 | 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 |
| 123 | Development of a Novel Vertical-Sheet Structured Packing. Chemical Engineering Research and Design, 2005, 83, 515-526. | 2.7 | 5 |
| 124 | A projection scheme for incompressible multiphase flow using adaptive Eulerian grid: 3D validation. International Journal for Numerical Methods in Fluids, 2005, 48, 455-466. | 0.9 | 4 |
| 125 | Characteristics of Sprays Formed by Impingement of a Pair of Liquid Jets. Journal of Propulsion and Power, 2004, 20, 76-82. | 1.3 | 6 |
| 126 | Effect of charged colloidal particles on adsorption of surfactants at oil-water interface. Journal of Colloid and Interface Science, 2004, 274, 625-630. | 5.0 | 46 |

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| 127 | Modeling of polymer melting, drop deformation, and breakup under shear flow. <i>Polymer Engineering and Science</i> , 2004, 44, 1258-1266. | 1.5 | 15 |
| 128 | A projection scheme for incompressible multiphase flow using adaptive Eulerian grid. <i>International Journal for Numerical Methods in Fluids</i> , 2004, 45, 1-19. | 0.9 | 25 |
| 129 | A novel experimental technique to study single bubble-bitumen attachment in flotation. <i>International Journal of Mineral Processing</i> , 2004, 74, 15-29. | 2.6 | 40 |
| 130 | Effect of calcium ion and montmorillonite clay on bitumen displacement by water on a glass surface. <i>Fuel</i> , 2004, 83, 17-22. | 3.4 | 26 |
| 131 | Investigation of the Melting Mechanism in a Twin-Screw Extruder Using a Pulse Method and Online Measurement. <i>Industrial & Engineering Chemistry Research</i> , 2004, 43, 6822-6831. | 1.8 | 18 |
| 132 | CFD SIMULATION AND EXPERIMENTAL STUDY OF FLOW IN PACKED BUBBLE COLUMNS. <i>Chemical Engineering Communications</i> , 2004, 191, 1417-1436. | 1.5 | 0 |
| 133 | A New Device to Determine Bitumen Extraction from Oil Sands. <i>Canadian Journal of Chemical Engineering</i> , 2004, 82, 752-762. | 0.9 | 6 |
| 134 | Bubble Size Distributions for Dispersed Air & Water Flows in a 100 mm Horizontal Pipeline. <i>Canadian Journal of Chemical Engineering</i> , 2004, 82, 858-864. | 0.9 | 9 |
| 135 | On-line Visualization of PS/PP Melting Mechanisms in a Co-rotating Twin Screw Extruder. <i>International Polymer Processing</i> , 2004, 19, 342-349. | 0.3 | 9 |
| 136 | A 3D Projection Scheme for Incompressible Multiphase Flows Using Dynamic Front Refinement and Reconnection. <i>Lecture Notes in Computer Science</i> , 2004, , 17-24. | 1.0 | 0 |
| 137 | CFD modeling of flow patterns and hydraulics of commercial-scale sieve trays. <i>AIChE Journal</i> , 2003, 49, 910-924. | 1.8 | 63 |
| 138 | Experimental and simulation studies of heat transfer in polymer melts. <i>AIChE Journal</i> , 2003, 49, 1372-1382. | 1.8 | 4 |
| 139 | Effect of surface mobility on the particle sliding along a bubble or a solid sphere. <i>Journal of Colloid and Interface Science</i> , 2003, 259, 81-88. | 5.0 | 20 |
| 140 | A finite element technique for multifluid incompressible flow using Eulerian grids. <i>Journal of Computational Physics</i> , 2003, 187, 255-273. | 1.9 | 45 |
| 141 | A fictitious domain/finite element method for particulate flows. <i>Journal of Computational Physics</i> , 2003, 192, 105-123. | 1.9 | 64 |
| 142 | Attachment of individual particles to a stationary air bubble in model systems. <i>International Journal of Mineral Processing</i> , 2003, 68, 47-69. | 2.6 | 41 |
| 143 | Bubble size in coalescence dominant regime of turbulent air-water flow through horizontal pipes. <i>International Journal of Multiphase Flow</i> , 2003, 29, 1451-1471. | 1.6 | 45 |
| 144 | Combustion and deposit formation behavior on the fireside surfaces of a pulverized fuel boiler fired with a blend of coal and petroleum coke. <i>Combustion Science and Technology</i> , 2003, 175, 1625-1647. | 1.2 | 3 |

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| 145 | Geometry-Based Model for Predicting Mass Transfer in Packed Columns. Industrial & Engineering Chemistry Research, 2003, 42, 5373-5382. | 1.8 | 10 |
| 146 | Highly accurate solutions of the bifurcation structure of mixed-convection heat transfer using spectral method. International Journal for Numerical Methods in Fluids, 2002, 40, 619-638. | 0.9 | 2 |
| 147 | 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 |
| 148 | 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 |
| 149 | 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 |
| 150 | Predicting liquid flow profile in randomly packed beds from computer simulation. AIChE Journal, 2001, 47, 1770-1779. | 1.8 | 18 |
| 151 | Porosity distribution in random packed columns by gamma ray tomography. Chemical Engineering and Processing: Process Intensification, 2001, 40, 209-219. | 1.8 | 48 |
| 152 | A Lagrange Multipliers/Fictitious Domain Approach for Particulate Flow. Lecture Notes in Computer Science, 2001, , 409-416. | 1.0 | 1 |
| 153 | Experimental studies of liquid flow maldistribution in a random packed column. Canadian Journal of Chemical Engineering, 2000, 78, 449-457. | 0.9 | 33 |
| 154 | Hydrodynamics in a gravity settling vessel: CFD modelling with LDA validation. Canadian Journal of Chemical Engineering, 2000, 78, 1046-1055. | 0.9 | 5 |
| 155 | A study on daughter droplets formation in bitumen/glass/water contact line displacement due to instability. Fuel, 2000, 79, 837-841. | 3.4 | 4 |
| 156 | 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 |
| 157 | CFD Modeling of Mass-Transfer Processes in Randomly Packed Distillation Columns. Industrial & Engineering Chemistry Research, 2000, 39, 1369-1380. | 1.8 | 50 |
| 158 | DISTILLATION Tray Columns: Performance. , 2000, , 1140-1145. | | 1 |
| 159 | Bifurcation study of flow through rotating curved ducts. Physics of Fluids, 1999, 11, 2030-2043. | 1.6 | 30 |
| 160 | Cramer's Rule for Non-Square Matrices: 10618. American Mathematical Monthly, 1999, 106, 865. | 0.2 | 1 |
| 161 | Continuous separation of suspensions containing light and heavy particle species. Canadian Journal of Chemical Engineering, 1999, 77, 1003-1012. | 0.9 | 9 |
| 162 | Predicting geometrical properties of random packed beds from computer simulation. AIChE Journal, 1999, 45, 2286-2297. | 1.8 | 43 |

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| 163 | Symbolic Computation as a Tool for High-Order Long-Wave Stability Analysis of Thin Film Flows with Coupled Transport Processes. <i>Journal of Computational Physics</i> , 1999, 150, 1-16. | 1.9 | 13 |
| 164 | A comparative study of two-phase flow models relevant to bubble column dynamics. <i>Journal of Fluid Mechanics</i> , 1999, 394, 73-96. | 1.4 | 18 |
| 165 | Model for Liquid Phase Flow on Sieve Trays. <i>Chemical Engineering Research and Design</i> , 1998, 76, 843-848. | 2.7 | 35 |
| 166 | A bifurcation study of natural convection in porous media with internal heat sources: the non-Darcy effects. <i>International Journal of Heat and Mass Transfer</i> , 1998, 41, 383-392. | 2.5 | 22 |
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