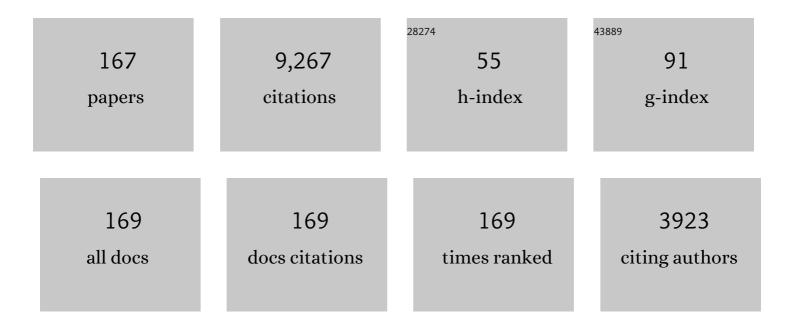
## Sankaran Sundaresan

List of Publications by Year in descending order

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| #  | Article   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Plasma-assisted catalysis for ammonia synthesis in a dielectric barrier discharge reactor: key surface<br>reaction steps and potential causes of low energy yield. Journal Physics D: Applied Physics, 2022, 55,<br>055202. | 2.8  | 10        |
| 2  | <i>In Situ</i> Identification of NNH and N <sub>2</sub> H <sub>2</sub> by Using Molecular-Beam Mass<br>Spectrometry in Plasma-Assisted Catalysis for NH <sub>3</sub> Synthesis. ACS Energy Letters, 2022, 7,<br>53-58.      | 17.4 | 25        |
| 3  | The effect of gas on tribocharging of particles in a vibrated bed. Powder Technology, 2022, 401, 117272.  | 4.2  | 7         |
| 4  | Development of data-driven filtered drag model for industrial-scale fluidized beds. Chemical<br>Engineering Science, 2021, 230, 116235.   | 3.8  | 35        |
| 5  | Mid-Infrared Scattering in Î <sup>3</sup> -Al2O3 Catalytic Powders. Applied Spectroscopy, 2021, 75, 706-717.  | 2.2  | 0         |
| 6  | Particle-based coarse-grained approach for simulating dry powder inhaler. International Journal of<br>Pharmaceutics, 2021, 606, 120821.   | 5.2  | 9         |
| 7  | Effects of dose loading conditions and device geometry on the transport and aerosolization in dry powder inhalers: A simulation study. International Journal of Pharmaceutics, 2021, 610, 121219.                           | 5.2  | 6         |
| 8  | Effect of particle size on tribocharging. Powder Technology, 2020, 375, 199-209.  | 4.2  | 13        |
| 9  | Coarse graining Euler-Lagrange simulations of cohesive particle fluidization. Powder Technology, 2020, 364, 167-182.  | 4.2  | 40        |
| 10 | On modelling shear layers in dense granular flows. Journal of Fluid Mechanics, 2020, 892, .   | 3.4  | 3         |
| 11 | <i>110th Anniversary</i> : Effect of System Size on Boundary-Driven Contact Charging in Particulate<br>Flows. Industrial & Engineering Chemistry Research, 2019, 58, 17980-17990.   | 3.7  | 5         |
| 12 | Neural-network-based filtered drag model for gas-particle flows. Powder Technology, 2019, 346, 403-413.   | 4.2  | 74        |
| 13 | Computationally generated constitutive models for particle phase rheology in gas-fluidized suspensions. Journal of Fluid Mechanics, 2019, 860, 318-349.   | 3.4  | 32        |
| 14 | Introducing a variable speed of sound in single-component lattice Boltzmann simulations of isothermal fluid flows. Computers and Fluids, 2018, 167, 129-145.  | 2.5  | 5         |
| 15 | Toward Constitutive Models for Momentum, Species, and Energy Transport in Gas–Particle Flows.<br>Annual Review of Chemical and Biomolecular Engineering, 2018, 9, 61-81.  | 6.8  | 125       |
| 16 | Effects of Polarization on Particle-Laden Flows. Physical Review Letters, 2018, 121, 124503.  | 7.8  | 15        |
| 17 | Experimental and numerical study of wall layer development in a tribocharged fluidized bed. Journal of Fluid Mechanics, 2018, 849, 860-884.   | 3.4  | 40        |
| 18 | Eulerian modelling of gas–solid flows with triboelectric charging. Journal of Fluid Mechanics, 2018,<br>848, 340-369.   | 3.4  | 25        |

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| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Multiple timescale contact charging. Physical Review Materials, 2018, 2, .  | 2.4 | 5         |
| 20 | Growth and breakup of a wet agglomerate in a dry gas–solid fluidized bed. AICHE Journal, 2017, 63,<br>2520-2527.  | 3.6 | 29        |
| 21 | Analysis of the effect of small amounts of liquid on gas–solid fluidization using CFDâ€ĐEM<br>simulations. AICHE Journal, 2017, 63, 5290-5302.                                  | 3.6 | 31        |
| 22 | Forward osmosis using draw solutions manifesting liquid-liquid phase separation. Desalination, 2017, 421, 23-31.  | 8.2 | 16        |
| 23 | Effective particle diameters for simulating fluidization of nonâ€spherical particles: CFDâ€ĐEM models vs.<br>MRI measurements. AICHE Journal, 2017, 63, 2555-2568.              | 3.6 | 19        |
| 24 | A tribute to professor Roy Jackson: Intellectual leader, scholar, mentor. AICHE Journal, 2017, 63, 5239-5249.   | 3.6 | 0         |
| 25 | Effect of humidity on triboelectric charging in a vertically vibrated granular bed: Experiments and modeling. Chemical Engineering Science, 2017, 173, 363-373.                 | 3.8 | 37        |
| 26 | Dynamics of Tissue-Induced Alignment of Fibrous Extracellular Matrix. Biophysical Journal, 2017, 113,<br>702-713.   | 0.5 | 57        |
| 27 | A Tribute to Roy Jackson. AICHE Journal, 2017, 63, 5238-5238.   | 3.6 | 0         |
| 28 | Lattice Boltzmann simulations of low-Reynolds-number flows past fluidized spheres: effect of inhomogeneities on the dragÂforce. Journal of Fluid Mechanics, 2017, 833, 599-630. | 3.4 | 48        |
| 29 | Towards filtered drag force model for non-cohesive and cohesive particle-gas flows. Physics of Fluids, 2017, 29, .  | 4.0 | 67        |
| 30 | Triboelectric charging of monodisperse particles in fluidized beds. AICHE Journal, 2017, 63, 1872-1891.   | 3.6 | 37        |
| 31 | Numerical studies of the effects of fines on fluidization. AICHE Journal, 2016, 62, 2271-2281.  | 3.6 | 23        |
| 32 | Lattice Boltzmann simulations of low-Reynolds-number flow past fluidized spheres: effect of Stokes<br>number on drag force. Journal of Fluid Mechanics, 2016, 788, 576-601.     | 3.4 | 86        |
| 33 | Sub-grid models for heat transfer in gas-particle flows with immersed horizontal cylinders. Chemical Engineering Science, 2016, 151, 7-15.                                      | 3.8 | 19        |
| 34 | Rheology of granular materials with size distributions across dense-flow regimes. Powder<br>Technology, 2016, 295, 322-329.   | 4.2 | 23        |
| 35 | Filtered sub-grid constitutive models for fluidized gas-particle flows constructed from 3-D simulations. Chemical Engineering Science, 2016, 152, 443-456.                      | 3.8 | 114       |
| 36 | Intrusion of a Liquid Droplet into a Powder under Gravity. Langmuir, 2016, 32, 8631-8640.   | 3.5 | 13        |

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| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 37 | Fluid and particle coarsening of drag force for discrete-parcel approach. Chemical Engineering Science, 2016, 155, 258-267.  | 3.8 | 77        |
| 38 | A hybrid approach to computing electrostatic forces in fluidized beds of charged particles. AICHE<br>Journal, 2016, 62, 2282-2295.   | 3.6 | 44        |
| 39 | Formation of cyclopentane methane binary clathrate hydrate in brine solutions. Chemical Engineering Science, 2016, 141, 125-132.   | 3.8 | 61        |
| 40 | Simulating wet gas–solid fluidized beds using coarse-grid CFD-DEM. Chemical Engineering Science,<br>2016, 144, 224-238.  | 3.8 | 59        |
| 41 | A modified cohesion model for CFD–DEM simulations of fluidization. Powder Technology, 2016, 296, 17-28.  | 4.2 | 82        |
| 42 | Validation of filtered two-fluid models for gas–particle flows against experimental data from<br>bubbling fluidized bed. Powder Technology, 2015, 284, 159-169.            | 4.2 | 39        |
| 43 | Sub-Grid Filtering Model for Multiphase Heat Transfer With Immersed Tubes. , 2014, , .   |     | 1         |
| 44 | A drag model for filtered Euler–Lagrange simulations of clustered gas–particle suspensions.<br>Chemical Engineering Science, 2014, 117, 416-425.                           | 3.8 | 160       |
| 45 | Rheology of cohesive granular materials across multiple dense-flow regimes. Physical Review E, 2014,<br>90, 032206.  | 2.1 | 41        |
| 46 | Verification of sub-grid filtered drag models for gas-particle fluidized beds with immersed cylinder<br>arrays. Chemical Engineering Science, 2014, 114, 144-154.          | 3.8 | 32        |
| 47 | Formation kinetics of cyclopentane–methane binary clathrate hydrate. Chemical Engineering Science,<br>2014, 119, 147-157.  | 3.8 | 37        |
| 48 | Carbon Capture Simulation Initiative: A Case Study in Multiscale Modeling and New Challenges.<br>Annual Review of Chemical and Biomolecular Engineering, 2014, 5, 301-323. | 6.8 | 66        |
| 49 | Filtered models for bidisperse gas–particle flows. Chemical Engineering Science, 2014, 108, 67-86.   | 3.8 | 30        |
| 50 | Radial hopper flow prediction using a constitutive model with microstructure evolution. Powder Technology, 2013, 242, 81-85.   | 4.2 | 14        |
| 51 | Periodic flow structures in vertical gas-particle flows. Powder Technology, 2013, 241, 174-180.  | 4.2 | 1         |
| 52 | Filtered twoâ€fluid models of fluidized gasâ€particle flows: New constitutive relations. AICHE Journal,<br>2013, 59, 3265-3275.  | 3.6 | 174       |
| 53 | Lattice-Boltzmann-based two-phase thermal model for simulating phase change. Physical Review E, 2013, 88, 033302.  | 2.1 | 27        |
| 54 | Filtered models for scalar transport in gas–particle flows. Chemical Engineering Science, 2013, 95,<br>291-300.  | 3.8 | 65        |

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 55 | Role of hydrodynamics on chemical reactor performance. Current Opinion in Chemical Engineering, 2013, 2, 325-330.  | 7.8 | 16        |
| 56 | Sub-grid drag models for horizontal cylinder arrays immersed in gas-particle multiphase flows.<br>Chemical Engineering Science, 2013, 104, 399-412.                                | 3.8 | 25        |
| 57 | Dynamics of Single Rising Bubbles in Neutrally Buoyant Liquid-Solid Suspensions. Physical Review<br>Letters, 2013, 110, 244501.  | 7.8 | 23        |
| 58 | A modified kinetic theory for frictional granular flows in dense and dilute regimes. Physics of Fluids, 2013, 25, .  | 4.0 | 100       |
| 59 | Bridging the rheology of granular flows in three regimes. Physical Review E, 2012, 85, 021305.   | 2.1 | 215       |
| 60 | Effect of microstructural anisotropy on the fluid–particle drag force and the stability of the uniformly fluidized state. Journal of Fluid Mechanics, 2012, 713, 27-49.            | 3.4 | 12        |
| 61 | Filtered models for reacting gas–particle flows. Chemical Engineering Science, 2012, 82, 132-143.  | 3.8 | 62        |
| 62 | Validation Studies on Filtered Model Equations for Gas-Particle Flows in Risers. Industrial &<br>Engineering Chemistry Research, 2012, 51, 2094-2103.                              | 3.7 | 84        |
| 63 | Experimental and computational studies of dense granular flow: Transition from quasi-static to intermediate regime in a Couette shear device. Powder Technology, 2012, 220, 7-14.  | 4.2 | 15        |
| 64 | Do we need sub-grid scale corrections for both continuum and discrete gas-particle flow models?.<br>Powder Technology, 2012, 220, 2-6.   | 4.2 | 74        |
| 65 | Professor M. S. Ananth: Leading Researcher, Gifted Teacher, and Visionary Leader of Higher Education in India. Industrial & Engineering Chemistry Research, 2011, 50, 12845-12846. | 3.7 | 1         |
| 66 | Constitutive Models for Filtered Two-Fluid Models of Fluidized Gas–Particle Flows. Industrial &<br>Engineering Chemistry Research, 2011, 50, 13190-13201.                          | 3.7 | 144       |
| 67 | A lattice Boltzmann study on the drag force in bubble swarms. Journal of Fluid Mechanics, 2011, 679, 101-121.  | 3.4 | 16        |
| 68 | A constitutive model with microstructure evolution for flow of rate-independent granular materials. Journal of Fluid Mechanics, 2011, 682, 590-616.                                | 3.4 | 141       |
| 69 | Meso-scale structures of bidisperse mixtures of particles fluidized by a gas. Chemical Engineering Science, 2011, 66, 4403-4420.   | 3.8 | 24        |
| 70 | Nanoparticle mixing through rapid expansion of high pressure and supercritical suspensions. Journal of Nanoparticle Research, 2011, 13, 4253-4266.                                 | 1.9 | 20        |
| 71 | Efficiency of hydrogen recovery from reformate with a polymer electrolyte hydrogen pump. AICHE<br>Journal, 2011, 57, 1767-1779.  | 3.6 | 41        |
| 72 | Verification of filtered twoâ€fluid models for gasâ€particle flows in risers. AICHE Journal, 2011, 57,<br>2691-2707.   | 3.6 | 106       |

| #  | Article  | IF  | CITATIONS |
|----|--|-----|-----------|
| 73 | Contact line motion without slip in lattice Boltzmann simulations. Chemical Engineering Science, 2011, 66, 3452-3458.  | 3.8 | 11        |
| 74 | Environmentally benign dry mechanical mixing of nano-particles using magnetically assisted impaction mixing process. Powder Technology, 2011, 209, 138-146.                        | 4.2 | 12        |
| 75 | Fluidâ€particle drag in inertial polydisperse gas–solid suspensions. AICHE Journal, 2010, 56, 1995-2004.   | 3.6 | 28        |
| 76 | Transmission of stresses in static and sheared granular beds: The influence of particle size, shearing rate, layer thickness and sensor size. Powder Technology, 2010, 203, 23-32. | 4.2 | 10        |
| 77 | A plasticity model with microstructure evolution for quasi-static granular flows. AIP Conference<br>Proceedings, 2010, , .   | 0.4 | 4         |
| 78 | Permeability in Fixed Beds of Spheres with Size Distributions and Stochastically Generated Porous Media Analogs. , 2010, , .   |     | 2         |
| 79 | Unsteady Shear of Dense Assemblies of Cohesive Granular Materials under Constant Volume<br>Conditions. Industrial & Engineering Chemistry Research, 2010, 49, 5153-5165.           | 3.7 | 6         |
| 80 | Preface: 21st International Symposium on Chemical Reaction Engineering (ISCRE 21). Industrial &<br>Engineering Chemistry Research, 2010, 49, 10153-10153.                          | 3.7 | 2         |
| 81 | Fluidâ€particle drag in lowâ€Reynoldsâ€number polydisperse gas–solid suspensions. AICHE Journal, 2009, 55, 1352-1368.  | 3.6 | 108       |
| 82 | Deagglomeration of nanoparticle aggregates via rapid expansion of supercritical or highâ€pressure suspensions. AICHE Journal, 2009, 55, 2807-2826.                                 | 3.6 | 53        |
| 83 | Drag Law for Bidisperse Gasâ^'Solid Suspensions Containing Equally Sized Spheres. Industrial &<br>Engineering Chemistry Research, 2009, 48, 227-241.                               | 3.7 | 59        |
| 84 | Twoâ€way coupled largeâ€eddy simulations of the gasâ€solid flow in cyclone separators. AICHE Journal,<br>2008, 54, 872-885.  | 3.6 | 96        |
| 85 | Filtered twoâ€fluid models for fluidized gasâ€particle suspensions. AICHE Journal, 2008, 54, 1431-1448.  | 3.6 | 379       |
| 86 | Shear flow of assemblies of cohesive granular materials under constant applied normal stress.<br>Powder Technology, 2008, 183, 340-355.  | 4.2 | 9         |
| 87 | Lattice Boltzmann Simulation of Two-Fluid Model Equations. Industrial & Engineering Chemistry<br>Research, 2008, 47, 9165-9173.  | 3.7 | 18        |
| 88 | Multifunctional Catalyst for Fischer-Tropsch Synthesis. ACS Symposium Series, 2007, , 75-85.   | 0.5 | 0         |
| 89 | ExSact: Novel Solid-Acid Catalyzed Iso-Paraffin Alkylation Process. ACS Symposium Series, 2007, ,<br>181-193.  | 0.5 | 0         |
| 90 | Direct numerical simulations of dense suspensions: wave instabilities in liquid-fluidized beds. Journal of Fluid Mechanics, 2007, 587, 303-336.                                    | 3.4 | 99        |

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| #   | Article  | IF   | CITATIONS |
|-----|--|------|-----------|
| 91  | Particle Simulation of Vibrated Gas-Fluidized Beds of Cohesive Fine Powders. Industrial &<br>Engineering Chemistry Research, 2006, 45, 6966-6977.                              | 3.7  | 18        |
| 92  | Analysis of unsteady forces in ordered arrays of monodisperse spheres. Journal of Fluid Mechanics, 2006, 552, 257.   | 3.4  | 15        |
| 93  | Simulation of mass-loading effects in gas–solid cyclone separators. Powder Technology, 2006, 163, 59-68.   | 4.2  | 115       |
| 94  | Shear flow of assemblies of cohesive and non-cohesive granular materials. Powder Technology, 2006, 169, 10-21.   | 4.2  | 41        |
| 95  | SIMULATION OF BUBBLE BREAKUP DYNAMICS IN HOMOGENEOUS TURBULENCE. Chemical Engineering Communications, 2006, 193, 1038-1063.  | 2.6  | 57        |
| 96  | Coarse-Grid Simulation of Gas-Particle Flows in Vertical Risers. Industrial & Engineering<br>Chemistry Research, 2005, 44, 6022-6037.  | 3.7  | 225       |
| 97  | Silo music and silo quake: granular flow-induced vibration. Powder Technology, 2004, 145, 190-202.   | 4.2  | 56        |
| 98  | Coarse bifurcation studies of bubble flow lattice Boltzmann simulations. Chemical Engineering Science, 2004, 59, 2357-2362.  | 3.8  | 28        |
| 99  | Aerated vibrofluidization of silica nanoparticles. AICHE Journal, 2004, 50, 1776-1785.   | 3.6  | 179       |
| 100 | Analysis of a frictional–kinetic model for gas–particle flow. Powder Technology, 2003, 129, 72-85.   | 4.2  | 330       |
| 101 | Electrical capacitance tomography measurements on vertical and inclined pneumatic conveying of granular solids. Chemical Engineering Science, 2003, 58, 4225-4245.             | 3.8  | 95        |
| 102 | A comparative study of lattice Boltzmann and front-tracking finite-difference methods for bubble simulations. International Journal of Multiphase Flow, 2003, 29, 109-116.     | 3.4  | 58        |
| 103 | Workshop Findings. International Journal of Multiphase Flow, 2003, 29, 1047-1059.  | 3.4  | 14        |
| 104 | Appendix 2: Report of study group on disperse flow. International Journal of Multiphase Flow, 2003, 29, 1069-1087.   | 3.4  | 19        |
| 105 | INSTABILITIES IN FLUIDIZED BEDS. Annual Review of Fluid Mechanics, 2003, 35, 63-88.  | 25.0 | 154       |
| 106 | The Effect of Static Electrification on Gasâ^'Solid Flows in Vertical Risers. Industrial & Engineering<br>Chemistry Research, 2002, 41, 6224-6234.                             | 3.7  | 56        |
| 107 | Analysis of drag and virtual mass forces in bubbly suspensions using an implicit formulation of the<br>lattice Boltzmann method. Journal of Fluid Mechanics, 2002, 452, 61-96. | 3.4  | 171       |
| 108 | Role of wall friction in fluidization and standpipe flow. Powder Technology, 2002, 124, 45-54.   | 4.2  | 42        |

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| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 109 | Lift force in bubbly suspensions. Chemical Engineering Science, 2002, 57, 3521-3542.  | 3.8 | 75        |
| 110 | The role of contact stresses and wall friction on fluidization. Chemical Engineering Science, 2002, 57, 5123-5141.  | 3.8 | 66        |
| 111 | The role of meso-scale structures in rapid gas–solid flows. Journal of Fluid Mechanics, 2001, 445, 151-185.   | 3.4 | 629       |
| 112 | Electrical Capacitance Tomography Measurements on the Pneumatic Conveying of Solids. Industrial<br>& Engineering Chemistry Research, 2001, 40, 4216-4226. | 3.7 | 58        |
| 113 | James Wei. Industrial & Engineering Chemistry Research, 2001, 40, 4155-4156.  | 3.7 | Ο         |
| 114 | Some outstanding questions in handling of cohesionless particles. Powder Technology, 2001, 115, 2-7.  | 4.2 | 46        |
| 115 | Modeling the hydrodynamics of multiphase flow reactors: Current status and challenges. AICHE<br>Journal, 2000, 46, 1102-1105.                             | 3.6 | 198       |
| 116 | Bubble flow simulations with the lattice Boltzmann method. Chemical Engineering Science, 1999, 54, 4817-4823.   | 3.8 | 58        |
| 117 | Title is missing!. Catalysis Letters, 1999, 62, 87-91.  | 2.6 | 16        |
| 118 | Roy Jackson. Industrial & amp; Engineering Chemistry Research, 1999, 38, 575-575.   | 3.7 | 1         |
| 119 | The effect of boundaries on the plane Couette flow of granular materials: a bifurcation analysis.<br>Journal of Fluid Mechanics, 1999, 397, 203-229.      | 3.4 | 42        |
| 120 | Gas-particle flow in vertical pipes with high mass loading of particles. Powder Technology, 1998, 96, 6-23.   | 4.2 | 36        |
| 121 | Dynamics of gas-particle flow in circulating fluidized beds. Powder Technology, 1998, 100, 173-182.   | 4.2 | 40        |
| 122 | From Bubbles to Clusters in Fluidized Beds. Physical Review Letters, 1998, 81, 1849-1852.   | 7.8 | 76        |
| 123 | The growth, saturation, and scaling behaviour of one- and two-dimensional disturbances in fluidized beds. Journal of Fluid Mechanics, 1998, 362, 83-119.  | 3.4 | 13        |
| 124 | Fully developed travelling wave solutions and bubble formation in fluidized beds. Journal of Fluid<br>Mechanics, 1997, 334, 157-188.                      | 3.4 | 60        |
| 125 | Instabilities of fully developed rapid flow of a granular material in a channel. Journal of Fluid<br>Mechanics, 1997, 342, 179-197.                       | 3.4 | 31        |
| 126 | Developing Flow of Gas-Particle Mixtures in Vertical Ducts. Industrial & Engineering Chemistry<br>Research, 1997, 36, 3375-3390.                          | 3.7 | 8         |

| #   | Article   | IF   | CITATIONS |
|-----|---|------|-----------|
| 127 | Rebuttal to the Comments of Lyle F. Albright on "Kinetic Analysis of Isobutane/Butene Alkylations over<br>Ultrastable Hâ^Y Zeoliteâ€: Industrial & Engineering Chemistry Research, 1997, 36, 2517-2520. | 3.7  | 2         |
| 128 | Metastability of Spinel-type Solid Solutions in the SiO2â^'Al2O3System. Chemistry of Materials, 1997, 9, 3096-3100.   | 6.7  | 23        |
| 129 | New precursors to vanadium phosphorus oxide catalysts. Catalysis Today, 1997, 33, 49-56.  | 4.4  | 35        |
| 130 | Fundamental Studies of Butane Oxidation over Model-Supported Vanadium Oxide Catalysts: Molecular<br>Structure-Reactivity Relationships. Journal of Catalysis, 1997, 170, 75-88.                         | 6.2  | 132       |
| 131 | Stability of bounded rapid shear flows of a granular material. Journal of Fluid Mechanics, 1996, 308, 31-62.  | 3.4  | 55        |
| 132 | One- and two-dimensional travelling wave solutions in gas-fluidized beds. Journal of Fluid Mechanics, 1996, 306, 183-221.   | 3.4  | 71        |
| 133 | Kinetics of Zeolitic Solid Acid-Catalyzed Alkylation of Isobutane with 2-Butene. ACS Symposium Series, 1996, , 105-115.   | 0.5  | 6         |
| 134 | Kinetic Analysis of Isobutane/Butene Alkylation over Ultrastable Hâ^'Y Zeolite. Industrial &<br>Engineering Chemistry Research, 1996, 35, 3861-3873.  | 3.7  | 86        |
| 135 | The oxidation of C4 molecules on vanadyl pyrophosphate catalysts. Studies in Surface Science and Catalysis, 1996, 101, 991-1000.  | 1.5  | 9         |
| 136 | The effect of the phase composition of model VPO catalysts for partial oxidation of n-butane.<br>Catalysis Today, 1996, 28, 275-295.  | 4.4  | 169       |
| 137 | A two-phase release model for quantifying risk reduction for modified HF alkylation catalysts.<br>Journal of Hazardous Materials, 1995, 44, 141-183.  | 12.4 | 6         |
| 138 | New Layered Vanadyl(IV) Phosphite as a Precursor to Vanadyl Pyrophosphate Catalysts for Partial<br>Oxidation of n-Butane to Maleic Anhydride. Journal of Catalysis, 1995, 156, 298-300.                 | 6.2  | 9         |
| 139 | Evolution of the active surface of the vanadyl pyrophosphate catalysts. Catalysis Letters, 1995, 32, 379-386.   | 2.6  | 84        |
| 140 | Synthesis and Characterization of Vanadyl Phosphite, VIVOHPIIIO3.cntdot.1.5H2O. Chemistry of Materials, 1995, 7, 1485-1492.   | 6.7  | 26        |
| 141 | Vanadyl(IV) Phosphonates, VOCnH2n+1PO3.cntdot.xH2O (n = 0-4, x = 1 or 1.5), as Precursors of<br>Vanadyl(IV) Pyrophosphate, (VO)2P2O7. Chemistry of Materials, 1995, 7, 1493-1498.                       | 6.7  | 29        |
| 142 | Instabilities and the formation of bubbles in fluidized beds. Journal of Fluid Mechanics, 1995, 303, 327-366.   | 3.4  | 124       |
| 143 | Multiphase Flow and Fluidization. By D. GIDASPOW. Academic Press, 1994. 467 pp. ISBN 0-12-282470-9<br>Journal of Fluid Mechanics, 1995, 287, 405-407.   | 3.4  | 0         |
| 144 | Turbulent gas-particle flow in vertical risers. AICHE Journal, 1994, 40, 215-228.   | 3.6  | 127       |

| #   | Article   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 145 | Liquid Distribution in Trickle Bed Reactors. Energy & Fuels, 1994, 8, 531-535.  | 5.1 | 10        |
| 146 | Structural Investigation and Energetics of Mullite Formation from Sol-Gel Precursors. Chemistry of Materials, 1994, 6, 160-170.   | 6.7 | 103       |
| 147 | Intercalation of Aliphatic Amines into the Layered Structure of Vanadyl(IV) Hydrogen Phosphate<br>Hemihydrate (VOHPO4.cntdot.0.5H2O). Chemistry of Materials, 1994, 6, 353-356. | 6.7 | 28        |
| 148 | Developing flow of a gas-particle mixture in a vertical riser. AICHE Journal, 1993, 39, 541-552.  | 3.6 | 75        |
| 149 | Gas-Particle flow in a duct of arbitrary inclination with particle-particle interactions. AICHE Journal, 1993, 39, 1261-1271.   | 3.6 | 98        |
| 150 | Infinite-wavelength analysis for two-phase flow: A three-parameter computer-assisted study of global<br>bifurcations. Physica D: Nonlinear Phenomena, 1992, 55, 197-220.        | 2.8 | 2         |
| 151 | Time-dependent vertical gas—liquid flow in packed beds. Chemical Engineering Science, 1992, 47, 337-346.  | 3.8 | 11        |
| 152 | Stability of periodic travelling waves in trickle beds. Chemical Engineering Science, 1992, 47, 3257-3264.  | 3.8 | 3         |
| 153 | Mullitization of Diphasic Aluminosilicate Gels. Journal of the American Ceramic Society, 1991, 74, 2388-2392.   | 3.8 | 123       |
| 154 | Gas-solid flow in vertical tubes. AICHE Journal, 1991, 37, 1009-1018.   | 3.6 | 123       |
| 155 | Effect of boundaries on trickle-bed hydrodynamics. AICHE Journal, 1991, 37, 1237-1241.  | 3.6 | 17        |
| 156 | Sintering with Rigid Inclusions: Pair Interactions. Journal of the American Ceramic Society, 1990, 73, 54-60.   | 3.8 | 31        |
| 157 | Dynamics of pulsing flow in trickle beds. AICHE Journal, 1990, 36, 605-621.   | 3.6 | 93        |
| 158 | Time dependent hydrodynamics in multiphase reactors. Chemical Engineering Science, 1990, 45, 2239-2246.   | 3.8 | 6         |
| 159 | Dynamics of packed-bed reactors loaded with oxide catalysts. AICHE Journal, 1989, 35, 746-754.  | 3.6 | 15        |
| 160 | A macroscopic model for countercurrent gas-liquid flow in packed columns. AICHE Journal, 1989, 35, 1282-1292.   | 3.6 | 20        |
| 161 | Oxygen transfer between rhodium and an oxygen-ion conducting support. AICHE Journal, 1988, 34, 1048-1050.   | 3.6 | 5         |
| 162 | Disproportionation of toluene over ZSM–5 under near-critical conditions. AICHE Journal, 1988, 34,<br>1211-1214.   | 3.6 | 47        |

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|-----|--|-----|-----------|
| 163 | Onset of pulsing in two-phase cocurrent downflow through a packed bed. AICHE Journal, 1988, 34, 1850-1860.   | 3.6 | 141       |
| 164 | Effect of water vapor on the activity and selectivity characteristics of a vanadium phosphate catalyst towards butane oxidation. Applied Catalysis, 1988, 41, 225-239. | 0.8 | 46        |
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