

Rodney Fox

List of Publications by Year in descending order

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231
papers

10,819
citations

36203

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91
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all docs

236
docs citations

236
times ranked

4353
citing authors

#	ARTICLE	IF	CITATIONS
1	An effectiveness factor model for slurry phase olefin polymerizations. <i>Chemical Engineering Science</i> , 2022, 251, 117429.	1.9	5
2	Hyperbolic Quadrature Method of Moments for the One-Dimensional Kinetic Equation. <i>SIAM Journal on Applied Mathematics</i> , 2022, 82, 750-771.	0.8	10
3	Solution of the first-order conditional moment closure for multiphase reacting flows using quadrature-based moment methods. <i>Chemical Engineering Journal</i> , 2021, 405, 127020.	6.6	2
4	Application of quadrature-based moment methods to the conditional moment closure. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 2749-2757.	2.4	2
5	CFD simulations of stirred-tank reactors for gas-liquid and gas-liquid-solid systems using OpenFOAM. <i>International Journal of Chemical Reactor Engineering</i> , 2021, 19, 193-207.	0.6	12
6	Statistics of velocity fluctuations in a homogeneous liquid fluidized bed. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	0
7	Sparse identification of multiphase turbulence closures for coupled fluid-particle flows. <i>Journal of Fluid Mechanics</i> , 2021, 914, .	1.4	36
8	A Lagrangian probability-density-function model for turbulent particle-laden channel flow in the dense regime. <i>Physics of Fluids</i> , 2021, 33, 053308.	1.6	4
9	The closure issue related to liquid-cell mass transfer and substrate uptake dynamics in biological systems. <i>Biotechnology and Bioengineering</i> , 2021, 118, 2435-2447.	1.7	1
10	Sparse identification of multiphase turbulence closures for coupled fluid-particle flows. CORRIGENDUM. <i>Journal of Fluid Mechanics</i> , 2021, 920, .	1.4	1
11	Coherent structure characteristics of the swirling flow during turbulent mixing in a multi-inlet vortex reactor. <i>Physics of Fluids</i> , 2021, 33, .	1.6	2
12	A quadrature-based moment method for the evolution of the joint size-velocity number density function of a particle population. <i>Computer Physics Communications</i> , 2021, 267, 108072.	3.0	3
13	Multiphase turbulence. , 2021, , 307-371.		3
14	A moment-based kinetic theory model for polydisperse gas-particle flows. <i>Powder Technology</i> , 2020, 365, 92-105.	2.1	12
15	A volume-filtered description of compressible particle-laden flows. <i>International Journal of Multiphase Flow</i> , 2020, 122, 103138.	1.6	61
16	A second-order realizable scheme for moment advection on unstructured grids. <i>Computer Physics Communications</i> , 2020, 248, 106993.	3.0	11
17	QBMMlib: A library of quadrature-based moment methods. <i>SoftwareX</i> , 2020, 12, 100615.	1.2	6
18	Effect of the conditional scalar dissipation rate in the conditional moment closure. <i>Physics of Fluids</i> , 2020, 32, .	1.6	2

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19	A hyperbolic two-fluid model for compressible flows with arbitrary material-density ratios. Journal of Fluid Mechanics, 2020, 903, .	1.4	16
20	A quadrature-based conditional moment closure for mixing-sensitive reactions. Chemical Engineering Science, 2020, 226, 115831.	1.9	2
21	Computational study of buoyancy driven turbulence in statistically homogeneous bubbly flows. Chemical Engineering Science, 2020, 216, 115546.	1.9	14
22	Direct comparison of Eulerian–Eulerian and Eulerian–Lagrangian simulations for particle-laden vertical channel flow. AIChE Journal, 2020, 66, e16230.	1.8	12
23	Reynolds-stress modeling of cluster-induced turbulence in particle-laden vertical channel flow. Physical Review Fluids, 2020, 5, .	1.0	15
24	Computational Study of the Effect of Homogeneous and Heterogeneous Bubbly Flows on Bulk Gas–Liquid Heat Transfer. Journal of Fluids Engineering, Transactions of the ASME, 2020, 142, 101402.	0.8	0
25	A delayed detached eddy simulation model with low Reynolds number correction for transitional swirling flow in a multi-inlet vortex nanoprecipitation reactor. Chemical Engineering Science, 2019, 193, 66-75.	1.9	11
26	A kinetic-based hyperbolic two-fluid model for binary hard-sphere mixtures. Journal of Fluid Mechanics, 2019, 877, 282-329.	1.4	23
27	Implementation of pseudo-turbulence closures in an Eulerian–Eulerian two-fluid model for non-isothermal gas–solid flow. Chemical Engineering Science, 2019, 207, 663-671.	1.9	19
28	A quadrature-based moment method for polydisperse bubbly flows. Computer Physics Communications, 2019, 244, 187-204.	3.0	19
29	A Lagrangian probability-density-function model for collisional turbulent fluid–particle flows. Journal of Fluid Mechanics, 2019, 862, 449-489.	1.4	14
30	Experimental characterization of turbulent mixing performance using simultaneous stereoscopic particle image velocimetry and planar laser-induced fluorescence. Experiments in Fluids, 2019, 60, 1.	1.1	12
31	A critical analysis of Powell’s results on the interdivision time distribution. Scientific Reports, 2019, 9, 8165.	1.6	2
32	Three-dimensional conditional hyperbolic quadrature method of moments. Journal of Computational Physics: X, 2019, 1, 100006.	1.1	12
33	Eulerian conditional statistics of turbulent flow in a macroscale multi-inlet vortex chemical reactor. Physics of Fluids, 2019, 31, 115106.	1.6	0
34	Effect of density ratio on velocity fluctuations in dispersed multiphase flow from simulations of finite-size particles. Acta Mechanica, 2019, 230, 469-484.	1.1	20
35	Fluctuations in inertial dense homogeneous suspensions. Physical Review Fluids, 2019, 4, .	1.0	5
36	A two-dimensional population balance model for cell growth including multiple uptake systems. Chemical Engineering Research and Design, 2018, 132, 966-981.	2.7	16

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37	On the hyperbolicity of the two-fluid model for gas-liquid bubbly flows. Applied Mathematical Modelling, 2018, 57, 432-447.	2.2	25
38	On the transition between turbulence regimes in particle-laden channel flows. Journal of Fluid Mechanics, 2018, 845, 499-519.	1.4	55
39	Conditional hyperbolic quadrature method of moments for kinetic equations. Journal of Computational Physics, 2018, 365, 269-293.	1.9	32
40	An open-source quadrature-based population balance solver for OpenFOAM. Chemical Engineering Science, 2018, 176, 306-318.	1.9	37
41	Quadrature-Based Moment Methods for Multiphase Chemically Reacting Flows. Advances in Chemical Engineering, 2018, 52, 1-50.	0.5	8
42	Eulerian-euler anisotropic gaussian mesoscale simulation of homogeneous cluster-induced gas-particle turbulence. AIChE Journal, 2017, 63, 2630-2643.	1.8	40
43	A solution algorithm for fluid-particle flows across all flow regimes. Journal of Computational Physics, 2017, 344, 575-594.	1.9	24
44	Verification of Eulerian-Eulerian and Eulerian-Lagrangian simulations for turbulent fluid-particle flows. AIChE Journal, 2017, 63, 5396-5412.	1.8	39
45	Application of the Fokker-Planck molecular mixing model to turbulent scalar mixing using moment methods. Physics of Fluids, 2017, 29, 065109.	1.6	14
46	Turbulent mixing in the confined swirling flow of a multi-inlet vortex reactor. AIChE Journal, 2017, 63, 2409-2419.	1.8	19
47	Modeling soot oxidation with the Extended Quadrature Method of Moments. Proceedings of the Combustion Institute, 2017, 36, 789-797.	2.4	28
48	Multivariate Gaussian Extended Quadrature Method of Moments for Turbulent Disperse Multiphase Flow. Multiscale Modeling and Simulation, 2017, 15, 1553-1583.	0.6	22
49	Reacting Flows and the Interaction between Turbulence and Chemistry. , 2016, , .		0
50	Dynamic delayed detached eddy simulation of a multi-inlet vortex reactor. AIChE Journal, 2016, 62, 2570-2578.	1.8	27
51	Strongly coupled fluid-particle flows in vertical channels. II. Turbulence modeling. Physics of Fluids, 2016, 28, .	1.6	27
52	Strongly coupled fluid-particle flows in vertical channels. I. Reynolds-averaged two-phase turbulence statistics. Physics of Fluids, 2016, 28, .	1.6	31
53	Solution of population balance equations in applications with fine particles: Mathematical modeling and numerical schemes. Journal of Computational Physics, 2016, 325, 129-156.	1.9	75
54	Effect of Domain Size on Fluid-Particle Statistics in Homogeneous, Gravity-Driven, Cluster-Induced Turbulence. Journal of Fluids Engineering, Transactions of the ASME, 2016, 138, .	0.8	23

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55	Modeling of Fine-Particle Formation in Turbulent Flames. Annual Review of Fluid Mechanics, 2016, 48, 159-190.	10.8	82
56	Turbulence in Multiphase Flows. , 2016, , 1-63.		0
57	On fluidâ€™particle dynamics in fully developed cluster-induced turbulence. Journal of Fluid Mechanics, 2015, 780, 578-635.	1.4	128
58	Filtration model for polydisperse aerosols in gasâ€™solid flow using granuleâ€™resolved direct numerical simulation. AIChE Journal, 2015, 61, 3594-3606.	1.8	7
59	A Batchelor Vortex Model for Mean Velocity of Turbulent Swirling Flow in a Macroscale Multi-Inlet Vortex Reactor. Journal of Fluids Engineering, Transactions of the ASME, 2015, 137, .	0.8	16
60	Flow Characteristics in a Scaled-up Multi-inlet Vortex Nanoprecipitation Reactor. Industrial & Engineering Chemistry Research, 2015, 54, 4512-4525.	1.8	32
61	Reduced Chemical Kinetics for the Modeling of TiO ₂ Nanoparticle Synthesis in Flame Reactors. Industrial & Engineering Chemistry Research, 2015, 54, 5407-5415.	1.8	9
62	Large eddy simulation of passive scalar transport in a high Schmidt number turbulent incompressible wake with experimental validation. Chemical Engineering Science, 2015, 137, 862-874.	1.9	5
63	Application of quadrature-based uncertainty quantification to the NETL small-scale challenge problem SSCP-I. Powder Technology, 2015, 272, 100-112.	2.1	10
64	Computational Modeling of Biomass Thermochemical Conversion in Fluidized Beds: Particle Density Variation and Size Distribution. Industrial & Engineering Chemistry Research, 2015, 54, 4084-4094.	1.8	34
65	EULERIAN MOMENT METHODS FOR AUTOMOTIVE SPRAYS. Atomization and Sprays, 2015, 25, 189-254.	0.3	13
66	Investigation of Turbulent Mixing in a Macro-Scale Multi-Inlet Vortex Nanoprecipitation Reactor by Stereoscopic-PIV. , 2014, , .		2
67	Towards Eulerian Modeling of a Polydisperse Evaporating Spray Under Realistic Internal-Combustion-Engine Conditions. Flow, Turbulence and Combustion, 2014, 93, 689-722.	1.4	9
68	Micromixing visualization and quantification in a microscale multi-inlet vortex nanoprecipitation reactor using confocal-based reactive micro laser-induced fluorescence. Biomicrofluidics, 2014, 8, 044102.	1.2	6
69	Numerical study of collisional particle dynamics in cluster-induced turbulence. Journal of Fluid Mechanics, 2014, 747, .	1.4	75
70	Effect of inlet conditions on the accuracy of large eddy simulations of a turbulent rectangular wake. Chemical Engineering Journal, 2014, 250, 175-189.	6.6	9
71	Reprint of: Multi-fluid CFD modeling of biomass gasification in polydisperse fluidized-bed gasifiers. Powder Technology, 2014, 265, 23-34.	2.1	14
72	Largeâ€™eddy simulation modeling of turbulent flame synthesis of titania nanoparticles using a bivariate particle description. AIChE Journal, 2014, 60, 459-472.	1.8	18

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73	Multi-fluid CFD modeling of biomass gasification in polydisperse fluidized-bed gasifiers. Powder Technology, 2014, 254, 187-198.	2.1	57
74	An extended quadrature-based mass-velocity moment model for polydisperse bubbly flows. Canadian Journal of Chemical Engineering, 2014, 92, 2053-2066.	0.9	19
75	Characterization of sheared colloidal aggregation using Langevin dynamics simulation. Physical Review E, 2014, 89, 062312.	0.8	17
76	On multiphase turbulence models for collisional fluid-particle flows. Journal of Fluid Mechanics, 2014, 742, 368-424.	1.4	162
77	Quadrature-Based Moment Methods for Polydisperse Multiphase Flows. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2014, , 87-136.	0.3	3
78	Numerical study of mixing and segregation in a biomass fluidized bed. Powder Technology, 2013, 237, 355-366.	2.1	38
79	Multivariate Quadrature-Based Moments Methods for turbulent polydisperse gas-liquid systems. International Journal of Multiphase Flow, 2013, 50, 41-57.	1.6	78
80	Realizable high-order finite-volume schemes for quadrature-based moment methods applied to diffusion population balance equations. Journal of Computational Physics, 2013, 249, 162-179.	1.9	27
81	Computational and experimental study of electrostatics in gas-solid polymerization fluidized beds. Chemical Engineering Science, 2013, 92, 146-156.	1.9	43
82	Radiation transport modeling using extended quadrature method of moments. Journal of Computational Physics, 2013, 246, 221-241.	1.9	25
83	Quantifying mixing in 3D binary particulate systems. Chemical Engineering Science, 2013, 93, 412-422.	1.9	4
84	On the role of gas-phase and surface chemistry in the production of titania nanoparticles in turbulent flames. Chemical Engineering Science, 2013, 104, 1003-1018.	1.9	23
85	Equilibrium-Eulerian LES Model for Turbulent Poly-dispersed Particle-laden Flow. International Journal of Nonlinear Sciences and Numerical Simulation, 2013, 14, 139-158.	0.4	3
86	Measurements of turbulence in a microscale multi-inlet vortex nanoprecipitation reactor. Journal of Micromechanics and Microengineering, 2013, 23, 075005.	1.5	23
87	Coarse-Graining Approach to Infer Mesoscale Interaction Potentials from Atomistic Interactions for Aggregating Systems. Industrial & Engineering Chemistry Research, 2012, 51, 16116-16134.	1.8	7
88	An extended quadrature method of moments for population balance equations. Journal of Aerosol Science, 2012, 51, 1-23.	1.8	174
89	Large-Eddy-Simulation Tools for Multiphase Flows. Annual Review of Fluid Mechanics, 2012, 44, 47-76.	10.8	185
90	Quadrature-based moment closures for non-equilibrium flows: Hard-sphere collisions and approach to equilibrium. Journal of Computational Physics, 2012, 231, 7431-7449.	1.9	9

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91	Turbulence measurements in a rectangular mesoscale confined impinging jets reactor. Experiments in Fluids, 2012, 53, 1929-1941.	1.1	5
92	Predictive capability of Large Eddy Simulation for point-wise and spatial turbulence statistics in a confined rectangular jet. Chemical Engineering Science, 2012, 69, 240-256.	1.9	8
93	Experimental validation and CFD modeling study of biomass fast pyrolysis in fluidized-bed reactors. Fuel, 2012, 97, 757-769.	3.4	143
94	Confocal imaging of laminar and turbulent mixing in a microscale multi-inlet vortex nanoprecipitation reactor. Applied Physics Letters, 2011, 99, 204103.	1.5	17
95	A Quadrature-Based Kinetic Model for Dilute Non-Isothermal Granular Flows. Communications in Computational Physics, 2011, 10, 216-252.	0.7	30
96	Conditional quadrature method of moments for kinetic equations. Journal of Computational Physics, 2011, 230, 8216-8246.	1.9	186
97	Implementation of an iterative solution procedure for multi-fluid gas-particle flow models on unstructured grids. Powder Technology, 2011, 213, 174-187.	2.1	78
98	On the apparent particle dispersion in granular media. Advanced Powder Technology, 2011, 22, 728-734.	2.0	3
99	Large-eddy-simulation-based multiscale modeling of TiO ₂ nanoparticle synthesis in a turbulent flame reactor using detailed nucleation chemistry. Chemical Engineering Science, 2011, 66, 4370-4381.	1.9	39
100	Population, characteristics and kinematics of vortices in a confined rectangular jet with a co-flow. Experiments in Fluids, 2011, 50, 1473-1493.	1.1	8
101	Realizable high-order finite-volume schemes for quadrature-based moment methods. Journal of Computational Physics, 2011, 230, 5328-5352.	1.9	88
102	Validation of LES predictions for turbulent flow in a Confined Impinging Jets Reactor. Applied Mathematical Modelling, 2011, 35, 1591-1602.	2.2	37
103	Advanced continuum modelling of gas-particle flows beyond the hydrodynamic limit. Applied Mathematical Modelling, 2011, 35, 1616-1627.	2.2	36
104	Investigation of the flow field in a three-dimensional Confined Impinging Jets Reactor by means of microPIV and DNS. Chemical Engineering Journal, 2011, 166, 294-305.	6.6	62
105	Modeling of bubble-column flows with quadrature-based moment methods. Chemical Engineering Science, 2011, 66, 3058-3070.	1.9	23
106	A CFD model for biomass fast pyrolysis in fluidized-bed reactors. Chemical Engineering Science, 2011, 66, 2440-2452.	1.9	175
107	A level set approach for dilute non-collisional fluid-particle flows. Journal of Computational Physics, 2011, 230, 920-936.	1.9	5
108	Visualization of turbulent reactive mixing in a planar microscale confined impinging-jet reactor. Journal of Micromechanics and Microengineering, 2011, 21, 115006.	1.5	8

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109	CFD Modeling of Electrostatic Forces in Gas-Solid Fluidized Beds. <i>Journal of Computational Multiphase Flows</i> , 2010, 2, 189-205.	0.8	14
110	Investigation of passive scalar mixing in a confined rectangular wake using simultaneous PIV and PLIF. <i>Chemical Engineering Science</i> , 2010, 65, 3372-3383.	1.9	13
111	Direct numerical simulation of gas-solid suspensions at moderate Reynolds number: Quantifying the coupling between hydrodynamic forces and particle velocity fluctuations. <i>Powder Technology</i> , 2010, 203, 57-69.	2.1	74
112	Computational fluid dynamics and electrostatic modeling of polymerization fluidized-bed reactors. <i>Powder Technology</i> , 2010, 203, 109-124.	2.1	103
113	Eulerian Quadrature-Based Moment Models for Dilute Polydisperse Evaporating Sprays. <i>Flow, Turbulence and Combustion</i> , 2010, 85, 649-676.	1.4	36
114	Experimental validation of CFD simulations of a lab-scale fluidized-bed reactor with and without side-gas injection. <i>AIChE Journal</i> , 2010, 56, 1434-1446.	1.8	63
115	A competitive aggregation model for Flash NanoPrecipitation. <i>Journal of Colloid and Interface Science</i> , 2010, 351, 330-342.	5.0	53
116	Coarse-grained computation for particle coagulation and sintering processes by linking Quadrature Method of Moments with Monte-Carlo. <i>Journal of Computational Physics</i> , 2010, 229, 5299-5314.	1.9	10
117	A fully coupled quadrature-based moment method for dilute to moderately dilute fluid-particle flows. <i>Chemical Engineering Science</i> , 2010, 65, 2267-2283.	1.9	65
118	Turbulent precipitation in micromixers: CFD simulation and flow field validation. <i>Chemical Engineering Research and Design</i> , 2010, 88, 1182-1193.	2.7	39
119	Quadrature-Based Moment Model for Moderately Dense Polydisperse Gas-Particle Flows. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 5174-5187.	1.8	44
120	Theoretical Study of the Pyrolysis of Methyltrichlorosilane in the Gas Phase. 3. Reaction Rate Constant Calculations. <i>Journal of Physical Chemistry A</i> , 2010, 114, 2384-2392.	1.1	60
121	Kinetic Modeling of Nanoprecipitation using CFD Coupled with a Population Balance. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 10651-10662.	1.8	57
122	Multiscale Modeling of TiO ₂ Nanoparticle Production in Flame Reactors: Effect of Chemical Mechanism. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 10663-10673.	1.8	30
123	Development of High-Order Realizable Finite-Volume Schemes for Quadrature-Based Moment Method. , 2010, , .		6
124	Higher-order quadrature-based moment methods for kinetic equations. <i>Journal of Computational Physics</i> , 2009, 228, 7771-7791.	1.9	66
125	Eulerian models for turbulent spray combustion with polydispersity and droplet crossing. <i>Comptes Rendus - Mecanique</i> , 2009, 337, 438-448.	2.1	38
126	Optimal Moment Sets for Multivariate Direct Quadrature Method of Moments. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 9686-9696.	1.8	48

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127	A microscale multi-inlet vortex nanoprecipitation reactor: Turbulence measurement and simulation. Applied Physics Letters, 2009, 94, 204104.	1.5	51
128	Validation of Two-Fluid Simulations of a Pseudo-Two-Dimensional Bubble Column with Uniform and Nonuniform Aeration. Industrial & Engineering Chemistry Research, 2009, 48, 8134-8147.	1.8	9
129	Turbulence in a microscale planar confined impinging-jets reactor. Lab on A Chip, 2009, 9, 1110.	3.1	45
130	Segregation in polydisperse fluidized beds: Validation of a multi-fluid model. Chemical Engineering Science, 2008, 63, 272-285.	1.9	125
131	A quadrature-based third-order moment method for dilute gas-particle flows. Journal of Computational Physics, 2008, 227, 6313-6350.	1.9	118
132	Large eddy simulations of incompressible turbulent flows using parallel computing techniques. International Journal for Numerical Methods in Fluids, 2008, 56, 1819-1843.	0.9	8
133	A quadrature-based moment method for dilute fluid-particle flows. Journal of Computational Physics, 2008, 227, 2514-2539.	1.9	140
134	Numerical simulation of spray coalescence in an Eulerian framework: Direct quadrature method of moments and multi-fluid method. Journal of Computational Physics, 2008, 227, 3058-3088.	1.9	116
135	Mixing in a multi-inlet vortex mixer (MIVM) for flash nano-precipitation. Chemical Engineering Science, 2008, 63, 2829-2842.	1.9	319
136	On Brownian Dynamics Simulation of Nanoparticle Aggregation. Industrial & Engineering Chemistry Research, 2008, 47, 3338-3345.	1.8	19
137	Conditional statistics of passive-scalar mixing in a confined wake flow. Physics of Fluids, 2008, 20, 077105.	1.6	3
138	A term-by-term direct numerical simulation validation study of the multi-environment conditional probability-density-function model for turbulent reacting flows. Physics of Fluids, 2007, 19, 085102.	1.6	7
139	Conditional statistics for passive-scalar mixing in a confined rectangular turbulent jet. Physics of Fluids, 2007, 19, 055104.	1.6	7
140	Theoretical Study of the Pyrolysis of Methyltrichlorosilane in the Gas Phase. 2. Reaction Paths and Transition States. Journal of Physical Chemistry A, 2007, 111, 1475-1486.	1.1	46
141	Introduction and Fundamentals of Modeling Approaches for Polydisperse Multiphase Flows. , 2007, , 1-40.		11
142	Theoretical Study of the Pyrolysis of Methyltrichlorosilane in the Gas Phase. 1. Thermodynamics. Journal of Physical Chemistry A, 2007, 111, 1462-1474.	1.1	43
143	Effect of model formulation on flow-regime predictions for bubble columns. AIChE Journal, 2007, 53, 9-18.	1.8	19
144	Numerical study on the turbulent reacting flow in the vicinity of the injector of an LDPE tubular reactor. Chemical Engineering Science, 2007, 62, 2435-2444.	1.9	9

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145	A quadrature closure for the reaction-source term in conditional-moment closure. Proceedings of the Combustion Institute, 2007, 31, 1675-1682.	2.4	8
146	Population balance modeling of aggregation and breakage in turbulent Taylor-Couette flow. Journal of Colloid and Interface Science, 2007, 307, 433-446.	5.0	44
147	Multi-environment probability density function method for modelling turbulent combustion using realistic chemical kinetics. Combustion Theory and Modelling, 2007, 11, 889-907.	1.0	49
148	Simultaneous velocity and concentration field measurements of passive-scalar mixing in a confined rectangular jet. Experiments in Fluids, 2007, 42, 847-862.	1.1	35
149	Linear stability analysis of a two-fluid model for air-water bubble columns. Chemical Engineering Science, 2007, 62, 3159-3177.	1.9	51
150	CFD Models for Analysis and Design of Chemical Reactors. Advances in Chemical Engineering, 2006, 31, 231-305.	0.5	32
151	Bivariate direct quadrature method of moments for coagulation and sintering of particle populations. Journal of Aerosol Science, 2006, 37, 1562-1580.	1.8	51
152	Momentum Transfer Between Polydisperse Particles in Dense Granular Flow. Journal of Fluids Engineering, Transactions of the ASME, 2006, 128, 62-68.	0.8	9
153	Implementation of the population balance equation in CFD codes for modelling soot formation in turbulent flames. Chemical Engineering Science, 2006, 61, 87-95.	1.9	107
154	Turbulent mixing in a confined rectangular wake. Chemical Engineering Science, 2006, 61, 6946-6962.	1.9	27
155	Simulations of mixing for a confined co-flowing planar jet. Computers and Fluids, 2006, 35, 1228-1238.	1.3	4
156	Destructive aggregation: Aggregation with collision-induced breakage. Journal of Colloid and Interface Science, 2006, 302, 149-158.	5.0	25
157	CFD predictions for chemical processing in a confined impinging-jets reactor. AIChE Journal, 2006, 52, 731-744.	1.8	177
158	Eulerian transported probability density function sub-filter model for large-eddy simulations of turbulent combustion. Combustion Theory and Modelling, 2006, 10, 439-458.	1.0	65
159	Wavelet-based Spatiotemporal Multiscaling in Diffusion Problems with Chemically Reactive Boundary. International Journal for Multiscale Computational Engineering, 2006, 4, 755-770.	0.8	13
160	Conditional Statistics for Passive-Scalar Mixing in Confined Turbulent Shear Flows. , 2006, , .		0
161	CFD simulation of aggregation and breakage processes in laminar Taylor-Couette flow. Journal of Colloid and Interface Science, 2005, 282, 380-396.	5.0	85
162	CFD simulation of shear-induced aggregation and breakage in turbulent Taylor-Couette flow. Journal of Colloid and Interface Science, 2005, 285, 167-178.	5.0	49

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163	Hybrid large-eddy simulation/Lagrangian filtered-density-function approach for simulating turbulent combustion. <i>Combustion and Flame</i> , 2005, 143, 56-78.	2.8	163
164	PDF simulations of ethylene decomposition in tubular LDPE reactors. <i>AIChE Journal</i> , 2005, 51, 585-606.	1.8	32
165	CFD predictions for flow-regime transitions in bubble columns. <i>AIChE Journal</i> , 2005, 51, 1897-1923.	1.8	101
166	Investigation of turbulent mixing in a confined planar-jet reactor. <i>AIChE Journal</i> , 2005, 51, 2649-2664.	1.8	64
167	Objective decomposition of the stress tensor in granular flows. <i>Physical Review E</i> , 2005, 71, 021302.	0.8	19
168	Solution of population balance equations using the direct quadrature method of moments. <i>Journal of Aerosol Science</i> , 2005, 36, 43-73.	1.8	654
169	On the Comparison between Population Balance Models for CFD Simulation of Bubble Columns. <i>Industrial & Engineering Chemistry Research</i> , 2005, 44, 5063-5072.	1.8	120
170	A multienvironment conditional probability density function model for turbulent reacting flows. <i>Physics of Fluids</i> , 2004, 16, 4551-4565.	1.6	25
171	Application of the direct quadrature method of moments to polydisperse gas-solid fluidized beds. <i>Powder Technology</i> , 2004, 139, 7-20.	2.1	245
172	Scale up of gas-phase chlorination reactors using CFD. <i>Chemical Engineering Science</i> , 2004, 59, 5167-5176.	1.9	5
173	Comparison of micromixing models for CFD simulation of nanoparticle formation. <i>AIChE Journal</i> , 2004, 50, 2217-2232.	1.8	69
174	Hybrid finite-volume/transported PDF simulations of a partially premixed methane-air flame. <i>Combustion and Flame</i> , 2004, 136, 327-350.	2.8	77
175	Simulations of multiphase reactive flows in fluidized beds using in situ adaptive tabulation. <i>Combustion Theory and Modelling</i> , 2004, 8, 195-209.	1.0	26
176	Dynamics of scalar dissipation in isotropic turbulence: a numerical and modelling study. <i>Journal of Fluid Mechanics</i> , 2004, 503, 377-377.	1.4	1
177	Treatment of Fast Chemistry in FDF/LES: In Situ Adaptive Tabulation. , 2004, , .		0
178	Momentum Transfer Between Polydisperse Particles in Granular Flow. , 2004, , .		0
179	Quadrature method of moments for population-balance equations. <i>AIChE Journal</i> , 2003, 49, 1266-1276.	1.8	355
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