

Rodney Fox

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

228 papers	8,912 citations	48 h-index	86 g-index
236 ext. papers	9,882 ext. citations	4.1 avg, IF	6.71 L-index

#	Paper	IF	Citations
228	An effectiveness factor model for slurry phase olefin polymerizations. <i>Chemical Engineering Science</i> , 2022 , 251, 117429	4.4	1
227	Hyperbolic Quadrature Method of Moments for the One-Dimensional Kinetic Equation. <i>SIAM Journal on Applied Mathematics</i> , 2022 , 82, 750-771	1.8	1
226	Sparse identification of multiphase turbulence closures for coupled fluid-particle flows. <i>Journal of Fluid Mechanics</i> , 2021 , 914,	3.7	15
225	A Lagrangian probability-density-function model for turbulent particle-laden channel flow in the dense regime. <i>Physics of Fluids</i> , 2021 , 33, 053308	4.4	1
224	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	4.9	
223	Sparse identification of multiphase turbulence closures for coupled fluid-particle flows □ CORRIGENDUM. <i>Journal of Fluid Mechanics</i> , 2021 , 920,	3.7	1
222	Coherent structure characteristics of the swirling flow during turbulent mixing in a multi-inlet vortex reactor. <i>Physics of Fluids</i> , 2021 , 33, 065119	4.4	0
221	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	14.7	1
220	Application of quadrature-based moment methods to the conditional moment closure. <i>Proceedings of the Combustion Institute</i> , 2021 , 38, 2749-2757	5.9	1
219	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	1.2	3
218	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	4.2	1
217	Multiphase turbulence 2021 , 307-371		
216	A quadrature-based conditional moment closure for mixing-sensitive reactions. <i>Chemical Engineering Science</i> , 2020 , 226, 115831	4.4	2
215	Computational study of buoyancy driven turbulence in statistically homogeneous bubbly flows. <i>Chemical Engineering Science</i> , 2020 , 216, 115546	4.4	7
214	Direct comparison of Eulerian-Eulerian and Eulerian-Lagrangian simulations for particle-laden vertical channel flow. <i>AIChE Journal</i> , 2020 , 66, e16230	3.6	5
213	Reynolds-stress modeling of cluster-induced turbulence in particle-laden vertical channel flow. <i>Physical Review Fluids</i> , 2020 , 5,	2.8	4
212	Computational Study of the Effect of Homogeneous and Heterogeneous Bubbly Flows on Bulk Gas-Liquid Heat Transfer. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2020 , 142, 101402	2.1	

211	A second-order realizable scheme for moment advection on unstructured grids. <i>Computer Physics Communications</i> , 2020 , 248, 106993	4.2	7
210	QBMLlib: A library of quadrature-based moment methods. <i>SoftwareX</i> , 2020 , 12, 100615	2.7	0
209	Effect of the conditional scalar dissipation rate in the conditional moment closure. <i>Physics of Fluids</i> , 2020 , 32, 115118	4.4	0
208	A hyperbolic two-fluid model for compressible flows with arbitrary material-density ratios. <i>Journal of Fluid Mechanics</i> , 2020 , 903,	3.7	4
207	A moment-based kinetic theory model for polydisperse gas-particle flows. <i>Powder Technology</i> , 2020 , 365, 92-105	5.2	6
206	A volume-filtered description of compressible particle-laden flows. <i>International Journal of Multiphase Flow</i> , 2020 , 122, 103138	3.6	30
205	A Lagrangian probability-density-function model for collisional turbulent fluid-particle flows. <i>Journal of Fluid Mechanics</i> , 2019 , 862, 449-489	3.7	9
204	Experimental characterization of turbulent mixing performance using simultaneous stereoscopic particle image velocimetry and planar laser-induced fluorescence. <i>Experiments in Fluids</i> , 2019 , 60, 1	2.5	8
203	A critical analysis of Powell's results on the interdivision time distribution. <i>Scientific Reports</i> , 2019 , 9, 8165	4.9	1
202	Three-dimensional conditional hyperbolic quadrature method of moments. <i>Journal of Computational Physics: X</i> , 2019 , 1, 100006	1	5
201	A delayed detached eddy simulation model with low Reynolds number correction for transitional swirling flow in a multi-inlet vortex nanoprecipitation reactor. <i>Chemical Engineering Science</i> , 2019 , 193, 66-75	4.4	7
200	A kinetic-based hyperbolic two-fluid model for binary hard-sphere mixtures. <i>Journal of Fluid Mechanics</i> , 2019 , 877, 282-329	3.7	8
199	Implementation of pseudo-turbulence closures in an Eulerian-Eulerian two-fluid model for non-isothermal gas-solid flow. <i>Chemical Engineering Science</i> , 2019 , 207, 663-671	4.4	11
198	A quadrature-based moment method for polydisperse bubbly flows. <i>Computer Physics Communications</i> , 2019 , 244, 187-204	4.2	12
197	Fluctuations in inertial dense homogeneous suspensions. <i>Physical Review Fluids</i> , 2019 , 4,	2.8	3
196	Eulerian conditional statistics of turbulent flow in a macroscale multi-inlet vortex chemical reactor. <i>Physics of Fluids</i> , 2019 , 31, 115106	4.4	
195	Effect of density ratio on velocity fluctuations in dispersed multiphase flow from simulations of finite-size particles. <i>Acta Mechanica</i> , 2019 , 230, 469-484	2.1	13
194	A two-dimensional population balance model for cell growth including multiple uptake systems. <i>Chemical Engineering Research and Design</i> , 2018 , 132, 966-981	5.5	9

193	On the hyperbolicity of the two-fluid model for gas-liquid bubbly flows. <i>Applied Mathematical Modelling</i> , 2018 , 57, 432-447	4.5	19
192	On the transition between turbulence regimes in particle-laden channel flows. <i>Journal of Fluid Mechanics</i> , 2018 , 845, 499-519	3.7	35
191	Conditional hyperbolic quadrature method of moments for kinetic equations. <i>Journal of Computational Physics</i> , 2018 , 365, 269-293	4.1	17
190	An open-source quadrature-based population balance solver for OpenFOAM. <i>Chemical Engineering Science</i> , 2018 , 176, 306-318	4.4	25
189	Quadrature-Based Moment Methods for Multiphase Chemically Reacting Flows. <i>Advances in Chemical Engineering</i> , 2018 , 52, 1-50	0.6	6
188	Euler-Euler anisotropic gaussian mesoscale simulation of homogeneous cluster-induced gas-particle turbulence. <i>AIChE Journal</i> , 2017 , 63, 2630-2643	3.6	36
187	A solution algorithm for fluid-particle flows across all flow regimes. <i>Journal of Computational Physics</i> , 2017 , 344, 575-594	4.1	23
186	Verification of Eulerian-Eulerian and Eulerian-Lagrangian simulations for turbulent fluid-particle flows. <i>AIChE Journal</i> , 2017 , 63, 5396-5412	3.6	30
185	Application of the Fokker-Planck molecular mixing model to turbulent scalar mixing using moment methods. <i>Physics of Fluids</i> , 2017 , 29, 065109	4.4	11
184	Turbulent mixing in the confined swirling flow of a multi-inlet vortex reactor. <i>AIChE Journal</i> , 2017 , 63, 2409-2419	3.6	16
183	Modeling soot oxidation with the Extended Quadrature Method of Moments. <i>Proceedings of the Combustion Institute</i> , 2017 , 36, 789-797	5.9	21
182	Multivariate Gaussian Extended Quadrature Method of Moments for Turbulent Disperse Multiphase Flow. <i>Multiscale Modeling and Simulation</i> , 2017 , 15, 1553-1583	1.8	16
181	Modeling of Fine-Particle Formation in Turbulent Flames. <i>Annual Review of Fluid Mechanics</i> , 2016 , 48, 159-190	2.2	64
180	Solution of population balance equations in applications with fine particles: Mathematical modeling and numerical schemes. <i>Journal of Computational Physics</i> , 2016 , 325, 129-156	4.1	54
179	Effect of Domain Size on Fluid-Particle Statistics in Homogeneous, Gravity-Driven, Cluster-Induced Turbulence. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2016 , 138,	2.1	17
178	Turbulence in Multiphase Flows 2016 , 1-63		
177	Dynamic delayed detached eddy simulation of a multi-inlet vortex reactor. <i>AIChE Journal</i> , 2016 , 62, 2570-2578	3.5	17
176	Strongly coupled fluid-particle flows in vertical channels. II. Turbulence modeling. <i>Physics of Fluids</i> , 2016 , 28, 033307	4.4	21

175	Strongly coupled fluid-particle flows in vertical channels. I. Reynolds-averaged two-phase turbulence statistics. <i>Physics of Fluids</i> , 2016 , 28, 033306	4.4	23
174	Reduced Chemical Kinetics for the Modeling of TiO ₂ Nanoparticle Synthesis in Flame Reactors. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 5407-5415	3.9	8
173	Large eddy simulation of passive scalar transport in a high Schmidt number turbulent incompressible wake with experimental validation. <i>Chemical Engineering Science</i> , 2015 , 137, 862-874	4.4	5
172	Application of quadrature-based uncertainty quantification to the NETL small-scale challenge problem SSCP-I. <i>Powder Technology</i> , 2015 , 272, 100-112	5.2	9
171	Computational Modeling of Biomass Thermochemical Conversion in Fluidized Beds: Particle Density Variation and Size Distribution. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 4084-4094	3.9	28
170	On fluid-particle dynamics in fully developed cluster-induced turbulence. <i>Journal of Fluid Mechanics</i> , 2015 , 780, 578-635	3.7	98
169	Filtration model for polydisperse aerosols in gas-solid flow using granule-resolved direct numerical simulation. <i>AIChE Journal</i> , 2015 , 61, 3594-3606	3.6	7
168	A Batchelor Vortex Model for Mean Velocity of Turbulent Swirling Flow in a Macroscale Multi-Inlet Vortex Reactor. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2015 , 137,	2.1	11
167	Flow Characteristics in a Scaled-up Multi-inlet Vortex Nanoprecipitation Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 4512-4525	3.9	25
166	EULERIAN MOMENT METHODS FOR AUTOMOTIVE SPRAYS. <i>Atomization and Sprays</i> , 2015 , 25, 189-254	1.2	10
165	Large-eddy simulation modeling of turbulent flame synthesis of titania nanoparticles using a bivariate particle description. <i>AIChE Journal</i> , 2014 , 60, 459-472	3.6	13
164	Multi-fluid CFD modeling of biomass gasification in polydisperse fluidized-bed gasifiers. <i>Powder Technology</i> , 2014 , 254, 187-198	5.2	45
163	An extended quadrature-based mass-velocity moment model for polydisperse bubbly flows. <i>Canadian Journal of Chemical Engineering</i> , 2014 , 92, 2053-2066	2.3	19
162	Characterization of sheared colloidal aggregation using Langevin dynamics simulation. <i>Physical Review E</i> , 2014 , 89, 062312	2.4	14
161	On multiphase turbulence models for collisional fluid-particle flows. <i>Journal of Fluid Mechanics</i> , 2014 , 742, 368-424	3.7	121
160	Investigation of Turbulent Mixing in a Macro-Scale Multi-Inlet Vortex Nanoprecipitation Reactor by Stereoscopic-PIV 2014 ,		1
159	Towards Eulerian Modeling of a Polydisperse Evaporating Spray Under Realistic Internal-Combustion-Engine Conditions. <i>Flow, Turbulence and Combustion</i> , 2014 , 93, 689-722	2.5	8
158	Micromixing visualization and quantification in a microscale multi-inlet vortex nanoprecipitation reactor using confocal-based reactive micro laser-induced fluorescence. <i>Biomicrofluidics</i> , 2014 , 8, 044102	3.2	5

157	Numerical study of collisional particle dynamics in cluster-induced turbulence. <i>Journal of Fluid Mechanics</i> , 2014 , 747,	3.7	61
156	Effect of inlet conditions on the accuracy of large eddy simulations of a turbulent rectangular wake. <i>Chemical Engineering Journal</i> , 2014 , 250, 175-189	14.7	8
155	Reprint of: Multi-fluid CFD modeling of biomass gasification in polydisperse fluidized-bed gasifiers. <i>Powder Technology</i> , 2014 , 265, 23-34	5.2	12
154	Quadrature-Based Moment Methods for Polydisperse Multiphase Flows. <i>CISM International Centre for Mechanical Sciences, Courses and Lectures</i> , 2014 , 87-136	0.6	3
153	Computational Models for Polydisperse Particulate and Multiphase Systems 2013 ,		134
152	Numerical study of mixing and segregation in a biomass fluidized bed. <i>Powder Technology</i> , 2013 , 237, 355-366	5.2	26
151	Multivariate Quadrature-Based Moments Methods for turbulent polydisperse gas-liquid systems. <i>International Journal of Multiphase Flow</i> , 2013 , 50, 41-57	3.6	72
150	Realizable high-order finite-volume schemes for quadrature-based moment methods applied to diffusion population balance equations. <i>Journal of Computational Physics</i> , 2013 , 249, 162-179	4.1	24
149	Computational and experimental study of electrostatics in gas-solid polymerization fluidized beds. <i>Chemical Engineering Science</i> , 2013 , 92, 146-156	4.4	38
148	Radiation transport modeling using extended quadrature method of moments. <i>Journal of Computational Physics</i> , 2013 , 246, 221-241	4.1	24
147	Quantifying mixing in 3D binary particulate systems. <i>Chemical Engineering Science</i> , 2013 , 93, 412-422	4.4	2
146	On the role of gas-phase and surface chemistry in the production of titania nanoparticles in turbulent flames. <i>Chemical Engineering Science</i> , 2013 , 104, 1003-1018	4.4	21
145	Equilibrium-Eulerian LES Model for Turbulent Poly-dispersed Particle-laden Flow. <i>International Journal of Nonlinear Sciences and Numerical Simulation</i> , 2013 , 14,	1.8	2
144	Measurements of turbulence in a microscale multi-inlet vortex nanoprecipitation reactor. <i>Journal of Micromechanics and Microengineering</i> , 2013 , 23, 075005	2	18
143	Coarse-Graining Approach to Infer Mesoscale Interaction Potentials from Atomistic Interactions for Aggregating Systems. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 16116-16134	3.9	6
142	An extended quadrature method of moments for population balance equations. <i>Journal of Aerosol Science</i> , 2012 , 51, 1-23	4.3	131
141	Large-Eddy-Simulation Tools for Multiphase Flows. <i>Annual Review of Fluid Mechanics</i> , 2012 , 44, 47-76	22	148
140	Quadrature-based moment closures for non-equilibrium flows: Hard-sphere collisions and approach to equilibrium. <i>Journal of Computational Physics</i> , 2012 , 231, 7431-7449	4.1	7

139	Simulation of Mono- and Bidisperse Gas-Particle Flow in a Riser with a Third-Order Quadrature-Based Moment Method. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 1209131450380004 ²		
138	Turbulence measurements in a rectangular mesoscale confined impinging jets reactor. <i>Experiments in Fluids</i> , 2012 , 53, 1929-1941	2.5	5
137	Predictive capability of Large Eddy Simulation for point-wise and spatial turbulence statistics in a confined rectangular jet. <i>Chemical Engineering Science</i> , 2012 , 69, 240-256	4.4	8
136	Experimental validation and CFD modeling study of biomass fast pyrolysis in fluidized-bed reactors. <i>Fuel</i> , 2012 , 97, 757-769	7.1	117
135	A Quadrature-Based Kinetic Model for Dilute Non-Isothermal Granular Flows. <i>Communications in Computational Physics</i> , 2011 , 10, 216-252	2.4	24
134	Conditional quadrature method of moments for kinetic equations. <i>Journal of Computational Physics</i> , 2011 , 230, 8216-8246	4.1	153
133	Implementation of an iterative solution procedure for multi-fluid gas-particle flow models on unstructured grids. <i>Powder Technology</i> , 2011 , 213, 174-187	5.2	68
132	On the apparent particle dispersion in granular media. <i>Advanced Powder Technology</i> , 2011 , 22, 728-734	4.6	3
131	Large-eddy-simulation-based multiscale modeling of TiO ₂ nanoparticle synthesis in a turbulent flame reactor using detailed nucleation chemistry. <i>Chemical Engineering Science</i> , 2011 , 66, 4370-4381	4.4	32
130	Population, characteristics and kinematics of vortices in a confined rectangular jet with a co-flow. <i>Experiments in Fluids</i> , 2011 , 50, 1473-1493	2.5	7
129	Realizable high-order finite-volume schemes for quadrature-based moment methods. <i>Journal of Computational Physics</i> , 2011 , 230, 5328-5352	4.1	70
128	Validation of LES predictions for turbulent flow in a Confined Impinging Jets Reactor. <i>Applied Mathematical Modelling</i> , 2011 , 35, 1591-1602	4.5	32
127	Advanced continuum modelling of gas-particle flows beyond the hydrodynamic limit. <i>Applied Mathematical Modelling</i> , 2011 , 35, 1616-1627	4.5	31
126	Investigation of the flow field in a three-dimensional Confined Impinging Jets Reactor by means of microPIV and DNS. <i>Chemical Engineering Journal</i> , 2011 , 166, 294-305	14.7	52
125	Modeling of bubble-column flows with quadrature-based moment methods. <i>Chemical Engineering Science</i> , 2011 , 66, 3058-3070	4.4	19
124	A CFD model for biomass fast pyrolysis in fluidized-bed reactors. <i>Chemical Engineering Science</i> , 2011 , 66, 2440-2452	4.4	151
123	Confocal imaging of laminar and turbulent mixing in a microscale multi-inlet vortex nanoprecipitation reactor. <i>Applied Physics Letters</i> , 2011 , 99, 204103	3.4	15
122	A level set approach for dilute non-collisional fluid-particle flows. <i>Journal of Computational Physics</i> , 2011 , 230, 920-936	4.1	5

121	Visualization of turbulent reactive mixing in a planar microscale confined impinging-jet reactor. <i>Journal of Micromechanics and Microengineering</i> , 2011 , 21, 115006	2	8
120	Quadrature-Based Moment Model for Moderately Dense Polydisperse Gas-Particle Flows. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 5174-5187	3.9	34
119	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, 2384-92	2.8	47
118	Kinetic Modeling of Nanoprecipitation using CFD Coupled with a Population Balance. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 10651-10662	3.9	49
117	Multiscale Modeling of TiO ₂ Nanoparticle Production in Flame Reactors: Effect of Chemical Mechanism. <i>Industrial & Engineering Chemistry Research</i> , 2010 , 49, 10663-10673	3.9	27
116	Development of High-Order Realizable Finite-Volume Schemes for Quadrature-Based Moment Method 2010 ,		4
115	CFD Modeling of Electrostatic Forces in Gas-Solid Fluidized Beds. <i>Journal of Computational Multiphase Flows</i> , 2010 , 2, 189-205		14
114	Investigation of passive scalar mixing in a confined rectangular wake using simultaneous PIV and PLIF. <i>Chemical Engineering Science</i> , 2010 , 65, 3372-3383	4.4	12
113	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	5.2	60
112	Computational fluid dynamics and electrostatic modeling of polymerization fluidized-bed reactors. <i>Powder Technology</i> , 2010 , 203, 109-124	5.2	91
111	Eulerian Quadrature-Based Moment Models for Dilute Polydisperse Evaporating Sprays. <i>Flow, Turbulence and Combustion</i> , 2010 , 85, 649-676	2.5	33
110	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	3.6	56
109	A competitive aggregation model for flash nanoprecipitation. <i>Journal of Colloid and Interface Science</i> , 2010 , 351, 330-42	9.3	47
108	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	4.1	9
107	A fully coupled quadrature-based moment method for dilute to moderately dilute fluid-particle flows. <i>Chemical Engineering Science</i> , 2010 , 65, 2267-2283	4.4	55
106	Turbulent precipitation in micromixers: CFD simulation and flow field validation. <i>Chemical Engineering Research and Design</i> , 2010 , 88, 1182-1193	5.5	34
105	Higher-order quadrature-based moment methods for kinetic equations. <i>Journal of Computational Physics</i> , 2009 , 228, 7771-7791	4.1	53
104	Eulerian models for turbulent spray combustion with polydispersity and droplet crossing. <i>Comptes Rendus - Mecanique</i> , 2009 , 337, 438-448	2.1	32

103	Optimal Moment Sets for Multivariate Direct Quadrature Method of Moments. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 9686-9696	3.9	44
102	A microscale multi-inlet vortex nanoprecipitation reactor: Turbulence measurement and simulation. <i>Applied Physics Letters</i> , 2009 , 94, 204104	3.4	40
101	Validation of Two-Fluid Simulations of a Pseudo-Two-Dimensional Bubble Column with Uniform and Nonuniform Aeration. <i>Industrial & Engineering Chemistry Research</i> , 2009 , 48, 8134-8147	3.9	8
100	Turbulence in a microscale planar confined impinging-jets reactor. <i>Lab on A Chip</i> , 2009 , 9, 1110-8	7.2	34
99	On Brownian Dynamics Simulation of Nanoparticle Aggregation. <i>Industrial & Engineering Chemistry Research</i> , 2008 , 47, 3338-3345	3.9	17
98	Conditional statistics of passive-scalar mixing in a confined wake flow. <i>Physics of Fluids</i> , 2008 , 20, 077105	4.4	3
97	Segregation in polydisperse fluidized beds: Validation of a multi-fluid model. <i>Chemical Engineering Science</i> , 2008 , 63, 272-285	4.4	107
96	A quadrature-based third-order moment method for dilute gas-particle flows. <i>Journal of Computational Physics</i> , 2008 , 227, 6313-6350	4.1	98
95	Large eddy simulations of incompressible turbulent flows using parallel computing techniques. <i>International Journal for Numerical Methods in Fluids</i> , 2008 , 56, 1819-1843	1.9	7
94	A quadrature-based moment method for dilute fluid-particle flows. <i>Journal of Computational Physics</i> , 2008 , 227, 2514-2539	4.1	114
93	Numerical simulation of spray coalescence in an Eulerian framework: Direct quadrature method of moments and multi-fluid method. <i>Journal of Computational Physics</i> , 2008 , 227, 3058-3088	4.1	101
92	Mixing in a multi-inlet vortex mixer (MIVM) for flash nano-precipitation. <i>Chemical Engineering Science</i> , 2008 , 63, 2829-2842	4.4	260
91	Theoretical study of the pyrolysis of methyltrichlorosilane in the gas phase. 1. Thermodynamics. <i>Journal of Physical Chemistry A</i> , 2007 , 111, 1462-74	2.8	36
90	Effect of model formulation on flow-regime predictions for bubble columns. <i>AIChE Journal</i> , 2007 , 53, 9-18	3.6	18
89	Numerical study on the turbulent reacting flow in the vicinity of the injector of an LDPE tubular reactor. <i>Chemical Engineering Science</i> , 2007 , 62, 2435-2444	4.4	6
88	A quadrature closure for the reaction-source term in conditional-moment closure. <i>Proceedings of the Combustion Institute</i> , 2007 , 31, 1675-1682	5.9	6
87	Population balance modeling of aggregation and breakage in turbulent Taylor-Couette flow. <i>Journal of Colloid and Interface Science</i> , 2007 , 307, 433-46	9.3	33
86	Multi-environment probability density function method for modelling turbulent combustion using realistic chemical kinetics. <i>Combustion Theory and Modelling</i> , 2007 , 11, 889-907	1.5	44

85	Simultaneous velocity and concentration field measurements of passive-scalar mixing in a confined rectangular jet. <i>Experiments in Fluids</i> , 2007 , 42, 847-862	2.5	29
84	Linear stability analysis of a two-fluid model for air-water bubble columns. <i>Chemical Engineering Science</i> , 2007 , 62, 3159-3177	4.4	47
83	A term-by-term direct numerical simulation validation study of the multi-environment conditional probability-density-function model for turbulent reacting flows. <i>Physics of Fluids</i> , 2007 , 19, 085102	4.4	6
82	Conditional statistics for passive-scalar mixing in a confined rectangular turbulent jet. <i>Physics of Fluids</i> , 2007 , 19, 055104	4.4	7
81	Theoretical study of the pyrolysis of methyltrichlorosilane in the gas phase. 2. Reaction paths and transition states. <i>Journal of Physical Chemistry A</i> , 2007 , 111, 1475-86	2.8	37
80	Introduction and Fundamentals of Modeling Approaches for Polydisperse Multiphase Flows 2007 , 1-40		10
79	CFD predictions for chemical processing in a confined impinging-jets reactor. <i>AIChE Journal</i> , 2006 , 52, 731-744	3.6	158
78	Eulerian transported probability density function sub-filter model for large-eddy simulations of turbulent combustion. <i>Combustion Theory and Modelling</i> , 2006 , 10, 439-458	1.5	55
77	CFD Models for Analysis and Design of Chemical Reactors. <i>Advances in Chemical Engineering</i> , 2006 , 31, 231-305	0.6	26
76	Bivariate direct quadrature method of moments for coagulation and sintering of particle populations. <i>Journal of Aerosol Science</i> , 2006 , 37, 1562-1580	4.3	45
75	Momentum Transfer Between Polydisperse Particles in Dense Granular Flow. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2006 , 128, 62-68	2.1	7
74	Implementation of the population balance equation in CFD codes for modelling soot formation in turbulent flames. <i>Chemical Engineering Science</i> , 2006 , 61, 87-95	4.4	91
73	Turbulent mixing in a confined rectangular wake. <i>Chemical Engineering Science</i> , 2006 , 61, 6946-6962	4.4	25
72	Simulations of mixing for a confined co-flowing planar jet. <i>Computers and Fluids</i> , 2006 , 35, 1228-1238	2.8	2
71	Destructive aggregation: aggregation with collision-induced breakage. <i>Journal of Colloid and Interface Science</i> , 2006 , 302, 149-58	9.3	22
70	Wavelet-based Spatiotemporal Multiscaling in Diffusion Problems with Chemically Reactive Boundary. <i>International Journal for Multiscale Computational Engineering</i> , 2006 , 4, 755-770	2.4	11
69	Solution of population balance equations using the direct quadrature method of moments. <i>Journal of Aerosol Science</i> , 2005 , 36, 43-73	4.3	579
68	On the Comparison between Population Balance Models for CFD Simulation of Bubble Columns. <i>Industrial & Engineering Chemistry Research</i> , 2005 , 44, 5063-5072	3.9	106

67	CFD simulation of aggregation and breakage processes in laminar Taylor-Couette flow. <i>Journal of Colloid and Interface Science</i> , 2005 , 282, 380-96	9.3	74
66	CFD simulation of shear-induced aggregation and breakage in turbulent Taylor-Couette flow. <i>Journal of Colloid and Interface Science</i> , 2005 , 285, 167-78	9.3	43
65	Hybrid large-eddy simulation/Lagrangian filtered-density-function approach for simulating turbulent combustion. <i>Combustion and Flame</i> , 2005 , 143, 56-78	5.3	148
64	PDF simulations of ethylene decomposition in tubular LDPE reactors. <i>AIChE Journal</i> , 2005 , 51, 585-606	3.6	23
63	CFD predictions for flow-regime transitions in bubble columns. <i>AIChE Journal</i> , 2005 , 51, 1897-1923	3.6	87
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