

Zheng-Hong Luo

List of Publications by Year in descending order

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206
papers

5,689
citations

71061

41
h-index

123376

61
g-index

213
all docs

213
docs citations

213
times ranked

4158
citing authors

#	ARTICLE	IF	CITATIONS
1	Smart Fiber Membrane for pH-Induced Oil/Water Separation. ACS Applied Materials & Interfaces, 2015, 7, 19643-19650.	4.0	213
2	Polymeric materials with switchable superwettability for controllable oil/water separation: A comprehensive review. Progress in Polymer Science, 2018, 87, 1-33.	11.8	210
3	Electrospun fibrous membrane with enhanced switchable oil/water wettability for oily water separation. Chemical Engineering Journal, 2016, 287, 474-481.	6.6	204
4	Role of External Field in Polymerization: Mechanism and Kinetics. Chemical Reviews, 2020, 120, 2950-3048.	23.0	141
5	1,2,4-Triazolium perfluorobutanesulfonate as an archetypal pure protic organic ionic plastic crystal electrolyte for all-solid-state fuel cells. Energy and Environmental Science, 2015, 8, 1276-1291.	15.6	134
6	A fundamental CFD study of the gas-liquid-solid flow field in fluidized bed polymerization reactors. Powder Technology, 2011, 205, 276-288.	2.1	112
7	CFD simulations of gas-liquid-solid flow in fluidized bed reactors - A review. Powder Technology, 2016, 299, 235-258.	2.1	95
8	State-of-the-Art and Progress in Method of Moments for the Model-Based Reversible Deactivation Radical Polymerization. Macromolecular Reaction Engineering, 2016, 10, 516-534.	0.9	88
9	Machine learning to assist filtered two-fluid model development for dense gas-particle flows. AIChE Journal, 2020, 66, e16973.	1.8	88
10	CFD-DEM modeling of gas-solid flow and catalytic MTO reaction in a fluidized bed reactor. Computers and Chemical Engineering, 2014, 60, 1-16.	2.0	86
11	Electrospun Fibrous Mat with pH-Switchable Superwettability That Can Separate Layered Oil/Water Mixtures. Langmuir, 2016, 32, 13358-13366.	1.6	79
12	Mussel-inspired V-shaped copolymer coating for intelligent oil/water separation. Chemical Engineering Journal, 2017, 322, 693-701.	6.6	72
13	Precision polymer synthesis by controlled radical polymerization: Fusing the progress from polymer chemistry and reaction engineering. Progress in Polymer Science, 2022, 130, 101555.	11.8	71
14	Three-dimensional CFD-PBM coupled model of the temperature fields in fluidized bed polymerization reactors. AIChE Journal, 2011, 57, 3351-3366.	1.8	68
15	A CFD-PBM-PMLM integrated model for the gas-solid flow fields in fluidized bed polymerization reactors. AIChE Journal, 2012, 58, 1717-1732.	1.8	68
16	CFD modeling of gas flow in porous medium and catalytic coupling reaction from carbon monoxide to diethyl oxalate in fixed-bed reactors. Chemical Engineering Science, 2011, 66, 6028-6038.	1.9	66
17	CFD-PBM approach with modified drag model for the gas-liquid flow in a bubble column. Chemical Engineering Research and Design, 2016, 112, 88-102.	2.7	66
18	Review of Machine Learning for Hydrodynamics, Transport, and Reactions in Multiphase Flows and Reactors. Industrial & Engineering Chemistry Research, 2022, 61, 9901-9949.	1.8	63

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19	Synthesis of gradient copolymers with simultaneously tailor-made chain composition distribution and glass transition temperature by semibatch ATRP: From modeling to application. <i>Journal of Polymer Science Part A</i> , 2012, 50, 3052-3066.	2.5	61
20	Aqueous Metal-Free Atom Transfer Radical Polymerization: Experiments and Model-Based Approach for Mechanistic Understanding. <i>Macromolecules</i> , 2018, 51, 2367-2376.	2.2	61
21	Model-based downdraft biomass gasifier operation and design for synthetic gas production. <i>Journal of Cleaner Production</i> , 2018, 178, 476-493.	4.6	59
22	A material-property-dependent sub-grid drag model for coarse-grained simulation of 3D large-scale CFB risers. <i>Chemical Engineering Science</i> , 2019, 204, 228-245.	1.9	58
23	Numerical simulation of the turbulent gas-solid flow and reaction in a polydisperse FCC riser reactor. <i>Powder Technology</i> , 2013, 237, 569-580.	2.1	57
24	Filtered model for the cold-model gas-solid flow in a large-scale MTO fluidized bed reactor. <i>Chemical Engineering Science</i> , 2016, 143, 369-383.	1.9	57
25	Steady-state and dynamic modeling of commercial bulk polypropylene process of Hypol technology. <i>Chemical Engineering Journal</i> , 2009, 149, 370-382.	6.6	55
26	Synthesis and characterization of poly(dimethylsiloxane)-block-poly(2,2,3,3,4,4,4-heptafluorobutyl) polymerization. <i>Reactive and Functional Polymers</i> , 2008, 68, 931-942.	2.0	53
27	A Novel ABC Triblock Copolymer with Very Low Surface Energy: Poly(dimethylsiloxane)-block-Poly(methyl methacrylate)-block-Poly(ethylene glycol). <i>Journal of Applied Polymer Science</i> , 2008, 2, 398-406.	0.9	53
28	Poly(ionic liquid)s-based nanocomposite polyelectrolytes with tunable ionic conductivity prepared via SI-ATRP. <i>Polymer Chemistry</i> , 2014, 5, 882-891.	1.9	53
29	A Light and pH Dual-Stimuli-Responsive Block Copolymer Synthesized by Copper(0)-Mediated Living Radical Polymerization: Solvatochromic, Isomerization, and Schizophrenic Behaviors. <i>Langmuir</i> , 2014, 30, 1489-1499.	1.6	52
30	Light-Responsive Smart Surface with Controllable Wettability and Excellent Stability. <i>Langmuir</i> , 2014, 30, 12236-12242.	1.6	51
31	PhotoATRP-Based Fluorinated Thermosensitive Block Copolymer for Controllable Water/Oil Separation. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 10714-10722.	1.8	48
32	Copper(0)-Mediated Reversible-Deactivation Radical Polymerization: Kinetics Insight and Experimental Study. <i>Macromolecules</i> , 2014, 47, 6218-6229.	2.2	47
33	An old kinetic method for a new polymerization mechanism: Toward photochemically mediated ATRP. <i>AIChE Journal</i> , 2015, 61, 1947-1958.	1.8	47
34	CFD-VOF-DPM simulations of bubble rising and coalescence in low hold-up particle-liquid suspension systems. <i>Powder Technology</i> , 2018, 339, 459-469.	2.1	47
35	Numerical Simulation of the Gas-Solid Flow in Fluidized-Bed Polymerization Reactors. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 4070-4079.	1.8	45
36	Coupling of CFD with PBM for a pilot-plant tubular loop polymerization reactor. <i>Chemical Engineering Science</i> , 2011, 66, 5148-5163.	1.9	45

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37	Poly(ionic liquid)-Based Nanocomposites and Their Performance in CO ₂ Capture. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 3107-3115.	1.8	45
38	Modeling and simulation of the influences of particle-particle interactions on dense solid-liquid suspensions in stirred vessels. <i>Chemical Engineering Science</i> , 2018, 176, 439-453.	1.9	44
39	Kinetic Insights into the Iron-Based Electrochemically Mediated Atom Transfer Radical Polymerization of Methyl Methacrylate. <i>Macromolecules</i> , 2016, 49, 4038-4046.	2.2	43
40	An effective three-marker drag model via sub-grid modeling for turbulent fluidization. <i>Chemical Engineering Science</i> , 2018, 192, 759-773.	1.9	42
41	CFD modeling of methanol to olefins process in a fixed-bed reactor. <i>Powder Technology</i> , 2012, 221, 419-430.	2.1	41
42	Kinetic insight into electrochemically mediated ATRP gained through modeling. <i>AIChE Journal</i> , 2015, 61, 4347-4357.	1.8	41
43	Thermo-responsive brush copolymers with structure-tunable LCST and switchable surface wettability. <i>Polymer</i> , 2014, 55, 6552-6560.	1.8	40
44	An enhanced correlation for gas-particle heat and mass transfer in packed and fluidized bed reactors. <i>Chemical Engineering Journal</i> , 2019, 374, 531-544.	6.6	40
45	Conventional and data-driven modeling of filtered drag, heat transfer, and reaction rate in gas-particle flows. <i>AIChE Journal</i> , 2021, 67, e17299.	1.8	40
46	Application of Filtered Model for Reacting Gas-Solid Flows and Optimization in a Large-Scale Methanol-to-Olefin Fluidized-Bed Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 11887-11899.	1.8	39
47	Influence of mixing performance on polymerization of acrylamide in capillary microreactors. <i>AIChE Journal</i> , 2018, 64, 1828-1840.	1.8	38
48	Novel fluorosilicone triblock copolymers prepared by two-step RAFT polymerization: Synthesis, characterization, and surface properties. <i>European Polymer Journal</i> , 2010, 46, 1582-1593.	2.6	37
49	A CFD-PBM coupled model with polymerization kinetics for multizone circulating polymerization reactors. <i>Powder Technology</i> , 2012, 231, 77-87.	2.1	37
50	Numerical Simulation of Influence of Feed Injection on Hydrodynamic Behavior and Catalytic Cracking Reactions in a FCC Riser under Reactive Conditions. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 11084-11098.	1.8	37
51	Mechanically Mediated Atom Transfer Radical Polymerization: Exploring Its Potential at High Conversions. <i>Macromolecules</i> , 2018, 51, 6911-6921.	2.2	37
52	Coupled matrix kinetic Monte Carlo simulations applied for advanced understanding of polymer grafting kinetics. <i>Reaction Chemistry and Engineering</i> , 2021, 6, 640-661.	1.9	35
53	Numerical simulation of liquid-solid two-phase flow in a tubular loop polymerization reactor. <i>Powder Technology</i> , 2010, 198, 135-143.	2.1	34
54	CFD-PBM modeling polydisperse polymerization FBRs with simultaneous particle growth and aggregation: The effect of the method of moments. <i>Powder Technology</i> , 2015, 272, 142-152.	2.1	33

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55	3D CFD-PBM modeling of the gas–solid flow field in a polydisperse polymerization FBR: The effect of drag model. <i>Advanced Powder Technology</i> , 2014, 25, 1474-1482.	2.0	32
56	Mathematical modeling of the molecular weight distribution of polypropylene produced in a loop reactor. <i>Polymer Engineering and Science</i> , 2007, 47, 1643-1649.	1.5	31
57	Novel superhydrophobic silica/poly(siloxane–fluoroacrylate) hybrid nanoparticles prepared via two-step surface-initiated ATRP: Synthesis, characterization, and wettability. <i>Journal of Polymer Science Part A</i> , 2010, 48, 5570-5580.	2.5	30
58	Multiscale Computational Fluid Dynamics–Population Balance Model Coupled System of Atom Transfer Radical Suspension Polymerization in Stirred Tank Reactors. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 4690-4702.	1.8	30
59	Steady-State and Dynamic Modeling of the Basell Multireactor Olefin Polymerization Process. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 322-331.	1.8	29
60	Facile synthesis of gradient copolymers via semi-batch copper(0)-mediated living radical copolymerization at ambient temperature. <i>Polymer Chemistry</i> , 2013, 4, 76-84.	1.9	27
61	Effects of bubble coalescence and breakup models on the simulation of bubble columns. <i>Chemical Engineering Science</i> , 2020, 226, 115850.	1.9	27
62	Three-dimensional CFD model of the temperature field for a pilot-plant tubular loop polymerization reactor. <i>Powder Technology</i> , 2010, 203, 574-590.	2.1	26
63	An improved kinetic model for cellulose hydrolysis to 5-hydroxymethylfurfural using the solid SO ₄ ²⁻ /Ti-MCM-41 catalyst. <i>RSC Advances</i> , 2014, 4, 15216.	1.7	26
64	Photoinduced Iron(III)-Mediated Atom Transfer Radical Polymerization with In Situ Generated Initiator: Mechanism and Kinetics Studies. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 10235-10242.	1.8	26
65	Direct Preparation Kinetics of 1,3-Dichloro-2-propanol from Glycerol Using Acetic Acid Catalyst. <i>Industrial & Engineering Chemistry Research</i> , 2009, 48, 446-452.	1.8	25
66	Synthesis, surface property, micellization and pH responsivity of fluorinated gradient copolymers. <i>Journal of Polymer Science Part A</i> , 2013, 51, 1107-1117.	2.5	25
67	Thermal-Responsive Block Copolymers for Surface with Reversible Switchable Wettability. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 18112-18120.	1.8	25
68	Synthesis and pH-responsive micellization of brush copolymers poly(methyl methacrylate)- <i>b</i> -poly(2-vinylpyridine) profile. <i>Soft Matter</i> , 2012, 8, 11051.	1.2	24
69	A multiscale CFD-PBM coupled model for the kinetics and liquid–liquid dispersion behavior in a suspension polymerization stirred tank. <i>Chemical Engineering Research and Design</i> , 2018, 130, 1-17.	2.7	24
70	Experimental and computational investigation of oxidative quenching governed aqueous organocatalyzed atom transfer radical polymerization. <i>Chemical Engineering Journal</i> , 2019, 362, 721-730.	6.6	24
71	Synthesis of adipic acid through oxidation of K/A oil and its kinetic study in a microreactor system. <i>AIChE Journal</i> , 2020, 66, e16289.	1.8	24
72	Modeling of the Atom Transfer Radical Copolymerization Processes of Methyl Methacrylate and 2-(Trimethylsilyl) Ethyl Methacrylate under Batch, Semibatch, and Continuous Feeding: A Chemical Reactor Engineering Viewpoint. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 11873-11883.	1.8	23

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73	Capability assessment of coarse-grid simulation of gas-particle riser flow using sub-grid drag closures. <i>Chemical Engineering Science</i> , 2020, 213, 115410.	1.9	23
74	Network Formation Kinetics of Poly(dimethylsiloxane) Based on Step-Growth Polymerization. <i>Macromolecules</i> , 2021, 54, 7678-7689.	2.2	23
75	Cost-efficient modeling of distributed molar mass and topological variations in graft copolymer synthesis by upgrading the method of moments. <i>AIChE Journal</i> , 2022, 68, .	1.8	23
76	Synthesis and characterization of the hydrophobic diblock copolymers of poly(dimethylsiloxane)- <i>block</i> -poly(ethyl methyl acrylate) through atom transfer radical polymerization. <i>Journal of Applied Polymer Science</i> , 2008, 108, 1201-1208.	1.3	22
77	New insights into intraparticle transfer, particle kinetics, and gas-solid two-phase flow in polydisperse fluid catalytic cracking riser reactors under reaction conditions using multi-scale modeling. <i>Chemical Engineering Science</i> , 2014, 109, 38-52.	1.9	22
78	Iron-based electrochemically mediated atom transfer radical polymerization with tunable catalytic activity. <i>AIChE Journal</i> , 2018, 64, 961-969.	1.8	22
79	Analysis and development of homogeneous drag closure for filtered mesoscale modeling of fluidized gas-particle flows. <i>Chemical Engineering Science</i> , 2021, 229, 116147.	1.9	22
80	A preliminary CFD study of the gas-solid flow fields in multizone circulating polymerization reactors. <i>Powder Technology</i> , 2011, 214, 143-154.	2.1	21
81	Three-dimensional CFD study of liquid-solid flow behaviors in tubular loop polymerization reactors: The effect of guide vane. <i>Chemical Engineering Science</i> , 2011, 66, 4127-4137.	1.9	21
82	Data-driven modeling of mesoscale solids stress closures for filtered two-fluid model in gas-particle flows. <i>AIChE Journal</i> , 2021, 67, e17290.	1.8	21
83	Microphase separation behavior on the surfaces of poly(dimethylsiloxane)- <i>block</i> -poly(2,2,3,3,4,4,4-heptafluorobutyl methacrylate) diblock copolymer coatings. <i>Journal of Applied Polymer Science</i> , 2009, 113, 4032-4041.	1.3	20
84	Steady-state particle size distribution modeling of polypropylene produced in tubular loop reactors. <i>Chemical Engineering Journal</i> , 2009, 146, 466-476.	6.6	20
85	A CFD Modeling Approach to Design a New Gas Barrier in a Multizone Circulating Polymerization Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2012, 51, 15132-15144.	1.8	20
86	Evaluating the role of intraparticle mass and heat transfers in a commercial FCC riser: A meso-scale study. <i>Chemical Engineering Journal</i> , 2013, 228, 352-365.	6.6	20
87	Electrochemically mediated ATRP process intensified by ionic liquid: A flash-polymerization of methyl acrylate. <i>Chemical Engineering Journal</i> , 2019, 372, 163-170.	6.6	20
88	Comprehensive validation analysis of sub-grid drag and wall corrections for coarse-grid two-fluid modeling. <i>Chemical Engineering Science</i> , 2019, 196, 478-492.	1.9	20
89	CFD-PBM simulation of bubble columns: Effect of parameters in the class method for solving PBEs. <i>Chemical Engineering Science</i> , 2020, 226, 115853.	1.9	20
90	Coarse-grid simulations of full-loop gas-solid flows using a hybrid drag model: Investigations on turbulence models. <i>Powder Technology</i> , 2021, 379, 108-126.	2.1	20

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91	CFD-DEM modeling of filtered fluid-particle drag and heat transfer in bidisperse gas-solid flows. <i>Chemical Engineering Science</i> , 2021, 246, 116896.	1.9	20
92	Study of filtered interphase heat transfer using highly resolved CFD-DEM simulations. <i>AIChE Journal</i> , 2021, 67, e17121.	1.8	20
93	A hybrid mesoscale closure combining CFD and deep learning for coarse-grid prediction of gas-particle flow dynamics. <i>Chemical Engineering Science</i> , 2022, 248, 117268.	1.9	20
94	Particle kinetics and physical mechanism of microemulsion polymerization of octamethylcyclotetrasiloxane. <i>Powder Technology</i> , 2010, 201, 146-152.	2.1	19
95	Computational Fluid Dynamics Simulation of Multiscale Mixing in Anionic Polymerization Tubular Reactors. <i>Chemical Engineering and Technology</i> , 2016, 39, 857-864.	0.9	19
96	Visible-Light-Induced Atom-Transfer-Radical Polymerization with a ppm-Level Iron Catalyst. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 4949-4956.	1.8	19
97	Photoinduced Fe-mediated atom transfer radical polymerization in aqueous media. <i>Polymer Chemistry</i> , 2017, 8, 7360-7368.	1.9	19
98	Bridging principal component analysis and method of moments based parameter estimation for grafting of polybutadiene with styrene. <i>Chemical Engineering Journal</i> , 2021, 425, 130463.	6.6	19
99	Direct concurrent multi-scale CFD modeling: The effect of intraparticle transfer on the flow field in a MTO FBR. <i>Chemical Engineering Science</i> , 2013, 104, 690-700.	1.9	18
100	Important Analysis of Liquid Vaporization Modeling Scheme in Computational Fluid Dynamics Modeling of Gas-Liquid-Solid Polyethylene Fluidized Bed Reactors. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 10199-10213.	1.8	18
101	Assessment of kinetics of photoinduced Fe-based atom transfer radical polymerization under conditions using modeling approach. <i>AIChE Journal</i> , 2017, 63, 4987-4997.	1.8	18
102	Modeling and simulation of particle size distribution behavior in gas-liquid-solid polyethylene fluidized bed reactors. <i>Powder Technology</i> , 2018, 328, 95-107.	2.1	18
103	Influence of distributed pore size and porosity on MTO catalyst particle performance: Modeling and simulation. <i>Chemical Engineering Research and Design</i> , 2018, 137, 141-153.	2.7	18
104	Iterative Multiscale Computational Fluid Dynamics Single-Particle Model for Intraparticle Transfer and Catalytic Hydrogenation Reaction of Dimethyl Oxalate in a Fluidized-Bed Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 110-122.	1.8	17
105	Modeling the Effect of Polymerization Rate on the Intraparticle Mass and Heat Transfer during Propylene Polymerization in a Loop Reactor. <i>Journal of Chemical Engineering of Japan</i> , 2009, 42, 576-580.	0.3	16
106	Novel superhydrophobic silica/poly(siloxane-fluoroacrylate) hybrid nanoparticles prepared via surface-initiated ATRP and their surface properties: The effects of polymerization conditions. <i>Journal of Polymer Science Part A</i> , 2011, 49, 174-183.	2.5	16
107	CFD modeling using heterogeneous reaction kinetics for catalytic dehydrogenation syngas reactions in a fixed-bed reactor. <i>Particuology</i> , 2013, 11, 703-714.	2.0	16
108	Mechanistic and kinetic investigation of Cu(II)-catalyzed controlled radical polymerization enabled by ultrasound irradiation. <i>AIChE Journal</i> , 2020, 66, e16746.	1.8	16

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109	A kinetic model for glycerol chlorination in the presence of acetic acid catalyst. Korean Journal of Chemical Engineering, 2010, 27, 66-72.	1.2	15
110	Fluorinated AB diblock copolymers and their aggregates in organic solvents. Journal of Polymer Science Part A, 2011, 49, 3647-3657.	2.5	15
111	Intraparticle Mass and Heat Transfer Modeling of Methanol to Olefins Process on SAPO-34: A Single Particle Model. Industrial & Engineering Chemistry Research, 2013, 52, 3693-3707.	1.8	15
112	Particle Behavior in FBRs: A Comparison of the PBM-CFD, Multi-Scale CFD Simulation of Gas-Solid Catalytic Propylene Polymerization. Macromolecular Reaction Engineering, 2014, 8, 609-621.	0.9	15
113	A CFD modeling of the gas-solid two-phase flow in an FCC riser under the electrostatic conditions. Asia-Pacific Journal of Chemical Engineering, 2014, 9, 645-655.	0.8	15
114	Modeling of the ATRcoP Processes of Methyl Methacrylate and 2-(Trimethylsilyl) Ethyl Methacrylate in Continuous Reactors: From CSTR to PFR. Macromolecular Reaction Engineering, 2015, 9, 418-430.	0.9	15
115	Industrial Loop Reactor for Catalytic Propylene Polymerization: Dynamic Modeling of Emergency Accidents. Industrial & Engineering Chemistry Research, 2010, 49, 11232-11243.	1.8	14
116	Physics-informed deep learning for modelling particle aggregation and breakage processes. Chemical Engineering Journal, 2021, 426, 131220.	6.6	14
117	<i>In silico</i> mechanically mediated atom transfer radical polymerization: A detailed kinetic study. AIChE Journal, 2021, 67, e17151.	1.8	14
118	Design of a Reactive Distillation Column for Direct Preparation of Dichloropropanol from Glycerol. Industrial & Engineering Chemistry Research, 2009, 48, 10779-10787.	1.8	13
119	Coupled Single-Particle and Population Balance Modeling for Particle Size Distribution of Poly(propylene) Produced in Loop Reactors. Macromolecular Reaction Engineering, 2010, 4, 123-134.	0.9	13
120	Surface microphase separation in PDMS- <i>b</i> -PMMA- <i>b</i> -PHFBMA triblock copolymer films. Journal of Applied Polymer Science, 2011, 120, 156-164.	1.3	13
121	Design of a two-stage fluidized bed reactor for preparation of diethyl oxalate from carbon monoxide. Chemical Engineering Research and Design, 2012, 90, 915-925.	2.7	13
122	Multi-scale product property model of polypropylene produced in a FBR: From chemical process engineering to product engineering. Computers and Chemical Engineering, 2014, 71, 39-51.	2.0	13
123	Living Polymer Dispersity Quantification for Nitroxide-Mediated Polymerization Systems by Mimicking a Monodispersed Polymer Blending Strategy. Macromolecules, 2020, 53, 10813-10822.	2.2	13
124	Computer-aided estimation of kinetic rate constant for degradation of volatile organic compounds by hydroxyl radical: An improved model using quantum chemical and norm descriptors. Chemical Engineering Science, 2022, 248, 117244.	1.9	13
125	Modeling of the propylene polymerization catalyzed by single active site catalyst: A Monte Carlo study. Journal of Applied Polymer Science, 2008, 110, 3360-3367.	1.3	12
126	Multiple active site Monte Carlo model for heterogeneous Ziegler-Natta propylene polymerization. Journal of Applied Polymer Science, 2010, 115, 2962-2970.	1.3	12

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127	Kinetic modeling of two-step RAFT process for the production of novel fluorosilicone triblock copolymers. <i>European Polymer Journal</i> , 2010, 46, 2164-2173.	2.6	12
128	Modeling for the catalytic coupling reaction of carbon monoxide to diethyl oxalate in fixed-bed reactors: Reactor model and its applications. <i>Chemical Engineering Research and Design</i> , 2012, 90, 1361-1371.	2.7	12
129	Insight into the ATRP rate controlling ability of initiator structure: Micromolecular, macromolecular, and immobilized initiators. <i>Journal of Polymer Science Part A</i> , 2014, 52, 2228-2238.	2.5	12
130	Effect of Particle Polydispersity on Flow and Reaction Behaviors of Methanol-to-Olefins Fluidized Bed Reactors. <i>Industrial & Engineering Chemistry Research</i> , 2017, 56, 1090-1102.	1.8	12
131	How the catalyst circulates and works in organocatalyzed atom transfer radical polymerization. <i>AIChE Journal</i> , 2018, 64, 2581-2591.	1.8	12
132	CFD-PBM Simulation of Bubble Columns: Sensitivity Analysis of the Nondrag Forces. <i>Industrial & Engineering Chemistry Research</i> , 2020, 59, 18674-18682.	1.8	12
133	Supervised Machine Learning Algorithms for Predicting Rate Constants of Ozone Reaction with Micropollutants. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 8359-8367.	1.8	12
134	Machine learning for full spatiotemporal acceleration of gas-particle flow simulations. <i>Powder Technology</i> , 2022, 408, 117701.	2.1	12
135	Self-assembly of ABC nonamphiphilic fluorosilicone triblock copolymers in dilute solutions: The first example. <i>Journal of Polymer Science Part A</i> , 2011, 49, 2513-2519.	2.5	11
136	Facile preparation of gold nanoparticles using the self-assembled ABC non-amphiphilic fluorosilicone triblock copolymer template. <i>Materials Chemistry and Physics</i> , 2013, 138, 780-786.	2.0	11
137	Case Study to Bridge the Gap between Chemistry and Chemical Product Engineering: From Molecules to Products Based on Brush Copolymers Having Different Backbone Composition Profiles. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 1900-1908.	1.8	11
138	CFD modeling of the gas-solid two-fluid flow in polyethylene FBRs: From traditional operation to super-condensed mode. <i>Advanced Powder Technology</i> , 2016, 27, 1494-1505.	2.0	11
139	Dual-responsive copolymer poly(2,2,3,4,4-hexafluorobutyl) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 267 Td (methacrylate) for surface with tunable wettability. <i>Journal of Polymer Science Part A</i> , 2016, 54, 3868-3877.	2.5	11
140	CO ₂ /N ₂ -Switchable Thermoresponsive Ionic Liquid Copolymer. <i>Macromolecules</i> , 2017, 50, 8378-8389.	2.2	11
141	Effect of granular properties on hydrodynamics in coarse-grid riser flow simulation of Geldart A and B particles. <i>Powder Technology</i> , 2020, 359, 126-144.	2.1	11
142	Kinetic features of iron-based electrochemically mediated ATRP revealed by Monte Carlo simulation. <i>AIChE Journal</i> , 2021, 67, e17098.	1.8	11
143	Sensitivity analysis of isothermal free radical induced grafting through application of the distribution - Numerical fractionation - Method of moments. <i>Chemical Engineering Journal</i> , 2022, 444, 136595.	6.6	11
144	Hydrodynamics of gas-solid turbulent fluidized bed of polydisperse binary particles. <i>Powder Technology</i> , 2014, 262, 106-123.	2.1	10

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145	Effect of spatial radiation distribution on photocatalytic oxidation of methylene blue in gas-liquid-solid mini-fluidized beds. <i>Chemical Engineering Journal</i> , 2019, 370, 1154-1168.	6.6	10
146	Computational fluid dynamics simulation of gas-liquid-solid polyethylene fluidized bed reactors incorporating with a dynamic polymerization kinetic model. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2019, 14, e2265.	0.8	10
147	Comparative analysis of numerically derived drag models for development of bed expansion ratio correlation in a bubbling fluidized bed. <i>Advanced Powder Technology</i> , 2020, 31, 2723-2732.	2.0	10
148	Double-external field enables bulk controlled radical polymerization with narrow molecular weight distribution at high conversion. <i>AIChE Journal</i> , 2020, 66, e16245.	1.8	10
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