

Kun Luo

List of Publications by Year in descending order

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259
papers

7,604
citations

81434

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times ranked

6503
citing authors

#	ARTICLE	IF	CITATIONS
1	Mesoscale simulations of a real onshore wind power base in complex terrain: Wind farm wake behavior and power production. <i>Energy</i> , 2022, 241, 122873.	4.5	30
2	Three-dimensional modeling study of the oxy-fuel co-firing of coal and biomass in a bubbling fluidized bed. <i>Energy</i> , 2022, 247, 123496.	4.5	11
3	Particle-scale study of coal-direct chemical looping combustion (CLC). <i>Energy</i> , 2022, 250, 123859.	4.5	8
4	Experimental and Kinetic Studies on Tobacco Pyrolysis under a Wide Range of Heating Rates. <i>ACS Omega</i> , 2022, 7, 1420-1427.	1.6	8
5	Evaluation of the spatiotemporal unsteady characteristics of the tip leakage vortex based on a direct numerical simulation database. <i>Physics of Fluids</i> , 2022, 34, .	1.6	8
6	The interaction between droplet evaporation and turbulence with interface-resolved direct numerical simulation. <i>Physics of Fluids</i> , 2022, 34, .	1.6	7
7	Bubble Dynamics and Particle Orientation in a Binary Fluidized Bed Containing Spherocylinders and Spheres. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 11209-11225.	1.8	2
8	Analysis and development of novel data-driven drag models based on direct numerical simulations of fluidized beds. <i>Chemical Engineering Science</i> , 2021, 231, 116245.	1.9	27
9	Large eddy simulation of Cambridge bluff-body coal (CCB2) flames with a flamelet progress variable model. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 5347-5354.	2.4	2
10	A DNS study on temporally evolving jet flames of pulverized coal/biomass co-firing with different blending ratios. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 4005-4012.	2.4	10
11	A-priori and a-posteriori studies of a direct moment closure approach for turbulent combustion using DNS data of a premixed flame. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 3003-3011.	2.4	4
12	Direct numerical simulation of turbulence modulation by premixed flames in a model annular swirling combustor. <i>Proceedings of the Combustion Institute</i> , 2021, 38, 3013-3020.	2.4	7
13	Direct numerical simulations of turbulent non-premixed flames: Assessment of turbulence within swirling flows. <i>Physics of Fluids</i> , 2021, 33, 015112.	1.6	8
14	A priori assessment of convolutional neural network and algebraic models for flame surface density of high Karlovitz premixed flames. <i>Physics of Fluids</i> , 2021, 33, .	1.6	22
15	Predictive models for flame evolution using machine learning: <i>a priori</i> assessment in turbulent flames without and with mean shear. <i>Physics of Fluids</i> , 2021, 33, .	1.6	16
16	Flame edge structures and dynamics in planar turbulent non-premixed inclined slot-jet flames impinging at a wall. <i>Journal of Fluid Mechanics</i> , 2021, 920, .	1.4	6
17	Direct numerical simulation of a supercritical hydrothermal flame in a turbulent jet. <i>Journal of Fluid Mechanics</i> , 2021, 922, .	1.4	4
18	Effects of tip clearance size on vortical structures and turbulence statistics in tip-leakage flows: A direct numerical simulation study. <i>Physics of Fluids</i> , 2021, 33, .	1.6	22

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19	A Priori Modeling of NO Formation with Principal Component Analysis and the Convolutional Neural Network in the Context of Large Eddy Simulation. <i>Energy & Fuels</i> , 2021, 35, 20272-20283.	2.5	4
20	Frictional granular flows of rod and disk mixtures with particle shape distributions. <i>Physics of Fluids</i> , 2021, 33, 093303.	1.6	9
21	High-Capacity Anode Material for Lithium-Ion Batteries with a Core-Shell NiFe ₂ O ₄ /Reduced Graphene Oxide Heterostructure. <i>ACS Omega</i> , 2021, 6, 25269-25276.	1.6	10
22	Fluctuations of thermodynamic variables in compressible isotropic turbulence laden with inertial particles. <i>Physics of Fluids</i> , 2021, 33, .	1.6	5
23	An integrated fluid-chemical model toward modeling the thrombus formation in an idealized model of aortic dissection. <i>Computers in Biology and Medicine</i> , 2021, 136, 104709.	3.9	8
24	Fluid-structure interaction: Insights into biomechanical implications of endograft after thoracic endovascular aortic repair. <i>Computers in Biology and Medicine</i> , 2021, 138, 104882.	3.9	18
25	Effect of wall boundary conditions on the nonlinear response of turbulent premixed flames. <i>AIP Advances</i> , 2021, 11, .	0.6	2
26	Direct numerical simulation of the flow around a sphere immersed in a flat-plate turbulent boundary layer. <i>Physics of Fluids</i> , 2021, 33, .	1.6	1
27	High-fidelity numerical analysis of non-premixed hydrothermal flames: Flame structure and stabilization mechanism. <i>Fuel</i> , 2020, 259, 116162.	3.4	21
28	Hemodynamic consequences of TEVAR with in situ double fenestrations of left carotid artery and left subclavian artery. <i>Medical Engineering and Physics</i> , 2020, 76, 32-39.	0.8	11
29	An augmented coarse-grained CFD-DEM approach for simulation of fluidized beds. <i>Advanced Powder Technology</i> , 2020, 31, 4420-4427.	2.0	41
30	Modeling and analysis of flow regimes in hydraulic conveying of coarse particles. <i>Powder Technology</i> , 2020, 373, 543-554.	2.1	48
31	Hybrid Flamelet/Progress Variable Approach for NO Prediction in Pulverized Coal Flames. <i>Energy & Fuels</i> , 2020, 34, 10000-10009.	2.5	0
32	CFD-DEM coupled with thermochemical sub-models for biomass gasification: Validation and sensitivity analysis. <i>Chemical Engineering Science</i> , 2020, 217, 115550.	1.9	123
33	Direct numerical simulation of particle-laden turbulent boundary layers without and with combustion. <i>Physics of Fluids</i> , 2020, 32, 105108.	1.6	12
34	Eulerian-Lagrangian direct numerical simulation of preferential accumulation of inertial particles in a compressible turbulent boundary layer. <i>Journal of Fluid Mechanics</i> , 2020, 903, .	1.4	18
35	Numerical Investigation of a Syngas-Fueled Chemical Looping Combustion System. <i>Energy & Fuels</i> , 2020, 34, 12800-12809.	2.5	5
36	A lower-dimensional approximation model of turbulent flame stretch and its related quantities with machine learning approaches. <i>Physics of Fluids</i> , 2020, 32, .	1.6	13

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37	Fully resolved simulation of a shockwave interacting with randomly clustered particles via a ghost-cell immersed boundary method. <i>Physics of Fluids</i> , 2020, 32, 066105.	1.6	9
38	Three-dimensional full-loop numerical simulation of co-combustion of coal and refuse derived fuel in a pilot-scale circulating fluidized bed boiler. <i>Chemical Engineering Science</i> , 2020, 220, 115612.	1.9	25
39	Influences of secondary gas injection pattern on fluidized bed combustion process: A CFD-DEM study. <i>Fuel</i> , 2020, 268, 117314.	3.4	21
40	Novel Sensitivity Study for Biomass Directional Devolatilization by Random Forest Models. <i>Energy & Fuels</i> , 2020, 34, 8414-8423.	2.5	8
41	Dual-Scale Flamelet/Progress Variable Approach for Prediction of Polycyclic Aromatic Hydrocarbons Formation under the Condition of Coal Combustion. <i>Energy & Fuels</i> , 2020, 34, 10010-10018.	2.5	2
42	Large eddy simulations and analysis of NO emission characteristics in a laboratory pulverized coal flame. <i>Fuel</i> , 2020, 279, 118316.	3.4	9
43	Comparative Study on Different Treatments of Coal Devolatilization for Pulverized Coal Combustion Simulation. <i>Energy & Fuels</i> , 2020, 34, 3816-3827.	2.5	12
44	Characteristics and sources of PM _{2.5} with focus on two severe pollution events in a coastal city of Qingdao, China. <i>Chemosphere</i> , 2020, 247, 125861.	4.2	23
45	Charging Mechanism of Li ₂ MnO ₃ . <i>Chemistry of Materials</i> , 2020, 32, 3733-3740.	3.2	68
46	Recent advances in high-fidelity simulations of pulverized coal combustion. <i>Advanced Powder Technology</i> , 2020, 31, 3062-3079.	2.0	13
47	Analysis of Gas-Assisted Pulverized Coal Combustion in Cambridge Coal Burner CCB1 Using FPV-LES. <i>Energy & Fuels</i> , 2020, 34, 7477-7489.	2.5	5
48	A three mixture fraction flamelet model for multi-stream laminar pulverized coal combustion. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 2901-2910.	2.4	35
49	Predicting kinetic parameters for coal devolatilization by means of Artificial Neural Networks. <i>Proceedings of the Combustion Institute</i> , 2019, 37, 2943-2950.	2.4	40
50	Impact of substantial wind farms on the local and regional atmospheric boundary layer: Case study of Zhangbei wind power base in China. <i>Energy</i> , 2019, 183, 1136-1149.	4.5	22
51	CFD-DEM modelling of hydraulic conveying of solid particles in a vertical pipe. <i>Powder Technology</i> , 2019, 354, 893-905.	2.1	97
52	Direct numerical simulation of a three-dimensional spatially evolving compressible mixing layer laden with particles. II. Turbulence anisotropy and growth rate. <i>Physics of Fluids</i> , 2019, 31, 083303.	1.6	17
53	A comprehensive study on estimating higher heating value of biomass from proximate and ultimate analysis with machine learning approaches. <i>Energy</i> , 2019, 188, 116077.	4.5	102
54	Effects of solid particles and wall roughness on turbulent boundary layer in a two-phase horizontal channel flow. <i>Powder Technology</i> , 2019, 353, 48-56.	2.1	6

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55	Ignition dynamics of DME/methane-air reactive mixing layer under reactivity controlled compression ignition conditions: Effects of cool flames. Applied Energy, 2019, 249, 343-354.	5.1	24
56	The effects of collisional parameters on the hydrodynamics and heat transfer in spouted bed: A CFD-DEM study. Powder Technology, 2019, 353, 132-144.	2.1	30
57	A priori study of an extended flamelet/progress variable model for NO prediction in pulverized coal flames. Energy, 2019, 175, 768-780.	4.5	15
58	Influence of particle shape on liner wear in tumbling mills: A DEM study. Powder Technology, 2019, 350, 26-35.	2.1	28
59	Numerical Investigation of Nickel-Copper Oxygen Carriers in Chemical-Looping Combustion Process with Zero Emission of CO and H ₂ . Energy & Fuels, 2019, 33, 12096-12105.	2.5	16
60	Direct numerical simulation on auto-ignition characteristics of turbulent supercritical hydrothermal flames. Combustion and Flame, 2019, 200, 354-364.	2.8	24
61	Predictive single-step kinetic model of biomass devolatilization for CFD applications: A comparison study of empirical correlations (EC), artificial neural networks (ANN) and random forest (RF). Renewable Energy, 2019, 136, 104-114.	4.3	72
62	Computational Fluid Dynamics/Discrete Element Method Investigation on the Biomass Fast Pyrolysis: The Influences of Shrinkage Patterns and Operating Parameters. Industrial & Engineering Chemistry Research, 2019, 58, 1404-1416.	1.8	29
63	CFD-DEM simulation of heat transfer in fluidized beds: Model verification, validation, and application. Chemical Engineering Science, 2019, 197, 280-295.	1.9	116
64	CFD-DEM study of the effect of ring baffles on system performance of a full-loop circulating fluidized bed. Chemical Engineering Science, 2019, 196, 130-144.	1.9	36
65	Influences of operating parameters on the fluidized bed coal gasification process: A coarse-grained CFD-DEM study. Chemical Engineering Science, 2019, 195, 693-706.	1.9	76
66	Dynamics of triple-flames in ignition of turbulent dual fuel mixture: A direct numerical simulation study. Proceedings of the Combustion Institute, 2019, 37, 4625-4633.	2.4	18
67	Numerical investigation of the cluster property and flux distribution in three-dimensional full-loop circulating fluidized bed with multiple parallel cyclones. Powder Technology, 2019, 342, 253-266.	2.1	12
68	An <i>a priori</i> study of different tabulation methods for turbulent pulverised coal combustion. Combustion Theory and Modelling, 2018, 22, 505-530.	1.0	8
69	DEM investigation of the axial dispersion behavior of a binary mixture in the rotating drum. Powder Technology, 2018, 330, 93-104.	2.1	27
70	Fully resolved simulations of single char particle combustion using a ghost-cell immersed boundary method. AIChE Journal, 2018, 64, 2851-2863.	1.8	19
71	Assessment of winter air pollution episodes using long-range transport modeling in Hangzhou, China, during World Internet Conference, 2015. Environmental Pollution, 2018, 236, 550-561.	3.7	38
72	Multiscale investigation of tube erosion in fluidized bed based on CFD-DEM simulation. Chemical Engineering Science, 2018, 183, 60-74.	1.9	29

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73	Impact of operating parameters on biomass gasification in a fluidized bed reactor: An Eulerian-Lagrangian approach. Powder Technology, 2018, 333, 304-316.	2.1	112
74	Effect of superficial gas velocity on solid behaviors in a full-loop CFB. Powder Technology, 2018, 333, 91-105.	2.1	39
75	Sheet, ligament and droplet formation in swirling primary atomization. AIP Advances, 2018, 8, .	0.6	21
76	Translational and rotational motions of small solid particles in a spatially developing turbulent boundary layer with heat transfer. International Journal of Heat and Mass Transfer, 2018, 124, 715-725.	2.5	3
77	Numerical prediction of wear in SAC mills based on DEM simulations. Powder Technology, 2018, 329, 353-363.	2.1	45
78	Analysis of pulverized coal flame stabilized in a 3D laminar counterflow. Combustion and Flame, 2018, 189, 106-125.	2.8	42
79	A quantitative method to describe the flow characteristics of an oscillating flow including porous media. International Journal of Heat and Mass Transfer, 2018, 119, 860-866.	2.5	10
80	Prediction of product distributions in coal devolatilization by an artificial neural network model. Combustion and Flame, 2018, 193, 283-294.	2.8	22
81	Direct numerical simulation of turbulent flow and heat transfer in a spatially developing turbulent boundary layer laden with particles. Journal of Fluid Mechanics, 2018, 845, 417-461.	1.4	15
82	Particle-Scale Investigation of Heat Transfer and Erosion Characteristics in a Three-Dimensional Circulating Fluidized Bed. Industrial & Engineering Chemistry Research, 2018, 57, 6774-6789.	1.8	26
83	Three-dimensional axial dispersion dynamics of granular flow in the rolling-regime rotating drum. Powder Technology, 2018, 332, 131-138.	2.1	18
84	Micrositing of roof mounting wind turbine in urban environment: CFD simulations and lidar measurements. Renewable Energy, 2018, 115, 1118-1133.	4.3	33
85	Production of synthetic natural gas by CO methanation over Ni/Al ₂ O ₃ catalyst in fluidized bed reactor. Catalysis Communications, 2018, 105, 37-42.	1.6	16
86	Investigations of data-driven closure for subgrid-scale stress in large-eddy simulation. Physics of Fluids, 2018, 30, 125101.	1.6	122
87	A generalized flamelet tabulation method for partially premixed combustion. Combustion and Flame, 2018, 198, 54-68.	2.8	21
88	Impacts of compound extreme weather events on ozone in the present and future. Atmospheric Chemistry and Physics, 2018, 18, 9861-9877.	1.9	55
89	Evaluation of different flamelet tabulation methods for laminar spray combustion. Physics of Fluids, 2018, 30, .	1.6	14
90	Direct numerical simulation of droplet breakup in homogeneous isotropic turbulence: The effect of the Weber number. International Journal of Multiphase Flow, 2018, 107, 263-274.	1.6	39

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91	Large-eddy simulation of multiphase combustion jet in cross-flow using flamelet model. <i>International Journal of Multiphase Flow</i> , 2018, 108, 211-225.	1.6	19
92	Numerical investigation on methanation kinetic and flow behavior in full-loop fluidized bed reactor. <i>Fuel</i> , 2018, 231, 85-93.	3.4	21
93	A coupled vaporization model based on temperature/species gradients for detailed numerical simulations using conservative level set method. <i>International Journal of Heat and Mass Transfer</i> , 2018, 127, 743-760.	2.5	11
94	Structure of tetrabrachial flames in non-premixed autoigniting dimethyl ether/air mixtures. <i>Fuel</i> , 2018, 232, 90-98.	3.4	5
95	A computational framework for interface-resolved DNS of simultaneous atomization, evaporation and combustion. <i>Journal of Computational Physics</i> , 2018, 371, 751-778.	1.9	15
96	DNS analysis of incipient drop impact dynamics using an accurate level set method. <i>Chinese Journal of Chemical Engineering</i> , 2017, 25, 1-10.	1.7	9
97	Buoyancy effects in an unstably stratified turbulent boundary layer flow. <i>Physics of Fluids</i> , 2017, 29, 015104.	1.6	9
98	Numerical investigation of coal flamelet characteristics in a laminar counterflow with detailed chemistry. <i>Fuel</i> , 2017, 195, 232-242.	3.4	19
99	Analysis of conditional statistics of a supersonic jet flame in heated coflow via direct numerical simulation. <i>Acta Astronautica</i> , 2017, 134, 179-188.	1.7	6
100	Experimental study of the wake characteristics of a two-blade horizontal axis wind turbine by time-resolved PIV. <i>Science China Technological Sciences</i> , 2017, 60, 593-601.	2.0	4
101	Experimental study of extracting alumina from coal fly ash using fluidized beds at high temperature. <i>Fuel</i> , 2017, 199, 22-27.	3.4	49
102	Direct numerical simulation of turbulent boundary layer with fully resolved particles at low volume fraction. <i>Physics of Fluids</i> , 2017, 29, 053301.	1.6	15
103	Fully resolved numerical simulation of interphase heat transfer in gas-solid turbulent flow. <i>International Journal of Heat and Mass Transfer</i> , 2017, 112, 45-60.	2.5	8
104	Large eddy simulation of piloted pulverised coal combustion using extended flamelet/progress variable model. <i>Combustion Theory and Modelling</i> , 2017, 21, 925-953.	1.0	44
105	An efficient level set remedy approach for simulations of two-phase flow based on sigmoid function. <i>Chemical Engineering Science</i> , 2017, 172, 335-352.	1.9	21
106	Universal Devolatilization Process Model for Numerical Simulations of Coal Combustion. <i>Energy & Fuels</i> , 2017, 31, 6525-6540.	2.5	22
107	CFD-DEM study of the effect of cyclone arrangements on the gas-solid flow dynamics in the full-loop circulating fluidized bed. <i>Chemical Engineering Science</i> , 2017, 172, 199-215.	1.9	96
108	Transient Growth and Receptivity of Steady Disturbances to Irregular Rough Walls. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2017, 139, .	0.8	2

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109	Identifying the local structural units in La _{0.5} Ba _{0.5} MnO _{2.5} and BaY _{0.25} Fe _{0.75} O _{2.5} through the neutron pair distribution function. Dalton Transactions, 2017, 46, 1145-1152.	1.6	7
110	Computational Fluid Dynamics—Discrete Element Method Investigation of Pressure Signals and Solid Back-Mixing in a Full-Loop Circulating Fluidized Bed. Industrial & Engineering Chemistry Research, 2017, 56, 799-813.	1.8	32
111	Direct numerical simulation of turbulence modulation by particles in compressible isotropic turbulence. Journal of Fluid Mechanics, 2017, 832, 438-482.	1.4	26
112	Numerical investigation of the effects of volatile matter composition and chemical reaction mechanism on pulverized coal combustion characteristics. Fuel, 2017, 210, 695-704.	3.4	21
113	Evaluation of flamelet/progress variable model for laminar pulverized coal combustion. Physics of Fluids, 2017, 29, .	1.6	45
114	Large-eddy simulation and experimental study on the turbulent wake flow characteristics of a two-bladed wind turbine. Science China Technological Sciences, 2017, 60, 1861-1869.	2.0	8
115	Coupled wind farm parameterization with a mesoscale model for simulations of an onshore wind farm. Applied Energy, 2017, 206, 113-125.	5.1	22
116	Numerical analysis on shock-cylinder interaction using immersed boundary method. Science China Technological Sciences, 2017, 60, 1423-1432.	2.0	8
117	Numerical study on flow behavior of ultrafine powders in conical spouted bed with coarse particles. Chemical Engineering Research and Design, 2017, 125, 461-470.	2.7	9
118	Population Balance Equation of Cohesive Particle Flow in a Circulating Fluidized Bed. Chemical Engineering and Technology, 2017, 40, 1544-1551.	0.9	6
119	Direct Numerical Simulation Study on the Stabilization Mechanism of a Turbulent Lifted Pulverized Coal Jet Flame in a Heated Coflow. Energy & Fuels, 2017, 31, 8742-8757.	2.5	12
120	Numerical Simulation of CO Methanation for the Production of Synthetic Natural Gas in a Fluidized Bed Reactor. Energy & Fuels, 2017, 31, 10267-10273.	2.5	13
121	Interaction of a planar reacting shock wave with an isotropic turbulent vorticity field. Physical Review E, 2017, 96, 053104.	0.8	13
122	LES of pulverized coal combustion with a multi-regime flamelet model. Fuel, 2017, 188, 661-671.	3.4	57
123	Detailed numerical simulation of swirling primary atomization using a mass conservative level set method. International Journal of Multiphase Flow, 2017, 89, 57-68.	1.6	38
124	A ghost-cell immersed boundary method for the simulations of heat transfer in compressible flows under different boundary conditions Part-II: Complex geometries. International Journal of Heat and Mass Transfer, 2017, 104, 98-111.	2.5	29
125	Parallel LES-DEM simulation of dense flows in fluidized beds. Applied Thermal Engineering, 2017, 111, 1523-1535.	3.0	79
126	Large eddy simulation of turbulent combustion by a dynamic second-order moment closure model. Fuel, 2017, 187, 457-467.	3.4	12

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127	Detailed numerical simulation of unsteady drag coefficient of deformable droplet. Chemical Engineering Journal, 2017, 308, 619-631.	6.6	30
128	Particle statistics in a two-way coupled turbulent boundary layer flow over a flat plate. Powder Technology, 2017, 305, 250-259.	2.1	8
129	DEM study of the size-induced segregation dynamics of a ternary-size granular mixture in the rolling-regime rotating drum. Physics of Fluids, 2017, 29, .	1.6	14
130	Fully resolved simulations of turbulence modulation by high-inertia particles in an isotropic turbulent flow. Physics of Fluids, 2017, 29, 113301.	1.6	22
131	LES-DEM investigation of the time-related solid phase properties and improvements of flow uniformity in a dual-side refeed CFB. Chemical Engineering Journal, 2017, 313, 858-872.	6.6	35
132	Studies on shock interactions with moving cylinders using immersed boundary method. Physical Review Fluids, 2017, 2, .	1.0	11
133	Investigation of Gas-Solid Flow Dynamics and Heat Transfer in Fluidized Beds by Using DEM-LES Coupling Approach. Springer Proceedings in Physics, 2017, , 1023-1035.	0.1	0
134	Direct numerical simulation of heat transfer in a spatially developing turbulent boundary layer. Physics of Fluids, 2016, 28, .	1.6	26
135	Modulation of turbulence by dispersed solid particles in a spatially developing flat-plate boundary layer. Journal of Fluid Mechanics, 2016, 802, 359-394.	1.4	39
136	Simulations of Cellular Detonation Interaction with Turbulent Flows. AIAA Journal, 2016, 54, 419-433.	1.5	21
137	Direct numerical simulation of turbulent boundary layer over hemispherical rough walls. International Journal of Multiphase Flow, 2016, 83, 128-141.	1.6	11
138	Direct numerical simulation of turbulent boundary layer with heat transfer. International Journal of Heat and Mass Transfer, 2016, 99, 10-19.	2.5	15
139	DNS of a turbulent flow past two fully resolved aligned spherical particles. Advanced Powder Technology, 2016, 27, 1149-1161.	2.0	6
140	On turbulence modulation by finite-size particles in dilute gas-solid internal flows. Powder Technology, 2016, 301, 1259-1263.	2.1	13
141	Numerical investigation of two-phase flame structures in a simplified coal jet flame. Fuel, 2016, 182, 944-957.	3.4	26
142	Large eddy simulation of a semi-industrial scale coal furnace using non-adiabatic three-stream flamelet/progress variable model. Applied Energy, 2016, 183, 1086-1097.	5.1	49
143	Turbulence modulation in a particle-laden flow over a hemisphere-roughened wall. International Journal of Multiphase Flow, 2016, 87, 250-262.	1.6	8
144	Anion Redox Chemistry in the Cobalt Free 3d Transition Metal Oxide Intercalation Electrode $\text{Li}_{0.2}\text{Ni}_{0.2}\text{Mn}_{0.6}\text{O}_2$. Journal of the American Chemical Society, 2016, 138, 11211-11218.	6.6	271

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145	A comprehensive numerical investigation on the hydrodynamics and erosion characteristics in a pressurized fluidized bed with dense immersed tube bundles. <i>Chemical Engineering Science</i> , 2016, 153, 129-145.	1.9	24
146	Numerical study on three-dimensional CJ detonation waves interacting with isotropic turbulence. <i>Science Bulletin</i> , 2016, 61, 1756-1765.	4.3	4
147	One-Pot Synthesis of Lithium-Rich Cathode Material with Hierarchical Morphology. <i>Nano Letters</i> , 2016, 16, 7503-7508.	4.5	42
148	Particle-resolved direct numerical simulation of gas-solid dynamics in experimental fluidized beds. <i>AIChE Journal</i> , 2016, 62, 1917-1932.	1.8	74
149	Direct numerical simulation on supersonic turbulent reacting and non-reacting spray jet in heated coflow. <i>Fuel</i> , 2016, 164, 267-276.	3.4	19
150	Direct numerical simulation of a particle-laden flow in a flat plate boundary layer. <i>International Journal of Multiphase Flow</i> , 2016, 79, 124-143.	1.6	46
151	Charge-compensation in 3d-transition-metal-oxide intercalation cathodes through the generation of localized electron holes on oxygen. <i>Nature Chemistry</i> , 2016, 8, 684-691.	6.6	898
152	CFD simulations of flow and dust dispersion in a realistic urban area. <i>Engineering Applications of Computational Fluid Mechanics</i> , 2016, 10, 228-242.	1.5	11
153	Application of the LSQR algorithm in non-parametric estimation of aerosol size distribution. <i>Optics Communications</i> , 2016, 366, 154-162.	1.0	12
154	Vortex dynamics of a sphere wake in proximity to a wall. <i>International Journal of Multiphase Flow</i> , 2016, 79, 88-106.	1.6	9
155	Heat transfer and erosion mechanisms of an immersed tube in a bubbling fluidized bed: A LES-DEM approach. <i>International Journal of Thermal Sciences</i> , 2016, 100, 357-371.	2.6	33
156	Computational evaluation of depth effect on the hydrodynamics of slot-rectangular spouted bed. <i>Powder Technology</i> , 2016, 287, 51-60.	2.1	9
157	A ghost-cell immersed boundary method for simulations of heat transfer in compressible flows under different boundary conditions. <i>International Journal of Heat and Mass Transfer</i> , 2016, 92, 708-717.	2.5	54
158	Time resolved particle image velocimetry experimental study of the near wake characteristics of a horizontal axis wind turbine. <i>Journal of Zhejiang University: Science A</i> , 2015, 16, 586-595.	1.3	4
159	Large-eddy simulation and wind-tunnel measurement of aerodynamics and aeroacoustics of a horizontal-axis wind turbine. <i>Renewable Energy</i> , 2015, 77, 351-362.	4.3	30
160	CFD simulation of high-temperature effect on EHD characteristics in a wire-plate electrostatic precipitator. <i>Chinese Journal of Chemical Engineering</i> , 2015, 23, 633-640.	1.7	20
161	Effects of preferential concentration on collision and erosion between solid particles and tube bank in a duct flow. <i>International Journal of Heat and Mass Transfer</i> , 2015, 83, 372-381.	2.5	11
162	Accurate level set method for simulations of liquid atomization. <i>Chinese Journal of Chemical Engineering</i> , 2015, 23, 597-604.	1.7	8

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163	Conditional statistics of a laboratory-scale lifted turbulent H ₂ /N ₂ flame using direct numerical simulation. <i>International Journal of Hydrogen Energy</i> , 2015, 40, 2004-2012.	3.8	1
164	Numerical investigation of the time-related properties of solid phase in a 3-D spout-fluid bed. <i>Chemical Engineering Journal</i> , 2015, 267, 207-220.	6.6	14
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