List of Publications by Year in descending order

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SHIVI CHEN

#	Article	IF	CITATIONS
1	Perturbation analysis of baroclinic torque in low-Mach-number flows. Journal of Fluid Mechanics, 2022, 930, .	1.4	1
2	Kinetic-energy-flux-constrained model using an artificial neural network for large-eddy simulation of compressible wall-bounded turbulence. Journal of Fluid Mechanics, 2022, 932, .	1.4	5
3	Unexpected High Contribution of Residential Biomass Burning to Nonâ€Methane Organic Gases (NMOGs) in the Yangtze River Delta Region of China. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	1.2	9
4	Simulation of three-dimensional forced compressible isotropic turbulence by a redesigned discrete unified gas kinetic scheme. Physics of Fluids, 2022, 34, 025106.	1.6	8
5	The instability of a helical vortex filament under a free surface. Journal of Fluid Mechanics, 2022, 937, .	1.4	Ο
6	Flow topology and enstrophy production in chemically reacting compressible isotropic turbulence. Physical Review Fluids, 2022, 7, .	1.0	0
7	Reduced aerodynamic heating in a hypersonic boundary layer by a wavy wall. Science Bulletin, 2022, 67, 988-990.	4.3	6
8	Contribution of flow topology to the kinetic energy flux in hypersonic turbulent boundary layer. Physics of Fluids, 2022, 34, 046103.	1.6	9
9	Historically understanding the spatial distributions of particle surface area concentrations over China estimated using a non-parametric machine learning method. Science of the Total Environment, 2022, 824, 153849.	3.9	2
10	Personal exposure to electrophilic compounds of fine particulate matter and the inflammatory response: The role of atmospheric transformation. Journal of Hazardous Materials, 2022, 432, 128559.	6.5	5
11	Variations in source contributions of particle number concentration under long-term emission control in winter of urban Beijing. Environmental Pollution, 2022, 304, 119072.	3.7	10
12	Reduced Aerosol Uptake of Hydroperoxyl Radical May Increase the Sensitivity of Ozone Production to Volatile Organic Compounds. Environmental Science and Technology Letters, 2022, 9, 22-29.	3.9	16
13	Flow structures in spanwise rotating plane Poiseuille flow based on thermal analogy. Journal of Fluid Mechanics, 2022, 933, .	1.4	3
14	Skin-friction and heat-transfer decompositions in hypersonic transitional and turbulent boundary layers. Journal of Fluid Mechanics, 2022, 941, .	1.4	20
15	Effect of compressibility on the small-scale structures in hypersonic turbulent boundary layer. Physics of Fluids, 2022, 34, .	1.6	8
16	Anthropogenic monoterpenes aggravating ozone pollution. National Science Review, 2022, 9, .	4.6	17
17	A novel algorithm to determine the scattering coefficient of ambient organic aerosols. Environmental Pollution, 2021, 270, 116209.	3.7	4
18	Interfacial settling mode and tail dynamics of spherical-particle motion through immiscible fluids interfaces. Chemical Engineering Science, 2021, 229, 116091.	1.9	2

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19	Hysteresis behaviour in spanwise rotating plane Couette flow at Rew = 2600. Journal of Turbulence, 2021, 22, 254-266.	0.5	1
20	Elucidating the effect of HONO on O3 pollution by a case study in southwest China. Science of the Total Environment, 2021, 756, 144127.	3.9	23
21	Inverse design of mesoscopic models for compressible flow using the Chapman-Enskog analysis. Advances in Aerodynamics, 2021, 3, .	1.3	8
22	Interscale kinetic energy transfer in chemically reacting compressible isotropic turbulence. Journal of Fluid Mechanics, 2021, 912, .	1.4	12
23	Computing mean fields with known Reynolds stresses at steady state. Theoretical and Applied Mechanics Letters, 2021, 11, 100244.	1.3	8
24	Stabilizing/destabilizing the large-scale circulation in turbulent Rayleigh–Bénard convection with sidewall temperature control. Journal of Fluid Mechanics, 2021, 915, .	1.4	13
25	Energy budget in decaying compressible MHD turbulence. Journal of Fluid Mechanics, 2021, 916, .	1.4	7
26	Constrained large-eddy simulation of turbulent flow over rough walls. Physical Review Fluids, 2021, 6, .	1.0	5
27	Compressibility effect in hypersonic boundary layer with isothermal wall condition. Physical Review Fluids, 2021, 6, .	1.0	24
28	Transfer of internal energy fluctuation in compressible isotropic turbulence with vibrational non-equilibrium. Journal of Fluid Mechanics, 2021, 919, .	1.4	9
29	A new idea to predict reshocked Richtmyer–Meshkov mixing: constrained large-eddy simulation. Journal of Fluid Mechanics, 2021, 918, .	1.4	15
30	Kinetic energy transfer in compressible homogeneous anisotropic turbulence. Physical Review Fluids, 2021, 6, .	1.0	5
31	Near-wall flow structures and related surface quantities in wall-bounded turbulence. Physics of Fluids, 2021, 33, .	1.6	22
32	Observations and modeling of OH and HO2 radicals in Chengdu, China in summer 2019. Science of the Total Environment, 2021, 772, 144829.	3.9	28
33	Assessing the Ratios of Formaldehyde and Glyoxal to NO ₂ as Indicators of O ₃ –NO _{<i>x</i>} –VOC Sensitivity. Environmental Science & Technology, 2021, 55, 10935-10945.	4.6	27
34	Evolution of Smâ€Ðoped Fe ₂ O ₃ /CeO ₂ Oxygen Carriers in Chemical Looping Hydrogen Generation. Energy Technology, 2021, 9, 2100535.	1.8	2
35	Links between the optical properties and chemical compositions of brown carbon chromophores in different environments: Contributions and formation of functionalized aromatic compounds. Science of the Total Environment, 2021, 786, 147418.	3.9	16
36	Ni, Co and Cu-promoted iron-based oxygen carriers in methane-fueled chemical looping hydrogen generation process. Fuel Processing Technology, 2021, 221, 106917.	3.7	40

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37	The particle phase state during the biomass burning events. Science of the Total Environment, 2021, 792, 148035.	3.9	10
38	Characterizing nitrate radical budget trends in Beijing during 2013–2019. Science of the Total Environment, 2021, 795, 148869.	3.9	17
39	Secondary aerosol formation from a Chinese gasoline vehicle: Impacts of fuel (E10, gasoline) and driving conditions (idling, cruising). Science of the Total Environment, 2021, 795, 148809.	3.9	14
40	Characteristics and sources of volatile organic compounds during pollution episodes and clean periods in the Beijing-Tianjin-Hebei region. Science of the Total Environment, 2021, 799, 149491.	3.9	24
41	Dilatational-wave-induced aerodynamic cooling in transitional hypersonic boundary layers. Journal of Fluid Mechanics, 2021, 911, .	1.4	17
42	Organic Iodine Compounds in Fine Particulate Matter from a Continental Urban Region: Insights into Secondary Formation in the Atmosphere. Environmental Science & Technology, 2021, 55, 1508-1514.	4.6	9
43	Constrained large-eddy simulation of turbulent flow over inhomogeneous rough surfaces. Theoretical and Applied Mechanics Letters, 2021, 11, 100229.	1.3	9
44	Effect of wall temperature on the kinetic energy transfer in a hypersonic turbulent boundary layer. Journal of Fluid Mechanics, 2021, 929, .	1.4	26
45	Humidity-Dependent Phase State of Gasoline Vehicle Emission-Related Aerosols. Environmental Science & Technology, 2021, 55, 832-841.	4.6	2
46	Precursors and Pathways Leading to Enhanced Secondary Organic Aerosol Formation during Severe Haze Episodes. Environmental Science & Technology, 2021, 55, 15680-15693.	4.6	28
47	Field observations and quantifications of atmospheric formaldehyde partitioning in gaseous and particulate phases. Science of the Total Environment, 2021, 808, 152122.	3.9	3
48	Practical framework for data-driven RANS modeling with data augmentation. Acta Mechanica Sinica/Lixue Xuebao, 2021, 37, 1748-1756.	1.5	7
49	Constrained large-eddy simulation of a spatially evolving supersonic turbulent boundary layer at <i>M</i> = 2.25. Physics of Fluids, 2021, 33, 125116.	1.6	5
50	Large Eddy Simulation of Secondary Flows in an Ultra-High Lift Low Pressure Turbine Cascade at Various Inlet Incidences. International Journal of Turbo and Jet Engines, 2020, 37, 195-207.	0.3	1
51	Effect of flow topology on the kinetic energy flux in compressible isotropic turbulence. Journal of Fluid Mechanics, 2020, 883, .	1.4	30
52	Synergistic Effects of the Zr and Sm Co-doped Fe ₂ O ₃ /CeO ₂ Oxygen Carrier for Chemical Looping Hydrogen Generation. Energy & Fuels, 2020, 34, 10256-10267.	2.5	21
53	A Ginzburg–Landau model for linear global modes in open shear flows. Journal of Fluid Mechanics, 2020, 904, .	1.4	1
54	Spatial artificial neural network model for subgrid-scale stress and heat flux of compressible turbulence. Theoretical and Applied Mechanics Letters, 2020, 10, 27-32.	1.3	22

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55	Significant Contribution of Primary Sources to Water-Soluble Organic Carbon During Spring in Beijing, China. Atmosphere, 2020, 11, 395.	1.0	13
56	Acoustic-wave-induced cooling in onset of hypersonic turbulence. Physics of Fluids, 2020, 32, 061702.	1.6	10
57	Controlling flow reversal in two-dimensional Rayleigh–Bénard convection. Journal of Fluid Mechanics, 2020, 891, .	1.4	10
58	Simultaneous Measurements of Chemical Compositions of Fine Particles during Winter Haze Period in Urban Sites in China and Korea. Atmosphere, 2020, 11, 292.	1.0	6
59	Sintering and agglomeration of Fe2O3-MgAl2O4 oxygen carriers with different Fe2O3 loadings in chemical looping processes. Fuel, 2020, 265, 116983.	3.4	32
60	Field Determination of Nitrate Formation Pathway in Winter Beijing. Environmental Science & Technology, 2020, 54, 9243-9253.	4.6	69
61	Spatially multi-scale artificial neural network model for large eddy simulation of compressible isotropic turbulence. AIP Advances, 2020, 10, .	0.6	24
62	Effects of compressibility and Atwood number on the single-mode Rayleigh-Taylor instability. Physics of Fluids, 2020, 32, 012110.	1.6	29
63	Effect of compressibility on the local flow topology in homogeneous shear turbulence. Physics of Fluids, 2020, 32, 015118.	1.6	17
64	Dual channels of helicity cascade in turbulent flows. Journal of Fluid Mechanics, 2020, 894, .	1.4	19
65	Simulation of three-dimensional compressible decaying isotropic turbulence using a redesigned discrete unified gas kinetic scheme. Physics of Fluids, 2020, 32, .	1.6	29
66	Vibrational relaxation in compressible isotropic turbulence with thermal nonequilibrium. Physical Review Fluids, 2020, 5, .	1.0	8
67	Spectra and scaling in chemically reacting compressible isotropic turbulence. Physical Review Fluids, 2020, 5, .	1.0	10
68	Flow structures and kinetic-potential exchange in forced rotating stratified turbulence. Physical Review Fluids, 2020, 5, .	1.0	16
69	Reynolds number dependence of heavy particles clustering in homogeneous isotropic turbulence. Physical Review Fluids, 2020, 5, .	1.0	6
70	Spectral energy transfers and kinetic-potential energy exchange in rotating stratified turbulence. Physical Review Fluids, 2020, 5, .	1.0	2
71	Recent progress in the study of transition in the hypersonic boundary layer. National Science Review, 2019, 6, 155-170.	4.6	82
72	Artificial neural network mixed model for large eddy simulation of compressible isotropic turbulence. Physics of Fluids, 2019, 31, .	1.6	66

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73	Effects of bulk viscosity on compressible homogeneous turbulence. Physics of Fluids, 2019, 31, .	1.6	24
74	Image-based modelling of the skin-friction coefficient in compressible boundary-layer transition. Journal of Fluid Mechanics, 2019, 875, 1175-1203.	1.4	9
75	A two-dimensional-three-component model for spanwise rotating plane Poiseuille flow. Journal of Fluid Mechanics, 2019, 880, 478-496.	1.4	6
76	Role of magnetic field curvature in magnetohydrodynamic turbulence. Physics of Plasmas, 2019, 26, .	0.7	20
77	Identifying the pattern of breakdown in a laminar-turbulent transition via binary sequence statistics and cellular-automaton simulations. Physical Review E, 2019, 100, 023110.	0.8	2
78	Subgrid-scale structure and fluxes of turbulence underneath a surface wave. Journal of Fluid Mechanics, 2019, 878, 768-795.	1.4	1
79	Relations between skin friction and other surface quantities in viscous flows. Physics of Fluids, 2019, 31, .	1.6	30
80	Winter photochemistry in Beijing: Observation and model simulation of OH and HO2 radicals at an urban site. Science of the Total Environment, 2019, 685, 85-95.	3.9	91
81	Improved aerosol correction for OMI tropospheric NO ₂ retrieval over East Asia: constraint from CALIOP aerosol vertical profile. Atmospheric Measurement Techniques, 2019, 12, 1-21.	1.2	75
82	Hypersonic aerodynamic heating over a flared cone with wavy wall. Physics of Fluids, 2019, 31, .	1.6	37
83	Improved iron oxide oxygen carriers for chemical looping hydrogen generation using colloidal crystal templated method. International Journal of Hydrogen Energy, 2019, 44, 13175-13184.	3.8	6
84	Cascades of temperature and entropy fluctuations in compressible turbulence. Journal of Fluid Mechanics, 2019, 867, 195-215.	1.4	30
85	Enhanced sintering resistance of Fe2O3/CeO2 oxygen carrier for chemical looping hydrogen generation using core-shell structure. International Journal of Hydrogen Energy, 2019, 44, 6491-6504.	3.8	53
86	Effect of compressibility on small scale statistics in homogeneous shear turbulence. Physics of Fluids, 2019, 31, 025107.	1.6	23
87	Interactions between the premixed flame front and the three-dimensional Taylor–Green vortex. Proceedings of the Combustion Institute, 2019, 37, 2461-2468.	2.4	15
88	Scale dependence of energy transfer in turbulent plasma. Monthly Notices of the Royal Astronomical Society, 2019, 482, 4933-4940.	1.6	41
89	Numerical investigation of plane Couette flow with weak spanwise rotation. Science China: Physics, Mechanics and Astronomy, 2019, 62, 1.	2.0	4
90	Heat transfer mechanisms of inclined jets in cross flow with different holes. International Journal of Heat and Mass Transfer, 2019, 131, 664-674.	2.5	7

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91	Hysteresis behavior in spanwise rotating plane Couette flow with varying rotation rates. Physical Review Fluids, 2019, 4, .	1.0	9
92	Role of the large-scale structures in spanwise rotating plane Couette flow with multiple states. Physical Review Fluids, 2019, 4, .	1.0	8
93	A Hybrid Numerical Simulation of Supersonic Isotropic Turbulence. Communications in Computational Physics, 2019, 25, .	0.7	6
94	Kinetic energy transfer in compressible isotropic turbulence. Journal of Fluid Mechanics, 2018, 841, 581-613.	1.4	112
95	Effect of shock waves on the statistics and scaling in compressible isotropic turbulence. Physical Review E, 2018, 97, 043108.	0.8	29
96	Characterization of Fe 2 O 3 /CeO 2 oxygen carriers for chemical looping hydrogen generation. International Journal of Hydrogen Energy, 2018, 43, 3154-3164.	3.8	44
97	Coupling of high Knudsen number and non-ideal gas effects in microporous media. Journal of Fluid Mechanics, 2018, 840, 56-73.	1.4	28
98	Multiple states in turbulent plane Couette flow with spanwise rotation. Journal of Fluid Mechanics, 2018, 837, 477-490.	1.4	28
99	Aerodynamic heating in transitional hypersonic boundary layers: Role of second-mode instability. Physics of Fluids, 2018, 30, .	1.6	103
100	Effects of Zr doping on Fe2O3/CeO2 oxygen carrier in chemical looping hydrogen generation. Chemical Engineering Journal, 2018, 346, 712-725.	6.6	71
101	Large eddy simulation of spanwise rotating turbulent channel flow with dynamic variants of eddy viscosity model. Physics of Fluids, 2018, 30, .	1.6	10
102	Large Eddy Simulation and CDNS Investigation of T106C Low-Pressure Turbine. Journal of Fluids Engineering, Transactions of the ASME, 2018, 140, .	0.8	7
103	Ca2Fe2O5: A promising oxygen carrier for CO/CH4 conversion and almost-pure H2 production with inherent CO2 capture over a two-step chemical looping hydrogen generation process. Applied Energy, 2018, 211, 431-442.	5.1	119
104	Enhanced Hydrogen Generation for Fe ₂ O ₃ /CeO ₂ Oxygen Carrier via Rare-Earth (Y, Sm, and La) Doping in Chemical Looping Process. Energy & Fuels, 2018, 32, 11362-11374.	2.5	22
105	Newly identified principle for aerodynamic heating in hypersonic flows. Journal of Fluid Mechanics, 2018, 855, 152-180.	1.4	66
106	A modified optimal LES model for highly compressible isotropic turbulence. Physics of Fluids, 2018, 30, 065108.	1.6	24
107	Spectra and Mach number scaling in compressible homogeneous shear turbulence. Physics of Fluids, 2018, 30, .	1.6	31
108	Large-Eddy Simulations of Inclined Jets in Crossflow with Different Holes. Journal of Propulsion and Power, 2018, 34, 1098-1108.	1.3	7

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109	Effects of supports on reduction activity and carbon deposition of iron oxide for methane chemical looping hydrogen generation. Applied Energy, 2018, 225, 912-921.	5.1	43
110	High-order moments of streamwise fluctuations in a turbulent channel flow with spanwise rotation. Physical Review Fluids, 2018, 3, .	1.0	5
111	Sinuous distortion of vortex surfaces in the lateral growth of turbulent spots. Physical Review Fluids, 2018, 3, .	1.0	18
112	Aerodynamic Heating in Hypersonic Boundary Layer: Role of Dilatational Waves. , 2017, , .		1
113	Compressibility effect on coherent structures, energy transfer, and scaling in magnetohydrodynamic turbulence. Physics of Fluids, 2017, 29, .	1.6	32
114	Carbon formation on iron-based oxygen carriers during CH 4 reduction period in Chemical Looping Hydrogen Generation process. Chemical Engineering Journal, 2017, 325, 322-331.	6.6	59
115	Constrained large-eddy simulation of supersonic turbulent boundary layer over a compression ramp. Journal of Turbulence, 2017, 18, 781-808.	0.5	8
116	Effects of supports on hydrogen production and carbon deposition of Fe-based oxygen carriers in chemical looping hydrogen generation. International Journal of Hydrogen Energy, 2017, 42, 11006-11016.	3.8	60
117	Energy transfer, pressure tensor, and heating of kinetic plasma. Physics of Plasmas, 2017, 24, .	0.7	115
118	Effects of CeO ₂ , ZrO ₂ , and Al ₂ O ₃ Supports on Iron Oxygen Carrier for Chemical Looping Hydrogen Generation. Energy & Fuels, 2017, 31, 8001-8013.	2.5	63
119	Modulation to compressible homogenous turbulence by heavy point particles. I. Effect of particles' density. Physics of Fluids, 2016, 28, .	1.6	21
120	Large Eddy Simulation of Inclined Jet in Cross Flow With Cylindrical and Fan-Shaped Holes. , 2016, , .		8
121	Effect of Oscillation Structures on Inertial-Range Intermittence and Topology in Turbulent Field. Communications in Computational Physics, 2016, 19, 251-272.	0.7	3
122	Vortex reconnection in the late transition in channel flow. Journal of Fluid Mechanics, 2016, 802, .	1.4	36
123	A new identification method in sampled quadrant analysis for wall-bounded turbulence. Physics of Fluids, 2016, 28, 061702.	1.6	7
124	Theoretical model of scattering from flow ducts with semi-infinite axial liner splices. Journal of Fluid Mechanics, 2016, 786, 62-83.	1.4	20
125	Intermittency caused by compressibility: aÂLagrangian study. Journal of Fluid Mechanics, 2016, 786, .	1.4	10
126	Direct numerical simulation of turbulent channel flow with spanwise rotation. Journal of Fluid Mechanics, 2016, 788, 42-56.	1.4	39

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127	Evolution of material surfaces in the temporal transition in channel flow. Journal of Fluid Mechanics, 2016, 793, 840-876.	1.4	25
128	Constrained large-eddy simulation of turbulent flow and heat transfer in a stationary ribbed duct. International Journal of Numerical Methods for Heat and Fluid Flow, 2016, 26, 1069-1091.	1.6	12
129	Mach Number Effect of Compressible Flow Around a Circular Cylinder. AIAA Journal, 2016, 54, 2004-2009.	1.5	23
130	Effects of approaching main flow boundary layer on flow and cooling performance of an inclined jet in cross flow. International Journal of Heat and Mass Transfer, 2016, 103, 572-581.	2.5	27
131	Slip boundary conditions over curved surfaces. Physical Review E, 2016, 93, 013105.	0.8	27
132	Energy cascade and its locality in compressible magnetohydrodynamic turbulence. Physical Review E, 2016, 93, 061102.	0.8	37
133	Multi-scale simulation method for electroosmotic flows. European Physical Journal: Special Topics, 2016, 225, 1551-1582.	1.2	7
134	Evolutionary geometry of Lagrangian structures in a transitional boundary layer. Physics of Fluids, 2016, 28, 035110.	1.6	15
135	Large-eddy simulation of plane channel flow with Vreman's model. Journal of Turbulence, 2016, 17, 807-822.	0.5	4
136	Transition in Hypersonic Boundary Layers: Role of Dilatational Waves. AIAA Journal, 2016, 54, 3039-3049.	1.5	85
137	A hybrid scheme for compressible magnetohydrodynamic turbulence. Journal of Computational Physics, 2016, 306, 73-91.	1.9	14
138	Turbulent statistics and flow structures in spanwise-rotating turbulent plane Couette flows. Physical Review Fluids, 2016, 1, .	1.0	21
139	Effective slip boundary conditions for sinusoidally corrugated surfaces. Physical Review Fluids, 2016, 1, .	1.0	16
140	Transition in hypersonic boundary layers. AIP Advances, 2015, 5, .	0.6	50
141	Recent progress in compressible turbulence. Acta Mechanica Sinica/Lixue Xuebao, 2015, 31, 275-291.	1.5	7
142	Constrained Large-Eddy Simulation for Aerodynamics. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2015, , 105-115.	0.2	3
143	Turbulent bands in plane-Poiseuille flow at moderate Reynolds numbers. Physics of Fluids, 2015, 27, .	1.6	45
144	Comparisons of different implementations of turbulence modelling in lattice Boltzmann method. Journal of Turbulence, 2015, 16, 67-80.	0.5	7

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145	Multiscale Simulations. , 2015, , 2326-2334.		1
146	Comment on "A hybrid subgrid-scale model constrained by Reynolds stress―[Phys. Fluids 25, 110805 (2013)]. Physics of Fluids, 2014, 26, .	1.6	3
147	Interactions between inertial particles and shocklets in compressible turbulent flow. Physics of Fluids, 2014, 26, .	1.6	21
148	Constrained large-eddy simulation of laminar-turbulent transition in channel flow. Physics of Fluids, 2014, 26, .	1.6	21
149	Ignition of methane with hydrogen and dimethyl ether addition. Fuel, 2014, 118, 1-8.	3.4	51
150	Multiscale Fluid Mechanics and Modeling. Procedia IUTAM, 2014, 10, 100-114.	1.2	15
151	Joint-constraint model for large-eddy simulation of helical turbulence. Physical Review E, 2014, 89, 043021.	0.8	5
152	Constrained Large-Eddy Simulation of Compressible Flow Past a Circular Cylinder. Communications in Computational Physics, 2014, 15, 388-421.	0.7	23
153	Momentum-exchange method in lattice Boltzmann simulations of particle-fluid interactions. Physical Review E, 2013, 88, 013303.	0.8	82
154	Local Reynolds number and thresholds of transition in shear flows. Science China: Physics, Mechanics and Astronomy, 2013, 56, 263-269.	2.0	12
155	Constrained large-eddy simulation and detached eddy simulation of flow past a commercial aircraft at 14 degrees angle of attack. Science China: Physics, Mechanics and Astronomy, 2013, 56, 270-276.	2.0	26
156	Simulation of self-assemblies of colloidal particles on the substrate using a lattice Boltzmann pseudo-solid model. Journal of Computational Physics, 2013, 248, 323-338.	1.9	14
157	Experimental investigation of freely falling thin disks. Part 2. Transition of three-dimensional motion from zigzag to spiral. Journal of Fluid Mechanics, 2013, 732, 77-104.	1.4	57
158	Subgrid-scale eddy viscosity model for helical turbulence. Physics of Fluids, 2013, 25, .	1.6	29
159	Statistics and structures of pressure and density in compressible isotropic turbulence. Journal of Turbulence, 2013, 14, 21-37.	0.5	16
160	Experimental investigation of freely falling thin disks. Part 1. The flow structures and Reynolds number effects on the zigzag motion. Journal of Fluid Mechanics, 2013, 716, 228-250.	1.4	62
161	Acceleration of Passive Tracers in Compressible Turbulent Flow. Physical Review Letters, 2013, 110, 064503.	2.9	18
162	Constrained large-eddy simulation of wall-bounded compressible turbulent flows. Physics of Fluids, 2013, 25, .	1.6	39

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163	Statistics of one-dimensional compressible turbulence with random large-scale force. Physics of Fluids, 2013, 25, .	1.6	8
164	Cascade of Kinetic Energy in Three-Dimensional Compressible Turbulence. Physical Review Letters, 2013, 110, 214505.	2.9	78
165	Constrained large-eddy simulation of separated flow in a channel with streamwise-periodic constrictions. Journal of Turbulence, 2013, 14, 1-21.	0.5	103
166	Multiscale Simulations. , 2013, , 1-9.		1
167	Uncovering Molecular Mechanisms of Electrowetting and Saturation with Simulations. Physical Review Letters, 2012, 108, 216101.	2.9	47
168	Effect of compressibility on the small-scale structures in isotropic turbulence. Journal of Fluid Mechanics, 2012, 713, 588-631.	1.4	105
169	Analysis of Reynolds number scaling for viscous vortex reconnection. Physics of Fluids, 2012, 24, .	1.6	10
170	Numerical Study on the Ignition Process of <i>n</i> -Decane/Toluene Binary Fuel Blends. Energy & Fuels, 2012, 26, 6729-6736.	2.5	4
171	A model for the laminar flame speed of binary fuel blends and its application to methane/hydrogen mixtures. International Journal of Hydrogen Energy, 2012, 37, 10390-10396.	3.8	59
172	Constrained Large Eddy Simulation of Wall-Bounded Turbulent Flows. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2012, , 121-130.	0.2	1
173	Scaling and Statistics in Three-Dimensional Compressible Turbulence. Physical Review Letters, 2012, 108, 214505.	2.9	48
174	Statistics of active and passive scalars in one-dimensional compressible turbulence. Physical Review E, 2012, 86, 066307.	0.8	3
175	Reynolds-stress-constrained large-eddy simulation of wall-bounded turbulent flows. Journal of Fluid Mechanics, 2012, 703, 1-28.	1.4	112
176	Effect of shocklets on the velocity gradients in highly compressible isotropic turbulence. Physics of Fluids, 2011, 23, .	1.6	70
177	A Memory-Saving Algorithm for Spectral Method of Three-Dimensional Homogeneous Isotropic Turbulence. Communications in Computational Physics, 2011, 9, 1152-1164.	0.7	1
178	Experimental investigation of chemical-looping hydrogen generation using Al 2 O 3 or TiO 2 -supported iron oxides in a batch fluidized bed. International Journal of Hydrogen Energy, 2011, 36, 8915-8926.	3.8	101
179	Correlations for the ignition delay times of hydrogen/air mixtures. Science Bulletin, 2011, 56, 215-221.	1.7	22
180	Experimental investigation of chemical looping hydrogen generation using iron oxides in a batch fluidized bed. Proceedings of the Combustion Institute, 2011, 33, 2691-2699.	2.4	39

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181	Experimental study of freely falling thin disks: Transition from planar zigzag to spiral. Physics of Fluids, 2011, 23, .	1.6	80
182	Molecular simulations of electroosmotic flows in rough nanochannels. Journal of Computational Physics, 2010, 229, 7834-7847.	1.9	31
183	Dissipation-energy flux correlations as evidence for the Lagrangian energy cascade in turbulence. Physics of Fluids, 2010, 22, .	1.6	24
184	Peristaltic particle transport using the lattice Boltzmann method. Physics of Fluids, 2009, 21, .	1.6	43
185	Contact Angle of Clycerol Nanodroplets Under van der Waals Force. Journal of Physical Chemistry C, 2009, 113, 16169-16173.	1.5	14
186	Molecular Simulation of Electrokinetic Transport in Nanofluidics. , 2009, , .		0
187	Flow patterns in the sedimentation of an elliptical particle. Journal of Fluid Mechanics, 2009, 625, 249-272.	1.4	137
188	Onset of convection over a transient base-state in anisotropic and layered porous media. Journal of Fluid Mechanics, 2009, 641, 227-244.	1.4	65
189	Constrained subgrid-scale stress model for large eddy simulation. Physics of Fluids, 2008, 20, .	1.6	63
190	A public turbulence database cluster and applications to study Lagrangian evolution of velocity increments in turbulence. Journal of Turbulence, 2008, 9, N31.	0.5	373
191	Non-modal growth of perturbations in density-driven convection in porous media. Journal of Fluid Mechanics, 2008, 609, 285-303.	1.4	104
192	Mesoscopic predictions of the effective thermal conductivity for microscale random porous media. Physical Review E, 2007, 75, 036702.	0.8	394
193	Three-dimensional effect on the effective thermal conductivity of porous media. Journal Physics D: Applied Physics, 2007, 40, 260-265.	1.3	75
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