

Zhen-Hua Wan

List of Publications by Year in descending order

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62
papers

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586496

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62
docs citations

62
times ranked

489
citing authors

#	ARTICLE	IF	CITATIONS
1	Statistical properties of pressure-Hessian tensor in a turbulent channel flow. <i>Journal of Fluid Mechanics</i> , 2022, 934, .	1.4	2
2	Accelerating CFD simulation with high order finite difference method on curvilinear coordinates for modern GPU clusters. <i>Advances in Aerodynamics</i> , 2022, 4, .	1.3	11
3	Nonlinear saturation of bubble evolution in a two-dimensional single-mode stratified compressible Rayleigh-Taylor instability. <i>Physical Review Fluids</i> , 2022, 7, .	1.0	8
4	Noise reduction mechanisms for insert-type serrations of the NACA-0012 airfoil. <i>Journal of Fluid Mechanics</i> , 2022, 941, .	1.4	8
5	Noise reduction in cavity flow by addition of porous media. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2022, 38, .	1.5	4
6	High-fidelity robust and efficient finite difference algorithm for simulation of polymer-induced turbulence in cylindrical coordinates. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2022, 307, 104875.	1.0	4
7	Convective amplification of stimulated Raman rescattering in a picosecond laser plasma interaction regime. <i>Matter and Radiation at Extremes</i> , 2021, 6, 015901.	1.5	10
8	Multiscale Simulations of Polymer Flow Between Two Parallel Plates. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2021, 143, .	0.8	6
9	Origin of Rebound Suppression for Dilute Polymer Solution Droplets on Superhydrophobic Substrate. <i>Langmuir</i> , 2021, 37, 7565-7572.	1.6	6
10	The influence of nonlinearities on jet noise modeling based on parabolized stability equation. <i>Physics of Fluids</i> , 2021, 33, 086107.	1.6	4
11	Radius ratio dependency of the instability of fully compressible convection in rapidly rotating spherical shells. <i>Journal of Fluid Mechanics</i> , 2021, 925, .	1.4	1
12	A reverse transition route from inertial to elasticity-dominated turbulence in viscoelastic Taylor-Couette flow. <i>Journal of Fluid Mechanics</i> , 2021, 927, .	1.4	12
13	The influence of aspect ratio on flow states in the buoyancy-driven turbulence with free slip boundaries. <i>International Journal of Heat and Mass Transfer</i> , 2021, 178, 121639.	2.5	5
14	Thermal convection in a tilted rectangular box. <i>AIP Advances</i> , 2021, 11, .	0.6	1
15	Heat transfer and plume statistics in turbulent thermal convection with sparse fractal roughness. <i>Journal of Hydrodynamics</i> , 2021, 33, 1065-1077.	1.3	2
16	Effect of Mach number on the mode transition for supersonic cavity flows. <i>Aerospace Science and Technology</i> , 2020, 106, 106101.	2.5	11
17	Noise control of subsonic flow past open cavities based on porous floors. <i>Physics of Fluids</i> , 2020, 32, .	1.6	20
18	Numerical investigation of the bevelled effects on shock structure and screech noise in planar supersonic jets. <i>Physics of Fluids</i> , 2020, 32, 086103.	1.6	13

#	ARTICLE	IF	CITATIONS
19	From Rayleigh-Bénard convection to porous-media convection: how porosity affects heat transfer and flow structure. <i>Journal of Fluid Mechanics</i> , 2020, 895, .	1.4	32
20	On non-Oberbeck-Boussinesq effects in Rayleigh-Bénard convection of air for large temperature differences. <i>Journal of Fluid Mechanics</i> , 2020, 889, .	1.4	21
21	On the near-wall structures and statistics of fluctuating pressure in compressible turbulent channel flows. <i>Physics of Fluids</i> , 2020, 32, .	1.6	20
22	Onset of fully compressible convection in a rapidly rotating spherical shell. <i>Journal of Fluid Mechanics</i> , 2019, 873, 1090-1115.	1.4	11
23	Effect of sidewall on heat transfer and flow structure in Rayleigh-Bénard convection. <i>Journal of Fluid Mechanics</i> , 2019, 881, 218-243.	1.4	22
24	Flow organization and heat transfer in two-dimensional tilted convection with aspect ratio 0.5. <i>Physics of Fluids</i> , 2019, 31, .	1.6	17
25	Penetrative turbulent Rayleigh-Bénard convection in two and three dimensions. <i>Journal of Fluid Mechanics</i> , 2019, 870, 718-734.	1.4	20
26	Bifurcations in penetrative Rayleigh-Bénard convection in a cylindrical container. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2019, 40, 695-704.	1.9	5
27	Two mode coupling of the ablative Rayleigh-Taylor instabilities. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	20
28	Space-time correlations of velocity in a Mach 0.9 turbulent round jet. <i>Physics of Fluids</i> , 2019, 31, .	1.6	9
29	Absolute and convective instabilities in electrohydrodynamic flow subjected to a Poiseuille flow: a linear analysis. <i>Journal of Fluid Mechanics</i> , 2019, 862, 816-844.	1.4	19
30	Non-Oberbeck-Boussinesq effects due to large temperature differences in a differentially heated square cavity filled with air. <i>International Journal of Heat and Mass Transfer</i> , 2019, 128, 479-491.	2.5	39
31	Heat transport enhancement and scaling law transition in two-dimensional Rayleigh-Bénard convection with rectangular-type roughness. <i>International Journal of Heat and Mass Transfer</i> , 2018, 121, 872-883.	2.5	12
32	Linear and weakly nonlinear analysis of Rayleigh-Bénard convection of perfect gas with non-Oberbeck-Boussinesq effects. <i>Journal of Fluid Mechanics</i> , 2018, 845, 141-169.	1.4	19
33	The piecewise parabolic method for elastic-plastic flow in solids. <i>Scientific Reports</i> , 2018, 8, 9989.	1.6	1
34	A Study on Slip Characteristics Using Hybrid Particle-Continuum Method. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 2018, 140, .	0.8	3
35	Instability waves and low-frequency noise radiation in the subsonic chevron jet. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2018, 34, 421-430.	1.5	8
36	Optimal "quiet" inlet perturbation using adjoint-based PSE in supersonic jets. <i>Fluid Dynamics Research</i> , 2018, 50, 045504.	0.6	2

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37	Flow reversals in two-dimensional thermal convection in tilted cells. <i>Journal of Fluid Mechanics</i> , 2018, 849, 355-372.	1.4	44
38	Multiple states and heat transfer in two-dimensional tilted convection with large aspect ratios. <i>Physical Review Fluids</i> , 2018, 3, .	1.0	31
39	Model reduction for supersonic cavity flow using proper orthogonal decomposition (POD) and Galerkin projection. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2017, 38, 723-736.	1.9	10
40	The piecewise parabolic method for Riemann problems in nonlinear elasticity. <i>Scientific Reports</i> , 2017, 7, 13497.	1.6	4
41	Thermal Convection in a Tilted Rectangular Cell with Aspect Ratio 0.5. <i>Chinese Physics Letters</i> , 2017, 34, 104401.	1.3	13
42	Coherent structures and wavepackets in subsonic transitional turbulent jets. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2017, 33, 10-19.	1.5	5
43	Mode transition and oscillation suppression in supersonic cavity flow. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2016, 37, 941-956.	1.9	14
44	Flow reversals in Rayleigh-Bénard convection with non-Oberbeck-Boussinesq effects. <i>Journal of Fluid Mechanics</i> , 2016, 798, 628-642.	1.4	35
45	Nonlinear interaction of instability waves and vortex-pairing noise in axisymmetric subsonic jets. <i>Fluid Dynamics Research</i> , 2016, 48, 055502.	0.6	1
46	Bifurcation analysis of laminar isothermal planar opposed-jet flow. <i>Computers and Fluids</i> , 2016, 140, 72-80.	1.3	6
47	Stability analysis of Rayleigh-Bénard convection in a cylinder with internal heat generation. <i>Physical Review E</i> , 2016, 94, 013108.	0.8	4
48	Instability waves and aerodynamic noise in a subsonic transitional turbulent jet. <i>European Journal of Mechanics, B/Fluids</i> , 2016, 57, 192-203.	1.2	14
49	The Effects of Heating on Noise Generation in Subsonic Transitional Jets. <i>Procedia Engineering</i> , 2015, 126, 29-33.	1.2	1
50	The Effects of Temperature on Vortex-pairing Noise in Axisymmetric Subsonic Jets. <i>Procedia Engineering</i> , 2015, 126, 63-67.	1.2	1
51	Transient growth in Taylor-Couette flow of a Bingham fluid. <i>Physical Review E</i> , 2015, 91, 043202.	0.8	4
52	Numerical Simulation of Shock Bubble Interaction with Different Mach Numbers. <i>Chinese Physics Letters</i> , 2015, 32, 034701.	1.3	6
53	Dynamic mode decomposition of forced spatially developed transitional jets. <i>European Journal of Mechanics, B/Fluids</i> , 2015, 51, 16-26.	1.2	32
54	Linear stability analysis of supersonic axisymmetric jets. <i>Theoretical and Applied Mechanics Letters</i> , 2014, 4, 062005.	1.3	1

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55	Linear instability analysis of convection in a laterally heated cylinder. Journal of Fluid Mechanics, 2014, 747, 447-459.	1.4	9
56	Rayleigh-Bénard convection in a vertical annular container near the convection threshold. Physical Review E, 2014, 89, 043014.	0.8	5
57	A study on large coherent structures and noise emission in a turbulent round jet. Science China: Physics, Mechanics and Astronomy, 2014, 57, 1552-1562.	2.0	3
58	Mode decomposition of a noise suppressed mixing layer. Theoretical and Applied Mechanics Letters, 2013, 3, 042007.	1.3	3
59	Large eddy simulation of flow development and noise generation of free and swirling jets. Physics of Fluids, 2013, 25, .	1.6	17
60	The effects of initial perturbation to mixing-layer noise. Theoretical and Applied Mechanics Letters, 2012, 2, 032003.	1.3	0
61	Sound generation by different vortex interactions in mixing layers. , 2012, , .		6
62	Robustness of the hybrid DRP-WENO scheme for shock flow computations. International Journal for Numerical Methods in Fluids, 2012, 70, 985-1003.	0.9	8