

Minping Wan

List of Publications by Year in descending order

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118
papers

4,643
citations

101384

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106150

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all docs

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docs citations

118
times ranked

2188
citing authors

#	ARTICLE	IF	CITATIONS
1	A DNS study of extreme and leading points in lean hydrogen-air turbulent flames â€œ Part I: Local thermochemical structure and reaction rates. <i>Combustion and Flame</i> , 2022, 235, 111716.	2.8	6
2	A DNS study of extreme and leading points in lean hydrogen-air turbulent flames - part II: Local velocity field and flame topology. <i>Combustion and Flame</i> , 2022, 235, 111712.	2.8	8
3	Hydrodynamic performance of an unconstrained flapping swimmer with flexible fin: A numerical study. <i>Physics of Fluids</i> , 2022, 34, .	1.6	17
4	10.1063/5.0077312.1. , 2022, , .		0
5	Acceleration statistics of tracer and light particles in compressible homogeneous isotropic turbulence. <i>Journal of Fluid Mechanics</i> , 2022, 935, .	1.4	0
6	Physical Regimes of Two-dimensional MHD Turbulent Reconnection in Different Lundquist Numbers. <i>Astrophysical Journal</i> , 2022, 926, 97.	1.6	3
7	The instability of a helical vortex filament under a free surface. <i>Journal of Fluid Mechanics</i> , 2022, 937, .	1.4	0
8	Lewis number and preferential diffusion effects in lean hydrogenâ€œair highly turbulent flames. <i>Physics of Fluids</i> , 2022, 34, .	1.6	17
9	The effects of caudal fin's bending stiffness on a self-propelled carangiform swimmer. <i>Physics of Fluids</i> , 2022, 34, .	1.6	12
10	Pressureâ€œStrain Interaction as the Energy Dissipation Estimate in Collisionless Plasma. <i>Astrophysical Journal</i> , 2022, 929, 142.	1.6	31
11	A numerical support of leading point concept. <i>International Journal of Hydrogen Energy</i> , 2022, 47, 23444-23461.	3.8	7
12	Effects of Lewis and Karlovitz numbers on transport equations for turbulent kinetic energy and enstrophy. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , 2022, 38, .	1.5	3
13	Evidence for Raupach <i>et al.</i> 's mixing-layer analogy in deep homogeneous urban-canopy flows. <i>Journal of Fluid Mechanics</i> , 2022, 944, .	1.4	5
14	Effects of Forcing Mechanisms on the Multiscale Properties of Magnetohydrodynamics. <i>Astrophysical Journal</i> , 2021, 909, 175.	1.6	2
15	Explicit formulations of G13-based gas kinetic flux solver (G13-GKFS) for simulation of continuum and rarefied flows. <i>Physics of Fluids</i> , 2021, 33, .	1.6	10
16	Energy budget in decaying compressible MHD turbulence. <i>Journal of Fluid Mechanics</i> , 2021, 916, .	1.4	7
17	Constrained large-eddy simulation of turbulent flow over rough walls. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	5
18	Compressibility effect in hypersonic boundary layer with isothermal wall condition. <i>Physical Review Fluids</i> , 2021, 6, .	1.0	24

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19	Uniform-momentum zones and internal shear layers in turbulent pipe flows at Reynolds numbers up to 10^6 . <i>Journal of Fluid Mechanics</i> , 2021, 925, .	1.4	8
20	Linear-model-based estimation in wall turbulence: improved stochastic forcing and eddy viscosity terms. <i>Journal of Fluid Mechanics</i> , 2021, 925, .	1.4	16
21	Special Topic on Selected Papers from the 11th National Congress on Fluid Mechanics of China. <i>Physics of Fluids</i> , 2021, 33, 090402.	1.6	0
22	Constrained large-eddy simulation of turbulent flow over inhomogeneous rough surfaces. <i>Theoretical and Applied Mechanics Letters</i> , 2021, 11, 100229.	1.3	9
23	Effect of wall temperature on the kinetic energy transfer in a hypersonic turbulent boundary layer. <i>Journal of Fluid Mechanics</i> , 2021, 929, .	1.4	26
24	Flow structures, nonlinear inertial waves and energy transfer in rotating spheres. <i>Theoretical and Applied Mechanics Letters</i> , 2021, 11, 100312.	1.3	3
25	Uniform-momentum zones in a turbulent pipe flow. <i>Journal of Fluid Mechanics</i> , 2020, 884, .	1.4	15
26	Effect of flow topology on the kinetic energy flux in compressible isotropic turbulence. <i>Journal of Fluid Mechanics</i> , 2020, 883, .	1.4	30
27	A Ginzburg-Landau model for linear global modes in open shear flows. <i>Journal of Fluid Mechanics</i> , 2020, 904, .	1.4	1
28	Spatial artificial neural network model for subgrid-scale stress and heat flux of compressible turbulence. <i>Theoretical and Applied Mechanics Letters</i> , 2020, 10, 27-32.	1.3	22
29	Pathways to Dissipation in Weakly Collisional Plasmas. <i>Astrophysical Journal</i> , 2020, 891, 101.	1.6	56
30	Spatially multi-scale artificial neural network model for large eddy simulation of compressible isotropic turbulence. <i>AIP Advances</i> , 2020, 10, .	0.6	24
31	Effects of compressibility and Atwood number on the single-mode Rayleigh-Taylor instability. <i>Physics of Fluids</i> , 2020, 32, 012110.	1.6	29
32	Effect of compressibility on the local flow topology in homogeneous shear turbulence. <i>Physics of Fluids</i> , 2020, 32, 015118.	1.6	17
33	A novel solver for simulation of flows from continuum regime to rarefied regime at moderate Knudsen number. <i>Journal of Computational Physics</i> , 2020, 415, 109548.	1.9	14
34	Vibrational relaxation in compressible isotropic turbulence with thermal nonequilibrium. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	8
35	Shear-driven Transition to Isotropically Turbulent Solar Wind Outside the Alfvén Critical Zone. <i>Astrophysical Journal</i> , 2020, 902, 94.	1.6	83
36	An Approximate Second-Order Closure Model for Large-Eddy Simulation of Compressible Isotropic Turbulence. <i>Communications in Computational Physics</i> , 2020, 27, 775-808.	0.7	5

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37	Flow structures and kinetic-potential exchange in forced rotating stratified turbulence. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	16
38	Reynolds number dependence of heavy particles clustering in homogeneous isotropic turbulence. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	6
39	Spectral energy transfers and kinetic-potential energy exchange in rotating stratified turbulence. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	2
40	The interpretation of data from the Parker Solar Probe mission: shear-driven transition to an isotropically turbulent solar wind. <i>Radiation Effects and Defects in Solids</i> , 2020, 175, 1002-1003.	0.4	0
41	Dynamic patterns of self-organization inflow in collisionless magnetic reconnection. <i>Astrophysics and Space Science</i> , 2019, 364, 1.	0.5	3
42	Artificial neural network mixed model for large eddy simulation of compressible isotropic turbulence. <i>Physics of Fluids</i> , 2019, 31, .	1.6	66
43	Evolution of similarity lengths in anisotropic magnetohydrodynamic turbulence. <i>Journal of Fluid Mechanics</i> , 2019, 876, 5-18.	1.4	12
44	Effects of bulk viscosity on compressible homogeneous turbulence. <i>Physics of Fluids</i> , 2019, 31, .	1.6	24
45	Low-order modelling of wake meandering behind turbines. <i>Journal of Fluid Mechanics</i> , 2019, 877, 534-560.	1.4	25
46	Role of magnetic field curvature in magnetohydrodynamic turbulence. <i>Physics of Plasmas</i> , 2019, 26, .	0.7	20
47	Identifying the pattern of breakdown in a laminar-turbulent transition via binary sequence statistics and cellular-automaton simulations. <i>Physical Review E</i> , 2019, 100, 023110.	0.8	2
48	Subgrid-scale structure and fluxes of turbulence underneath a surface wave. <i>Journal of Fluid Mechanics</i> , 2019, 878, 768-795.	1.4	1
49	Forced synchronization of quasiperiodic oscillations in a thermoacoustic system. <i>Journal of Fluid Mechanics</i> , 2019, 879, 390-421.	1.4	39
50	Cascades of temperature and entropy fluctuations in compressible turbulence. <i>Journal of Fluid Mechanics</i> , 2019, 867, 195-215.	1.4	30
51	Effect of compressibility on small scale statistics in homogeneous shear turbulence. <i>Physics of Fluids</i> , 2019, 31, 025107.	1.6	23
52	Scale dependence of energy transfer in turbulent plasma. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 482, 4933-4940.	1.6	41
53	Numerical investigation of plane Couette flow with weak spanwise rotation. <i>Science China: Physics, Mechanics and Astronomy</i> , 2019, 62, 1.	2.0	4
54	Hysteresis behavior in spanwise rotating plane Couette flow with varying rotation rates. <i>Physical Review Fluids</i> , 2019, 4, .	1.0	9

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55	Role of the large-scale structures in spanwise rotating plane Couette flow with multiple states. <i>Physical Review Fluids</i> , 2019, 4, .	1.0	8
56	Kinetic energy transfer in compressible isotropic turbulence. <i>Journal of Fluid Mechanics</i> , 2018, 841, 581-613.	1.4	112
57	Effect of shock waves on the statistics and scaling in compressible isotropic turbulence. <i>Physical Review E</i> , 2018, 97, 043108.	0.8	29
58	Partial Variance of Increments Method in Solar Wind Observations and Plasma Simulations. <i>Space Science Reviews</i> , 2018, 214, 1.	3.7	67
59	Multiple states in turbulent plane Couette flow with spanwise rotation. <i>Journal of Fluid Mechanics</i> , 2018, 837, 477-490.	1.4	28
60	Turbulent heating due to magnetic reconnection. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	29
61	In Situ Observation of Intermittent Dissipation at Kinetic Scales in the Earth's Magnetosheath. <i>Astrophysical Journal Letters</i> , 2018, 856, L19.	3.0	55
62	Finite Dissipation in Anisotropic Magnetohydrodynamic Turbulence. <i>Physical Review X</i> , 2018, 8, .	2.8	24
63	A modified optimal LES model for highly compressible isotropic turbulence. <i>Physics of Fluids</i> , 2018, 30, 065108.	1.6	24
64	Spectra and Mach number scaling in compressible homogeneous shear turbulence. <i>Physics of Fluids</i> , 2018, 30, .	1.6	31
65	Compressibility effect on coherent structures, energy transfer, and scaling in magnetohydrodynamic turbulence. <i>Physics of Fluids</i> , 2017, 29, .	1.6	32
66	Charged Particle Diffusion in Isotropic Random Magnetic Fields. <i>Astrophysical Journal</i> , 2017, 837, 140.	1.6	37
67	Exploring the statistics of magnetic reconnection X-points in kinetic particle-in-cell turbulence. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	37
68	Energy transfer, pressure tensor, and heating of kinetic plasma. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	115
69	Energy transfer channels and turbulence cascade in Vlasov-Maxwell turbulence. <i>Physical Review E</i> , 2017, 95, 061201.	0.8	63
70	VARIANCE ANISOTROPY IN KINETIC PLASMAS. <i>Astrophysical Journal</i> , 2016, 824, 44.	1.6	14
71	Variance anisotropy in compressible $\beta \ll 1$ MHD. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 5041-5054.	0.8	14
72	On the spatio-temporal behavior of magnetohydrodynamic turbulence in a magnetized plasma. <i>Physics of Plasmas</i> , 2016, 23, .	0.7	20

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73	Intermittency, coherent structures and dissipation in plasma turbulence. <i>Physics of Plasmas</i> , 2016, 23, .	0.7	77
74	Local modulation and trapping of energetic particles by coherent magnetic structures. <i>Geophysical Research Letters</i> , 2016, 43, 3620-3627.	1.5	20
75	TURBULENCE AND PROTON-INDUCED ELECTRON HEATING IN KINETIC PLASMA. <i>Astrophysical Journal Letters</i> , 2016, 827, L7.	3.0	43
76	Energy cascade and its locality in compressible magnetohydrodynamic turbulence. <i>Physical Review E</i> , 2016, 93, 061102.	0.8	37
77	A hybrid scheme for compressible magnetohydrodynamic turbulence. <i>Journal of Computational Physics</i> , 2016, 306, 73-91.	1.9	14
78	EFFECT OF COHERENT STRUCTURES ON ENERGETIC PARTICLE INTENSITY IN THE SOLAR WIND AT 1 AU. <i>Astrophysical Journal</i> , 2015, 812, 68.	1.6	27
79	Intermittency, nonlinear dynamics and dissipation in the solar wind and astrophysical plasmas. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2015, 373, 20140154.	1.6	141
80	Intermittent Dissipation and Heating in 3D Kinetic Plasma Turbulence. <i>Physical Review Letters</i> , 2015, 114, 175002.	2.9	110
81	Anisotropy in solar wind plasma turbulence. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2015, 373, 20140152.	1.6	88
82	TRANSITION FROM KINETIC TO MHD BEHAVIOR IN A COLLISIONLESS PLASMA. <i>Astrophysical Journal</i> , 2015, 811, 112.	1.6	40
83	The link between shocks, turbulence, and magnetic reconnection in collisionless plasmas. <i>Physics of Plasmas</i> , 2014, 21, .	0.7	217
84	DISSIPATION AND RECONNECTION IN BOUNDARY-DRIVEN REDUCED MAGNETOHYDRODYNAMICS. <i>Astrophysical Journal</i> , 2014, 797, 63.	1.6	32
85	NONLINEAR AND LINEAR TIMESCALES NEAR KINETIC SCALES IN SOLAR WIND TURBULENCE. <i>Astrophysical Journal</i> , 2014, 790, 155.	1.6	50
86	COMPLEXITY AND DIFFUSION OF MAGNETIC FLUX SURFACES IN ANISOTROPIC TURBULENCE. <i>Astrophysical Journal</i> , 2014, 785, 56.	1.6	17
87	GENERATING SYNTHETIC MAGNETIC FIELD INTERMITTENCY USING A MINIMAL MULTISCALE LAGRANGIAN MAPPING APPROACH. <i>Astrophysical Journal</i> , 2014, 796, 97.	1.6	3
88	von Kármán Energy Decay and Heating of Protons and Electrons in a Kinetic Turbulent Plasma. <i>Physical Review Letters</i> , 2013, 111, 121105.	2.9	57
89	Coherent structures, intermittent turbulence, and dissipation in high-temperature plasmas. <i>Physics of Plasmas</i> , 2013, 20, .	0.7	290
90	Overview on numerical studies of reconnection and dissipation in the solar wind. , 2013, , .		0

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91	Solar wind fluctuations and the von Kármán-Howarth equations: The role of fourth-order correlations. , 2013, , .		0
92	Generation of X-points and secondary islands in 2D magnetohydrodynamic turbulence. Physics of Plasmas, 2013, 20, .	0.7	38
93	INTERMITTENT HEATING IN SOLAR WIND AND KINETIC SIMULATIONS. Astrophysical Journal Letters, 2013, 763, L30.	3.0	130
94	ON THE ORIGIN OF ANISOTROPY IN MAGNETOHYDRODYNAMIC TURBULENCE: THE ROLE OF HIGHER-ORDER CORRELATIONS. Astrophysical Journal, 2013, 768, 10.	1.6	23
95	ASSOCIATION OF SUPRATHERMAL PARTICLES WITH COHERENT STRUCTURES AND SHOCKS. Astrophysical Journal Letters, 2013, 776, L8.	3.0	78
96	Intermittency and Local Heating in the Solar Wind. Physical Review Letters, 2012, 108, 261102.	2.9	112
97	Intermittent Dissipation at Kinetic Scales in Collisionless Plasma Turbulence. Physical Review Letters, 2012, 109, 195001.	2.9	155
98	INVESTIGATION OF INTERMITTENCY IN MAGNETOHYDRODYNAMICS AND SOLAR WIND TURBULENCE: SCALE-DEPENDENT KURTOSIS. Astrophysical Journal, 2012, 744, 171.	1.6	30
99	A review of relaxation and structure in some turbulent plasmas: magnetohydrodynamics and related models. Journal of Turbulence, 2012, 13, N37.	0.5	10
100	LOCAL ANISOTROPY, HIGHER ORDER STATISTICS, AND TURBULENCE SPECTRA. Astrophysical Journal, 2012, 750, 103.	1.6	50
101	von Kármán self-preservation hypothesis for magnetohydrodynamic turbulence and its consequences for universality. Journal of Fluid Mechanics, 2012, 697, 296-315.	1.4	67
102	Magnetic reconnection as an element of turbulence. Nonlinear Processes in Geophysics, 2011, 18, 675-695.	0.6	96
103	DIRECTIONAL ALIGNMENT AND NON-GAUSSIAN STATISTICS IN SOLAR WIND TURBULENCE. Astrophysical Journal, 2011, 741, 75.	1.6	22
104	Anisotropic Third-Moment Estimates of the Energy Cascade in Solar Wind Turbulence Using Multispacecraft Data. Physical Review Letters, 2011, 107, 165001.	2.9	61
105	Statistics of magnetic reconnection in two-dimensional magnetohydrodynamic turbulence. Physics of Plasmas, 2010, 17, .	0.7	113
106	Dissipation-energy flux correlations as evidence for the Lagrangian energy cascade in turbulence. Physics of Fluids, 2010, 22, .	1.6	24
107	Local relaxation and maximum entropy in two-dimensional turbulence. Physics of Fluids, 2010, 22, .	1.6	10
108	The third-order law for magnetohydrodynamic turbulence with shear: Numerical investigation. Physics of Plasmas, 2010, 17, .	0.7	37

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109	On the accuracy of simulations of turbulence. <i>Physics of Plasmas</i> , 2010, 17, 082308.	0.7	45
110	Properties of magnetic reconnection in MHD turbulence. , 2010, , .		1
111	Statistical properties of solar wind discontinuities, intermittent turbulence, and rapid emergence of non-Gaussian distributions. <i>AIP Conference Proceedings</i> , 2010, , .	0.3	3
112	The third-order law for magnetohydrodynamic turbulence with constant shear. , 2010, , .		0
113	Generation of non-Gaussian statistics and coherent structures in ideal magnetohydrodynamics. <i>Physics of Plasmas</i> , 2009, 16, .	0.7	34
114	The third-order law for increments in magnetohydrodynamic turbulence with constant shear. <i>Physics of Plasmas</i> , 2009, 16, .	0.7	41
115	Physical mechanism of the inverse energy cascade of two-dimensional turbulence: a numerical investigation. <i>Journal of Fluid Mechanics</i> , 2009, 619, 1-44.	1.4	88
116	A public turbulence database cluster and applications to study Lagrangian evolution of velocity increments in turbulence. <i>Journal of Turbulence</i> , 2008, 9, N31.	0.5	373
117	Physical Mechanism of the Two-Dimensional Inverse Energy Cascade. <i>Physical Review Letters</i> , 2006, 96, 084502.	2.9	134
118	Is the Kelvin Theorem Valid for High Reynolds Number Turbulence?. <i>Physical Review Letters</i> , 2006, 97, 144505.	2.9	20