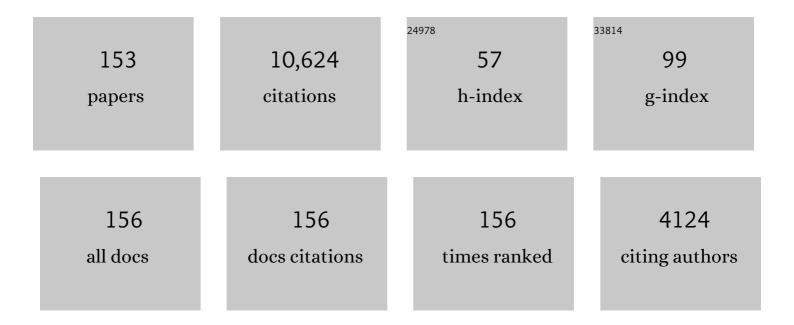
List of Publications by Year in descending order

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Version: 2024-02-01



#	Article	IF	CITATIONS
1	Nonmonotonic Pair Potentials in the Interaction of Like-Charged Objects in Solution. Langmuir, 2022, 38, 786-800.	1.6	5
2	Strong suppression of heat conduction in a laboratory replica of galaxy-cluster turbulent plasmas. Science Advances, 2022, 8, eabj6799.	4.7	11
3	High-frequency heating of the solar wind triggered by low-frequency turbulence. Nature Astronomy, 2022, 6, 715-723.	4.2	41
4	Energy partition between Alfvénic and compressive fluctuations in magnetorotational turbulence with near-azimuthal mean magnetic field. Journal of Plasma Physics, 2022, 88, .	0.7	6
5	Insensitivity of a turbulent laser-plasma dynamo to initial conditions. Matter and Radiation at Extremes, 2022, 7, .	1.5	3
6	Time-resolved turbulent dynamo in a laser plasma. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	20
7	On the violation of the zeroth law of turbulence in space plasmas. Journal of Plasma Physics, 2021, 87,	0.7	33
8	Reconnection-Controlled Decay of Magnetohydrodynamic Turbulence and the Role of Invariants. Physical Review X, 2021, 11, .	2.8	13
9	Inefficient Magnetic-Field Amplification in Supersonic Laser-Plasma Turbulence. Physical Review Letters, 2021, 127, 175002.	2.9	9
10	Elasticity of tangled magnetic fields. Journal of Plasma Physics, 2020, 86, .	0.7	4
11	Zonally dominated dynamics and Dimits threshold in curvature-driven ITG turbulence. Journal of Plasma Physics, 2020, 86, .	0.7	25
12	Fluctuation dynamo in a weakly collisional plasma. Journal of Plasma Physics, 2020, 86, .	0.7	27
13	Ion versus Electron Heating in Compressively Driven Astrophysical Gyrokinetic Turbulence. Physical Review X, 2020, 10, .	2.8	12
14	Transport of High-energy Charged Particles through Spatially Intermittent Turbulent Magnetic Fields. Astrophysical Journal, 2020, 892, 114.	1.6	8
15	Self-sustaining sound in collisionless, high- <i>î²</i> plasma. Journal of Plasma Physics, 2020, 86, .	0.7	15
16	Field reconstruction from proton radiography of intense laser driven magnetic reconnection. Physics of Plasmas, 2019, 26, .	0.7	18
17	Suppressed effective viscosity in the bulk intergalactic plasma. Nature Astronomy, 2019, 3, 832-837.	4.2	45
18	Constraints on ion versus electron heating by plasma turbulence at low beta. Journal of Plasma Physics, 2019, 85, .	0.7	31

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19	Supersonic plasma turbulence in the laboratory. Nature Communications, 2019, 10, 1758.	5.8	24
20	Overview of new MAST physics in anticipation of first results from MAST Upgrade. Nuclear Fusion, 2019, 59, 112011.	1.6	30
21	Magneto-immutable turbulence in weakly collisional plasmas. Journal of Plasma Physics, 2019, 85, .	0.7	20
22	Thermal disequilibration of ions and electrons by collisionless plasma turbulence. Proceedings of the United States of America, 2019, 116, 771-776.	3.3	90
23	Fluidization of collisionless plasma turbulence. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1185-1194.	3.3	38
24	Astrophysical gyrokinetics: turbulence in pressure-anisotropic plasmas at ion scales andÂbeyond. Journal of Plasma Physics, 2018, 84, .	0.7	38
25	A solvable model of Vlasov-kinetic plasma turbulence in Fourier–Hermite phase space. Journal of Plasma Physics, 2018, 84, .	0.7	26
26	Laboratory evidence of dynamo amplification of magnetic fields in a turbulent plasma. Nature Communications, 2018, 9, 591.	5.8	105
27	Generation of internal waves by buoyant bubbles in galaxy clusters and heating of intracluster medium. Monthly Notices of the Royal Astronomical Society, 2018, 478, 4785-4798.	1.6	33
28	Self-inhibiting thermal conduction in a high-, whistler-unstable plasma. Journal of Plasma Physics, 2018, 84, .	0.7	44
29	Supergranulation and multiscale flows in the solar photosphere. Astronomy and Astrophysics, 2017, 599, A69.	2.1	26
30	Numerical modeling of laser-driven experiments aiming to demonstrate magnetic field amplification via turbulent dynamo. Physics of Plasmas, 2017, 24, .	0.7	31
31	Ion-scale turbulence in MAST: anomalous transport, subcritical transitions, and comparison to BES measurements. Plasma Physics and Controlled Fusion, 2017, 59, 114003.	0.9	21
32	Kinetic Simulations of the Interruption of Large-Amplitude Shear-Alfvén Waves in a High- <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> <mml:mi>l²</mml:mi> Plasma. Physical Review Letters, 2017, 119, 155101.</mml:math 	2.9	31
33	Disruption of Alfvénic turbulence by magnetic reconnection in a collisionless plasma. Journal of Plasma Physics, 2017, 83, .	0.7	66
34	Magneto-optic probe measurements in low density-supersonic jets. Journal of Instrumentation, 2017, 12, P12001-P12001.	0.5	2
35	Symmetry breaking in MAST plasma turbulence due to toroidal flow shear. Plasma Physics and Controlled Fusion, 2017, 59, 034002.	0.9	11
36	Collisionality scaling of the electron heat flux in ETG turbulence. Plasma Physics and Controlled Fusion, 2017, 59, 055002.	0.9	33

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37	Amplitude limits and nonlinear damping of shear-Alfvén waves in high-beta low-collisionality plasmas. New Journal of Physics, 2017, 19, 055005.	1.2	19
38	Disruption of sheet-like structures in Alfvénic turbulence by magnetic reconnection. Monthly Notices of the Royal Astronomical Society, 2017, 468, 4862-4871.	1.6	83
39	Experimental determination of the correlation properties of plasma turbulence using 2D BES systems. Plasma Physics and Controlled Fusion, 2017, 59, 044008.	0.9	9
40	Proton imaging of stochastic magnetic fields. Journal of Plasma Physics, 2017, 83, .	0.7	47
41	A statistical model of three-dimensional anisotropy and intermittency in strong Alfvénic turbulence. Monthly Notices of the Royal Astronomical Society, 2017, 466, 3918-3927.	1.6	55
42	MULTI-SPECIES MEASUREMENTS OF THE FIREHOSE AND MIRROR INSTABILITY THRESHOLDS IN THE SOLAR WIND. Astrophysical Journal Letters, 2016, 825, L26.	3.0	86
43	Suppression of phase mixing in drift-kinetic plasma turbulence. Physics of Plasmas, 2016, 23, .	0.7	25
44	Constraints on dynamo action in plasmas. Journal of Plasma Physics, 2016, 82, .	0.7	12
45	Turbulent dynamo in a collisionless plasma. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 3950-3953.	3.3	43
46	Phase mixing versus nonlinear advection in drift-kinetic plasma turbulence. Journal of Plasma Physics, 2016, 82, .	0.7	91
47	The nature and energetics of AGN-driven perturbations in the hot gas in the Perseus Cluster. Monthly Notices of the Royal Astronomical Society, 2016, 458, 2902-2915.	1.6	47
48	Polarization of thermal bremsstrahlung emission due to electron pressure anisotropy. Monthly Notices of the Royal Astronomical Society, 2016, 461, 2162-2173.	1.6	3
49	Transition to subcritical turbulence in a tokamak plasma. Journal of Plasma Physics, 2016, 82, .	0.7	32
50	Measures of three-dimensional anisotropy and intermittency in strong Alfvénic turbulence. Monthly Notices of the Royal Astronomical Society, 2016, 459, 2130-2139.	1.6	35
51	Thermal conduction in a mirror-unstable plasma. Monthly Notices of the Royal Astronomical Society, 2016, 460, 467-477.	1.6	36
52	Pressure-anisotropy-driven microturbulence and magnetic-field evolution in shearing, collisionless plasma. Monthly Notices of the Royal Astronomical Society, 2016, 459, 2701-2720.	1.6	37
53	A STRINGENT LIMIT ON THE AMPLITUDE OF ALFVÉNIC PERTURBATIONS IN HIGH-BETA LOW-COLLISIONALITY PLASMAS. Astrophysical Journal Letters, 2016, 830, L25.	3.0	35
54	Inertial-range kinetic turbulence in pressure-anisotropic astrophysical plasmas. Journal of Plasma Physics, 2015, 81, .	0.7	58

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55	INEFFICIENT DRIVING OF BULK TURBULENCE BY ACTIVE GALACTIC NUCLEI IN A HYDRODYNAMIC MODEL OF THE INTRACLUSTER MEDIUM. Astrophysical Journal, 2015, 815, 41.	1.6	51
56	Gas density fluctuations in the Perseus Cluster: clumping factor and velocity power spectrum. Monthly Notices of the Royal Astronomical Society, 2015, 450, 4184-4197.	1.6	71
57	Refined critical balance in strong Alfvénic turbulence. Monthly Notices of the Royal Astronomical Society: Letters, 2015, 449, L77-L81.	1.2	52
58	Developed turbulence and nonlinear amplification of magnetic fields in laboratory and astrophysical plasmas. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 8211-8215.	3.3	52
59	Fluctuation-dissipation relations for a plasma-kinetic Langevin equation. Journal of Plasma Physics, 2015, 81, .	0.7	33
60	INTERMITTENCY AND ALIGNMENT IN STRONG RMHD TURBULENCE. Astrophysical Journal, 2015, 807, 39.	1.6	80
61	Overview of MAST results. Nuclear Fusion, 2015, 55, 104008.	1.6	16
62	Non-linear mirror instability. Monthly Notices of the Royal Astronomical Society: Letters, 2015, 447, L45-L49.	1.2	34
63	Suppression of local heat flux in a turbulent magnetized intracluster medium. Monthly Notices of the Royal Astronomical Society, 2014, 440, 1153-1164.	1.6	20
64	Firehose and Mirror Instabilities in a Collisionless Shearing Plasma. Physical Review Letters, 2014, 112, .	2.9	161
65	Comparison of BES measurements of ion-scale turbulence with direct gyro-kinetic simulations of MAST L-mode plasmas. Plasma Physics and Controlled Fusion, 2014, 56, 025012.	0.9	31
66	Local dependence of ion temperature gradient on magnetic configuration, rotational shear and turbulent heat flux in MAST. Nuclear Fusion, 2014, 54, 042003.	1.6	8
67	THE RELATION BETWEEN GAS DENSITY AND VELOCITY POWER SPECTRA IN GALAXY CLUSTERS: QUALITATIVE TREATMENT AND COSMOLOGICAL SIMULATIONS. Astrophysical Journal Letters, 2014, 788, L13.	3.0	65
68	Models of magnetic field evolution and effective viscosity in weakly collisional extragalactic plasmas. Monthly Notices of the Royal Astronomical Society, 2014, 440, 3226-3242.	1.6	30
69	Turbulent heating in galaxy clusters brightest in X-rays. Nature, 2014, 515, 85-87.	13.7	253
70	Turbulent amplification of magnetic fields in laboratory laser-produced shock waves. Nature Physics, 2014, 10, 520-524.	6.5	84
71	Overview of physics results from MAST towards ITER/DEMO and the MAST Upgrade. Nuclear Fusion, 2013, 53, 104008.	1.6	21
72	Plasmoid and Kelvin-Helmholtz instabilities in Sweet-Parker current sheets. Physical Review E, 2013, 87, 013102.	0.8	75

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73	Linear Structures in the Core of the Coma Cluster of Galaxies. Science, 2013, 341, 1365-1368.	6.0	35
74	Powering of cool filaments in cluster cores by buoyant bubbles – I. Qualitative model. Monthly Notices of the Royal Astronomical Society, 2013, 436, 526-530.	1.6	26
75	CORRELATIONS AT LARGE SCALES AND THE ONSET OF TURBULENCE IN THE FAST SOLAR WIND. Astrophysical Journal, 2013, 778, 177.	1.6	38
76	Multiscale gyrokinetics for rotating tokamak plasmas: fluctuations, transport and energy flows. Reports on Progress in Physics, 2013, 76, 116201.	8.1	78
77	Fast Collisionless Reconnection and Electron Heating in Strongly Magnetized Plasmas. Physical Review Letters, 2013, 111, 025002.	2.9	69
78	Alignment and Scaling of Large-Scale Fluctuations in the Solar Wind. Physical Review Letters, 2013, 110, 025003.	2.9	41
79	Experimental Signatures of Critically Balanced Turbulence in MAST. Physical Review Letters, 2013, 110, 145002.	2.9	29
80	Magnetic reconnection and stochastic plasmoid chains in high-Lundquist-number plasmas. Physics of Plasmas, 2012, 19, .	0.7	165
81	Weak Alfvén-wave turbulence revisited. Physical Review E, 2012, 85, 036406.	0.8	19
82	Scaling of Spontaneous Rotation with Temperature and Plasma Current in Tokamaks. Physical Review Letters, 2012, 108, 095001.	2.9	29
83	Measurement and physical interpretation of the mean motion of turbulent density patterns detected by the beam emission spectroscopy system on the mega amp spherical tokamak. Plasma Physics and Controlled Fusion, 2012, 54, 095012.	0.9	14
84	Subcritical fluctuations and suppression of turbulence in differentially rotating gyrokinetic plasmas. Plasma Physics and Controlled Fusion, 2012, 54, 055011.	0.9	26
85	THREE-DIMENSIONAL STRUCTURE OF SOLAR WIND TURBULENCE. Astrophysical Journal, 2012, 758, 120.	1.6	105
86	Zero-Turbulence Manifold in a Toroidal Plasma. Physical Review Letters, 2012, 109, 265001.	2.9	28
87	EIDOSCOPE: particle acceleration at plasma boundaries. Experimental Astronomy, 2012, 33, 491-527.	1.6	6
88	X-ray surface brightness and gas density fluctuations in the Coma cluster. Monthly Notices of the Royal Astronomical Society, 2012, 421, 1123-1135.	1.6	151
89	Gyrokinetic Simulations of Solar Wind Turbulence from Ion to Electron Scales. Physical Review Letters, 2011, 107, 035004.	2.9	205
90	Critical balance in magnetohydrodynamic, rotating and stratified turbulence: towards a universal scaling conjecture. Journal of Fluid Mechanics, 2011, 677, 134-153.	1.4	87

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91	A thermally stable heating mechanism for the intracluster medium: turbulence, magnetic fields and plasma instabilities. Monthly Notices of the Royal Astronomical Society, 2011, 410, 2446-2457.	1.6	102
92	A non-linear theory of the parallel firehose and gyrothermal instabilities in a weakly collisional plasma. Monthly Notices of the Royal Astronomical Society, 2011, 413, 7-38.	1.6	54
93	Anisotropy of Alfvénic turbulence in the solar wind and numerical simulations. Monthly Notices of the Royal Astronomical Society, 2011, 415, 3219-3226.	1.6	120
94	Large-Scale Magnetic Field Generation by Randomly Forced Shearing Waves. Physical Review Letters, 2011, 107, 255004.	2.9	66
95	Momentum Injection in Tokamak Plasmas and Transitions to Reduced Transport. Physical Review Letters, 2011, 106, 115004.	2.9	24
96	Turbulent Transport in Tokamak Plasmas with Rotational Shear. Physical Review Letters, 2011, 106, 175004.	2.9	69
97	Critically Balanced Ion Temperature Gradient Turbulence in Fusion Plasmas. Physical Review Letters, 2011, 107, 115003.	2.9	84
98	Anisotropy of Imbalanced Alfvénic Turbulence in Fast Solar Wind. Physical Review Letters, 2011, 106, 045001.	2.9	82
99	Reduced fluid-kinetic equations for low-frequency dynamics, magnetic reconnection, and electron heating in low-beta plasmas. Physics of Plasmas, 2011, 18, .	0.7	99
100	Transport bifurcation induced by sheared toroidal flow in tokamak plasmas. Physics of Plasmas, 2011, 18, .	0.7	17
101	Two-dimensional gyrokinetic turbulence. Journal of Fluid Mechanics, 2010, 664, 407-435.	1.4	52
102	INTERPRETING POWER ANISOTROPY MEASUREMENTS IN PLASMA TURBULENCE. Astrophysical Journal Letters, 2010, 711, L79-L83.	3.0	55
103	Power and spectral index anisotropy of the entire inertial range of turbulence in the fast solar wind. Monthly Notices of the Royal Astronomical Society: Letters, 2010, 407, L31-L35.	1.2	151
104	Magnetofluid dynamics of magnetized cosmic plasma: firehose and gyrothermal instabilities. Monthly Notices of the Royal Astronomical Society, 2010, , .	1.6	29
105	Transport Bifurcation in a Rotating Tokamak Plasma. Physical Review Letters, 2010, 105, 215003.	2.9	55
106	Fast Magnetic Reconnection in the Plasmoid-Dominated Regime. Physical Review Letters, 2010, 105, 235002.	2.9	292
107	Anisotropy of Solar Wind Turbulence between Ion and Electron Scales. Physical Review Letters, 2010, 104, 255002.	2.9	159
108	Linearized model Fokker–Planck collision operators for gyrokinetic simulations. II. Numerical implementation and tests. Physics of Plasmas, 2009, 16, .	0.7	81

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109	Nonlinear Phase Mixing and Phase-Space Cascade of Entropy in Gyrokinetic Plasma Turbulence. Physical Review Letters, 2009, 103, 015003.	2.9	107
110	Formation of Plasmoid Chains in Magnetic Reconnection. Physical Review Letters, 2009, 103, 105004.	2.9	196
111	Gyrokinetic simulations of spherical tokamaks. Plasma Physics and Controlled Fusion, 2009, 51, 124020.	0.9	84
112	Turbulent magnetic reconnection in two dimensions. Monthly Notices of the Royal Astronomical Society: Letters, 2009, 399, L146-L150.	1.2	99
113	Probing magnetic turbulence by synchrotron polarimetry: statistics and structure of magnetic fields from Stokes correlators. Monthly Notices of the Royal Astronomical Society, 2009, 398, 1970-1988.	1.6	31
114	ASTROPHYSICAL GYROKINETICS: KINETIC AND FLUID TURBULENT CASCADES IN MAGNETIZED WEAKLY COLLISIONAL PLASMAS. Astrophysical Journal, Supplement Series, 2009, 182, 310-377.	3.0	697
115	Magnetic turbulence in clusters of galaxies. Proceedings of the International Astronomical Union, 2009, 5, 456-458.	0.0	2
116	Numerical experiments on dynamo action in sheared and rotating turbulence. Astronomische Nachrichten, 2008, 329, 737-749.	0.6	43
117	A model of turbulence in magnetized plasmas: Implications for the dissipation range in the solar wind. Journal of Geophysical Research, 2008, 113, .	3.3	281
118	Kinetic Simulations of Magnetized Turbulence in Astrophysical Plasmas. Physical Review Letters, 2008, 100, 065004.	2.9	254
119	Gyrokinetic turbulence: a nonlinear route to dissipation through phase space. Plasma Physics and Controlled Fusion, 2008, 50, 124024.	0.9	106
120	Model Collision Operators for Numerical Gyrokinetics. , 2008, , .		1
121	Nonlinear Growth of Firehose and Mirror Fluctuations in Astrophysical Plasmas. Physical Review Letters, 2008, 100, 081301.	2.9	75
122	Linearized model Fokker–Planck collision operators for gyrokinetic simulations. I. Theory. Physics of Plasmas, 2008, 15, .	0.7	124
123	Generation of Magnetic Field by Combined Action of Turbulence and Shear. Physical Review Letters, 2008, 100, 184501.	2.9	103
124	Howes <i>etÂal.</i> Reply:. Physical Review Letters, 2008, 101, .	2.9	13
125	MHD Turbulence: Nonlocal, Anisotropic, Nonuniversal?. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2008, , 347-354.	0.1	20
126	Interplanetary and interstellar plasma turbulence. Plasma Physics and Controlled Fusion, 2007, 49, A195-A209.	0.9	29

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127	Fluctuation dynamo and turbulent induction at low magnetic Prandtl numbers. New Journal of Physics, 2007, 9, 300-300.	1.2	159
128	Numerical Demonstration of Fluctuation Dynamo at Low Magnetic Prandtl Numbers. Physical Review Letters, 2007, 98, 208501.	2.9	119
129	Dissipation-scale turbulence in the solar wind. AIP Conference Proceedings, 2007, , .	0.3	3
130	Instability of current sheets and formation of plasmoid chains. Physics of Plasmas, 2007, 14, .	0.7	560
131	Exact scaling laws and the local structure of isotropic magnetohydrodynamic turbulence. Journal of Fluid Mechanics, 2007, 575, 111-120.	1.4	36
132	Turbulence and Magnetic Fields in Astrophysical Plasmas. Fluid Mechanics and Its Applications, 2007, , 85-115.	0.1	62
133	Scaling laws, nonlocality and structure in isotropic magnetohydrodynamic turbulence. , 2007, , 76-78.		0
134	Astrophysical Gyrokinetics: Basic Equations and Linear Theory. Astrophysical Journal, 2006, 651, 590-614.	1.6	265
135	Fast growth of magnetic fields in galaxy clusters: a self-accelerating dynamo. Astronomische Nachrichten, 2006, 327, 599-604.	0.6	10
136	Future magnetic field studies using the Planck surveyor experiment. Astronomische Nachrichten, 2006, 327, 626-631.	0.6	6
137	Turbulence, magnetic fields, and plasma physics in clusters of galaxies. Physics of Plasmas, 2006, 13, 056501.	0.7	136
138	The Onset of a Small-Scale Turbulent Dynamo at Low Magnetic Prandtl Numbers. Astrophysical Journal, 2005, 625, L115-L118.	1.6	106
139	Microstability physics as illuminated in the spherical tokamak. Plasma Physics and Controlled Fusion, 2005, 47, B323-B336.	0.9	50
140	X-Point Collapse and Saturation in the Nonlinear Tearing Mode Reconnection. Physical Review Letters, 2005, 95, 235003.	2.9	112
141	Plasma Instabilities and Magnetic Field Growth in Clusters of Galaxies. Astrophysical Journal, 2005, 629, 139-142.	1.6	167
142	Saturated State of the Nonlinear Small-Scale Dynamo. Physical Review Letters, 2004, 92, 084504.	2.9	27
143	Self-Similar Turbulent Dynamo. Physical Review Letters, 2004, 92, 064501.	2.9	10
144	Diffusion of passive scalar in a finite-scale random flow. Physical Review E, 2004, 70, 046304.	0.8	21

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145	Critical Magnetic Prandtl Number for Small-Scale Dynamo. Physical Review Letters, 2004, 92, 054502.	2.9	76
146	From Small-Scale Dynamo to Isotropic MHD Turbulence. Astrophysics and Space Science, 2004, 292, 141-146.	0.5	2
147	Simulations of the Small cale Turbulent Dynamo. Astrophysical Journal, 2004, 612, 276-307.	1.6	412
148	A model of nonlinear evolution and saturation of the turbulent MHD dynamo. New Journal of Physics, 2002, 4, 84-84.	1.2	117
149	The Smallâ€6cale Structure of Magnetohydrodynamic Turbulence with Large Magnetic Prandtl Numbers. Astrophysical Journal, 2002, 576, 806-813.	1.6	79
150	Spectra and Growth Rates of Fluctuating Magnetic Fields in the Kinematic Dynamo Theory with Large Magnetic Prandtl Numbers. Astrophysical Journal, 2002, 567, 828-852.	1.6	91
151	Finite-correlation-time effects in the kinematic dynamo problem. Physics of Plasmas, 2001, 8, 4937-4953.	0.7	24
152	Structure of small-scale magnetic fields in the kinematic dynamo theory. Physical Review E, 2001, 65, 016305.	0.8	69
153	Geometric properties of passive random advection. Physical Review E, 2000, 62, 545-552.	0.8	12