

# Siyao Xu

## List of Publications by Year in descending order

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43  
papers

1,085  
citations

361413

20  
h-index

414414

32  
g-index

43  
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43  
docs citations

43  
times ranked

797  
citing authors

#	ARTICLE	IF	CITATIONS
1	Shock Acceleration with Oblique and Turbulent Magnetic Fields. <i>Astrophysical Journal</i> , 2022, 925, 48.	4.5	12
2	Superdiffusion of cosmic rays in compressible magnetized turbulence. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 512, 2111-2124.	4.4	22
3	Cosmic Ray Streaming in the Turbulent Interstellar Medium. <i>Astrophysical Journal</i> , 2022, 927, 94.	4.5	12
4	The velocity statistics of turbulent clouds in the presence of gravity, magnetic fields, radiation, and outflow feedback. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 513, 2100-2110.	4.4	12
5	Damping of Alfvén Waves in MHD Turbulence and Implications for Cosmic Ray Streaming Instability and Galactic Winds. <i>Frontiers in Physics</i> , 2022, 10, .	2.1	7
6	Nanoflare Theory Revisited. <i>Astrophysical Journal</i> , 2021, 906, 109.	4.5	7
7	Measuring Turbulence with Young Stars in the Orion Complex. <i>Astrophysical Journal Letters</i> , 2021, 907, L40.	8.3	24
8	Polarization Predictions in the GRB Prompt Phase with the Internal Shock Model. <i>Astrophysical Journal</i> , 2021, 909, 184.	4.5	4
9	Measuring Magnetization with Rotation Measures and Velocity Centroids in Supersonic MHD Turbulence. <i>Astrophysical Journal</i> , 2021, 910, 88.	4.5	16
10	Anisotropies in Compressible MHD Turbulence: Probing Magnetic Fields and Measuring Magnetization. <i>Astrophysical Journal</i> , 2021, 911, 37.	4.5	19
11	Small-scale turbulent dynamo in astrophysical environments: nonlinear dynamo and dynamo in a partially ionized plasma. <i>Reviews of Modern Plasma Physics</i> , 2021, 5, 1.	4.1	2
12	Anisotropic Turbulence in Position-Position-Velocity Space: Probing Three-dimensional Magnetic Fields. <i>Astrophysical Journal</i> , 2021, 915, 67.	4.5	14
13	Statistical Measurements of Dispersion Measure Fluctuations in Fast Radio Bursts. <i>Astrophysical Journal Letters</i> , 2021, 922, L31.	8.3	2
14	Mirror Diffusion of Cosmic Rays in Highly Compressible Turbulence Near Supernova Remnants. <i>Astrophysical Journal</i> , 2021, 922, 264.	4.5	8
15	Diffusion of Cosmic Rays in MHD Turbulence with Magnetic Mirrors. <i>Astrophysical Journal</i> , 2021, 923, 53.	4.5	28
16	Projected velocity statistics of interstellar turbulence. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 492, 1044-1048.	4.4	14
17	Turbulence in a Self-gravitating Molecular Cloud Core. <i>Astrophysical Journal</i> , 2020, 890, 157.	4.5	28
18	Trapping of Cosmic Rays in MHD Turbulence. <i>Astrophysical Journal</i> , 2020, 894, 63.	4.5	20

#	ARTICLE	IF	CITATIONS
19	Direct Detection of Black Hole-driven Turbulence in the Centers of Galaxy Clusters. <i>Astrophysical Journal Letters</i> , 2020, 889, L1.	8.3	48
20	Cosmic ray transport in starburst galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 493, 2817-2833.	4.4	47
21	3D turbulent reconnection: Theory, tests, and astrophysical implications. <i>Physics of Plasmas</i> , 2020, 27, .	1.9	128
22	Nonlinear Turbulent Dynamo during Gravitational Collapse. <i>Astrophysical Journal</i> , 2020, 899, 115.	4.5	19
23	Nonuniversal Interstellar Density Spectra Probed by Pulsars. <i>Astrophysical Journal</i> , 2020, 905, 159.	4.5	20
24	Probing the Intergalactic Turbulence with Fast Radio Bursts. <i>Astrophysical Journal Letters</i> , 2020, 898, L48.	8.3	16
25	Nanoflare Theory and Stochastic Reconnection. <i>Research Notes of the AAS</i> , 2020, 4, 89.	0.7	0
26	On the Formation of Density Filaments in the Turbulent Interstellar Medium. <i>Astrophysical Journal</i> , 2019, 878, 157.	4.5	42
27	Gamma-Ray Bursts Induced by Turbulent Reconnection. <i>Astrophysical Journal</i> , 2019, 882, 184.	4.5	24
28	Turbulent Dynamo in a Weakly Ionized Medium. <i>Astrophysical Journal</i> , 2019, 872, 62.	4.5	12
29	On the Broadband Synchrotron Spectra of Pulsar Wind Nebulae. <i>Astrophysical Journal</i> , 2019, 872, 10.	4.5	18
30	3D Turbulent Reconnection: 20 Years After. <i>Journal of Physics: Conference Series</i> , 2019, 1332, 012009.	0.4	5
31	Synchrotron spectra of GRB prompt emission and pulsar wind nebulae. <i>Journal of Physics: Conference Series</i> , 2019, 1332, 012019.	0.4	1
32	On the Synchrotron Spectrum of GRB Prompt Emission. <i>Astrophysical Journal</i> , 2018, 853, 43.	4.5	17
33	Resonance-broadened Transit Time Damping of Particles in MHD Turbulence. <i>Astrophysical Journal</i> , 2018, 868, 36.	4.5	32
34	Adiabatic Non-resonant Acceleration in Magnetic Turbulence and Hard Spectra of Gamma-Ray Bursts. <i>Astrophysical Journal Letters</i> , 2017, 846, L28.	8.3	35
35	Magnetic Field Amplification in Supernova Remnants. <i>Astrophysical Journal</i> , 2017, 850, 126.	4.5	29
36	Magnetohydrodynamic turbulence and turbulent dynamo in partially ionized plasma. <i>New Journal of Physics</i> , 2017, 19, 065005.	2.9	20

#	ARTICLE	IF	CITATIONS
37	SCATTER BROADENING OF PULSARS AND IMPLICATIONS ON THE INTERSTELLAR MEDIUM TURBULENCE. <i>Astrophysical Journal</i> , 2017, 835, 2.	4.5	38
38	INTERPRETATION OF THE STRUCTURE FUNCTION OF ROTATION MEASURE IN THE INTERSTELLAR MEDIUM. <i>Astrophysical Journal</i> , 2016, 824, 113.	4.5	42
39	DAMPING OF MAGNETOHYDRODYNAMIC TURBULENCE IN PARTIALLY IONIZED PLASMA: IMPLICATIONS FOR COSMIC RAY PROPAGATION. <i>Astrophysical Journal</i> , 2016, 826, 166.	4.5	52
40	ON THE ORIGIN OF THE SCATTER BROADENING OF FAST RADIO BURST PULSES AND ASTROPHYSICAL IMPLICATIONS. <i>Astrophysical Journal</i> , 2016, 832, 199.	4.5	39
41	TURBULENT DYNAMO IN A CONDUCTING FLUID AND A PARTIALLY IONIZED GAS. <i>Astrophysical Journal</i> , 2016, 833, 215.	4.5	58
42	THE LINE WIDTH DIFFERENCE OF NEUTRALS AND IONS INDUCED BY MHD TURBULENCE. <i>Astrophysical Journal</i> , 2015, 810, 44.	4.5	25
43	COSMIC-RAY PARALLEL AND PERPENDICULAR TRANSPORT IN TURBULENT MAGNETIC FIELDS. <i>Astrophysical Journal</i> , 2013, 779, 140.	4.5	67