Tong Liu

List of Publications by Year
in descending order

84 papers	1,593 citations	279798 23 h-index	330143 37 g-index
85 all docs	85 docs citations	85 times ranked	1007 citing authors

#	Article	IF	Citations
1	Structure and Luminosity of Neutrinoâ€cooled Accretion Disks. Astrophysical Journal, 2007, 661, 1025-1033.	4.5	110
2	Neutrino-dominated Accretion Models for Gamma-Ray Bursts: Effects of General Relativity and Neutrino Opacity. Astrophysical Journal, 2006, 643, L87-L90.	4.5	108
3	Neutrino-dominated accretion flows as the central engine of gamma-ray bursts. New Astronomy Reviews, 2017, 79, 1-25.	12.8	93
4	FAST RADIO BURSTS AND THEIR GAMMA-RAY OR RADIO AFTERGLOWS AS KERRâ€"NEWMAN BLACK HOLE BINARIES. Astrophysical Journal, 2016, 826, 82.	4.5	80
5	Internal x-ray plateau in short GRBs: Signature of supramassive fast-rotating quark stars?. Physical Review D, 2016, 94, .	4.7	69
6	A NEUTRON STARâ€"WHITE DWARF BINARY MODEL FOR REPEATING FAST RADIO BURST 121102. Astrophysical Journal Letters, 2016, 823, L28.	8.3	61
7	JET LUMINOSITY OF GAMMA-RAY BURSTS: THE BLANDFORDâ€"ZNAJEK MECHANISM VERSUS THE NEUTRINO ANNIHILATION PROCESS. Astrophysical Journal, Supplement Series, 2015, 218, 12.	7.7	56
8	RELATIVISTIC GLOBAL SOLUTIONS OF NEUTRINO-DOMINATED ACCRETION FLOWS. Astrophysical Journal, Supplement Series, 2013, 207, 23.	7.7	46
9	Constraints on the Mass Accretion Rate of Neutrinoâ€cooled Disks in Gammaâ€Ray Bursts. Astrophysical Journal, 2008, 676, 545-548.	4.5	40
10	Black Hole Hyperaccretion Inflowâ€"Outflow Model. I. Long and Ultra-long Gamma-Ray Bursts. Astrophysical Journal, 2018, 852, 20.	4.5	38
11	GRAVITATIONAL WAVES OF JET PRECESSION IN GAMMA-RAY BURSTS. Astrophysical Journal, 2012, 752, 31.	4.5	37
12	RADIAL ANGULAR MOMENTUM TRANSFER AND MAGNETIC BARRIER FOR SHORT-TYPE GAMMA-RAY-BURST CENTRAL ENGINE ACTIVITY. Astrophysical Journal, 2012, 760, 63.	4.5	35
13	VERTICAL STRUCTURE OF NEUTRINO-DOMINATED ACCRETION DISK AND APPLICATIONS TO GAMMA-RAY BURSTS. Astrophysical Journal, 2010, 709, 851-855.	4.5	32
14	Corona-heated Accretion-disk Reprocessing: A Physical Model to Decipher the Melody of AGN UV/Optical Twinkling. Astrophysical Journal, 2020, 891, 178.	4.5	30
15	TIME EVOLUTION OF FLARES IN GRB 130925A: JET PRECESSION IN A BLACK HOLE ACCRETION SYSTEM. Astrophysical Journal Letters, 2014, 781, L19.	8.3	28
16	CAN BLACK HOLE NEUTRINO-COOLED DISKS POWER SHORT GAMMA-RAY BURSTS?. Astrophysical Journal, 2015, 806, 58.	4.5	28
17	Testing black hole neutrino-dominated accretion discs for long-duration gamma-ray bursts. Monthly Notices of the Royal Astronomical Society, 2016, 458, 1921-1926.	4.4	28
18	A neutron starâ€"white dwarf binary model for periodically active fast radio burst sources. Monthly Notices of the Royal Astronomical Society, 2020, 497, 1543-1546.	4.4	28

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19	Advection-Dominated Accretion Disks: Geometrically Slim or Thick?. Publication of the Astronomical Society of Japan, 2009, 61, 1313-1318.	2.5	26
20	NEUTRINO-COOLED ACCRETION MODEL WITH MAGNETIC COUPLING FOR X-RAY FLARES IN GAMMA-RAY BURSTS. Astrophysical Journal, 2013, 773, 142.	4.5	26
21	Detectable MeV neutrinos from black hole neutrino-dominated accretion flows. Physical Review D, 2016, 93, .	4.7	25
22	Multicolor Blackbody Emission in GRB 081221. Astrophysical Journal, 2018, 866, 13.	4.5	25
23	Revisiting vertical structure of neutrino-dominated accretion disks: Bernoulli parameter, neutrino trapping and other distributions. Astrophysics and Space Science, 2012, 337, 711-717.	1.4	24
24	SELF-GRAVITY IN NEUTRINO-DOMINATED ACCRETION DISKS. Astrophysical Journal, 2014, 791, 69.	4.5	24
25	Outflows from black hole hyperaccretion systems: short and long-short gamma-ray bursts and â€˜quasi-supernovaeâ€™. Monthly Notices of the Royal Astronomical Society, 2018, 477, 2173-2182.	4.4	24
26	THE VERTICAL COMPOSITION OF NEUTRINO-DOMINATED ACCRETION DISKS IN GAMMA-RAY BURSTS. Astrophysical Journal, 2013, 762, 102.	4.5	23
27	EVOLUTIONS OF STELLAR-MASS BLACK HOLE HYPERACCRETION SYSTEMS IN THE CENTER OF GAMMA-RAY BURSTS. Astrophysical Journal, 2015, 815, 54.	4.5	20
28	CENTRAL ENGINE OF LATE-TIME X-RAY FLARES WITH INTERNAL ORIGIN. Astrophysical Journal, 2016, 832, 161.	4.5	20
29	The X-Ray Light Curve in GRB 170714A: Evidence for a Quark Star?. Astrophysical Journal, 2018, 854, 104.	4.5	20
30	A Pulsar Wind Nebula Embedded in the Kilonova AT 2017gfo Associated with GW170817/GRB 170817A. Astrophysical Journal, 2019, 885, 60.	4.5	20
31	Final Compact Remnants in Core-collapse Supernovae from 20 to 40 M _{âŠ™}: The Lower Mass Gap. Astrophysical Journal, 2021, 908, 106.	4.5	20
32	Comparison of Gravitational Waves from Central Engines of Gamma-Ray Bursts: Neutrino-dominated Accretion Flows, Blandfordâ€“Znajek Mechanisms, and Millisecond Magnetars. Astrophysical Journal, 2017, 850, 30.	4.5	18
33	Black Hole Hyperaccretion Inflowâ€“Outflow Model. II. Long-duration Gamma-Ray Bursts and Supernova ⁵⁶Ni Bumps. Astrophysical Journal, 2019, 871, 117.	4.5	18
34	VERTICAL CONVECTION IN NEUTRINO-DOMINATED ACCRETION FLOWS. Astrophysical Journal, 2015, 805, 37.	4.5	16
35	Black Hole Hyperaccretion in Collapsars. I. MeV Neutrinos. Astrophysical Journal, 2019, 878, 142.	4.5	15
36	A black holeâ€“white dwarf compact binary model for long gamma-ray bursts without supernova association. Monthly Notices of the Royal Astronomical Society: Letters, 2018, 475, L101-L105.	3.3	14

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37	Revisiting the hot matter in the center of gamma-ray bursts and supernovae. Astronomy and Astrophysics, 2013, 555, A129.	5.1	13
38	Variabilities of gamma-ray bursts from black hole hyper-accretion discs. Monthly Notices of the Royal Astronomical Society, 2016, 463, 245-250.	4.4	13
39	ON THE HOST GALAXY OF GRB 150101B AND THE ASSOCIATED ACTIVE GALACTIC NUCLEUS. Astrophysical Journal Letters, 2016, 824, L17.	8.3	12
40	A possible feedback mechanism of outflows from a black hole hyperaccretion disk in the center of jet-driven iPTF14hls. Journal of High Energy Astrophysics, 2019, 22, 5-9.	6.7	12
41	Black Hole Hyperaccretion in Collapsars. II. Gravitational Waves. Astrophysical Journal, 2020, 889, 73.	4.5	12
42	Faint Active Galactic Nuclei Favor Unexpectedly Long Inter-band Time Lags. Astrophysical Journal Letters, 2021, 912, L29.	8.3	12
43	First Electromagnetic Pulse Associated with a Gravitational-wave Event: Profile, Duration, and Delay. Astrophysical Journal, 2018, 856, 90.	4.5	11
44	Anisotropic Multimessenger Signals from Black Hole Neutrino-dominated Accretion Flows with Outflows in Binary Compact Object Mergers. Astrophysical Journal, 2022, 925, 43.	4.5	11
45	REVISITING THE LIGHT CURVES OF GAMMA-RAY BURSTS IN THE RELATIVISTIC TURBULENCE MODEL. Astrophysical Journal, 2013, 776, 41.	4.5	10
46	Vertical Advection Effects on Hyper-accretion Disks and Potential Link between Gamma-Ray Bursts and Kilonovae. Astrophysical Journal, 2017, 836, 245.	4.5	10
47	Testing Blandfordâ€"Znajek Mechanism in Black Hole Hyperaccretion Flows for Long-duration Gamma-Ray Bursts. Astrophysical Journal, 2021, 908, 242.	4.5	9
48	Energy Injection Driven by Precessing Jets in Gamma-Ray Burst Afterglows. Astrophysical Journal, 2021, 916, 71.	4.5	9
49	Modeling Quasar UV/Optical Variability with the Corona-heated Accretion-disk Reprocessing (CHAR) Model. Astrophysical Journal, 2020, 902, 7.	4.5	9
50	Statistical Analyses of the Energies of X-Ray Plateaus and Flares in Gamma-Ray Bursts. Astrophysical Journal, 2022, 924, 69.	4.5	9
51	A METHOD TO CONSTRAIN MASS AND SPIN OF GRB BLACK HOLES WITHIN THE NDAF MODEL. Astrophysical Journal, 2016, 821, 132.	4.5	8
52	Jet structure in the afterglow phase for gamma-ray bursts with a precessing jet. Monthly Notices of the Royal Astronomical Society, 2019, 487, 3214-3220.	4.4	8
53	UNDERSTANDING SIMULATIONS OF THIN ACCRETION DISKS BY ENERGY EQUATION. Astrophysical Journal, 2012, 761, 29.	4.5	7
54	THERMAL STABILITY OF MAGNETIZED, OPTICALLY THIN, RADIATIVE COOLING-DOMINATED ACCRETION DISKS. Astrophysical Journal, 2015, 801, 47.	4.5	7

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55	Steep Decay Phase Shaped by the Curvature Effect. I. Flux Evolution. Astrophysical Journal, 2017, 840, 95.	4.5	7
56	Central-engine-powered Bright X-Ray Flares in Short Gamma-Ray Bursts: A Hint of a Black Holeâ€"Neutron Star Merger?. Astrophysical Journal, 2018, 858, 34.	4.5	7
57	Neutrinos and gravitational waves from magnetized neutrino-dominated accretion discs with magnetic coupling. Monthly Notices of the Royal Astronomical Society, 2020, 494, 3962-3970.	4.4	6
58	Revisiting the boiling of primordial quark nuggets at nonzero chemical potential. Astroparticle Physics, 2015, 62, 115-121.	4.3	5
59	Anisotropic neutrinos and gravitational waves from black hole neutrino-dominated accretion flows in fallback core-collapse supernovae. Monthly Notices of the Royal Astronomical Society, 2021, 507, 431-442.	4.4	5
60	Evidence of X-Ray Plateaus Driven by the Magnetar Spindown Winds in Gamma-Ray Burst Afterglows. Astrophysical Journal, 2021, 922, 102.	4.5	5
61	Ignition of neutrino-dominated accretion disks. Science China: Physics, Mechanics and Astronomy, 2012, 55, 316-319.	5.1	4
62	POTENTIAL GAMMA-RAY EMISSIONS FROM LOW-MASS X-RAY BINARY JETS. Astrophysical Journal, 2015, 806, 168.	4.5	4
63	Compact binary merger and kilonova: outflows from remnant disc. Monthly Notices of the Royal Astronomical Society, 2018, 476, 683-689.	4.4	4
64	External Shock in a Multi-bursting Gamma-Ray Burst: Energy Injection Phase Induced by the Later Launched Ejecta. Astrophysical Journal, 2018, 852, 136.	4.5	4
65	Neutrino-dominated Accretion Flows: A Second Nucleosynthesis Factory in Core-collapse Supernovae and Regulating the Iron Markets in Galaxies. Astrophysical Journal, 2021, 920, 5.	4.5	4
66	Reconciling the 16.35-day Period of FRB 20180916B with Jet Precession. Astrophysical Journal, 2021, 921, 147.	4.5	4
67	Revisiting Black Hole Hyperaccretion in the Center of Gamma-Ray Bursts for the Lower Mass Gap. Astrophysical Journal, 2022, 929, 83.	4.5	4
68	Gravitational Instability in Neutrino Dominated Accretion Disks. Chinese Physics Letters, 2011, 28, 129802.	3.3	3
69	Testing the Weak Equivalence Principle with the Binary Neutron Star Merger GW 170817: The Gravitational Contribution of the Host Galaxy. Astrophysical Journal, 2020, 900, 31.	4.5	3
70	Contribution of Dark Matter Annihilation to Gamma-Ray Burst Afterglows near Massive Galaxy Centers. Astrophysical Journal, 2020, 904, 17.	4.5	3
71	Polarization in Early Optical Afterglows of Gamma-Ray Bursts Driven by Precessing Jets. Astrophysical Journal, 2022, 933, 103.	4.5	3
72	Lorentz Factor Evolution of an Expanding Jet Shell Observed in a Gamma-Ray Burst: Case Study of GRB 160625B. Astrophysical Journal, 2019, 883, 187.	4.5	2

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73	GRB variabilities and following gravitational waves induced by gravitational instability in NDAFs. Monthly Notices of the Royal Astronomical Society, 2021, 508, 6068-6076.	4.4	2
74	Neutrino-cooled Accretion Disks As the Central Engine of Gamma-ray Bursts. AIP Conference Proceedings, 2008, , .	0.4	1
75	Annihilation luminosity of a neutrino-cooled accretion disk in a gamma-ray burst. Science in China Series G: Physics, Mechanics and Astronomy, 2009, 52, 729-733.	0.2	1
76	GRAVITATIONAL RADIATIONS FROM THE PRECESSION CENTRAL ENGINE IN GAMMA-RAY BURSTS. International Journal of Modern Physics Conference Series, 2013, 23, 281-283.	0.7	1
77	Characteristics of Double Gamma-Ray Bursts. Chinese Physics Letters, 2014, 31, 119801.	3.3	1
78	Nucleosynthesis from neutrino-dominated accretion disks in gamma-ray bursts and its application. EPJ Web of Conferences, 2014, 66, 07015.	0.3	1
79	A lower occurrence rate of bright X-ray flares in SN-GRBs than zÂ<Â1 GRBs: evidence of energy partitions?. Monthly Notices of the Royal Astronomical Society, 2018, 478, 3605-3613.	4.4	1
80	Point-wise Self-similar Solution for Spiral Shocks in an Accretion Disk with Mass Outflow in a Binary. Astrophysical Journal, 2021, 922, 120.	4.5	1
81	Unified Description of SSDs, Slim Disks, and NDAFs. AIP Conference Proceedings, 2008, , .	0.4	0
82	Possible Outflow Formation in the Central Engine of GRBs. Journal of Astrophysics and Astronomy, 2011, 32, 285-287.	1.0	0
83	Publisherâ€™s Note: Detectable MeV neutrinos from black hole neutrino-dominated accretion flows [Phys. Rev. D 93 , 123004 (2016)]. Physical Review D, 2020, 102, .	4.7	0
84	Relativistic global solutions of neutrino-dominated accretion flows with magnetic coupling. Monthly Notices of the Royal Astronomical Society, 0, , .	4.4	0