X-J Zhu

List of Publications by Year
in descending order

104 papers	26,942 citations	19657 61 h-index	28297 105 g-index
106 all docs	106 docs citations	106 times ranked	12988 citing authors

#	Article	IF	Citations
1	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. Physical Review Letters, 2016, 116, 241103.	7.8	2,701
2	Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A. Astrophysical Journal Letters, 2017, 848, L13.	8.3	2,314
3	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. Physical Review Letters, 2017, 118, 221101.	7.8	1,987
4	GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence. Physical Review Letters, 2017, 119, 141101.	7.8	1,600
5	GW170817: Measurements of Neutron Star Radii and Equation of State. Physical Review Letters, 2018, 121, 161101.	7.8	1,473
6	Tests of General Relativity with GW150914. Physical Review Letters, 2016, 116, 221101.	7.8	1,224
7	GW190425: Observation of a Compact Binary Coalescence with Total MassÂâˆ¼Â3.4 M_{âŠ™}. Astrophysical Journal Letters, 2020, 892, L3.	8.3	1,049
8	Characterization of the LIGO detectors during their sixth science run. Classical and Quantum Gravity, 2015, 32, 115012.	4.0	1,029
9	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. Astrophysical Journal Letters, 2017, 851, L35.	8.3	968
10	Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light. Nature Photonics, 2013, 7, 613-619.	31.4	825
11	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2018, 21, 3.	26.7	808
12	A gravitational-wave standard siren measurement of the Hubble constant. Nature, 2017, 551, 85-88.	27.8	674
13	Properties of the Binary Black Hole Merger GW150914. Physical Review Letters, 2016, 116, 241102.	7.8	673
14	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. Astrophysical Journal Letters, 2016, 818, L22.	8.3	633
15	Binary Black Hole Population Properties Inferred from the First and Second Observing Runs of Advanced LIGO and Advanced Virgo. Astrophysical Journal Letters, 2019, 882, L24.	8.3	566
16	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. Physical Review Letters, 2016, 116, 131103.	7.8	466
17	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2020, 23, 3.	26.7	447
18	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. Living Reviews in Relativity, 2016, 19, 1.	26.7	427

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19	Gravitational waves from binary supermassive black holes missing in pulsar observations. Science, 2015, 349, 1522-1525.	12.6	386
20	The International Pulsar Timing Array: First data release. Monthly Notices of the Royal Astronomical Society, 2016, 458, 1267-1288.	4.4	332
21	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. Physical Review Letters, 2016, 116, 131102.	7.8	269
22	Timing analysis for 20 millisecond pulsars in the Parkes Pulsar Timing Array. Monthly Notices of the Royal Astronomical Society, 2016, 455, 1751-1769.	4.4	233
23	THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914. Astrophysical Journal Letters, 2016, 833, L1.	8.3	230
24	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. Classical and Quantum Gravity, 2016, 33, 134001.	4.0	225
25	On the Evidence for a Common-spectrum Process in the Search for the Nanohertz Gravitational-wave Background with the Parkes Pulsar Timing Array. Astrophysical Journal Letters, 2021, 917, L19.	8.3	217
26	Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGOâ€™s First Observing Run. Physical Review Letters, 2017, 118, 121101.	7.8	194
27	The International Pulsar Timing Array: second data release. Monthly Notices of the Royal Astronomical Society, 2019, 490, 4666-4687.	4.4	191
28	Search for Post-merger Gravitational Waves from the Remnant of the Binary Neutron Star Merger GW170817. Astrophysical Journal Letters, 2017, 851, L16.	8.3	189
29	First Measurement of the Hubble Constant from a Dark Standard Siren using the Dark Energy Survey Galaxies and the LIGO/Virgo Binaryâ€“Black-hole Merger GW170814. Astrophysical Journal Letters, 2019, 876, L7.	8.3	179
30	The International Pulsar Timing Array second data release: Search for an isotropic gravitational wave background. Monthly Notices of the Royal Astronomical Society, 2022, 510, 4873-4887.	4.4	174
31	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated withÂGW170817. Astrophysical Journal Letters, 2017, 850, L39.	8.3	156
32	UPPER LIMITS ON THE RATES OF BINARY NEUTRON STAR AND NEUTRON STARâ€“BLACK HOLE MERGERS FROM ADVANCED LIGOâ€™S FIRST OBSERVING RUN. Astrophysical Journal Letters, 2016, 832, L21.	8.3	146
33	A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo. Astrophysical Journal, 2021, 909, 218.	4.5	144
34	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. Astrophysical Journal, 2017, 839, 12.	4.5	131
35	GRAVITATIONAL WAVES FROM KNOWN PULSARS: RESULTS FROM THE INITIAL DETECTOR ERA. Astrophysical Journal, 2014, 785, 119.	4.5	125
36	STOCHASTIC GRAVITATIONAL WAVE BACKGROUND FROM COALESCING BINARY BLACK HOLES. Astrophysical Journal, 2011, 739, 86.	4.5	121

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37	Search for Subsolar Mass Ultracompact Binaries in Advanced LIGOâ€™s Second Observing Run. Physical Review Letters, 2019, 123, 161102.	7.8	119
38	The Mass Distribution of Galactic Double Neutron Stars. Astrophysical Journal, 2019, 876, 18.	4.5	115
39	Gravitational-Wave Cosmology across 29 Decades in Frequency. Physical Review X, 2016, 6, .	8.9	113
40	A study of multifrequency polarization pulse profiles of millisecond pulsars. Monthly Notices of the Royal Astronomical Society, 2015, 449, 3223-3262.	4.4	109
41	The Parkes Pulsar Timing Array project: second data release. Publications of the Astronomical Society of Australia, 2020, 37, .	3.4	107
42	An all-sky search for continuous gravitational waves in the Parkes Pulsar Timing Array data set. Monthly Notices of the Royal Astronomical Society, 2014, 444, 3709-3720.	4.4	98
43	Effects of waveform model systematics on the interpretation of GW150914. Classical and Quantum Gravity, 2017, 34, 104002.	4.0	98
44	Search for Gravitational Waves from a Long-lived Remnant of the Binary Neutron Star Merger GW170817. Astrophysical Journal, 2019, 875, 160.	4.5	97
45	Limitations in timing precision due to single-pulse shape variability in millisecond pulsars. Monthly Notices of the Royal Astronomical Society, 2014, 443, 1463-1481.	4.4	94
46	On the gravitational wave background from compact binary coalescences in the band of ground-based interferometers. Monthly Notices of the Royal Astronomical Society, 2013, 431, 882-899.	4.4	91
47	Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015â€“2017 LIGO Data. Astrophysical Journal, 2019, 879, 10.	4.5	88
48	Improved Upper Limits on the Stochastic Gravitational-Wave Background from 2009â€“2010 LIGO and Virgo Data. Physical Review Letters, 2014, 113, 231101.	7.8	86
49	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. Physical Review Letters, 2018, 120, 201102.	7.8	85
50	Directional Limits on Persistent Gravitational Waves from Advanced LIGOâ€™s First Observing Run. Physical Review Letters, 2017, 118, 121102.	7.8	84
51	From spin noise to systematics: stochastic processes in the first International Pulsar Timing Array data release. Monthly Notices of the Royal Astronomical Society, 2016, 458, 2161-2187.	4.4	82
52	Searching for gravitational wave memory bursts with the Parkes Pulsar Timing Array. Monthly Notices of the Royal Astronomical Society, 2015, 446, 1657-1671.	4.4	79
53	PULSAR OBSERVATIONS OF EXTREME SCATTERING EVENTS. Astrophysical Journal, 2015, 808, 113.	4.5	75
54	On the Progenitor of Binary Neutron Star Merger GW170817. Astrophysical Journal Letters, 2017, 850, L40.	8.3	73

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55	Parkes Pulsar Timing Array constraints on ultralight scalar-field dark matter. Physical Review D, 2018, 98, .	4.7	72
56	Search for Eccentric Binary Black Hole Mergers with Advanced LIGO and Advanced Virgo during Their First and Second Observing Runs. Astrophysical Journal, 2019, 883, 149.	4.5	72
57	Low-latency Gravitational-wave Alerts for Multimessenger Astronomy during the Second Advanced LIGO and Virgo Observing Run. Astrophysical Journal, 2019, 875, 161.	4.5	71
58	The basic physics of the binary black hole merger GW150914. Annalen Der Physik, 2017, 529, 1600209.	2.4	69
59	Constraints on Cosmic Strings from the LIGO-Virgo Gravitational-Wave Detectors. Physical Review Letters, 2014, 112, 131101.	7.8	68
60	SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM NINE YOUNG SUPERNOVA REMNANTS. Astrophysical Journal, 2015, 813, 39.	4.5	66
61	Searches for Continuous Gravitational Waves from 15 Supernova Remnants and Fomalhaut b with Advanced LIGO[*]. Astrophysical Journal, 2019, 875, 122.	4.5	61
62	FIRST SEARCHES FOR OPTICAL COUNTERPARTS TO GRAVITATIONAL-WAVE CANDIDATE EVENTS. Astrophysical Journal, Supplement Series, 2014, 211, 7.	7.7	57
63	Search for Gravitational Waves Associated with Gamma-Ray Bursts during the First Advanced LIGO Observing Run and Implications for the Origin of GRB 150906B. Astrophysical Journal, 2017, 841, 89.	4.5	52
64	Inferring the population properties of binary neutron stars with gravitational-wave measurements of spin. Physical Review D, 2018, 98, .	4.7	52
65	A pulsar-based time-scale from the International Pulsar Timing Array. Monthly Notices of the Royal Astronomical Society, 2020, 491, 5951-5965.	4.4	51
66	Identifying and mitigating noise sources in precision pulsar timing data sets. Monthly Notices of the Royal Astronomical Society, 2021, 502, 478-493.	4.4	47
67	Upper Limits on Gravitational Waves from Scorpius X-1 from a Model-based Cross-correlation Search in Advanced LIGO Data. Astrophysical Journal, 2017, 847, 47.	4.5	46
68	On the origin of GW190425. Monthly Notices of the Royal Astronomical Society: Letters, 2020, 496, L64-L69.	3.3	46
69	SUPPLEMENT: â€œLOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914â€• (2016, ApJL, 826, L13). Astrophysical Journal, Supplement Series, 2016, 225, 8.	7.7	44
70	The NINJA-2 project: detecting and characterizing gravitational waveforms modelled using numerical binary black hole simulations. Classical and Quantum Gravity, 2014, 31, 115004.	4.0	42
71	Constraining Cosmological Phase Transitions with the Parkes Pulsar Timing Array. Physical Review Letters, 2021, 127, 251303.	7.8	40
72	Precision Orbital Dynamics from Interstellar Scintillation Arcs for PSR J0437â€“4715. Astrophysical Journal, 2020, 904, 104.	4.5	39

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73	Detection and localization of single-source gravitational waves with pulsar timing arrays. Monthly Notices of the Royal Astronomical Society, 2015, 449, 1650-1663.	4.4	37
74	The Parkes pulsar timing array second data release: timing analysis. Monthly Notices of the Royal Astronomical Society, 2021, 507, 2137-2153.	4.4	37
75	Studying the Solar system with the International Pulsar Timing Array. Monthly Notices of the Royal Astronomical Society, 2018, 481, 5501-5516.	4.4	36
76	Implementation of an $mathcal{F}$-statistic all-sky search for continuous gravitational waves in Virgo VSR1 data. Classical and Quantum Gravity, 2014, 31, 165014.	4.0	34
77	THE DISTURBANCE OF A MILLISECOND PULSAR MAGNETOSPHERE. Astrophysical Journal Letters, 2016, 828, L1.	8.3	33
78	Search for Multimessenger Sources of Gravitational Waves and High-energy Neutrinos with Advanced LIGO during Its First Observing Run, ANTARES, and IceCube. Astrophysical Journal, 2019, 870, 134.	4.5	32
79	Commensal discovery of four fast radio bursts during Parkes Pulsar Timing Array observations. Monthly Notices of the Royal Astronomical Society, 2019, 488, 868-875.	4.4	31
80	SPIIR online coherent pipeline to search for gravitational waves from compact binary coalescences. Physical Review D, 2022, 105, .	4.7	31
81	STOCHASTIC GRAVITATIONAL WAVE BACKGROUND FROM NEUTRON STAR<i>r</i>-MODE INSTABILITY REVISITED. Astrophysical Journal, 2011, 729, 59.	4.5	30
82	A Fermi Gamma-Ray Burst Monitor Search for Electromagnetic Signals Coincident with Gravitational-wave Candidates in Advanced LIGO's First Observing Run. Astrophysical Journal, 2019, 871, 90.	4.5	30
83	Search for Gravitational-wave Signals Associated with Gamma-Ray Bursts during the Second Observing Run of Advanced LIGO and Advanced Virgo. Astrophysical Journal, 2019, 886, 75.	4.5	29
84	Standard-siren Cosmology Using Gravitational Waves from Binary Black Holes. Astrophysical Journal, 2021, 908, 215.	4.5	28
85	Gravitational wave astronomy: the current status. Science China: Physics, Mechanics and Astronomy, 2015, 58, 1.	5.1	26
86	Detection and localization of continuous gravitational waves with pulsar timing arrays: the role of pulsar terms. Monthly Notices of the Royal Astronomical Society, 2016, 461, 1317-1327.	4.4	26
87	Search for Transient Gravitational-wave Signals Associated with Magnetar Bursts during Advanced LIGOâ€™s Second Observing Run. Astrophysical Journal, 2019, 874, 163.	4.5	26
88	Observational upper limits on the gravitational wave production of core collapse supernovae. Monthly Notices of the Royal Astronomical Society: Letters, 2010, 409, L132-L136.	3.3	25
89	Heavy Double Neutron Stars: Birth, Midlife, and Death. Astrophysical Journal Letters, 2021, 909, L19.	8.3	24
90	Consistency of the Parkes Pulsar Timing Array Signal with a Nanohertz Gravitational-wave Background. Astrophysical Journal Letters, 2022, 932, L22.	8.3	21

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91	Comparison of pulsar positions from timing and very long baseline astrometry. Monthly Notices of the Royal Astronomical Society, 2017, 469, 425-434.	4.4	20
92	First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. Progress of Theoretical and Experimental Physics, 2022, 2022, .	6.6	20
93	Wide-band profile domain pulsar timing analysis. Monthly Notices of the Royal Astronomical Society, 2017, 466, 3706-3727.	4.4	18
94	The minimum and maximum gravitational-wave background from supermassive binary black holes. Monthly Notices of the Royal Astronomical Society, 2019, 482, 2588-2596.	4.4	18
95	Versatile directional searches for gravitational waves with Pulsar Timing Arrays. Monthly Notices of the Royal Astronomical Society, 2016, 455, 3662-3673.	4.4	17
96	Toward the Unambiguous Identification of Supermassive Binary Black Holes through Bayesian Inference. Astrophysical Journal, 2020, 900, 117.	4.5	17
97	High-precision search for dark photon dark matter with the Parkes Pulsar Timing Array. Physical Review Research, 2022, 4, .	3.6	16
98	Detectability of Gravitational Waves from High-Redshift Binaries. Physical Review Letters, 2016, 116, 101102.	7.8	15
99	Searching for gravitational-wave bursts from cosmic string cusps with the Parkes Pulsar Timing Array. Monthly Notices of the Royal Astronomical Society, 2020, 501, 701-712.	4.4	14
100	Is there a spectral turnover in the spin noise of millisecond pulsars?. Monthly Notices of the Royal Astronomical Society, 2020, 497, 3264-3272.	4.4	11
101	Characterizing Astrophysical Binary Neutron Stars with Gravitational Waves. Astrophysical Journal Letters, 2020, 902, L12.	8.3	9
102	On the Large Apparent Black Hole Spin-orbit Misalignment Angle in GW200115. Astrophysical Journal Letters, 2021, 920, L20.	8.3	5
103	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. , 2018, 21, 1.		2
104	Optimized localization for gravitational waves from merging binaries. Monthly Notices of the Royal Astronomical Society, 2021, 509, 3957-3965.	4.4	2