Will M Farr

List of Publications by Year
in descending order

74 papers	10,184 citations	57758 44 h-index	79698 73 g-index
74 all docs	74 docs citations	74 times ranked	7111 citing authors

#	Article	IF	Citations
1	Advanced LIGO. Classical and Quantum Gravity, 2015, 32, 074001.	4.0	1,929
2	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
3	Exploring the sensitivity of next generation gravitational wave detectors. Classical and Quantum Gravity, 2017, 34, 044001.	4.0	735
4	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
5	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. Living Reviews in Relativity, 2016, 19, 1.	26.7	427
6	Hot Jupiters from secular planetâ€“planet interactions. Nature, 2011, 473, 187-189.	27.8	407
7	THE MASS DISTRIBUTION OF STELLAR-MASS BLACK HOLES. Astrophysical Journal, 2011, 741, 103.	4.5	383
8	Secular dynamics in hierarchical three-body systems. Monthly Notices of the Royal Astronomical Society, 2013, 431, 2155-2171.	4.4	308
9	Evolutionary roads leading to low effective spins, high black hole masses, and O1/O2 rates for LIGO/Virgo binary black holes. Astronomy and Astrophysics, 2020, 636, A104.	5.1	256
10	ON THE FORMATION OF HOT JUPITERS IN STELLAR BINARIES. Astrophysical Journal Letters, 2012, 754, L36.	8.3	243
11	MASS MEASUREMENTS OF BLACK HOLES IN X-RAY TRANSIENTS: IS THERE A MASS GAP?. Astrophysical Journal, 2012, 757, 36.	4.5	223
12	Testing the No-Hair Theorem with GW150914. Physical Review Letters, 2019, 123, 111102.	7.8	220
13	Extracting distribution parameters from multiple uncertain observations with selection biases. Monthly Notices of the Royal Astronomical Society, 2019, 486, 1086-1093.	4.4	217
14	Distinguishing spin-aligned and isotropic black hole populations with gravitational waves. Nature, 2017, 548, 426-429.	27.8	208
15	Dynamic temperature selection for parallel tempering in Markov chain Monte Carlo simulations. Monthly Notices of the Royal Astronomical Society, 2016, 455, 1919-1937.	4.4	187
16	emcee v3: A Python ensemble sampling toolkit for affine-invariant MCMC. Journal of Open Source Software, 2019, 4, 1864.	4.6	162
17	THE FIRST TWO YEARS OF ELECTROMAGNETIC FOLLOW-UP WITH ADVANCED LIGO AND VIRGO. Astrophysical Journal, 2014, 795, 105.	4.5	159
18	Does the Black Hole Merger Rate Evolve with Redshift?. Astrophysical Journal Letters, 2018, 863, L41.	8.3	157

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19	A Standard Siren Measurement of the Hubble Constant from GW170817 without the Electromagnetic Counterpart. Astrophysical Journal Letters, 2019, 871, L13.	8.3	145
20	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
21	Parameter estimation for compact binary coalescence signals with the first generation gravitational-wave detector network. Physical Review D, 2013, 88, .	4.7	132
22	GOING THE DISTANCE: MAPPING HOST GALAXIES OF LIGO AND VIRGO SOURCES IN THREE DIMENSIONS USING LOCAL COSMOGRAPHY AND TARGETED FOLLOW-UP. Astrophysical Journal Letters, 2016, 829, L15.	8.3	126
23	PARAMETER ESTIMATION FOR BINARY NEUTRON-STAR COALESCENCES WITH REALISTIC NOISE DURING THE ADVANCED LIGO ERA. Astrophysical Journal, 2015, 804, 114.	4.5	117
24	Using Spin to Understand the Formation of LIGO and Virgoâ€™s Black Holes. Astrophysical Journal Letters, 2018, 854, L9.	8.3	108
25	A Future Percent-level Measurement of the Hubble Expansion at Redshift 0.8 with Advanced LIGO. Astrophysical Journal Letters, 2019, 883, L42.	8.3	106
26	Accuracy of inference on the physics of binary evolution from gravitational-wave observations. Monthly Notices of the Royal Astronomical Society, 2018, 477, 4685-4695.	4.4	100
27	Cosmological inference using gravitational wave standard sirens: A mock data analysis. Physical Review D, 2020, 101, .	4.7	95
28	BASIC PARAMETER ESTIMATION OF BINARY NEUTRON STAR SYSTEMS BY THE ADVANCED LIGO/VIRGO NETWORK. Astrophysical Journal, 2014, 784, 119.	4.5	82
29	Measuring the Star Formation Rate with Gravitational Waves from Binary Black Holes. Astrophysical Journal Letters, 2019, 886, L1.	8.3	75
30	Counting and confusion: Bayesian rate estimation with multiple populations. Physical Review D, 2015, 91, .	4.7	72
31	What if LIGOâ€™s gravitational wave detections are strongly lensed by massive galaxy clusters?. Monthly Notices of the Royal Astronomical Society, 2018, 475, 3823-3828.	4.4	71
32	PARAMETER ESTIMATION ON GRAVITATIONAL WAVES FROM NEUTRON-STAR BINARIES WITH SPINNING COMPONENTS. Astrophysical Journal, 2016, 825, 116.	4.5	68
33	The Low Effective Spin of Binary Black Holes and Implications for Individual Gravitational-wave Events. Astrophysical Journal, 2020, 895, 128.	4.5	68
34	Who Ordered That? Unequal-mass Binary Black Hole Mergers Have Larger Effective Spins. Astrophysical Journal Letters, 2021, 922, L5.	8.3	62
35	Model-independent inference on compact-binary observations. Monthly Notices of the Royal Astronomical Society, 2017, 465, 3254-3260.	4.4	58
36	The Most Massive Binary Black Hole Detections and the Identification of Population Outliers. Astrophysical Journal Letters, 2020, 891, L31.	8.3	57

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37	Accuracy Requirements for Empirically Measured Selection Functions. Research Notes of the AAS, 2019, 3, 66.	0.7	55
38	Noise spectral estimation methods and their impact on gravitational wave measurement of compact binary mergers. Physical Review D, 2019, 100, .	4.7	54
39	CIRCUMSTELLAR DEBRIS DISKS: DIAGNOSING THE UNSEEN PERTURBER. Astrophysical Journal, 2016, 826, 19.	4.5	53
40	Detecting Supermassive Black Holeâ€"induced Binary Eccentricity Oscillations with LISA. Astrophysical Journal Letters, 2019, 875, L31.	8.3	52
41	Shouts and Murmurs: Combining Individual Gravitational-wave Sources with the Stochastic Background to Measure the History of Binary Black Hole Mergers. Astrophysical Journal Letters, 2020, 896, L32.	8.3	51
42	Probing Multiple Populations of Compact Binaries with Third-generation Gravitational-wave Detectors. Astrophysical Journal Letters, 2021, 913, L5.	8.3	49
43	Testing the Black-Hole Area Law with GW150914. Physical Review Letters, 2021, 127, 011103.	7.8	49
44	Constraining the Black Hole Initial Mass Function with LIGO/Virgo Observations. Astrophysical Journal Letters, 2019, 878, L1.	8.3	48
45	When Are LIGO/Virgoâ€™s Big Black Hole Mergers?. Astrophysical Journal, 2021, 912, 98.	4.5	48
46	SUPPLEMENT: â€œGOING THE DISTANCE: MAPPING HOST GALAXIES OF LIGO AND VIRGO SOURCES IN THREE DIMENSIONS USING LOCAL COSMOGRAPHY AND TARGETED FOLLOW-UPâ€•(2016, ApJL, 829, L15). Astrophysical Journal, Supplement Series, 2016, 226, 10.	7.7	41
47	Hierarchical Test of General Relativity with Gravitational Waves. Physical Review Letters, 2019, 123, 121101.	7.8	34
48	Black holes in the low-mass gap: Implications for gravitational-wave observations. Physical Review D, 2020, 101, .	4.7	34
49	A Trend in the Effective Spin Distribution of LIGO Binary Black Holes with Mass. Astrophysical Journal, 2020, 894, 129.	4.5	34
50	A Population-Informed Mass Estimate for Pulsar J0740+6620. Research Notes of the AAS, 2020, 4, 65.	0.7	32
51	Hidden planetary friends: on the stability of two-planet systems in the presence of a distant, inclined companion. Monthly Notices of the Royal Astronomical Society, 2019, 482, 4146-4154.	4.4	27
52	A more effective coordinate system for parameter estimation of precessing compact binaries from gravitational waves. Physical Review D, 2014, 90, .	4.7	26
53	Evidence of Large Recoil Velocity from a Black Hole Merger Signal. Physical Review Letters, 2022, 128, .	7.8	26
54	exocartographer: A Bayesian Framework for Mapping Exoplanets in Reflected Light. Astronomical Journal, 2018, 156, 146.	4.7	25

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55	State of the Field: Binary Black Hole Natal Kicks and Prospects for Isolated Field Formation after GWTC-2. Astrophysical Journal, 2021, 920, 157.	4.5	24
56	The Binary Black Hole Spin Distribution Likely Broadens with Redshift. Astrophysical Journal Letters, 2022, 932, L19.	8.3	24
57	Inferring the maximum and minimum mass of merging neutron stars with gravitational waves. Physical Review D, 2020, 102, .	4.7	21
58	First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. Progress of Theoretical and Experimental Physics, 2022, 2022, .	6.6	20
59	Strong-lensing of Gravitational Waves by Galaxy Clusters. Proceedings of the International Astronomical Union, 2017, 13, 98-102.	0.0	19
60	Deep and rapid observations of strong-lensing galaxy clusters within the sky localization of GW170814. Monthly Notices of the Royal Astronomical Society, 2019, 485, 5180-5191.	4.4	19
61	LIGOâ€"Virgo correlations between mass ratio and effective inspiral spin: testing the active galactic nuclei channel. Monthly Notices of the Royal Astronomical Society, 2022, 514, 3886-3893.	4.4	19
62	Hierarchical inference of the relationship between concentration and mass in galaxy groups and clusters. Monthly Notices of the Royal Astronomical Society, 2017, 468, 4872-4886.	4.4	16
63	Aldebaran bâ€™s Temperate Past Uncovered in Planet Search Data. Astrophysical Journal Letters, 2018, 865, L20.	8.3	15
64	The K2 Bright Star Survey. I. Methodology and Data Release. Astrophysical Journal, Supplement Series, 2019, 245, 8.	7.7	14
65	Measuring binary black hole orbital-plane spin orientations. Physical Review D, 2022, 105, .	4.7	14
66	A standard siren cosmological measurement from the potential GW190521 electromagnetic counterpart ZTF19abanrhr. Monthly Notices of the Royal Astronomical Society, 2022, 513, 2152-2157.	4.4	14
67	Comment on â€œAn excess of massive stars in the local 30 Doradus starburstâ€• Science, 2018, 361, .	12.6	13
68	Hints of Spin-Orbit Resonances in the Binary Black Hole Population. Physical Review Letters, 2022, 128, 031101.	7.8	13
69	Constraining unmodeled physics with compact binary mergers from GWTC-1. Physical Review D, 2021, 103, .	4.7	10
70	The Impact of Metallicity Evolution of the Universe on the Maximum Mass of LIGO Binary Black Holes. Astrophysical Journal Letters, 2019, 883, L24.	8.3	10
71	An efficient interpolation technique for jump proposals in reversible-jump Markov chain Monte Carlo calculations. Royal Society Open Science, 2015, 2, 150030.	2.4	9
72	Relativistic Dynamical Stability Criterion of Multiplanet Systems with a Distant Companion. Astrophysical Journal, 2021, 923, 118.	4.5	6

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73	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. , 2018, 21, 1.		2
74	Hiding Planets Near and Far: The Parameter Space of Hidden Companions for Known Planetary Systems. Astrophysical Journal, 2022, 932, 78.	4.5	2