

Simon P Stevenson

List of Publications by Year in descending order

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103
papers

44,847
citations

23567

58
h-index

29157

104
g-index

104
all docs

104
docs citations

104
times ranked

16223
citing authors

#	ARTICLE	IF	CITATIONS
1	Observation of Gravitational Waves from a Binary Black Hole Merger. <i>Physical Review Letters</i> , 2016, 116, 061102.	7.8	8,753
2	GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral. <i>Physical Review Letters</i> , 2017, 119, 161101.	7.8	6,413
3	Multi-messenger Observations of a Binary Neutron Star Merger [*] . <i>Astrophysical Journal Letters</i> , 2017, 848, L12.	8.3	2,805
4	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. <i>Physical Review Letters</i> , 2016, 116, 241103.	7.8	2,701
5	Gravitational Waves and Gamma-Rays from a Binary Neutron Star Merger: GW170817 and GRB 170817A. <i>Astrophysical Journal Letters</i> , 2017, 848, L13.	8.3	2,314
6	GWTC-1: A Gravitational-Wave Transient Catalog of Compact Binary Mergers Observed by LIGO and Virgo during the First and Second Observing Runs. <i>Physical Review X</i> , 2019, 9, .	8.9	2,022
7	GW170104: Observation of a 50-Solar-Mass Binary Black Hole Coalescence at Redshift 0.2. <i>Physical Review Letters</i> , 2017, 118, 221101.	7.8	1,987
8	Advanced LIGO. <i>Classical and Quantum Gravity</i> , 2015, 32, 074001.	4.0	1,929
9	GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence. <i>Physical Review Letters</i> , 2017, 119, 141101.	7.8	1,600
10	GW170817: Measurements of Neutron Star Radii and Equation of State. <i>Physical Review Letters</i> , 2018, 121, 161101.	7.8	1,473
11	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. <i>Astrophysical Journal Letters</i> , 2017, 851, L35.	8.3	968
12	Binary Black Hole Mergers in the First Advanced LIGO Observing Run. <i>Physical Review X</i> , 2016, 6, .	8.9	898
13	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. <i>Living Reviews in Relativity</i> , 2018, 21, 3.	26.7	808
14	Properties of the Binary Neutron Star Merger GW170817. <i>Physical Review X</i> , 2019, 9, .	8.9	728
15	A gravitational-wave standard siren measurement of the Hubble constant. <i>Nature</i> , 2017, 551, 85-88.	27.8	674
16	Properties of the Binary Black Hole Merger GW150914. <i>Physical Review Letters</i> , 2016, 116, 241102.	7.8	673
17	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. <i>Astrophysical Journal Letters</i> , 2016, 818, L22.	8.3	633
18	Binary Black Hole Population Properties Inferred from the First and Second Observing Runs of Advanced LIGO and Advanced Virgo. <i>Astrophysical Journal Letters</i> , 2019, 882, L24.	8.3	566

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19	Tests of general relativity with the binary black hole signals from the LIGO-Virgo catalog GWTC-1. <i>Physical Review D</i> , 2019, 100, .	4.7	470
20	Tests of General Relativity with GW170817. <i>Physical Review Letters</i> , 2019, 123, 011102.	7.8	370
21	Formation of the first three gravitational-wave observations through isolated binary evolution. <i>Nature Communications</i> , 2017, 8, 14906.	12.8	270
22	THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914. <i>Astrophysical Journal Letters</i> , 2016, 833, L1.	8.3	230
23	Distinguishing spin-aligned and isotropic black hole populations with gravitational waves. <i>Nature</i> , 2017, 548, 426-429.	27.8	208
24	Search for the isotropic stochastic background using data from Advanced LIGO's second observing run. <i>Physical Review D</i> , 2019, 100, .	4.7	200
25	Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2017, 118, 121101.	7.8	194
26	The effect of the metallicity-specific star formation history on double compact object mergers. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 490, 3740-3759.	4.4	192
27	Search for Post-merger Gravitational Waves from the Remnant of the Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , 2017, 851, L16.	8.3	189
28	On the formation history of Galactic double neutron stars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 481, 4009-4029.	4.4	189
29	First Measurement of the Hubble Constant from a Dark Standard Siren using the Dark Energy Survey Galaxies and the LIGO/Virgo Binary's Black-hole Merger GW170814. <i>Astrophysical Journal Letters</i> , 2019, 876, L7.	8.3	179
30	GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences. <i>Physical Review Letters</i> , 2018, 120, 091101.	7.8	166
31	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817. <i>Astrophysical Journal Letters</i> , 2017, 850, L39.	8.3	156
32	The origin of spin in binary black holes. <i>Astronomy and Astrophysics</i> , 2020, 635, A97.	5.1	155
33	Hierarchical analysis of gravitational-wave measurements of binary black hole spin-orbit misalignments. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 471, 2801-2811.	4.4	152
34	Search for High-energy Neutrinos from Binary Neutron Star Merger GW170817 with ANTARES, IceCube, and the Pierre Auger Observatory. <i>Astrophysical Journal Letters</i> , 2017, 850, L35.	8.3	135
35	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. <i>Astrophysical Journal</i> , 2017, 839, 12.	4.5	131
36	Search for Substellar Mass Ultracompact Binaries in Advanced LIGO's Second Observing Run. <i>Physical Review Letters</i> , 2019, 123, 161102.	7.8	119

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37	The Impact of Pair-instability Mass Loss on the Binary Black Hole Mass Distribution. <i>Astrophysical Journal</i> , 2019, 882, 121.	4.5	114
38	Improved Analysis of GW150914 Using a Fully Spin-Precessing Waveform Model. <i>Physical Review X</i> , 2016, 6, .	8.9	106
39	Accuracy of inference on the physics of binary evolution from gravitational-wave observations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 477, 4685-4695.	4.4	100
40	Effects of waveform model systematics on the interpretation of GW150914. <i>Classical and Quantum Gravity</i> , 2017, 34, 104002.	4.0	98
41	Search for Gravitational Waves from a Long-lived Remnant of the Binary Neutron Star Merger GW170817. <i>Astrophysical Journal</i> , 2019, 875, 160.	4.5	97
42	DISTINGUISHING COMPACT BINARY POPULATION SYNTHESIS MODELS USING GRAVITATIONAL WAVE OBSERVATIONS OF COALESCING BINARY BLACK HOLES. <i>Astrophysical Journal</i> , 2015, 810, 58.	4.5	90
43	Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015â€“2017 LIGO Data. <i>Astrophysical Journal</i> , 2019, 879, 10.	4.5	88
44	Improved Upper Limits on the Stochastic Gravitational-Wave Background from 2009â€“2010 LIGO and Virgo Data. <i>Physical Review Letters</i> , 2014, 113, 231101.	7.8	86
45	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. <i>Physical Review Letters</i> , 2018, 120, 201102.	7.8	85
46	Directional Limits on Persistent Gravitational Waves from Advanced LIGOâ€™s First Observing Run. <i>Physical Review Letters</i> , 2017, 118, 121102.	7.8	84
47	Impact of massive binary star and cosmic evolution on gravitational wave observations I: black holeâ€“neutron star mergers. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 508, 5028-5063.	4.4	83
48	Search for Substellar-Mass Ultracompact Binaries in Advanced LIGOâ€™s First Observing Run. <i>Physical Review Letters</i> , 2018, 121, 231103.	7.8	77
49	On the Progenitor of Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , 2017, 850, L40.	8.3	73
50	Search for Eccentric Binary Black Hole Mergers with Advanced LIGO and Advanced Virgo during Their First and Second Observing Runs. <i>Astrophysical Journal</i> , 2019, 883, 149.	4.5	72
51	Low-latency Gravitational-wave Alerts for Multimessenger Astronomy during the Second Advanced LIGO and Virgo Observing Run. <i>Astrophysical Journal</i> , 2019, 875, 161.	4.5	71
52	All-sky search for short gravitational-wave bursts in the first Advanced LIGO run. <i>Physical Review D</i> , 2017, 95, .	4.7	69
53	SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM NINE YOUNG SUPERNOVA REMNANTS. <i>Astrophysical Journal</i> , 2015, 813, 39.	4.5	66
54	SUPPLEMENT: â€œTHE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914â€•(2016, <i>ApJL</i> , 833, L1). <i>Astrophysical Journal</i> , Supplement Series, 2016, 227, 14.	7.7	63

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55	Searches for Continuous Gravitational Waves from 15 Supernova Remnants and Fomalhaut b with Advanced LIGO. <i>Astrophysical Journal</i> , 2019, 875, 122.	4.5	61
56	First all-sky search for continuous gravitational waves from unknown sources in binary systems. <i>Physical Review D</i> , 2014, 90, .	4.7	60
57	Narrow-band search for gravitational waves from known pulsars using the second LIGO observing run. <i>Physical Review D</i> , 2019, 99, .	4.7	60
58	Model-independent inference on compact-binary observations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 465, 3254-3260.	4.4	58
59	Rapid Stellar and Binary Population Synthesis with COMPAS. <i>Astrophysical Journal, Supplement Series</i> , 2022, 258, 34.	7.7	57
60	Search for Gravitational Waves Associated with Gamma-Ray Bursts during the First Advanced LIGO Observing Run and Implications for the Origin of GRB 150906B. <i>Astrophysical Journal</i> , 2017, 841, 89.	4.5	52
61	Search for intermediate mass black hole binaries in the first and second observing runs of the Advanced LIGO and Virgo network. <i>Physical Review D</i> , 2019, 100, .	4.7	52
62	Directional limits on persistent gravitational waves using data from Advanced LIGO's first two observing runs. <i>Physical Review D</i> , 2019, 100, .	4.7	52
63	Detecting double neutron stars with LISA. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 492, 3061-3072.	4.4	49
64	Directed search for gravitational waves from Scorpius X-1 with initial LIGO data. <i>Physical Review D</i> , 2015, 91, .	4.7	47
65	First narrow-band search for continuous gravitational waves from known pulsars in advanced detector data. <i>Physical Review D</i> , 2017, 96, .	4.7	47
66	Impact of massive binary star and cosmic evolution on gravitational wave observations II. Double compact object rates and properties. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 516, 5737-5761.	4.4	47
67	Full band all-sky search for periodic gravitational waves in the O1 LIGO data. <i>Physical Review D</i> , 2018, 97, .	4.7	46
68	Search for gravitational waves from Scorpius X-1 in the second Advanced LIGO observing run with an improved hidden Markov model. <i>Physical Review D</i> , 2019, 100, .	4.7	46
69	On the origin of GW190425. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2020, 496, L64-L69.	3.3	46
70	Modelling neutron star-black hole binaries: future pulsar surveys and gravitational wave detectors. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 504, 3682-3710.	4.4	43
71	The NINJA-2 project: detecting and characterizing gravitational waveforms modelled using numerical binary black hole simulations. <i>Classical and Quantum Gravity</i> , 2014, 31, 115004.	4.0	42
72	Inference on gravitational waves from coalescences of stellar-mass compact objects and intermediate-mass black holes. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 457, 4499-4506.	4.4	42

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73	Luminous Red Novae: population models and future prospects. Monthly Notices of the Royal Astronomical Society, 2020, 492, 3229-3240.	4.4	42
74	Search for high-energy neutrinos from gravitational wave event GW151226 and candidate LVT151012 with ANTARES and IceCube. Physical Review D, 2017, 96, .	4.7	40
75	Narrow-band search of continuous gravitational-wave signals from Crab and Vela pulsars in Virgo VSR4 data. Physical Review D, 2015, 91, .	4.7	37
76	Constraining the $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -Mode $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -Mode Tidal Instability with GW170817. Physical Review Letters, 2019, 122, 061104.	7.8	36
77	Modelling double neutron stars: radio and gravitational waves. Monthly Notices of the Royal Astronomical Society, 2020, 494, 1587-1610.	4.4	36
78	Search for gravitational radiation from intermediate mass black hole binaries in data from the second LIGO-Virgo joint science run. Physical Review D, 2014, 89, .	4.7	35
79	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
80	Search for Gravitational Waves Associated with $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -ray Bursts Detected by the Interplanetary Network. Physical Review Letters, 2014, 113, 011102.	7.8	32
81	First low frequency all-sky search for continuous gravitational wave signals. Physical Review D, 2016, 93, .	4.7	32
82	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
83	$\langle \text{scp} \rangle \text{stroopwafel} \langle \text{scp} \rangle$: simulating rare outcomes from astrophysical populations, with application to gravitational-wave sources. Monthly Notices of the Royal Astronomical Society, 2019, 490, 5228-5248.	4.4	30
84	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
85	Multimessenger search for sources of gravitational waves and high-energy neutrinos: Initial results for LIGO-Virgo and IceCube. Physical Review D, 2014, 90, .	4.7	29
86	Methods and results of a search for gravitational waves associated with gamma-ray bursts using the GEO 600, LIGO, and Virgo detectors. Physical Review D, 2014, 89, .	4.7	29
87	Search for gravitational wave ringdowns from perturbed intermediate mass black holes in LIGO-Virgo data from 2005–2010. Physical Review D, 2014, 89, .	4.7	28
88	Search for Transient Gravitational-wave Signals Associated with Magnetar Bursts during Advanced LIGO's Second Observing Run. Astrophysical Journal, 2019, 874, 163.	4.5	26
89	The fates of massive stars: exploring uncertainties in stellar evolution with metisse. Monthly Notices of the Royal Astronomical Society, 2020, 497, 4549-4564.	4.4	26
90	Heavy Double Neutron Stars: Birth, Midlife, and Death. Astrophysical Journal Letters, 2021, 909, L19.	8.3	24

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91	All-sky search for long-duration gravitational-wave transients in the second Advanced LIGO observing run. <i>Physical Review D</i> , 2019, 99, .	4.7	22
92	Linking the rates of neutron star binaries and short gamma-ray bursts. <i>Physical Review D</i> , 2022, 105, .	4.7	21
93	All-sky search for long-duration gravitational wave transients in the first Advanced LIGO observing run. <i>Classical and Quantum Gravity</i> , 2018, 35, 065009.	4.0	18
94	Constraints on Weak Supernova Kicks from Observed Pulsar Velocities. <i>Astrophysical Journal Letters</i> , 2021, 920, L37.	8.3	18
95	Search of the Orion spur for continuous gravitational waves using a loosely coherent algorithm on data from LIGO interferometers. <i>Physical Review D</i> , 2016, 93, .	4.7	17
96	Unmodelled clustering methods for gravitational wave populations of compact binary mergers. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 488, 3810-3817.	4.4	16
97	Explaining the differences in massive star models from various simulations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 512, 5717-5725.	4.4	15
98	Dynamical double black holes and their host cluster properties. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 513, 4527-4555.	4.4	13
99	Modelling the formation of the first two neutron star "black hole mergers, GW200105 and GW200115: metallicity, chirp masses, and merger remnant spins. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 513, 5780-5789.	4.4	12
100	Biases in Estimates of Black Hole Kicks from the Spin Distribution of Binary Black Holes. <i>Astrophysical Journal Letters</i> , 2022, 926, L32.	8.3	11
101	COMPAS: A rapid binary population synthesis suite. <i>Journal of Open Source Software</i> , 2022, 7, 3838.	4.6	9
102	Exploring the Parameter Space of Compact Binary Population Synthesis. <i>Proceedings of the International Astronomical Union</i> , 2016, 12, 46-50.	0.0	8
103	Wide binary pulsars from electron-capture supernovae. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 513, 6105-6110.	4.4	4