Simon P Stevenson

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5315443/publications.pdf

Version: 2024-02-01

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	COMPAS: A rapid binary population synthesis suite. Journal of Open Source Software, 2022, 7, 3838.	4.6	9
2	Rapid Stellar and Binary Population Synthesis with COMPAS. Astrophysical Journal, Supplement Series, 2022, 258, 34.	7.7	57
3	Biases in Estimates of Black Hole Kicks from the Spin Distribution of Binary Black Holes. Astrophysical Journal Letters, 2022, 926, L32.	8.3	11
4	Explaining the differences in massive star models from various simulations. Monthly Notices of the Royal Astronomical Society, 2022, 512, 5717-5725.	4.4	15
5	Linking the rates of neutron star binaries and short gamma-ray bursts. Physical Review D, 2022, 105, .	4.7	21
6	Dynamical double black holes and their host cluster properties. Monthly Notices of the Royal Astronomical Society, 2022, 513, 4527-4555.	4.4	13
7	Modelling the formation of the first two neutron star–black hole mergers, GW200105 and GW200115: metallicity, chirp masses, and merger remnant spins. Monthly Notices of the Royal Astronomical Society, 2022, 513, 5780-5789.	4.4	12
8	Wide binary pulsars from electron-capture supernovae. Monthly Notices of the Royal Astronomical Society, 2022, 513, 6105-6110.	4.4	4
9	Impact of massive binary star and cosmic evolution on gravitational wave observations – II. Double compact object rates and properties. Monthly Notices of the Royal Astronomical Society, 2022, 516, 5737-5761.	4.4	47
10	Heavy Double Neutron Stars: Birth, Midlife, and Death. Astrophysical Journal Letters, 2021, 909, L19.	8.3	24
11	Modelling neutron star–black hole binaries: future pulsar surveys and gravitational wave detectors. Monthly Notices of the Royal Astronomical Society, 2021, 504, 3682-3710.	4.4	43
12	Impact of massive binary star and cosmic evolution on gravitational wave observations I: black hole–neutron star mergers. Monthly Notices of the Royal Astronomical Society, 2021, 508, 5028-5063.	4.4	83
13	Constraints on Weak Supernova Kicks from Observed Pulsar Velocities. Astrophysical Journal Letters, 2021, 920, L37.	8.3	18
14	Modelling double neutron stars: radio and gravitational waves. Monthly Notices of the Royal Astronomical Society, 2020, 494, 1587-1610.	4.4	36
15	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
16	On the origin of GW190425. Monthly Notices of the Royal Astronomical Society: Letters, 2020, 496, L64-L69.	3.3	46
17	Detecting double neutron stars with LISA. Monthly Notices of the Royal Astronomical Society, 2020, 492, 3061-3072.	4.4	49
18	The origin of spin in binary black holes. Astronomy and Astrophysics, 2020, 635, A97.	5.1	155

#	Article	IF	CITATIONS
19	Luminous Red Novae: population models and future prospects. Monthly Notices of the Royal Astronomical Society, 2020, 492, 3229-3240.	4.4	42
20	Narrow-band search for gravitational waves from known pulsars using the second LIGO observing run. Physical Review D, 2019, 99, .	4.7	60
21	Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015–2017 LIGO Data. Astrophysical Journal, 2019, 879, 10.	4.5	88
22	Tests of General Relativity with GW170817. Physical Review Letters, 2019, 123, 011102.	7.8	370
23	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
24	Search for intermediate mass black hole binaries in the first and second observing runs of the Advanced LIGO and Virgo network. Physical Review D, 2019, 100, .	4.7	52
25	<scp>stroopwafel</scp> : 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
26	The effect of the metallicity-specific star formation history on double compact object mergers. Monthly Notices of the Royal Astronomical Society, 2019, 490, 3740-3759.	4.4	192
27	Search for Subsolar Mass Ultracompact Binaries in Advanced LIGO's Second Observing Run. Physical Review Letters, 2019, 123, 161102.	7.8	119
28	Unmodelled clustering methods for gravitational wave populations of compact binary mergers. Monthly Notices of the Royal Astronomical Society, 2019, 488, 3810-3817.	4.4	16
29	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
30	Directional limits on persistent gravitational waves using data from Advanced LIGO's first two observing runs. Physical Review D, 2019, 100, .	4.7	52
31	GWTC-1: A Gravitational-Wave Transient Catalog of Compact Binary Mergers Observed by LIGO and Virgo during the First and Second Observing Runs. Physical Review X, 2019, 9, .	8.9	2,022
32	Search for the isotropic stochastic background using data from Advanced LIGO's second observing run. Physical Review D, 2019, 100, .	4.7	200
33	All-sky search for long-duration gravitational-wave transients in the second Advanced LIGO observing run. Physical Review D, 2019, 99, .	4.7	22
34	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
35	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
36	Searches for Continuous Gravitational Waves from 15 Supernova Remnants and Fomalhaut b with Advanced LIGO [*] . Astrophysical Journal, 2019, 875, 122.	4.5	61

#	Article	IF	CITATIONS
37	Search for Gravitational Waves from a Long-lived Remnant of the Binary Neutron Star Merger GW170817. Astrophysical Journal, 2019, 875, 160.	4.5	97
38	First Measurement of the Hubble Constant from a Dark Standard Siren using the Dark Energy Survey Galaxies and the LIGO/Virgo Binary–Black-hole Merger GW170814. Astrophysical Journal Letters, 2019, 876, L7.	8.3	179
39	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
40	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
41	Constraining the <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>p</mml:mi></mml:math> -Modeâ€" <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>g</mml:mi></mml:math> -Mode Tidal Instability with GW170817. Physical Review Letters. 2019. 122. 061104.	7.8	36
42	Tests of general relativity with the binary black hole signals from the LIGO-Virgo catalog GWTC-1. Physical Review D, 2019, 100, .	4.7	470
43	Search for gravitational waves from Scorpius X-1 in the second Advanced LIGO observing run with an improved hidden Markov model. Physical Review D, 2019, 100, .	4.7	46
44	Properties of the Binary Neutron Star Merger GW170817. Physical Review X, 2019, 9, .	8.9	728
45	The Impact of Pair-instability Mass Loss on the Binary Black Hole Mass Distribution. Astrophysical Journal, 2019, 882, 121.	4.5	114
46	GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences. Physical Review Letters, 2018, 120, 091101.	7.8	166
47	All-sky search for long-duration gravitational wave transients in the first Advanced LIGO observing run. Classical and Quantum Gravity, 2018, 35, 065009.	4.0	18
48	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
49	On the formation history of Galactic double neutron stars. Monthly Notices of the Royal Astronomical Society, 2018, 481, 4009-4029.	4.4	189
50	Search for Subsolar-Mass Ultracompact Binaries in Advanced LIGO's First Observing Run. Physical Review Letters, 2018, 121, 231103.	7.8	77
51	GW170817: Measurements of Neutron Star Radii and Equation of State. Physical Review Letters, 2018, 121, 161101.	7.8	1,473
52	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. Physical Review Letters, 2018, 120, 201102.	7.8	85
53	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
54	Full band all-sky search for periodic gravitational waves in the O1 LIGO data. Physical Review D, 2018, 97, .	4.7	46

#	Article	IF	CITATIONS
55	All-sky search for short gravitational-wave bursts in the first Advanced LIGO run. Physical Review D, 2017, 95, .	4.7	69
56	Effects of waveform model systematics on the interpretation of GW150914. Classical and Quantum Gravity, 2017, 34, 104002.	4.0	98
57	Formation of the first three gravitational-wave observations through isolated binary evolution. Nature Communications, 2017, 8, 14906.	12.8	270
58	Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGO's First Observing Run. Physical Review Letters, 2017, 118, 121101.	7.8	194
59	Directional Limits on Persistent Gravitational Waves from Advanced LIGO's First Observing Run. Physical Review Letters, 2017, 118, 121102.	7.8	84
60	First Search for Gravitational Waves from Known Pulsars with Advanced LIGO. Astrophysical Journal, 2017, 839, 12.	4.5	131
61	Model-independent inference on compact-binary observations. Monthly Notices of the Royal Astronomical Society, 2017, 465, 3254-3260.	4.4	58
62	GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence. Physical Review Letters, 2017, 119, 141101.	7.8	1,600
63	A gravitational-wave standard siren measurement of the Hubble constant. Nature, 2017, 551, 85-88.	27.8	674
64	GW170817: Observation of Gravitational Waves from a Binary Neutron Star Inspiral. Physical Review Letters, 2017, 119, 161101.	7.8	6,413
65	Multi-messenger Observations of a Binary Neutron Star Merger < sup>* < /sup>. Astrophysical Journal Letters, 2017, 848, L12.	8.3	2,805
66	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
67	Distinguishing spin-aligned and isotropic black hole populations with gravitational waves. Nature, 2017, 548, 426-429.	27.8	208
68	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
69	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
70	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
71	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated withÂGW170817. Astrophysical Journal Letters, 2017, 850, L39.	8.3	156
72	Search for High-energy Neutrinos from Binary Neutron Star Merger GW170817 with ANTARES, IceCube, and the Pierre Auger Observatory. Astrophysical Journal Letters, 2017, 850, L35.	8.3	135

#	Article	IF	CITATIONS
7 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
74	First narrow-band search for continuous gravitational waves from known pulsars in advanced detector data. Physical Review D, 2017, 96, .	4.7	47
75	On the Progenitor of Binary Neutron Star Merger GW170817. Astrophysical Journal Letters, 2017, 850, L40.	8.3	73
76	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. Astrophysical Journal Letters, 2017, 851, L35.	8.3	968
77	Hierarchical analysis of gravitational-wave measurements of binary black hole spin–orbit misalignments. Monthly Notices of the Royal Astronomical Society, 2017, 471, 2801-2811.	4.4	152
78	SUPPLEMENT: "THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914―(2016, ApJL, 833, L1). Astrophysical Journal, Supplement Series, 2016, 227, 14.	7.7	63
79	Improved Analysis of GW150914 Using a Fully Spin-Precessing Waveform Model. Physical Review X, 2016, 6, .	8.9	106
80	THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914. Astrophysical Journal Letters, 2016, 833, L1.	8.3	230
81	Search of the Orion spur for continuous gravitational waves using a loosely coherent algorithm on data from LIGO interferometers. Physical Review D, 2016, 93, .	4.7	17
82	First low frequency all-sky search for continuous gravitational wave signals. Physical Review D, 2016, 93, .	4.7	32
83	Properties of the Binary Black Hole Merger GW150914. Physical Review Letters, 2016, 116, 241102.	7.8	673
84	GW151226: Observation of Gravitational Waves from a 22-Solar-Mass Binary Black Hole Coalescence. Physical Review Letters, 2016, 116, 241103.	7.8	2,701
85	Binary Black Hole Mergers in the First Advanced LIGO Observing Run. Physical Review X, 2016, 6, .	8.9	898
86	Exploring the Parameter Space of Compact Binary Population Synthesis. Proceedings of the International Astronomical Union, 2016, 12, 46-50.	0.0	8
87	Inference on gravitational waves from coalescences of stellar-mass compact objects and intermediate-mass black holes. Monthly Notices of the Royal Astronomical Society, 2016, 457, 4499-4506.	4.4	42
88	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. Astrophysical Journal Letters, 2016, 818, L22.	8.3	633
89	Observation of Gravitational Waves from a Binary Black Hole Merger. Physical Review Letters, 2016, 116, 061102.	7.8	8,753
90	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

#	Article	IF	Citations
91	Directed search for gravitational waves from Scorpius X-1 with initial LIGO data. Physical Review D, 2015, 91, .	4.7	47
92	Advanced LIGO. Classical and Quantum Gravity, 2015, 32, 074001.	4.0	1,929
93	DISTINGUISHING COMPACT BINARY POPULATION SYNTHESIS MODELS USING GRAVITATIONAL WAVE OBSERVATIONS OF COALESCING BINARY BLACK HOLES. Astrophysical Journal, 2015, 810, 58.	4.5	90
94	SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM NINE YOUNG SUPERNOVA REMNANTS. Astrophysical Journal, 2015, 813, 39.	4.5	66
95	First all-sky search for continuous gravitational waves from unknown sources in binary systems. Physical Review D, 2014, 90, .	4.7	60
96	Improved Upper Limits on the Stochastic Gravitational-Wave Background from 2009–2010 LIGO and Virgo Data. Physical Review Letters, 2014, 113, 231101.	7.8	86
97	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
98	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
99	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
100	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
101	Search for Gravitational Waves Associated with $<$ mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> $<$ mml:mi> \hat{I}^3 $<$ /mml:math>-ray Bursts Detected by the Interplanetary Network. Physical Review Letters, 2014, 113, 011102.	7.8	32
102	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
103	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