Vivien Raymond

List of Publications by Year
in descending order

50 papers	6,695 citations	94269 37 h-index	223531 46 g-index
50 all docs	50 docs citations	50 times ranked	5272 citing authors

#	Article	IF	Citations
1	Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light. Nature Photonics, 2013, 7, 613-619.	15.6	825
2	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2018, 21, 3.	8.2	808
3	Parameter estimation for compact binaries with ground-based gravitational-wave observations using the LALInference software library. Physical Review D, 2015, 91, .	1.6	674
4	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Living Reviews in Relativity, 2020, 23, 3.	8.2	447
5	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. Living Reviews in Relativity, 2016, 19, 1.	8.2	427
6	Improved effective-one-body model of spinning, nonprecessing binary black holes for the era of gravitational-wave astrophysics with advanced detectors. Physical Review D, 2017, 95, .	1.6	401
7	Characterization of transient noise in Advanced LIGO relevant to gravitational wave signal GW150914. Classical and Quantum Gravity, 2016, 33, 134001.	1.5	225
8	Bayesian inference for compact binary coalescences with <scp>bilby</scp>: validation and application to the first LIGOâ€“Virgo gravitational-wave transient catalogue. Monthly Notices of the Royal Astronomical Society, 2020, 499, 3295-3319.	1.6	213
9	Prospects for fundamental physics with LISA. General Relativity and Gravitation, 2020, 52, 1.	0.7	198
10	Systematic and statistical errors in a Bayesian approach to the estimation of the neutron-star equation of state using advanced gravitational wave detectors. Physical Review D, 2014, 89, .	1.6	192
11	PyCBC Inference: A Python-based Parameter Estimation Toolkit for Compact Binary Coalescence Signals. Publications of the Astronomical Society of the Pacific, 2019, 131, 024503.	1.0	156
12	A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo. Astrophysical Journal, 2021, 909, 218.	1.6	144
13	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.	3.0	126
14	Fast and accurate inference on gravitational waves from precessing compact binaries. Physical Review D, 2016, 94, .	1.6	116
15	Testing gravitational-wave searches with numerical relativity waveforms: results from the first Numerical INJection Analysis (NINJA) project. Classical and Quantum Gravity, 2009, 26, 165008.	1.5	110
16	Parameter estimation of spinning binary inspirals using Markov chain Monte Carlo. Classical and Quantum Gravity, 2008, 25, 184011.	1.5	95
17	Measuring the Spin of Black Holes in Binary Systems Using Gravitational Waves. Physical Review Letters, 2014, 112, 251101.	2.9	95
18	SEARCH FOR GRAVITATIONAL-WAVE INSPIRAL SIGNALS ASSOCIATED WITH SHORT GAMMA-RAY BURSTS DURING LIGO'S FIFTH AND VIRGO'S FIRST SCIENCE RUN. Astrophysical Journal, 2010, 715, 1453-1461.	1.6	90

#	Article	IF	Citations
19	Gravitational-Wave Astronomy with Inspiral Signals of Spinning Compact-Object Binaries. Astrophysical Journal, 2008, 688, L61-L64.	1.6	89
20	Black-hole spectroscopy by making full use of gravitational-wave modeling. Physical Review D, 2018, 98, .	1.6	85
21	BASIC PARAMETER ESTIMATION OF BINARY NEUTRON STAR SYSTEMS BY THE ADVANCED LIGO/VIRGO NETWORK. Astrophysical Journal, 2014, 784, 119.	1.6	82
22	On the properties of the massive binary black hole merger GW170729. Physical Review D, 2019, 100, .	1.6	82
23	Estimating parameters of coalescing compact binaries with proposed advanced detector networks. Physical Review D, 2012, 85, .	1.6	79
24	Accelerated Gravitational Wave Parameter Estimation with Reduced Order Modeling. Physical Review Letters, 2015, 114, 071104.	2.9	79
25	Mitigation of the instrumental noise transient in gravitational-wave data surrounding GW170817. Physical Review D, 2018, 98, .	1.6	75
26	The basic physics of the binary black hole merger GW150914. Annalen Der Physik, 2017, 529, 1600209.	0.9	69
27	Parameter estimation for heavy binary-black holes with networks of second-generation gravitational-wave detectors. Physical Review D, 2017, 95, .	1.6	66
28	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.	1.6	52
29	Reconstructing the sky location of gravitational-wave detected compact binary systems: Methodology for testing and comparison. Physical Review D, 2014, 89, .	1.6	50
30	Degeneracies in sky localization determination from a spinning coalescing binary through gravitational wave observations: a Markov-chain Monte Carlo analysis for two detectors. Classical and Quantum Gravity, 2009, 26, 114007.	1.5	47
31	Parameter estimation of gravitational waves from precessing black hole-neutron star inspirals with higher harmonics. Physical Review D, 2014, 89, .	1.6	44
32	Measuring the neutron star equation of state with gravitational waves: The first forty binary neutron star merger observations. Physical Review D, 2019, 100, .	1.6	44
33	Direct limits for scalar field dark matter from a gravitational-wave detector. Nature, 2021, 600, 424-428.	13.7	43
34	PESummary: The code agnostic Parameter Estimation Summary page builder. SoftwareX, 2021, 15, 100765.	1.2	42
35	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.	3.0	41
36	Parametrized tests of the strong-field dynamics of general relativity using gravitational wave signals from coalescing binary black holes: Fast likelihood calculations and sensitivity of the method. Physical Review D, 2018, 97, .	1.6	40

#	Article	IF	Citations
37	Status of NINJA: the Numerical INJection Analysis project. Classical and Quantum Gravity, 2009, 26, 114008.	1.5	39
38	Parameter estimation for signals from compact binary inspirals injected into LIGO data. Classical and Quantum Gravity, 2009, 26, 204010.	1.5	36
39	Rapid parameter estimation of gravitational waves from binary neutron star coalescence using focused reduced order quadrature. Physical Review D, 2020, 102, .	1.6	34
40	Parameter estimation with a spinning multimode waveform model. Physical Review D, 2020, 101, .	1.6	33
41	Astrophysical science metrics for next-generation gravitational-wave detectors. Classical and Quantum Gravity, 2019, 36, 245010.	1.5	27
42	The effects of LIGO detector noise on a 15-dimensional Markov-chain Monte Carlo analysis of gravitational-wave signals. Classical and Quantum Gravity, 2010, 27, 114009.	1.5	24
43	First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. Progress of Theoretical and Experimental Physics, 2022, 2022, .	1.8	20
44	Parameter estimation bias from overlapping binary black hole events in second generation interferometers. Physical Review D, 2021, 104, .	1.6	14
45	Python-based reduced order quadrature building code for fast gravitational wave inference. Physical Review D, 2021, 104, .	1.6	7
46	Density estimation with Gaussian processes for gravitational wave posteriors. Monthly Notices of the Royal Astronomical Society, 2021, 508, 2090-2097.	1.6	7
47	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. , 2018, 21, 1.		2
48	Prospects for Observing and Localizing Gravitational-Wave Transients with Advanced LIGO and Advanced Virgo. , 2016, 19, 1.		1
49	Accelerating parameter estimation of gravitational waves from black hole binaries with reduced order quadratures. , 2017, , .		0
50	Prompt and accurate sky localization of gravitational-wave sources. Journal of Physics: Conference Series, 2020, 1468, 012219.	0.3	0