Chris Van Den Broeck

List of Publications by Year
in descending order

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96 papers	24,164 citations	22153 59 h-index	38395 95 g-index
98 all docs	98 docs citations	98 times ranked	11547 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	Tests of General Relativity with GW150914. Physical Review Letters, 2016, 116, 221101.	7.8	1,224
6	The Einstein Telescope: a third-generation gravitational wave observatory. Classical and Quantum Gravity, 2010, 27, 194002.	4.0	1,211
7	Characterization of the LIGO detectors during their sixth science run. Classical and Quantum Gravity, 2015, 32, 115012.	4.0	1,029
8	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. Astrophysical Journal Letters, 2017, 851, L35.	8.3	968
9	Predictions for the rates of compact binary coalescences observable by ground-based gravitational-wave detectors. Classical and Quantum Gravity, 2010, 27, 173001.	4.0	956
10	Testing general relativity with present and future astrophysical observations. Classical and Quantum Gravity, 2015, 32, 243001.	4.0	943
11	A gravitational-wave standard siren measurement of the Hubble constant. Nature, 2017, 551, 85-88.	27.8	674
12	Properties of the Binary Black Hole Merger GW150914. Physical Review Letters, 2016, 116, 241102.	7.8	673
13	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. Astrophysical Journal Letters, 2016, 818, L22.	8.3	633
14	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. Physical Review Letters, 2016, 116, 131103.	7.8	466
15	Scientific objectives of Einstein Telescope. Classical and Quantum Gravity, 2012, 29, 124013.	4.0	355
16	An upper limit on the stochastic gravitational-wave background of cosmological origin. Nature, 2009, 460, 990-994.	27.8	303
17	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. Physical Review Letters, 2016, 116, 131102.	7.8	269
18	Virgo: a laser interferometer to detect gravitational waves. Journal of Instrumentation, 2012, 7, P03012-P03012.	1.2	257

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19	THE RATE OF BINARY BLACK HOLE MERGERS INFERRED FROM ADVANCED LIGO OBSERVATIONS SURROUNDING GW150914. Astrophysical Journal Letters, 2016, 833, L1.	8.3	230
20	Demonstrating the Feasibility of Probing the Neutron-Star Equation of State with Second-Generation Gravitational-Wave Detectors. Physical Review Letters, 2013, 111, 071101.	7.8	201
21	Upper Limits on the Stochastic Gravitational-Wave Background from Advanced LIGOâ€™s First Observing Run. Physical Review Letters, 2017, 118, 121101.	7.8	194
22	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
23	Cosmography with the Einstein Telescope. Classical and Quantum Gravity, 2010, 27, 215006.	4.0	181
24	Status of the Virgo project. Classical and Quantum Gravity, 2011, 28, 114002.	4.0	171
25	Beating the Spin-Down Limit on Gravitational Wave Emission from the Crab Pulsar. Astrophysical Journal, 2008, 683, L45-L49.	4.5	160
26	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated withÂGW170817. Astrophysical Journal Letters, 2017, 850, L39.	8.3	156
27	SEARCHES FOR GRAVITATIONAL WAVES FROM KNOWN PULSARS WITH SCIENCE RUN 5 LIGO DATA. Astrophysical Journal, 2010, 713, 671-685.	4.5	155
28	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
29	Implications for the Origin of GRB 070201 from LIGO Observations. Astrophysical Journal, 2008, 681, 1419-1430.	4.5	143
30	Multipole moments of isolated horizons. Classical and Quantum Gravity, 2004, 21, 2549-2570.	4.0	125
31	GRAVITATIONAL WAVES FROM KNOWN PULSARS: RESULTS FROM THE INITIAL DETECTOR ERA. Astrophysical Journal, 2014, 785, 119.	4.5	125
32	Constraining neutron-star matter with microscopic and macroscopic collisions. Nature, 2022, 606, 276-280.	27.8	112
33	Mock data challenge for the Einstein Gravitational-Wave Telescope. Physical Review D, 2012, 86, .	4.7	107
34	FIRST SEARCH FOR GRAVITATIONAL WAVES FROM THE YOUNGEST KNOWN NEUTRON STAR. Astrophysical Journal, 2010, 722, 1504-1513.	4.5	104
35	SEARCH FOR GRAVITATIONAL WAVES ASSOCIATED WITH GAMMA-RAY BURSTS DURING LIGO SCIENCE RUN 6 AND VIRGO SCIENCE RUNS 2 AND 3. Astrophysical Journal, 2012, 760, 12.	4.5	104
36	Higher signal harmonics, LISAâ€™s angular resolution, and dark energy. Physical Review D, 2007, 76, .	4.7	101

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37	Effects of waveform model systematics on the interpretation of GW150914. Classical and Quantum Gravity, 2017, 34, 104002.	4.0	98
38	Directional Limits on Persistent Gravitational Waves Using LIGO S5 Science Data. Physical Review Letters, 2011, 107, 271102.	7.8	94
39	Marginally trapped tubes and dynamical horizons. Classical and Quantum Gravity, 2006, 23, 413-439.	4.0	93
40	Massive black-hole binary inspirals: results from the LISA parameter estimation taskforce. Classical and Quantum Gravity, 2009, 26, 094027.	4.0	93
41	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.	4.5	90
42	BEATING THE SPIN-DOWN LIMIT ON GRAVITATIONAL WAVE EMISSION FROM THE VELA PULSAR. Astrophysical Journal, 2011, 737, 93.	4.5	89
43	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
44	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. Physical Review Letters, 2018, 120, 201102.	7.8	85
45	Directional Limits on Persistent Gravitational Waves from Advanced LIGOâ€™s First Observing Run. Physical Review Letters, 2017, 118, 121102.	7.8	84
46	All-Sky LIGO Search for Periodic Gravitational Waves in the Early Fifth-Science-Run Data. Physical Review Letters, 2009, 102, 111102.	7.8	83
47	Search for gravitational-wave bursts in LIGO data from the fourth science run. Classical and Quantum Gravity, 2007, 24, 5343-5369.	4.0	78
48	Binary black hole spectroscopy. Classical and Quantum Gravity, 2007, 24, 1089-1113.	4.0	78
49	Nuclear Physics Multimessenger Astrophysics Constraints on the Neutron Star Equation of State: Adding NICERâ€™s PSR J0740+6620 Measurement. Astrophysical Journal, 2021, 922, 14.	4.5	75
50	The characterization of Virgo data and its impact on gravitational-wave searches. Classical and Quantum Gravity, 2012, 29, 155002.	4.0	73
51	On the Progenitor of Binary Neutron Star Merger GW170817. Astrophysical Journal Letters, 2017, 850, L40.	8.3	73
52	Search for Gravitational-Wave Bursts from Soft Gamma Repeaters. Physical Review Letters, 2008, 101, 211102.	7.8	69
53	The basic physics of the binary black hole merger GW150914. Annalen Der Physik, 2017, 529, 1600209.	2.4	69
54	Constraints on Cosmic Strings from the LIGO-Virgo Gravitational-Wave Detectors. Physical Review Letters, 2014, 112, 131101.	7.8	68

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55	Phenomenology of amplitude-corrected post-Newtonian gravitational waveforms for compact binary inspiral: I. Signal-to-noise ratios. Classical and Quantum Gravity, 2007, 24, 155-176.	4.0	67
56	SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM NINE YOUNG SUPERNOVA REMNANTS. Astrophysical Journal, 2015, 813, 39.	4.5	66
57	A `warp drive' with more reasonable total energy requirements. Classical and Quantum Gravity, 1999, 16, 3973-3979.	4.0	62
58	SWIFT FOLLOW-UP OBSERVATIONS OF CANDIDATE GRAVITATIONAL-WAVE TRANSIENT EVENTS. Astrophysical Journal, Supplement Series, 2012, 203, 28.	7.7	62
59	Effect of calibration errors on Bayesian parameter estimation for gravitational wave signals from inspiral binary systems in the advanced detectors era. Physical Review D, 2012, 85, .	4.7	62
60	SEARCH FOR GRAVITATIONAL-WAVE BURSTS ASSOCIATED WITH GAMMA-RAY BURSTS USING DATA FROM LIGO SCIENCE RUN 5 AND VIRGO SCIENCE RUN 1. Astrophysical Journal, 2010, 715, 1438-1452.	4.5	60
61	IMPLICATIONS FOR THE ORIGIN OF GRB 051103 FROM LIGO OBSERVATIONS. Astrophysical Journal, 2012, 755, 2.	4.5	60
62	Quantum horizons and black-hole entropy: inclusion of distortion and rotation. Classical and Quantum Gravity, 2005, 22, L27-L34.	4.0	59
63	FIRST SEARCHES FOR OPTICAL COUNTERPARTS TO GRAVITATIONAL-WAVE CANDIDATE EVENTS. Astrophysical Journal, Supplement Series, 2014, 211, 7.	7.7	57
64	SEARCH FOR GRAVITATIONAL WAVE BURSTS FROM SIX MAGNETARS. Astrophysical Journal Letters, 2011, 734, L35.	8.3	55
65	Effective-one-body waveforms for binary neutron stars using surrogate models. Physical Review D, 2017, 95, .	4.7	54
66	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
67	The gravitational wave spectrum of non-axisymmetric, freely precessing neutron stars. Classical and Quantum Gravity, 2005, 22, 1825-1839.	4.0	51
68	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
69	STACKED SEARCH FOR GRAVITATIONAL WAVES FROM THE 2006 SGR 1900+14 STORM. Astrophysical Journal, 2009, 701, L68-L74.	4.5	45
70	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
71	A morphology-independent data analysis method for detecting and characterizing gravitational wave echoes. Physical Review D, 2018, 98, .	4.7	43
72	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

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73	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, .	4.7	40
74	Template banks to search for compact binaries with spinning components in gravitational wave data. Physical Review D, 2009, 80, .	4.7	36
75	Testing the multipole structure of compact binaries using gravitational wave observations. Physical Review D, 2018, 98, .	4.7	33
76	Astrophysically triggered searches for gravitational waves: status and prospects. Classical and Quantum Gravity, 2008, 25, 114051.	4.0	26
77	LISA as a dark energy probe. Classical and Quantum Gravity, 2009, 26, 094021.	4.0	26
78	Biases in parameter estimation from overlapping gravitational-wave signals in the third-generation detector era. Physical Review D, 2021, 104, .	4.7	25
79	Beyond the Detector Horizon: Forecasting Gravitational-Wave Strong Lensing. Astrophysical Journal, 2021, 921, 154.	4.5	25
80	First joint search for gravitational-wave bursts in LIGO and GEO 600 data. Classical and Quantum Gravity, 2008, 25, 245008.	4.0	22
81	Mechanics of higher dimensional black holes in asymptotically anti-de Sitter spacetimes. Classical and Quantum Gravity, 2007, 24, 625-644.	4.0	21
82	Testing the multipole structure and conservative dynamics of compact binaries using gravitational wave observations: The spinning case. Physical Review D, 2019, 100, .	4.7	21
83	Publisherâ€™s Note: Higher signal harmonics, LISAâ€™s angular resolution, and dark energy [Phys. Rev. D76, 104016 (2007)]. Physical Review D, 2007, 76, .	4.7	19
84	Weak lensing effects in the measurement of the dark energy equation of state with LISA. Physical Review D, 2010, 81, .	4.7	19
85	A fast and precise methodology to search for and analyse strongly lensed gravitational-wave events. Monthly Notices of the Royal Astronomical Society, 2021, 506, 5430-5438.	4.4	18
86	Binary black hole detection rates in inspiral gravitational wave searches. Classical and Quantum Gravity, 2006, 23, L51-L58.	4.0	17
87	On the Identification of Individual Gravitational-wave Image Types of a Lensed System Using Higher-order Modes. Astrophysical Journal Letters, 2021, 923, L1.	8.3	14
88	Reconstruction of the gravitational wave signal h (t) during the Virgo science runs and independent validation with a photon calibrator. Classical and Quantum Gravity, 2014, 31, 165013.	4.0	10
89	Bounding dark charges on binary black holes using gravitational waves. Physical Review D, 2021, 104, .	4.7	9
90	Status of the Advanced Virgo gravitational wave detector. International Journal of Modern Physics A, 2017, 32, 1744003.	1.5	6

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91	Batalin-Vilkovisky gauge-fixing of a chiral 2-form in six dimensions. Classical and Quantum Gravity, 1999, 16, 4011-4021.	4.0	5
92	Probing Dynamical Spacetimes with Gravitational Waves. , 2014, , 589-613.		4
93	Prospective Evaluation of Clinical Voiding Re-Education or Voiding School for Lower Urinary Tract Conditions in Children. Journal of Pediatric Urology, 2010, 6, S68.	1.1	1
94	The 9th Edoardo Amaldi conference on gravitational waves (Amaldi 9) and the 2011 Numerical Relativity and Data Analysis meeting (NRDA 2011), Cardiff, 10â€"15 July 2011. Classical and Quantum Gravity, 2012, 29, 120301.	4.0	1
95	The rigid limit in special KÃhler geometry for SU (2) SYM with a massive quark hypermultiplet. Classical and Quantum Gravity, 1999, 16, 529-541.	4.0	0
96	COMPACT BINARY INSPIRAL AND THE SCIENCE POTENTIAL OF THIRD-GENERATION GROUND-BASED GRAVITATIONAL WAVE DETECTORS. , 2008, , .		0