

Chris Van Den Broeck

List of Publications by Year in descending order

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Version: 2024-02-01

96
papers

24,164
citations

22153

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38395

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98
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98
docs citations

98
times ranked

11547
citing authors

#	ARTICLE	IF	CITATIONS
1	Constraining neutron-star matter with microscopic and macroscopic collisions. <i>Nature</i> , 2022, 606, 276-280.	27.8	112
2	A fast and precise methodology to search for and analyse strongly lensed gravitational-wave events. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 506, 5430-5438.	4.4	18
3	Biases in parameter estimation from overlapping gravitational-wave signals in the third-generation detector era. <i>Physical Review D</i> , 2021, 104, .	4.7	25
4	Bounding dark charges on binary black holes using gravitational waves. <i>Physical Review D</i> , 2021, 104, .	4.7	9
5	Beyond the Detector Horizon: Forecasting Gravitational-Wave Strong Lensing. <i>Astrophysical Journal</i> , 2021, 921, 154.	4.5	25
6	Nuclear Physics Multimessenger Astrophysics Constraints on the Neutron Star Equation of State: Adding NICER's PSR J0740+6620 Measurement. <i>Astrophysical Journal</i> , 2021, 922, 14.	4.5	75
7	On the Identification of Individual Gravitational-wave Image Types of a Lensed System Using Higher-order Modes. <i>Astrophysical Journal Letters</i> , 2021, 923, L1.	8.3	14
8	Testing the multipole structure and conservative dynamics of compact binaries using gravitational wave observations: The spinning case. <i>Physical Review D</i> , 2019, 100, .	4.7	21
9	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. <i>Physical Review D</i> , 2018, 97, .	4.7	40
10	Testing the multipole structure of compact binaries using gravitational wave observations. <i>Physical Review D</i> , 2018, 98, .	4.7	33
11	Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. <i>Physical Review Letters</i> , 2018, 120, 201102.	7.8	85
12	A morphology-independent data analysis method for detecting and characterizing gravitational wave echoes. <i>Physical Review D</i> , 2018, 98, .	4.7	43
13	Effects of waveform model systematics on the interpretation of GW150914. <i>Classical and Quantum Gravity</i> , 2017, 34, 104002.	4.0	98
14	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
15	Directional Limits on Persistent Gravitational Waves from Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2017, 118, 121102.	7.8	84
16	The basic physics of the binary black hole merger GW150914. <i>Annalen Der Physik</i> , 2017, 529, 1600209.	2.4	69
17	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
18	Upper Limits on Gravitational Waves from Scorpius X-1 from a Model-based Cross-correlation Search in Advanced LIGO Data. <i>Astrophysical Journal</i> , 2017, 847, 47.	4.5	46

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19	A gravitational-wave standard siren measurement of the Hubble constant. <i>Nature</i> , 2017, 551, 85-88.	27.8	674
20	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
21	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
22	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
23	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817. <i>Astrophysical Journal Letters</i> , 2017, 850, L39.	8.3	156
24	Effective-one-body waveforms for binary neutron stars using surrogate models. <i>Physical Review D</i> , 2017, 95, .	4.7	54
25	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
26	Status of the Advanced Virgo gravitational wave detector. <i>International Journal of Modern Physics A</i> , 2017, 32, 1744003.	1.5	6
27	On the Progenitor of Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , 2017, 850, L40.	8.3	73
28	GW170608: Observation of a 19 Solar-mass Binary Black Hole Coalescence. <i>Astrophysical Journal Letters</i> , 2017, 851, L35.	8.3	968
29	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
30	UPPER LIMITS ON THE RATES OF BINARY NEUTRON STAR AND NEUTRON STAR-BLACK HOLE MERGERS FROM ADVANCED LIGO'S FIRST OBSERVING RUN. <i>Astrophysical Journal Letters</i> , 2016, 832, L21.	8.3	146
31	GW150914: Implications for the Stochastic Gravitational-Wave Background from Binary Black Holes. <i>Physical Review Letters</i> , 2016, 116, 131102.	7.8	269
32	GW150914: The Advanced LIGO Detectors in the Era of First Discoveries. <i>Physical Review Letters</i> , 2016, 116, 131103.	7.8	466
33	SUPPLEMENT: LOCALIZATION AND BROADBAND FOLLOW-UP OF THE GRAVITATIONAL-WAVE TRANSIENT GW150914 (2016, <i>ApJL</i> , 826, L13). <i>Astrophysical Journal, Supplement Series</i> , 2016, 225, 8.	7.7	44
34	Tests of General Relativity with GW150914. <i>Physical Review Letters</i> , 2016, 116, 221101.	7.8	1,224
35	Properties of the Binary Black Hole Merger GW150914. <i>Physical Review Letters</i> , 2016, 116, 241102.	7.8	673
36	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

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37	ASTROPHYSICAL IMPLICATIONS OF THE BINARY BLACK HOLE MERGER GW150914. <i>Astrophysical Journal Letters</i> , 2016, 818, L22.	8.3	633
38	Testing general relativity with present and future astrophysical observations. <i>Classical and Quantum Gravity</i> , 2015, 32, 243001.	4.0	943
39	Characterization of the LIGO detectors during their sixth science run. <i>Classical and Quantum Gravity</i> , 2015, 32, 115012.	4.0	1,029
40	SEARCHES FOR CONTINUOUS GRAVITATIONAL WAVES FROM NINE YOUNG SUPERNOVA REMNANTS. <i>Astrophysical Journal</i> , 2015, 813, 39.	4.5	66
41	Reconstruction of the gravitational wave signal $h(t)$ during the Virgo science runs and independent validation with a photon calibrator. <i>Classical and Quantum Gravity</i> , 2014, 31, 165013.	4.0	10
42	FIRST SEARCHES FOR OPTICAL COUNTERPARTS TO GRAVITATIONAL-WAVE CANDIDATE EVENTS. <i>Astrophysical Journal, Supplement Series</i> , 2014, 211, 7.	7.7	57
43	Constraints on Cosmic Strings from the LIGO-Virgo Gravitational-Wave Detectors. <i>Physical Review Letters</i> , 2014, 112, 131101.	7.8	68
44	Improved Upper Limits on the Stochastic Gravitational-Wave Background from 2009–2010 LIGO and Virgo Data. <i>Physical Review Letters</i> , 2014, 113, 231101.	7.8	86
45	GRAVITATIONAL WAVES FROM KNOWN PULSARS: RESULTS FROM THE INITIAL DETECTOR ERA. <i>Astrophysical Journal</i> , 2014, 785, 119.	4.5	125
46	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
47	Probing Dynamical Spacetimes with Gravitational Waves. , 2014, , 589-613.		4
48	Demonstrating the Feasibility of Probing the Neutron-Star Equation of State with Second-Generation Gravitational-Wave Detectors. <i>Physical Review Letters</i> , 2013, 111, 071101.	7.8	201
49	The 9th Edoardo Amaldi conference on gravitational waves (Amaldi 9) and the 2011 Numerical Relativity and Data Analysis meeting (NRDA 2011), Cardiff, 10–15 July 2011. <i>Classical and Quantum Gravity</i> , 2012, 29, 120301.	4.0	1
50	SWIFT FOLLOW-UP OBSERVATIONS OF CANDIDATE GRAVITATIONAL-WAVE TRANSIENT EVENTS. <i>Astrophysical Journal, Supplement Series</i> , 2012, 203, 28.	7.7	62
51	The characterization of Virgo data and its impact on gravitational-wave searches. <i>Classical and Quantum Gravity</i> , 2012, 29, 155002.	4.0	73
52	Mock data challenge for the Einstein Gravitational-Wave Telescope. <i>Physical Review D</i> , 2012, 86, .	4.7	107
53	SEARCH FOR GRAVITATIONAL WAVES ASSOCIATED WITH GAMMA-RAY BURSTS DURING LIGO SCIENCE RUN 6 AND VIRGO SCIENCE RUNS 2 AND 3. <i>Astrophysical Journal</i> , 2012, 760, 12.	4.5	104
54	IMPLICATIONS FOR THE ORIGIN OF GRB 051103 FROM LIGO OBSERVATIONS. <i>Astrophysical Journal</i> , 2012, 755, 2.	4.5	60

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55	Effect of calibration errors on Bayesian parameter estimation for gravitational wave signals from inspiral binary systems in the advanced detectors era. <i>Physical Review D</i> , 2012, 85, .	4.7	62
56	Virgo: a laser interferometer to detect gravitational waves. <i>Journal of Instrumentation</i> , 2012, 7, P03012-P03012.	1.2	257
57	Scientific objectives of Einstein Telescope. <i>Classical and Quantum Gravity</i> , 2012, 29, 124013.	4.0	355
58	SEARCH FOR GRAVITATIONAL WAVE BURSTS FROM SIX MAGNETARS. <i>Astrophysical Journal Letters</i> , 2011, 734, L35.	8.3	55
59	BEATING THE SPIN-DOWN LIMIT ON GRAVITATIONAL WAVE EMISSION FROM THE VELA PULSAR. <i>Astrophysical Journal</i> , 2011, 737, 93.	4.5	89
60	Directional Limits on Persistent Gravitational Waves Using LIGO S5 Science Data. <i>Physical Review Letters</i> , 2011, 107, 271102.	7.8	94
61	Status of the Virgo project. <i>Classical and Quantum Gravity</i> , 2011, 28, 114002.	4.0	171
62	SEARCH FOR GRAVITATIONAL-WAVE BURSTS ASSOCIATED WITH GAMMA-RAY BURSTS USING DATA FROM LIGO SCIENCE RUN 5 AND VIRGO SCIENCE RUN 1. <i>Astrophysical Journal</i> , 2010, 715, 1438-1452.	4.5	60
63	FIRST SEARCH FOR GRAVITATIONAL WAVES FROM THE YOUNGEST KNOWN NEUTRON STAR. <i>Astrophysical Journal</i> , 2010, 722, 1504-1513.	4.5	104
64	Cosmography with the Einstein Telescope. <i>Classical and Quantum Gravity</i> , 2010, 27, 215006.	4.0	181
65	SEARCHES FOR GRAVITATIONAL WAVES FROM KNOWN PULSARS WITH SCIENCE RUN 5 LIGO DATA. <i>Astrophysical Journal</i> , 2010, 713, 671-685.	4.5	155
66	The Einstein Telescope: a third-generation gravitational wave observatory. <i>Classical and Quantum Gravity</i> , 2010, 27, 194002.	4.0	1,211
67	Weak lensing effects in the measurement of the dark energy equation of state with LISA. <i>Physical Review D</i> , 2010, 81, .	4.7	19
68	Prospective Evaluation of Clinical Voiding Re-Education or Voiding School for Lower Urinary Tract Conditions in Children. <i>Journal of Pediatric Urology</i> , 2010, 6, S68.	1.1	1
69	Predictions for the rates of compact binary coalescences observable by ground-based gravitational-wave detectors. <i>Classical and Quantum Gravity</i> , 2010, 27, 173001.	4.0	956
70	SEARCH FOR GRAVITATIONAL-WAVE INSPIRAL SIGNALS ASSOCIATED WITH SHORT GAMMA-RAY BURSTS DURING LIGO'S FIFTH AND VIRGO'S FIRST SCIENCE RUN. <i>Astrophysical Journal</i> , 2010, 715, 1453-1461.	4.5	90
71	All-Sky LIGO Search for Periodic Gravitational Waves in the Early Fifth-Science-Run Data. <i>Physical Review Letters</i> , 2009, 102, 111102.	7.8	83
72	Massive black-hole binary inspirals: results from the LISA parameter estimation taskforce. <i>Classical and Quantum Gravity</i> , 2009, 26, 094027.	4.0	93

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73	LISA as a dark energy probe. <i>Classical and Quantum Gravity</i> , 2009, 26, 094021.	4.0	26
74	An upper limit on the stochastic gravitational-wave background of cosmological origin. <i>Nature</i> , 2009, 460, 990-994.	27.8	303
75	Template banks to search for compact binaries with spinning components in gravitational wave data. <i>Physical Review D</i> , 2009, 80, .	4.7	36
76	STACKED SEARCH FOR GRAVITATIONAL WAVES FROM THE 2006 SGR 1900+14 STORM. <i>Astrophysical Journal</i> , 2009, 701, L68-L74.	4.5	45
77	Astrophysically triggered searches for gravitational waves: status and prospects. <i>Classical and Quantum Gravity</i> , 2008, 25, 114051.	4.0	26
78	First joint search for gravitational-wave bursts in LIGO and GEO 600 data. <i>Classical and Quantum Gravity</i> , 2008, 25, 245008.	4.0	22
79	Search for Gravitational-Wave Bursts from Soft Gamma Repeaters. <i>Physical Review Letters</i> , 2008, 101, 211102.	7.8	69
80	Implications for the Origin of GRB 070201 from LIGO Observations. <i>Astrophysical Journal</i> , 2008, 681, 1419-1430.	4.5	143
81	Beating the Spin-Down Limit on Gravitational Wave Emission from the Crab Pulsar. <i>Astrophysical Journal</i> , 2008, 683, L45-L49.	4.5	160
82	COMPACT BINARY INSPIRAL AND THE SCIENCE POTENTIAL OF THIRD-GENERATION GROUND-BASED GRAVITATIONAL WAVE DETECTORS. , 2008, , .		0
83	Search for gravitational-wave bursts in LIGO data from the fourth science run. <i>Classical and Quantum Gravity</i> , 2007, 24, 5343-5369.	4.0	78
84	Mechanics of higher dimensional black holes in asymptotically anti-de Sitter spacetimes. <i>Classical and Quantum Gravity</i> , 2007, 24, 625-644.	4.0	21
85	Binary black hole spectroscopy. <i>Classical and Quantum Gravity</i> , 2007, 24, 1089-1113.	4.0	78
86	Phenomenology of amplitude-corrected post-Newtonian gravitational waveforms for compact binary inspiral: I. Signal-to-noise ratios. <i>Classical and Quantum Gravity</i> , 2007, 24, 155-176.	4.0	67
87	Publisher's Note: Higher signal harmonics, LISA's angular resolution, and dark energy [Phys. Rev. D76, 104016 (2007)]. <i>Physical Review D</i> , 2007, 76, .	4.7	19
88	Higher signal harmonics, LISA's angular resolution, and dark energy. <i>Physical Review D</i> , 2007, 76, .	4.7	101
89	Binary black hole detection rates in inspiral gravitational wave searches. <i>Classical and Quantum Gravity</i> , 2006, 23, L51-L58.	4.0	17
90	Marginally trapped tubes and dynamical horizons. <i>Classical and Quantum Gravity</i> , 2006, 23, 413-439.	4.0	93

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91	The gravitational wave spectrum of non-axisymmetric, freely precessing neutron stars. Classical and Quantum Gravity, 2005, 22, 1825-1839.	4.0	51
92	Quantum horizons and black-hole entropy: inclusion of distortion and rotation. Classical and Quantum Gravity, 2005, 22, L27-L34.	4.0	59
93	Multipole moments of isolated horizons. Classical and Quantum Gravity, 2004, 21, 2549-2570.	4.0	125
94	The rigid limit in special Kähler geometry for SU (2) SYM with a massive quark hypermultiplet. Classical and Quantum Gravity, 1999, 16, 529-541.	4.0	0
95	Batalin-Vilkovisky gauge-fixing of a chiral 2-form in six dimensions. Classical and Quantum Gravity, 1999, 16, 4011-4021.	4.0	5
96	A 'warp drive' with more reasonable total energy requirements. Classical and Quantum Gravity, 1999, 16, 3973-3979.	4.0	62