

Pablo Cerdá-Durán

List of Publications by Year in descending order

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155
papers

33,944
citations

22153

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7348

152
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159
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159
docs citations

159
times ranked

13317
citing authors

#	ARTICLE	IF	CITATIONS
19	Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. <i>Living Reviews in Relativity</i> , 2020, 23, 3.	26.7	447
20	Properties and Astrophysical Implications of the 150 M_{\odot} Binary Black Hole Merger GW190521. <i>Astrophysical Journal Letters</i> , 2020, 900, L13.	8.3	406
21	GW190412: Observation of a binary-black-hole coalescence with asymmetric masses. <i>Physical Review D</i> , 2020, 102, .	4.7	394
22	Tests of General Relativity with GW170817. <i>Physical Review Letters</i> , 2019, 123, 011102.	7.8	370
23	Tests of general relativity with binary black holes from the second LIGO-Virgo gravitational-wave transient catalog. <i>Physical Review D</i> , 2021, 103, .	4.7	338
24	Increasing the Astrophysical Reach of the Advanced Virgo Detector via the Application of Squeezed Vacuum States of Light. <i>Physical Review Letters</i> , 2019, 123, 231108.	7.8	254
25	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
26	Upper limits on the isotropic gravitational-wave background from Advanced LIGO and Advanced Virgo's third observing run. <i>Physical Review D</i> , 2021, 104, .	4.7	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	A guide to LIGO-Virgo detector noise and extraction of transient gravitational-wave signals. <i>Classical and Quantum Gravity</i> , 2020, 37, 055002.	4.0	188
29	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. <i>Astrophysical Journal Letters</i> , 2019, 876, L7.	8.3	179
30	Time-domain effective-one-body gravitational waveforms for coalescing compact binaries with nonprecessing spins, tides, and self-spin effects. <i>Physical Review D</i> , 2018, 98, .	4.7	168
31	GW170817: Implications for the Stochastic Gravitational-Wave Background from Compact Binary Coalescences. <i>Physical Review Letters</i> , 2018, 120, 091101.	7.8	166
32	Efficient magnetic-field amplification due to the Kelvin-Helmholtz instability in binary neutron star mergers. <i>Physical Review D</i> , 2015, 92, .	4.7	165
33	Estimating the Contribution of Dynamical Ejecta in the Kilonova Associated with GW170817. <i>Astrophysical Journal Letters</i> , 2017, 850, L39.	8.3	156
34	A Standard Siren Measurement of the Hubble Constant from GW170817 without the Electromagnetic Counterpart. <i>Astrophysical Journal Letters</i> , 2019, 871, L13.	8.3	145
35	A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo. <i>Astrophysical Journal</i> , 2021, 909, 218.	4.5	144
36	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

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37	Semi-global simulations of the magneto-rotational instability in core collapse supernovae. <i>Astronomy and Astrophysics</i> , 2009, 498, 241-271.	5.1	132
38	Search for Substellar Mass Ultracompact Binaries in Advanced LIGO's Second Observing Run. <i>Physical Review Letters</i> , 2019, 123, 161102.	7.8	119
39	Improved constrained scheme for the Einstein equations: An approach to the uniqueness issue. <i>Physical Review D</i> , 2009, 79, .	4.7	112
40	Model comparison from LIGO's Virgo data on GW170817's binary components and consequences for the merger remnant. <i>Classical and Quantum Gravity</i> , 2020, 37, 045006.	4.0	109
41	All-sky search for continuous gravitational waves from isolated neutron stars using Advanced LIGO O2 data. <i>Physical Review D</i> , 2019, 100, .	4.7	102
42	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
43	Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015-2017 LIGO Data. <i>Astrophysical Journal</i> , 2019, 879, 10.	4.5	88
44	Constraints on Cosmic Strings Using Data from the Third Advanced LIGO's Virgo Observing Run. <i>Physical Review Letters</i> , 2021, 126, 241102.	7.8	87
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	Nonlinear Dynamics of Spinning Bosonic Stars: Formation and Stability. <i>Physical Review Letters</i> , 2019, 123, 221101.	7.8	82
47	Search for Substellar-Mass Ultracompact Binaries in Advanced LIGO's First Observing Run. <i>Physical Review Letters</i> , 2018, 121, 231103.	7.8	77
48	Magnetoelastic oscillations of neutron stars with dipolar magnetic fields. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 421, 2054-2078.	4.4	74
49	On the Progenitor of Binary Neutron Star Merger GW170817. <i>Astrophysical Journal Letters</i> , 2017, 850, L40.	8.3	73
50	GRAVITATIONAL WAVE SIGNATURES IN BLACK HOLE FORMING CORE COLLAPSE. <i>Astrophysical Journal Letters</i> , 2013, 779, L18.	8.3	72
51	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
52	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
53	Magneto-elastic oscillations and the damping of crustal shear modes in magnetars. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2011, 410, L37-L41.	3.3	70
54	Optically targeted search for gravitational waves emitted by core-collapse supernovae during the first and second observing runs of advanced LIGO and advanced Virgo. <i>Physical Review D</i> , 2020, 101, .	4.7	69

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55	Gravitational-wave Constraints on the Equatorial Ellipticity of Millisecond Pulsars. <i>Astrophysical Journal Letters</i> , 2020, 902, L21.	8.3	65
56	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
57	A new general relativistic magnetohydrodynamics code for dynamical spacetimes. <i>Astronomy and Astrophysics</i> , 2008, 492, 937-953.	5.1	60
58	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
59	Search for Lensing Signatures in the Gravitational-Wave Observations from the First Half of LIGO-Virgo's Third Observing Run. <i>Astrophysical Journal</i> , 2021, 923, 14.	4.5	59
60	General relativistic simulations of passive-magneto-rotational core collapse with microphysics. <i>Astronomy and Astrophysics</i> , 2007, 474, 169-191.	5.1	58
61	Alfvén QPOs in magnetars in the anelastic approximation. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009, 397, 1607-1620.	4.4	58
62	Magneto-elastic oscillations of neutron stars: exploring different magnetic field configurations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 430, 1811-1831.	4.4	56
63	Towards asteroseismology of core-collapse supernovae with gravitational-wave observations I. Cowling approximation. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 474, 5272-5286.	4.4	54
64	All-sky search for short gravitational-wave bursts in the second Advanced LIGO and Advanced Virgo run. <i>Physical Review D</i> , 2019, 100, .	4.7	54
65	Towards asteroseismology of core-collapse supernovae with gravitational wave observations II. Inclusion of space-time perturbations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 482, 3967-3988.	4.4	53
66	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
67	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
68	Universal Relations for Gravitational-Wave Asteroseismology of Protoneutron Stars. <i>Physical Review Letters</i> , 2019, 123, 051102.	7.8	50
69	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
70	On the maximum magnetic field amplification by the magnetorotational instability in core-collapse supernovae. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 460, 3316-3334.	4.4	46
71	Full band all-sky search for periodic gravitational waves in the O1 LIGO data. <i>Physical Review D</i> , 2018, 97, .	4.7	46
72	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

#	ARTICLE	IF	CITATIONS
91	Search for intermediate-mass black hole binaries in the third observing run of Advanced LIGO and Advanced Virgo. <i>Astronomy and Astrophysics</i> , 2022, 659, A84.	5.1	32
92	Search for continuous gravitational waves from 20 accreting millisecond x-ray pulsars in O3 LIGO data. <i>Physical Review D</i> , 2022, 105, .	4.7	31
93	Imprints of Superfluidity on Magnetoelastic Quasiperiodic Oscillations of Soft Gamma-Ray Repeaters. <i>Physical Review Letters</i> , 2013, 111, 211102.	7.8	30
94	Are pulsars born with a hidden magnetic field?. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 456, 3813-3826.	4.4	30
95	A Fermi Gamma-Ray Burst Monitor Search for Electromagnetic Signals Coincident with Gravitational-wave Candidates in Advanced LIGO's First Observing Run. <i>Astrophysical Journal</i> , 2019, 871, 90.	4.5	30
96	Deep learning for core-collapse supernova detection. <i>Physical Review D</i> , 2021, 103, .	4.7	30
97	Search for Gravitational-wave Signals Associated with Gamma-Ray Bursts during the Second Observing Run of Advanced LIGO and Advanced Virgo. <i>Astrophysical Journal</i> , 2019, 886, 75.	4.5	29
98	Constraints from LIGO O3 Data on Gravitational-wave Emission Due to R-modes in the Glitching Pulsar PSR J0537â€“6910. <i>Astrophysical Journal</i> , 2021, 922, 71.	4.5	29
99	Crustâ€“magnetosphere coupling during magnetar evolution and implications for the surface temperature. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 481, 5331-5338.	4.4	27
100	AMR simulations of the low bar-mode instability of neutron stars. <i>Computer Physics Communications</i> , 2007, 177, 288-297.	7.5	26
101	Search for Transient Gravitational-wave Signals Associated with Magnetar Bursts during Advanced LIGOâ€™s Second Observing Run. <i>Astrophysical Journal</i> , 2019, 874, 163.	4.5	26
102	On the Measurements of Numerical Viscosity and Resistivity in Eulerian MHD Codes. <i>Astrophysical Journal, Supplement Series</i> , 2017, 230, 18.	7.7	25
103	Inference of protoneutron star properties from gravitational-wave data in core-collapse supernovae. <i>Physical Review D</i> , 2021, 103, .	4.7	25
104	The force-free twisted magnetosphere of a neutron star. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 462, 1894-1909.	4.4	23
105	Constraining properties of high-density matter in neutron stars with magneto-elastic oscillations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 476, 4199-4212.	4.4	22
106	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
107	Estimation of the mechanical properties of the eye through the study of its vibrational modes. <i>PLoS ONE</i> , 2017, 12, e0183892.	2.5	21
108	Search of the early O3 LIGO data for continuous gravitational waves from the Cassiopeia A and Vela Jr. supernova remnants. <i>Physical Review D</i> , 2022, 105, .	4.7	21

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109	Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGO–Virgo Run O3a. <i>Astrophysical Journal</i> , 2021, 915, 86.	4.5	20
110	Calibration of advanced Virgo and reconstruction of the detector strain $h(t)$ during the observing run O3. <i>Classical and Quantum Gravity</i> , 2022, 39, 045006.	4.0	20
111	Very-high-frequency oscillations in the main peak of a magnetar giant flare. <i>Nature</i> , 2021, 600, 621-624.	27.8	20
112	Modulating the magnetosphere of magnetars by internal magneto-elastic oscillations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 443, 1416-1424.	4.4	19
113	Long-term evolution of the force-free twisted magnetosphere of a magnetar. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 472, 3914-3923.	4.4	19
114	Numerically solving the relativistic Grad–Shafranov equation in Kerr spacetimes: numerical techniques. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 477, 3927-3944.	4.4	19
115	All-sky search for long-duration gravitational-wave bursts in the third Advanced LIGO and Advanced Virgo run. <i>Physical Review D</i> , 2021, 104, .	4.7	19
116	Coherent magneto-elastic oscillations in superfluid magnetars. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 460, 4242-4257.	4.4	18
117	All-sky, all-frequency directional search for persistent gravitational waves from Advanced LIGO–Virgo’s first three observing runs. <i>Physical Review D</i> , 2022, 105, .	4.7	18
118	Can fermion-boson stars reconcile multimessenger observations of compact stars?. <i>Physical Review D</i> , 2022, 105, .	4.7	17
119	Gravitational waves in dynamical spacetimes with matter content in the fully constrained formulation. <i>Physical Review D</i> , 2012, 85, .	4.7	16
120	XIPE: the x-ray imaging polarimetry explorer. , 2016, , .		16
121	The force-free twisted magnetosphere of a neutron star–II. Degeneracies of the Grad–Shafranov equation. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 474, 625-635.	4.4	15
122	Gravitational wave signature of proto-neutron star convection: I. MHD numerical simulations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 509, 3410-3426.	4.4	15
123	Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGO–Virgo Run O3b. <i>Astrophysical Journal</i> , 2022, 928, 186.	4.5	15
124	Instability of twisted magnetar magnetospheres. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 490, 4858-4876.	4.4	14
125	On the equivalence between the Scheduled Relaxation Jacobi method and Richardson’s non-stationary method. <i>Journal of Computational Physics</i> , 2017, 332, 446-460.	3.8	13
126	A Joint Fermi-GBM and LIGO/Virgo Analysis of Compact Binary Mergers from the First and Second Gravitational-wave Observing Runs. <i>Astrophysical Journal</i> , 2020, 893, 100.	4.5	12

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127	Computational general relativistic force-free electrodynamics. <i>Astronomy and Astrophysics</i> , 2021, 647, A58.	5.1	11
128	The Large Observatory for x-ray timing. <i>Proceedings of SPIE</i> , 2014, , .	0.8	10
129	Neutron Stars Formation and Core Collapse Supernovae. <i>Astrophysics and Space Science Library</i> , 2018, , 1-56.	2.7	10
130	The LOFT mission concept: a status update. <i>Proceedings of SPIE</i> , 2016, , .	0.8	9
131	Ocular anatomic changes for different accommodative demands using swept-source optical coherence tomography: a pilot study. <i>Graefe's Archive for Clinical and Experimental Ophthalmology</i> , 2017, 255, 2399-2406.	1.9	9
132	Status of Advanced Virgo. <i>EPJ Web of Conferences</i> , 2018, 182, 02003.	0.3	9
133	Ocular biometric changes with different accommodative stimuli using swept-source optical coherence tomography. <i>International Ophthalmology</i> , 2019, 39, 303-310.	1.4	9
134	The advanced Virgo longitudinal control system for the O2 observing run. <i>Astroparticle Physics</i> , 2020, 116, 102386.	4.3	9
135	Advanced Virgo Status. <i>Journal of Physics: Conference Series</i> , 2020, 1342, 012010.	0.4	9
136	Cosmic Microwave Background Maps Lensed by Cosmological Structures: Simulations and Statistical Analysis. <i>Astrophysical Journal</i> , 2005, 628, 1-13.	4.5	8
137	Computational general relativistic force-free electrodynamics. <i>Astronomy and Astrophysics</i> , 2021, 647, A57.	5.1	8
138	Dynamical spacetimes and gravitational radiation in a Fully Constrained Formulation. <i>Journal of Physics: Conference Series</i> , 2010, 228, 012055.	0.4	6
139	Numerical viscosity in hydrodynamics simulations in general relativity. <i>Classical and Quantum Gravity</i> , 2010, 27, 205012.	4.0	6
140	Towards relativistic simulations of magneto-rotational core collapse. <i>Classical and Quantum Gravity</i> , 2007, 24, S155-S169.	4.0	5
141	Termination of the MRI via parasitic instabilities in core-collapse supernovae: influence of numerical methods. <i>Journal of Physics: Conference Series</i> , 2016, 719, 012009.	0.4	4
142	Non-Gaussian signatures in the lens deformations of the CMB Sky: A new ray-tracing procedure. <i>Physical Review D</i> , 2004, 69, .	4.7	3
143	Modulating magnetar emission by magnetoelastic oscillations. <i>Astronomische Nachrichten</i> , 2014, 335, 240-245.	1.2	3
144	Hydromagnetic instabilities and magnetic field amplification in core collapse supernovae. <i>Journal of Physics: Conference Series</i> , 2011, 314, 012079.	0.4	2

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145	Magneto-elastic torsional oscillations of magnetars. Journal of Physics: Conference Series, 2011, 283, 012013.	0.4	2
146	Magneto-elastic oscillations modulating the emission of magnetars. Astronomische Nachrichten, 2017, 338, 1105-1108.	1.2	2
147	How to form a millisecond magnetar? Magnetic field amplification in protoneutron stars. Proceedings of the International Astronomical Union, 2017, 12, 119-124.	0.0	2
148	Partially Implicit Runge-Kutta Methods for Wave-Like Equations. SEMA SIMAI Springer Series, 2014, , 267-278.	0.7	2
149	Magnetorotational Instability in Core-Collapse Supernovae. Acta Physica Polonica B, Proceedings Supplement, 2017, 10, 361.	0.1	2
150	Gravitational waves in Fully Constrained Formulation in a dynamical spacetime with matter content. Journal of Physics: Conference Series, 2011, 314, 012078.	0.4	1
151	Deep learning algorithms for gravitational waves core-collapse supernova detection. , 2021, , .		1
152	High-order methods for the simulation of hydromagnetic instabilities in core-collapse supernovae. Proceedings of the International Astronomical Union, 2010, 6, 479-481.	0.0	0
153	Relativistic MHD simulations of stellar core collapse and magnetars. Journal of Physics: Conference Series, 2011, 283, 012011.	0.4	0
154	Fallback accretion onto magnetized neutron stars and the hidden magnetic field model. Journal of Physics: Conference Series, 2015, 600, 012057.	0.4	0
155	Spanish Relativity Meeting (ERE 2014): almost 100 years after Einstein's revolution. Journal of Physics: Conference Series, 2015, 600, 011001.	0.4	0