Francesco Chiadini

List of Publications by Year
in descending order

138 papers	9,577 citations	109321 35 h-index	36028 97 g-index
143 all docs	143 docs citations	143 times ranked	5113 citing authors

#	Article	IF	Citations
1	GWTC-2: Compact Binary Coalescences Observed by LIGO and Virgo during the First Half of the Third Observing Run. Physical Review X, 2021, 11, .	8.9	1,097
2	GW190814: Gravitational Waves from the Coalescence of a 23 Solar Mass Black Hole with a 2.6 Solar Mass Compact Object. Astrophysical Journal Letters, 2020, 896, L44.	8.3	1,090
3	GW190425: Observation of a Compact Binary Coalescence with Total MassÂâˆ¼Â3.4 M_{âŠ™}. Astrophysical Journal Letters, 2020, 892, L3.	8.3	1,049
4	GW190521: A Binary Black Hole Merger with a Total Mass of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>150</mml:mn><mml:mtext>â€‰</mml:mtext><mml:mtext>â€‰</mml:mtext><mml:msub><mml:mi mathvariant="normal" stretchy="false">âŠ™</mml:mi></mml:mrow></mml:msub></mml:mrow></mml:math>. Physical Review Letters, 2020, 125, 101102.	7.8	836
5	Population Properties of Compact Objects from the Second LIGOâ€“Virgo Gravitational-Wave Transient Catalog. Astrophysical Journal Letters, 2021, 913, L7.	8.3	514
6	Observation of Gravitational Waves from Two Neutron Starâ€“Black Hole Coalescences. Astrophysical Journal Letters, 2021, 915, L5.	8.3	453
7	Properties and Astrophysical Implications of the 150 M_{âŠ™} Binary Black Hole Merger GW190521. Astrophysical Journal Letters, 2020, 900, L13.	8.3	406
8	GW190412: Observation of a binary-black-hole coalescence with asymmetric masses. Physical Review D, 2020, 102, .	4.7	394
9	Tests of general relativity with binary black holes from the second LIGO-Virgo gravitational-wave transient catalog. Physical Review D, 2021, 103, .	4.7	338
10	Increasing the Astrophysical Reach of the Advanced Virgo Detector via the Application of Squeezed Vacuum States of Light. Physical Review Letters, 2019, 123, 231108.	7.8	254
11	Upper limits on the isotropic gravitational-wave background from Advanced LIGO and Advanced Virgoâ€™s third observing run. Physical Review D, 2021, 104, .	4.7	192
12	A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo. Astrophysical Journal, 2021, 909, 218.	4.5	144
13	Implications for the Origin of GRB 070201 from LIGO Observations. Astrophysical Journal, 2008, 681, 1419-1430.	4.5	143
14	Searches for periodic gravitational waves from unknown isolated sources and Scorpius X-1: Results from the second LIGO science run. Physical Review D, 2007, 76, .	4.7	128
15	Search for gravitational waves from binary inspirals in S3 and S4 LIGO data. Physical Review D, 2008, 77, .	4.7	126
16	Upper limits on gravitational wave emission from 78 radio pulsars. Physical Review D, 2007, 76, .	4.7	121
17	Search for Subsolar Mass Ultracompact Binaries in Advanced LIGOâ€™s Second Observing Run. Physical Review Letters, 2019, 123, 161102.	7.8	119
18	All-sky search for periodic gravitational waves in LIGO S4 data. Physical Review D, 2008, 77, .	4.7	110

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19	Model comparison from LIGOâ€“Virgo data on GW170817â€™s binary components and consequences for the merger remnant. Classical and Quantum Gravity, 2020, 37, 045006.	4.0	109
20	Upper limit map of a background of gravitational waves. Physical Review D, 2007, 76, .	4.7	90
21	Constraints on Cosmic Strings Using Data from the Third Advanced LIGOâ€“Virgo Observing Run. Physical Review Letters, 2021, 126, 241102.	7.8	87
22	Search for gravitational-wave bursts in LIGO data from the fourth science run. Classical and Quantum Gravity, 2007, 24, 5343-5369.	4.0	78
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	Optically targeted search for gravitational waves emitted by core-collapse supernovae during the first and second observing runs of advanced LIGO and advanced Virgo. Physical Review D, 2020, 101, .	4.7	69
25	Gravitational-wave Constraints on the Equatorial Ellipticity of Millisecond Pulsars. Astrophysical Journal Letters, 2020, 902, L21.	8.3	65
26	Search for anisotropic gravitational-wave backgrounds using data from Advanced LIGO and Advanced Virgoâ€™s first three observing runs. Physical Review D, 2021, 104, .	4.7	62
27	Search for gravitational waves associated with 39 gamma-ray bursts using data from the second, third, and fourth LIGO runs. Physical Review D, 2008, 77, .	4.7	60
28	Search for Lensing Signatures in the Gravitational-Wave Observations from the First Half of LIGOâ€“Virgoâ€™s Third Observing Run. Astrophysical Journal, 2021, 923, 14.	4.5	59
29	Search of S3 LIGO data for gravitational wave signals from spinning black hole and neutron star binary inspirals. Physical Review D, 2008, 78, .	4.7	54
30	All-sky search for short gravitational-wave bursts in the second Advanced LIGO and Advanced Virgo run. Physical Review D, 2019, 100, .	4.7	54
31	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
32	Search for gravitational wave radiation associated with the pulsating tail of the SGR<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mn>1806</mml:mn><mml:mo>â^’</mml:mo><mml:mn>20</mml:mn></mml:math>hyperflare of 27 December 2004 using LIGO. Physical Review D, 2007, 76, .	4.7	51
33	All-sky search in early O3 LIGO data for continuous gravitational-wave signals from unknown neutron stars in binary systems. Physical Review D, 2021, 103, .	4.7	43
34	All-sky search for continuous gravitational waves from isolated neutron stars in the early O3 LIGO data. Physical Review D, 2021, 104, .	4.7	42
35	Searches for Continuous Gravitational Waves from Young Supernova Remnants in the Early Third Observing Run of Advanced LIGO and Virgo. Astrophysical Journal, 2021, 921, 80.	4.5	39
36	First cross-correlation analysis of interferometric and resonant-bar gravitational-wave data for stochastic backgrounds. Physical Review D, 2007, 76, .	4.7	35

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37	Quantum Backaction on Kg-Scale Mirrors: Observation of Radiation Pressure Noise in the Advanced Virgo Detector. Physical Review Letters, 2020, 125, 131101.	7.8	35
38	All-sky search for short gravitational-wave bursts in the third Advanced LIGO and Advanced Virgo run. Physical Review D, 2021, 104, .	4.7	33
39	Narrowband Searches for Continuous and Long-duration Transient Gravitational Waves from Known Pulsars in the LIGO-Virgo Third Observing Run. Astrophysical Journal, 2022, 932, 133.	4.5	33
40	Diving below the Spin-down Limit: Constraints on Gravitational Waves from the Energetic Young Pulsar PSR J0537-6910. Astrophysical Journal Letters, 2021, 913, L27.	8.3	32
41	Search for intermediate-mass black hole binaries in the third observing run of Advanced LIGO and Advanced Virgo. Astronomy and Astrophysics, 2022, 659, A84.	5.1	32
42	Search for continuous gravitational waves from 20 accreting millisecond x-ray pulsars in O3 LIGO data. Physical Review D, 2022, 105, .	4.7	31
43	Self-scaling properties of the reflection coefficient of Cantor prefactal multilayers. Microwave and Optical Technology Letters, 2003, 37, 339-343.	1.4	30
44	Search for Gravitational-wave Signals Associated with Gamma-Ray Bursts during the Second Observing Run of Advanced LIGO and Advanced Virgo. Astrophysical Journal, 2019, 886, 75.	4.5	29
45	Constraints from LIGO O3 Data on Gravitational-wave Emission Due to R-modes in the Glitching Pulsar PSR J0537â€“6910. Astrophysical Journal, 2021, 922, 71.	4.5	29
46	Constraints on dark photon dark matter using data from LIGOâ€™s and Virgoâ€™s third observing run. Physical Review D, 2022, 105, .	4.7	27
47	Compound guided waves that mix characteristics of surface-plasmon-polariton, Tamm, Dyakonovâ€“Tamm, and Ullerâ€“Zenneck waves. Journal of the Optical Society of America B: Optical Physics, 2016, 33, 1197.	2.1	26
48	Filtering properties of defect-bearing periodic and triadic cantor multilayers. Optics Communications, 2008, 281, 633-639.	2.1	24
49	Transmission properties of perturbed optical Cantor multilayers. Journal of Applied Physics, 2006, 100, 023119.	2.5	22
50	All-sky search for long-duration gravitational-wave transients in the second Advanced LIGO observing run. Physical Review D, 2019, 99, .	4.7	22
51	Gaussian model for refractive indexes of columnar thin films and Bragg multilayers. Optics Communications, 2004, 231, 257-261.	2.1	21
52	Simulation and analysis of prismatic bioinspired compound lenses for solar cells. Bioinspiration and Biomimetics, 2010, 5, 026002.	2.9	21
53	Search of the early O3 LIGO data for continuous gravitational waves from the Cassiopeia A and Vela Jr. supernova remnants. Physical Review D, 2022, 105, .	4.7	21
54	Emergence and Evolution of Crystallization in TiO2 Thin Films: A Structural and Morphological Study. Nanomaterials, 2021, 11, 1409.	4.1	20

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55	Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGOâ€“Virgo Run O3a. Astrophysical Journal, 2021, 915, 86.	4.5	20
56	Calibration of advanced Virgo and reconstruction of the detector strain h(t) during the observing run O3. Classical and Quantum Gravity, 2022, 39, 045006.	4.0	20
57	First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. Progress of Theoretical and Experimental Physics, 2022, 2022, .	6.6	20
58	All-sky search for long-duration gravitational-wave bursts in the third Advanced LIGO and Advanced Virgo run. Physical Review D, 2021, 104, .	4.7	19
59	All-sky, all-frequency directional search for persistent gravitational waves from Advanced LIGOâ€™s and Advanced Virgoâ€™s first three observing runs. Physical Review D, 2022, 105, .	4.7	18
60	A joint search for gravitational wave bursts with AURIGA and LIGO. Classical and Quantum Gravity, 2008, 25, 095004.	4.0	16
61	Omnidirectional bandgap in Cantor dielectric multilayers. Optics Communications, 2009, 282, 4009-4013.	2.1	16
62	Simulation and analysis of prismatic bioinspired compound lenses for solar cells: II. Multifrequency analysis. Bioinspiration and Biomimetics, 2011, 6, 014002.	2.9	16
63	Composite surface-plasmon-polariton waves guided by a thin metal layer sandwiched between a homogeneous isotropic dielectric material and a periodically multilayered isotropic dielectric material. Journal of Nanophotonics, 2015, 9, 093060.	1.0	16
64	Temperature-mediated transition from Dyakonovâ€“Tamm surface waves to surface-plasmon-polariton waves. Journal of Optics (United Kingdom), 2017, 19, 085002.	2.2	15
65	Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGOâ€“Virgo Run O3b. Astrophysical Journal, 2022, 928, 186.	4.5	15
66	Design of wideband circular-polarization filters made of chiral sculptured thin films. Microwave and Optical Technology Letters, 2004, 42, 135-138.	1.4	12
67	Bioinspired pit texturing of silicon solar cell surfaces. Journal of Photonics for Energy, 2013, 3, 034596.	1.3	12
68	A Joint Fermi-GBM and LIGO/Virgo Analysis of Compact Binary Mergers from the First and Second Gravitational-wave Observing Runs. Astrophysical Journal, 2020, 893, 100.	4.5	12
69	Field localization inside a lossy dielectric slab by means of cantor dielectric multilayers. Journal of Applied Physics, 2008, 103, 063104.	2.5	11
70	Analysis of prismatic bioinspired texturing of the surface of a silicon solar cell for enhanced light-coupling efficiency. Journal of Photonics for Energy, 2013, 3, 034599.	1.3	11
71	Extension of Hodgkinson's model for optical characterization of columnar thin films. Microwave and Optical Technology Letters, 2004, 42, 72-73.	1.4	10
72	Theory of thin-film, narrowband, linear-polarization rejection filters with superlattice structure. Optics Communications, 2006, 268, 182-188.	2.1	10

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73	Insect Eyes Inspire Improved Solar Cells. Optics and Photonics News, 2011, 22, 38.	0.5	10
74	Synthesis method for N-band multilayer antireflection coatings. Journal of Nanophotonics, 2013, 7, 073097.	1.0	10
75	On the performance limits of coatings for gravitational wave detectors made of alternating layers of two materials. Optical Materials, 2019, 96, 109269.	3.6	10
76	Bicontrollable terahertz metasurface with subwavelength scattering elements of two different materials. Applied Optics, 2018, 57, 189.	1.8	9
77	Variational analysis of matched-clad optical fibers. Journal of Lightwave Technology, 2003, 21, 96-105.	4.6	8
78	Cantor Dielectric Filters in Rectangular Waveguides. Electromagnetics, 2009, 29, 575-585.	0.7	8
79	Induction of alkaline phosphatase activity by exposure of human cell lines to a low-frequency electric field from apparatuses used in clinical therapies. Bioelectromagnetics, 2011, 32, 113-119.	1.6	8
80	A Cantor multilayer traveling wave applicator for microwave heating: Numerical analysis and design. Journal of Applied Physics, 2014, 116, .	2.5	8
81	Compound surface-plasmon-polariton waves guided by a thin metal layer sandwiched between a homogeneous isotropic dielectric material and a structurally chiral material. Optics Communications, 2016, 363, 201-206.	2.1	8
82	Bilaterally asymmetric reflection and transmission of light by a grating structure containing a topological insulator. Optics Communications, 2017, 398, 67-76.	2.1	8
83	A reflectometric optical fiber temperature sensor. IEEE Sensors Journal, 2003, 3, 80-86.	4.7	7
84	Left/right asymmetry in Dyakonovâ€“Tamm-wave propagation guided by a topological insulator and a structurally chiral material. Journal of Optics (United Kingdom), 2016, 18, 115101.	2.2	7
85	Ternary quarter wavelength coatings for gravitational wave detector mirrors: Design optimization via exhaustive search. Physical Review Research, 2021, 3, .	3.6	7
86	Improved Design if Waveguide Slot Array Applicators For Microwave Heating. Materials Research Innovations, 2004, 8, 71-74.	2.3	6
87	Effect of low frequency (LF) electric fields on gene expression of a bone human cell line. Electromagnetic Biology and Medicine, 2014, 33, 289-295.	1.4	6
88	Enhanced left/right asymmetry in reflection and transmission due to a periodic multilayer of a topological insulator and an anisotropic dielectric material. Applied Optics, 2019, 58, 1724.	1.8	5
89	Multiple excitations of a surface-plasmon-polariton wave guided by a columnar thin film deposited on a metal grating. Optical Engineering, 2014, 53, 127105.	1.0	4
90	Effect of chemical potential on Dyakonovâ€“Tamm waves guided by a graphene-coated structurally chiral medium. Journal of Optics (United Kingdom), 2019, 21, 055002.	2.2	4

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91	Waveguide slot applicators for microwave heating. , 0, , .		3
92	Arrays of bioinspired compound lenses for solar cells. , 2012, , .		3
93	Cantor dielectric resonators for microwave waveguide applicators. Radio Science, 2016, 51, 731-741.	1.6	3
94	How much topological insulation does one need? how much can one get?. , 2017, , .		3
95	Bioinspired irregularly chirped broadband reflecting multilayers. Optical Engineering, 2017, 56, 1.	1.0	3
96	Signatures of thermal hysteresis in Tamm-wave propagation. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 2155.	2.1	3
97	<title>On the reflection coefficient properties of optical-Cantor prefractal multilayers</title>. , 2004, , .		2
98	Filtering Properties of Optical Cantor Multilayers. , 2005, , .		2
99	Prismatic bioinspired compound lenses for solar cells. Proceedings of SPIE, 2011, , .	0.8	2
100	Periodicity effects on compound waves guided by a thin metal slab sandwiched between two periodically nonhomogeneous dielectric materials. Journal of Nanophotonics, 2017, 11, 043507.	1.0	2
101	Design of bioinspired chirped reflectors using a genetic algorithm. , 2017, , .		2
102	Temperatureâ€mediated excitation of defect modes in a periodic structure at terahertz frequencies. Microwave and Optical Technology Letters, 2020, 62, 3677-3681.	1.4	2
103	Optimal Design of Coatings for Mirrors of Gravitational Wave Detectors: Analytic Turbo Solution via Herpin Equivalent Layers. Applied Sciences (Switzerland), 2021, 11, 11669.	2.5	2
104	Circular dielectric cantor fibers. Microwave and Optical Technology Letters, 2009, 51, 2726-2728.	1.4	1
105	The Cantor dielectric fractal multilayer as an omnidirectional mirror. , 2010, , .		1
106	Surface-plasmon-polariton wave guided by the periodically corrugated interface of a metal and a columnar thin film. , 2014, , .		1
107	Sensitive photoreceiver based on carbon nanotube/tobacco cell composite material. Proceedings of SPIE, 2017, , .	0.8	1
108	Left/right asymmetry of the dipole field due to reflection from a periodic multilayer of a topological insulator and a columnar thin film. Optics Express, 2020, 28, 22266.	3.4	1

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109	Broadband reflectors with a disordered layered structure: statistical properties of high performing configurations selected via genetic algorithm. Journal of Optics (United Kingdom), 2022, 24, 035101.	2.2	1
110	Theoretical cutoff frequencies in optical fiber using a variational technique. , 0, , .		0
111	Designing modified cladding sensors: a structured approach [optical fiber sensors]. , 0, , .		0
112	Numerical calculation of cutoff frequencies of optical fibers by a variational technique. Optical and Quantum Electronics, 2004, 36, 981-995.	3.3	0
113	<title>Numerical evaluation of cabling effects on the cutoff frequency of optical fibers</title>. , 2004, 5445, 180.		0
114	Design of periodic structures made of columnar and sculptured thin films. , 2004, , .		0
115	Numerical Analysis of Optical Waveguides. , 2005, , .		0
116	Designing Low-Cost Modified Cladding Sensors: A Structured Approach. IEEE Transactions on Instrumentation and Measurement, 2006, 55, 477-482.	4.7	0
117	Publisherâ€™s Note: First cross-correlation analysis of interferometric and resonant-bar gravitational-wave data for stochastic backgrounds [Phys. Rev. DPRVDAQ0556-282176, 022001 (2007)]. Physical Review D, 2007, 76, .	4.7	0
118	Narrowband, linear-polarization rejection filter based on columnar-thin-film superlattice. Proceedings of SPIE, 2007, , .	0.8	0
119	Publisherâ€™s Note: Upper limit map of a background of gravitational waves [Phys. Rev. D76, 082003 (2007)]. Physical Review D, 2008, 77, .	4.7	0
120	Publisherâ€™s Note: Upper limits on gravitational wave emission from 78 radio pulsars [Phys. Rev. D76, 042001 (2007)]. Physical Review D, 2008, 77, .	4.7	0
121	Publisherâ€™s Note: All-sky search for periodic gravitational waves in LIGO S4 data [Phys. Rev. D77, 022001 (2008)]. Physical Review D, 2008, 77, .	4.7	0
122	Publisherâ€™s Note: First cross-correlation analysis of interferometric and resonant-bar gravitational-wave data for stochastic backgrounds [Phys. Rev. D76, 022001 (2007)]. Physical Review D, 2008, 77, .	4.7	0
123	A new bioinspired pit texture to enhance the light-coupling efficiency of silicon solar cells. , 2013, , .		0
124	Design of quarter-wave multi-section multi-band devices. , 2013, , .		0
125	Multilayer resonators with fractal morphology for microwave heating. , 2013, , .		0
126	Design of dielectric multilayers for multi-band antireflection coatings. , 2014, , .		0

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127	Comparison of bioinspired hillock and pit textures for silicon solar cells. , 2014, , .		0
128	Design of N-band multilayer antireflection coatings. Proceedings of SPIE, 2014, , .	0.8	0
129	Can dielectric resonators be useful for microwave heating?. , 2015, , .		0
130	Periodicity effects on compound guided waves. Proceedings of SPIE, 2016, , .	0.8	0
131	Temperature Dependent Defect Modes at Terahertz Regime. , 2019, , .		0
132	Fractal defected ground microstrips. , 2019, , .		0
133	Electrostatic and thermal control of Dyakonovâ€“Tamm waves guided by a graphene-coated structurally chiral medium. , 2019, , .		0
134	Asymmetries in surface waves and reflection/transmission characteristics associated with topological insulators. , 2017, , .		0
135	Transition from Dyakonov and Dyakonov-Tamm surface waves to surface-plasmon-polariton waves induced by temperature. , 2017, , .		0
136	Fractal Photonic Bandgap Fiber. , 2018, , .		0
137	Toward multicontrollable metasurfaces. , 2018, , .		0
138	A bioinspired broadband reflector in the VIS-NIR wavelength range. , 2018, , .		0