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	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
2	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
3	Search for continuous gravitational waves from 20 accreting millisecond x-ray pulsars in O3 LIGO data. Physical Review D, 2022, 105, .	4.7	31
4	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
5	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
6	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
7	First joint observation by the underground gravitational-wave detector KAGRA with GEO 600. Progress of Theoretical and Experimental Physics, 2022, 2022, .	6.6	20
8	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
9	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
10	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
11	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
12	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
13	Emergence and Evolution of Crystallization in TiO2 Thin Films: A Structural and Morphological Study. Nanomaterials, 2021, 11, 1409.	4.1	20
14	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
15	Population Properties of Compact Objects from the Second LIGOâ€“Virgo Gravitational-Wave Transient Catalog. Astrophysical Journal Letters, 2021, 913, L7.	8.3	514
16	Ternary quarter wavelength coatings for gravitational wave detector mirrors: Design optimization via exhaustive search. Physical Review Research, 2021, 3, .	3.6	7
17	Observation of Gravitational Waves from Two Neutron Starâ€“Black Hole Coalescences. Astrophysical Journal Letters, 2021, 915, L5.	8.3	453
18	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

#	Article	IF	Citations
19	Constraints on Cosmic Strings Using Data from the Third Advanced LIGOâ€“Virgo Observing Run. Physical Review Letters, 2021, 126, 241102.	7.8	87
20	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
21	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
22	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
23	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
24	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
25	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
26	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
27	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
28	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
29	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
30	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
31	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
32	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:mrow stretchy="false">âŠ™</mml:mo></mml:mrow></mml:msub></mml:mrow></mml:math>. Physical Review Letters, 2020, 125, 101102.	7.8	836
33	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
34	GW190412: Observation of a binary-black-hole coalescence with asymmetric masses. Physical Review D, 2020, 102, .	4.7	394
35	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
36	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

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37	GW190425: Observation of a Compact Binary Coalescence with Total MassÂâˆ¼Â3.4 M_{âŠ™}. Astrophysical Journal Letters, 2020, 892, L3.	8.3	1,049
38	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
39	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
40	Properties and Astrophysical Implications of the 150 M_{âŠ™} Binary Black Hole Merger GW190521. Astrophysical Journal Letters, 2020, 900, L13.	8.3	406
41	Gravitational-wave Constraints on the Equatorial Ellipticity of Millisecond Pulsars. Astrophysical Journal Letters, 2020, 902, L21.	8.3	65
42	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
43	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
44	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
45	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
46	Search for Subsolar Mass Ultracompact Binaries in Advanced LIGOâ€™s Second Observing Run. Physical Review Letters, 2019, 123, 161102.	7.8	119
47	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
48	All-sky search for long-duration gravitational-wave transients in the second Advanced LIGO observing run. Physical Review D, 2019, 99, .	4.7	22
49	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
50	Temperature Dependent Defect Modes at Terahertz Regime. , 2019, , .		0
51	Fractal defected ground microstrips. , 2019, , .		0
52	Electrostatic and thermal control of Dyakonovâ€“Tamm waves guided by a graphene-coated structurally chiral medium. , 2019, , .		0
53	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
54	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

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55	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
56	Bicontrollable terahertz metasurface with subwavelength scattering elements of two different materials. Applied Optics, 2018, 57, 189.	1.8	9
57	Fractal Photonic Bandgap Fiber. , 2018, , .		0
58	Toward multicontrollable metasurfaces. , 2018, , .		0
59	A bioinspired broadband reflector in the VIS-NIR wavelength range. , 2018, , .		0
60	Bilaterally asymmetric reflection and transmission of light by a grating structure containing a topological insulator. Optics Communications, 2017, 398, 67-76.	2.1	8
61	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
62	Design of bioinspired chirped reflectors using a genetic algorithm. , 2017, , .		2
63	Temperature-mediated transition from Dyakonovâ€“Tamm surface waves to surface-plasmon-polariton waves. Journal of Optics (United Kingdom), 2017, 19, 085002.	2.2	15
64	How much topological insulation does one need? how much can one get?. , 2017, , .		3
65	Sensitive photoreceiver based on carbon nanotube/tobacco cell composite material. Proceedings of SPIE, 2017, , .	0.8	1
66	Asymmetries in surface waves and reflection/transmission characteristics associated with topological insulators. , 2017, , .		0
67	Bioinspired irregularly chirped broadband reflecting multilayers. Optical Engineering, 2017, 56, 1.	1.0	3
68	Transition from Dyakonov and Dyakonov-Tamm surface waves to surface-plasmon-polariton waves induced by temperature. , 2017, , .		0
69	Signatures of thermal hysteresis in Tamm-wave propagation. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 2155.	2.1	3
70	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
71	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
72	Periodicity effects on compound guided waves. Proceedings of SPIE, 2016, , .	0.8	0

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73	Cantor dielectric resonators for microwave waveguide applicators. Radio Science, 2016, 51, 731-741.	1.6	3
74	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
75	Can dielectric resonators be useful for microwave heating?. , 2015, , .		0
76	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
77	A Cantor multilayer traveling wave applicator for microwave heating: Numerical analysis and design. Journal of Applied Physics, 2014, 116, .	2.5	8
78	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
79	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
80	Design of dielectric multilayers for multi-band antireflection coatings. , 2014, , .		0
81	Comparison of bioinspired hillock and pit textures for silicon solar cells. , 2014, , .		0
82	Design of N-band multilayer antireflection coatings. Proceedings of SPIE, 2014, , .	0.8	0
83	Surface-plasmon-polariton wave guided by the periodically corrugated interface of a metal and a columnar thin film. , 2014, , .		1
84	A new bioinspired pit texture to enhance the light-coupling efficiency of silicon solar cells. , 2013, , .		0
85	Design of quarter-wave multi-section multi-band devices. , 2013, , .		0
86	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
87	Synthesis method for N-band multilayer antireflection coatings. Journal of Nanophotonics, 2013, 7, 073097.	1.0	10
88	Bioinspired pit texturing of silicon solar cell surfaces. Journal of Photonics for Energy, 2013, 3, 034596.	1.3	12
89	Multilayer resonators with fractal morphology for microwave heating. , 2013, , .		0
90	Arrays of bioinspired compound lenses for solar cells. , 2012, , .		3

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91	Insect Eyes Inspire Improved Solar Cells. Optics and Photonics News, 2011, 22, 38.	0.5	10
92	Prismatic bioinspired compound lenses for solar cells. Proceedings of SPIE, 2011, , .	0.8	2
93	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
94	Simulation and analysis of prismatic bioinspired compound lenses for solar cells: II. Multifrequency analysis. Bioinspiration and Biomimetics, 2011, 6, 014002.	2.9	16
95	Simulation and analysis of prismatic bioinspired compound lenses for solar cells. Bioinspiration and Biomimetics, 2010, 5, 026002.	2.9	21
96	The Cantor dielectric fractal multilayer as an omnidirectional mirror. , 2010, , .		1
97	Circular dielectric cantor fibers. Microwave and Optical Technology Letters, 2009, 51, 2726-2728.	1.4	1
98	Omnidirectional bandgap in Cantor dielectric multilayers. Optics Communications, 2009, 282, 4009-4013.	2.1	16
99	Cantor Dielectric Filters in Rectangular Waveguides. Electromagnetics, 2009, 29, 575-585.	0.7	8
100	Filtering properties of defect-bearing periodic and triadic cantor multilayers. Optics Communications, 2008, 281, 633-639.	2.1	24
101	Field localization inside a lossy dielectric slab by means of cantor dielectric multilayers. Journal of Applied Physics, 2008, 103, 063104.	2.5	11
102	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
103	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
104	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
105	All-sky search for periodic gravitational waves in LIGO S4 data. Physical Review D, 2008, 77, .	4.7	110
106	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
107	A joint search for gravitational wave bursts with AURIGA and LIGO. Classical and Quantum Gravity, 2008, 25, 095004.	4.0	16
108	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

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109	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
110	Search for gravitational waves from binary inspirals in S3 and S4 LIGO data. Physical Review D, 2008, 77, .	4.7	126
111	Implications for the Origin of GRB 070201 from LIGO Observations. Astrophysical Journal, 2008, 681, 1419-1430.	4.5	143
112	Search for gravitational-wave bursts in LIGO data from the fourth science run. Classical and Quantum Gravity, 2007, 24, 5343-5369.	4.0	78
113	Upper limits on gravitational wave emission from 78 radio pulsars. Physical Review D, 2007, 76, .	4.7	121
114	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
115	First cross-correlation analysis of interferometric and resonant-bar gravitational-wave data for stochastic backgrounds. Physical Review D, 2007, 76, .	4.7	35
116	Narrowband, linear-polarization rejection filter based on columnar-thin-film superlattice. Proceedings of SPIE, 2007, , .	0.8	0
117	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
118	Upper limit map of a background of gravitational waves. Physical Review D, 2007, 76, .	4.7	90
119	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
120	Transmission properties of perturbed optical Cantor multilayers. Journal of Applied Physics, 2006, 100, 023119.	2.5	22
121	Theory of thin-film, narrowband, linear-polarization rejection filters with superlattice structure. Optics Communications, 2006, 268, 182-188.	2.1	10
122	Designing Low-Cost Modified Cladding Sensors: A Structured Approach. IEEE Transactions on Instrumentation and Measurement, 2006, 55, 477-482.	4.7	0
123	Numerical Analysis of Optical Waveguides. , 2005, , .		0
124	Filtering Properties of Optical Cantor Multilayers. , 2005, , .		2
125	Improved Design if Waveguide Slot Array Applicators For Microwave Heating. Materials Research Innovations, 2004, 8, 71-74.	2.3	6
126	Numerical calculation of cutoff frequencies of optical fibers by a variational technique. Optical and Quantum Electronics, 2004, 36, 981-995.	3.3	0

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127	Extension of Hodgkinson's model for optical characterization of columnar thin films. Microwave and Optical Technology Letters, 2004, 42, 72-73.	1.4	10
128	Design of wideband circular-polarization filters made of chiral sculptured thin films. Microwave and Optical Technology Letters, 2004, 42, 135-138.	1.4	12
129	Gaussian model for refractive indexes of columnar thin films and Bragg multilayers. Optics Communications, 2004, 231, 257-261.	2.1	21
130	<title>Numerical evaluation of cabling effects on the cutoff frequency of optical fibers</title>. , 2004, 5445, 180.		0
131	Design of periodic structures made of columnar and sculptured thin films. , 2004, , .		0
132	<title>On the reflection coefficient properties of optical-Cantor prefractal multilayers</title>. , 2004, , .		2
133	Self-scaling properties of the reflection coefficient of Cantor prefactal multilayers. Microwave and Optical Technology Letters, 2003, 37, 339-343.	1.4	30
134	Variational analysis of matched-clad optical fibers. Journal of Lightwave Technology, 2003, 21, 96-105.	4.6	8
135	A reflectometric optical fiber temperature sensor. IEEE Sensors Journal, 2003, 3, 80-86.	4.7	7
136	Theoretical cutoff frequencies in optical fiber using a variational technique. , 0, , .		0
137	Waveguide slot applicators for microwave heating. , 0, , .		3
138	Designing modified cladding sensors: a structured approach [optical fiber sensors]. , 0, , .		0