Christiano J S De Matos

List of Publications by Year
in descending order

121	2,894	186265	175258
papers	citations	28 h-index	52 g-index

122	122	122	3705
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Unusual Angular Dependence of the Raman Response in Black Phosphorus. ACS Nano, 2015, 9, 4270-4276.	14.6	301
2	Random Fiber Laser. Physical Review Letters, 2007, 99, 153903.	7.8	251
3	Characterization of the second- and third-order nonlinear optical susceptibilities of monolayer MoS ₂ using multiphoton microscopy. 2D Materials, 2017, 4, 011006.	4.4	147
4	Lateral access to the holes of photonic crystal fibers â€“ selective filling and sensing applications. Optics Express, 2006, 14, 8403.	3.4	132
5	Supercontinuum generation in a water-core photonic crystal fiber. Optics Express, 2008, 16, 9671.	3.4	123
6	Raman spectroscopy in black phosphorus. Journal of Raman Spectroscopy, 2018, 49, 76-90.	2.5	115
7	All-fiber chirped pulse amplification using highly-dispersive air-core photonic bandgap fiber. Optics Express, 2003, 11, 2832.	3.4	97
8	Optical coherence tomography using a continuous-wave, high-power, Raman continuum light source. Optics Express, 2004, 12, 5287.	3.4	91
9	Continuous-wave, totally fiber integrated optical parametric oscillator using holey fiber. Optics Letters, 2004, 29, 983.	3.3	86
10	Fiber Bragg grating (FBG) characterization and shaping by local pressure. Journal of Lightwave Technology, 2001, 19, 1206-1211.	4.6	72
11	Edge phonons in black phosphorus. Nature Communications, 2016, 7, 12191.	12.8	70
12	Towards practical liquid and gas sensing with photonic crystal fibres: side access to the fibre microstructure and single-mode liquid-core fibre. Measurement Science and Technology, 2007, 18, 3075-3081.	2.6	69
13	Resonantly Increased Optical Frequency Conversion in Atomically Thin Black Phosphorus. Advanced Materials, 2016, 28, 10693-10700.	21.0	64
14	Liquid-core, liquid-cladding photonic crystal fibers. Optics Express, 2007, 15, 11207.	3.4	59
15	Graphene Based Waveguide Polarizers: In-Depth Physical Analysis and Relevant Parameters. Scientific Reports, 2015, 5, 16949.	3.3	57
16	Spontaneous chemical functionalization via coordination of Au single atoms on monolayer MoS ₂. Science Advances, 2020, 6, .	10.3	56
17	All-Fiber Format Compression of Frequency Chirped Pulses in Air-Guiding Photonic Crystal Fibers. Physical Review Letters, 2004, 93, 103901.	7.8	51
18	Temporal and noise characteristics of continuous-wave-pumped continuum generation in holey fibers around 1300nm. Applied Physics Letters, 2004, 85, 2706-2708.	3.3	42

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19	All-fiber high repetition rate microfluidic dye laser. Optica, 2015, 2, 186.	9.3	41
20	Graphene Oxide/Gold Nanorod Nanocomposite for Stable Surface-Enhanced Raman Spectroscopy. ACS Photonics, 2016, 3, 1027-1035.	6.6	40
21	All-fiber devices based on photonic crystal fibers with integrated electrodes. Optics Express, 2009, 17, 1660.	3.4	38
22	Low-threshold self-induced modulational instability ring laser in highly nonlinear fiber yielding a continuous-wave 262-GHz soliton train. Optics Letters, 2002, 27, 915.	3.3	36
23	Efficient and short-range light coupling to index-matched liquid-filled hole in a solid-core photonic crystal fiber. Optics Express, 2011, 19, 24687.	3.4	34
24	Nonlinear Optical Interactions and Relaxation in 2D Layered Transition Metal Dichalcogenides Probed by Optical and Photoacoustic Z-Scan Methods. ACS Photonics, 2020, 7, 3440-3447.	6.6	34
25	Raman-assisted fiber optical parametric amplifier and wavelength converter in highly nonlinear fiber. Journal of the Optical Society of America B: Optical Physics, 2002, 19, 1901.	2.1	32
26	Multi-kilowatt, all-fiber integrated chirped-pulse amplification system yielding 40ï¿½ pulse compression using air-core fiber and conventional erbium-doped fiber amplifier. Optics Express, 2004, 12, 405.	3.4	32
27	Temperature Sensing Using Colloidal-Core Photonic Crystal Fiber. IEEE Sensors Journal, 2012, 12, 195-200.	4.7	30
28	Multi-wavelength, continuous wave fibre Raman ring laser operating at 1.55 [micro sign]m. Electronics Letters, 2001, 37, 825.	1.0	29
29	Continuous-wave-pumped Raman-assisted fiber optical parametric amplifier and wavelength converter in conventional dispersion-shifted fiber. Optics Letters, 2001, 26, 1583.	3.3	27
30	Short-pulse, all-fiber, Raman laser with dispersion compensation in a holey fiber. Optics Letters, 2003, 28, 1891.	3.3	27
31	Single-design-parameter microstructured optical fiber for chromatic dispersion tailoring and evanescent field enhancement. Optics Letters, 2007, 32, 3324.	3.3	27
32	Femtosecond Nonlinear Optical Properties of 2D Metallic NbS₂ in the Near Infrared. Journal of Physical Chemistry C, 2020, 124, 15425-15433.	3.1	27
33	20-kW peak power all-fiber 157-Âµm source based on compression in air-core photonic bandgap fiber, its frequency doubling, and broadband generation from 430 to 1450 nm. Optics Letters, 2005, 30, 436.	3.3	26
34	Probing Polaritons in 2D Materials with Synchrotron Infrared Nanospectroscopy. Advanced Optical Materials, 2020, 8, 1901091.	7.3	26
35	Tunable repetition-rate multiplication of a 10 GHz pulse train using linear and nonlinear fiber propagation. Applied Physics Letters, 2003, 83, 5356-5358.	3.3	25
36	Experimental characterisation of Raman gain efficiency of holey fibre. Electronics Letters, 2003, 39, 424.	1.0	23

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37	Yb^3+, Tm^3+ and Ho^3+ triply-doped tellurite core-cladding optical fiber for white light generation. Optical Materials Express, 2011, 1, 1515.	3.0	23
38	In-fiber modal Mach-Zehnder interferometer based on the locally post-processed core of a photonic crystal fiber. Optics Express, 2011, 19, 3124.	3.4	22
39	Edge phonons in layered orthorhombic GeS and GeSe monochalcogenides. Physical Review B, 2019, 100, .	3.2	22
40	Dual wavelength pumped L- and U-band Raman amplifier. Electronics Letters, 2001, 37, 883.	1.0	21
41	Microsecond switching of plasmonic nanorods in an all-fiber optofluidic component. Optica, 2017, 4, 864.	9.3	20
42	Copropagating and counterpropagating pumps in second-order-pumped discrete fiber Raman amplifiers. Optics Letters, 2002, 27, 1708.	3.3	17
43	Pressure Sensing Based on Nonconventional Air-Guiding Transmission Windows in Hollow-Core Photonic Crystal Fibers. Journal of Lightwave Technology, 2009, 27, 1605-1609.	4.6	17
44	Oxygen impact on the electronic and vibrational properties of black phosphorus probed by synchrotron infrared nanospectroscopy. 2D Materials, 2017, 4, 035028.	4.4	16
45	Direct dry transfer of CVD graphene to an optical substrate by in situ photo-polymerization. Applied Surface Science, 2018, 440, 55-60.	6.1	15
46	Second-harmonic generation enhancement in monolayer transition-metal dichalcogenides by using an epsilon-near-zero substrate. Nanoscale Advances, 2021, 3, 272-278.	4.6	15
47	4Ã— repetition-rate multiplication and Raman compression of pulses in the same optical fiber. Optics Letters, 2002, 27, 1262.	3.3	14
48	Novel Sealing Technique for Practical Liquid-Core Photonic Crystal Fibers. IEEE Photonics Technology Letters, 2012, 24, 191-193.	2.5	14
49	CNT Film Fabrication for Mode-Locked Er-Doped Fiber Lasers: The Droplet Method. IEEE Photonics Technology Letters, 2013, 25, 1007-1010.	2.5	14
50	Fabrication and Optical Characterization of Silica Optical Fibers Containing Gold Nanoparticles. ACS Applied Materials & Interfaces, 2015, 7, 370-375.	8.0	14
51	Femtosecond nonlinear refraction of 2D semi-metallic redox exfoliated ZrTe2 at 800â€‰nm. Applied Physics Letters, 2021, 118, .	3.3	13
52	Making graphene visible on transparent dielectric substrates: Brewster angle imaging. 2D Materials, 2015, 2, 035017.	4.4	12
53	Exploring the structural and optoelectronic properties of natural insulating phlogopite in van der Waals heterostructures. 2D Materials, 2022, 9, 035007.	4.4	12
54	All-fibre Brillouin laser based on holey fibre yielding comb-like spectra. Optics Communications, 2004, 238, 185-189.	2.1	11

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55	Chirped pulse Raman amplification with compression in air-core photonic bandgap fiber. Optics Express, 2005, 13, 2828.	3.4	11
56	Quasi-phase-matched second harmonic generation in silicon nitride ring resonators controlled by static electric field. Optics Express, 2013, 21, 32690.	3.4	11
57	Real-time optofluidic surface-enhanced Raman spectroscopy based on a graphene oxide/gold nanorod nanocomposite. Optics Express, 2018, 26, 22698.	3.4	11
58	Charge emission in thermal poling of glasses with carbon film anode. Journal of Non-Crystalline Solids, 2000, 273, 25-29.	3.1	10
59	One-step deposition and in-situ reduction of graphene oxide in photonic crystal fiber for all-fiber laser mode locking. Optics and Laser Technology, 2020, 121, 105838.	4.6	10
60	Selectively coupling core pairs in multicore photonic crystal fibers: optical couplers, filters and polarization splitters for space-division-multiplexed transmission systems. Optics Express, 2012, 20, 28981.	3.4	7
61	Distributed Pressure Sensing Using an Embedded-Core Capillary Fiber and Optical Frequency Domain Reflectometry. IEEE Sensors Journal, 2021, 21, 360-365.	4.7	7
62	Long-term environmental stability of nitrogen-healed black phosphorus. Applied Surface Science, 2021, 564, 150450.	6.1	7
63	CVD growth and optical characterization of homo and heterobilayer TMDs. Journal of Applied Physics, 2022, 132, .	2.5	7
64	Wavelength- and duration-tunable soliton source based on a 20-GHz Machâ€“Zehnder modulator and adiabatic Raman compression. Applied Physics Letters, 2002, 81, 2932-2934.	3.3	6
65	Temperature response of an all-solid photonic bandgap fiber for sensing applications. Applied Optics, 2013, 52, 1461.	1.8	6
66	Hyperâ€“Rayleigh scattering in 2D redox exfoliated semi-metallic ZrTe₂ transition metal dichalcogenide. Physical Chemistry Chemical Physics, 2020, 22, 27845-27849.	2.8	6
67	Visible transmission windows in infrared hollow-core photonic bandgap fiber: characterization and response to pressure. Journal of the Optical Society of America B: Optical Physics, 2012, 29, 977.	2.1	5
68	Interfacial electronic coupling and band alignment of P3HT and exfoliated black phosphorous van der Waals heterojunctions. Applied Surface Science, 2021, 541, 148455.	6.1	5
69	3d transition metal coordination on monolayer MoS₂: a facile doping method to functionalize surfaces. Nanoscale, 2022, 14, 10801-10815.	5.6	5
70	Random Laser Action in the Core of a Photonic Crystal Fiber. Optics and Photonics News, 2008, 19, 27.	0.5	4
71	Integrated polarizers based on tapered highly birefringent photonic crystal fibers. Optics Express, 2014, 22, 17769.	3.4	4
72	Simultaneous generation and wavelength conversion of a pulse train from multi-wave mixing in an optical fibre. Optics Communications, 2007, 269, 94-97.	2.1	3

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73	Sealed liquid-core photonic crystal fibers for practical nonlinear optics, nanophotonics, and sensing applications. , 2010, , .		3
74	Electrically Controlled Silicon Nitride Ring Resonator for Quasi-phase Matched Second-harmonic Generation. , 2012, , .		3
75	Simultaneous pulse train generation and wavelength conversion in a highly nonlinear fibre due to multiwave mixing. , 2005, , .		3
76	Continuous-wave 1664.7 nm fiber source utilizing four-wave mixing and stimulated Raman scattering. Applied Physics Letters, 2002, 81, 1390-1392.	3.3	2
77	Use of an electroabsorption modulator and an autocorrelator for fibre chromatic dispersion measurement at 1550 nm. Optics Communications, 2003, 226, 221-225.	2.1	2
78	Optical time-domain reflectometry of discrete fiber Raman amplifiers. IEEE Photonics Technology Letters, 2003, 15, 1064-1066.	2.5	2
79	Measurement of raman gain efficiency in a DCF and its application in optical amplification for the O-band. , 2007, , .		2
80	Evaporation in Water-Core Photonic Crystal Fibers. AIP Conference Proceedings, 2008, , .	0.4	2
81	Creating and fixing a metal nanoparticle layer on the holes of microstructured fibers for plasmonic applications. , 2008, , .		2
82	Corrections to "Temperature Sensing Using Colloidal-Core Photonic Crystal Fiber" [Jan 12 195-200]. IEEE Sensors Journal, 2012, 12, 832-832.	4.7	2
83	Surface Plasmon Resonance Platforms for Chemical and Bio Sensing. , 2021, , .		2
84	Optical fibre modulator based on electrostatic attraction. Optics Communications, 2001, 190, 135-139.	2.1	1
85	All-fiber integrated â^¼10kW peak power ultrashort optical pulse source based on compression in aircore photonic band gap fiber. Applied Physics Letters, 2004, 85, 5541-5543.	3.3	1
86	Multiple, polarization diverse, idler wave generation in fibers from competing four-wave mixing processes. Optics Communications, 2006, 259, 856-860.	2.1	1
87	Random Laser Action inside a Photonic Crystal Fiber. , 2007, , .		1
88	Analysis of raman amplification in a practical, low-loss, photonic crystal fiber. , 2007, , .		1
89	Loss Mechanisms and Fluorescence in Photonic Crystal Fibers Filled with Liquids and Polymers. AIP Conference Proceedings, 2008, , .	0.4	1
90	Modeling Long-Pass Filters Based on Fundamental-Mode Cutoff in Photonic Crystal Fibers. IEEE Photonics Technology Letters, 2009, 21, 112-114.	2.5	1

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91	Response to pressure of a hollow core photonic crystal fiber for sensing applications. , 2009, , .		1
92	Colloidal-core photonic crystal fiber incorporating CdSe quantum dots for temperature sensing. Proceedings of SPIE, 2010, , .	0.8	1
93	Experimental comparison of Raman gain efficiency of a dispersion compensating fiber in C and Oâ€bands. Microwave and Optical Technology Letters, 2010, 52, 151-154.	1.4	1
94	Black Phosphorus: Resonantly Increased Optical Frequency Conversion in Atomically Thin Black Phosphorus (Adv. Mater. 48/2016). Advanced Materials, 2016, 28, 10692-10692.	21.0	1
95	Fabrication and characterization of silicon nitride waveguides for mid-infrared applications. , 2019, , .		1
96	Nonlinear Absorption and Optical Limiting Effect in Redox Exfoliated Layered Transition Metal Dichalcogenides. , 2018, , .		1
97	Analysis and Optimization of Graphene Based Waveguide Polarizers. , 2016, , .		1
98	High efficiency, dual-wavelength fibre Raman pump laser for U-band fibre Raman amplifiers. Optical and Quantum Electronics, 2002, 34, 1025-1030.	3.3	0
99	All-fiber CW Raman continuum light source for ultrahigh resolution optical coherence tomography. , 2005, , .		0
100	Analysis of the signal polarization evolution with pump power in a fibre optical parametric amplifier. , 0, , .		0
101	Index-Guiding, Single-Mode, Liquid-Core, Liquid-Cladding Photonic Crystal Fibers. , 2007, , .		0
102	Random laser action inside a photonic crystal fiber. , 2007, , .		0
103	All-fiber Devices Based on Photonic Crystal Fibers with Integrated Electrodes. AIP Conference Proceedings, 2008, , .	0.4	0
104	Simple and Temperature-Insensitive Pressure Sensing Based on a Hollow-Core Photonic Crystal Fiber. AIP Conference Proceedings, 2008, , .	0.4	0
105	Theoretical and experimental study of supercontinuum generation in a water-core PCF. AIP Conference Proceedings, 2008, , .	0.4	0
106	Visible to near-infrared continuum generation in a water-core photonic crystal fiber. AIP Conference Proceedings, 2008, , .	0.4	0
107	Large hollow-core fiber random dye laser. , 2009, , .		0
108	Numerical modeling of a birefringent photonic crystal fiber for discrete and distributed pressure sensing. , 2010, , .		0

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109	Efficient coupling between core and fluidic channel in a solid-core photonic crystal fiber. Proceedings of SPIE, 2010, , .	0.8	0
110	Post-processing multicore photonic crystal fibers for locally coupling selected core pairs. , 2011, , .		0
111	All-fiber setup for temperature sensing based on a polymeric-core PCF with semiconductor nanocrystals. , 2013, , .		0
112	Modification of a photonic crystal fiber by selective collapse of the microstructure holes. , 2013, , .		0
113	Generation of Polarizing Sections in Highly Birefringent Photonic Crystal Fibers via Post-Processing. , 2013, , .		0
114	Synthesis and Characterization of MoS2/WS2 Heterostructures by Second Harmonic Generation. , 2019, , .		0
115	Fabrication and Electro-Optical Characterization of Aluminum Silicate Fiber Doped with Gold Nanoparticles. , 2013, , .		0
116	GLASSY MATERIALS AND LIGHT: PART 1. Quimica Nova, 2016, , .	0.3	0
117	Photonics with Special Optical Fibers and Nanoparticles. , 2016, , .		0
118	GLASSY MATERIALS AND LIGHT: PART 2. Quimica Nova, 2016, , .	0.3	0
119	Linear and Nonlinear Optics in Two-Dimensional Materials and Nanocomposites. , 2016, , .		0
120	Optofluidic SERS in a Microcapillary Coated with a Graphene Oxide/Gold Nanorod Nanocomposite. , 2018, , .		0
121	Enhancement of the SHG in monolayer MoS2 by an epsilon-near-zero substrate. , 2020, , .		0