Christiano J S De Matos

List of Publications by Year
in descending order

121 papers	2,894 citations	186265 28 h-index	175258 52 g-index
122 all docs	122 docs citations	122 times ranked	3705 citing authors

#	Article	IF	Citations
1	Exploring the structural and optoelectronic properties of natural insulating phlogopite in van der Waals heterostructures. 2D Materials, 2022, 9, 035007.	4.4	12
2	3d transition metal coordination on monolayer MoS₂: a facile doping method to functionalize surfaces. Nanoscale, 2022, 14, 10801-10815.	5.6	5
3	CVD growth and optical characterization of homo and heterobilayer TMDs. Journal of Applied Physics, 2022, 132, .	2.5	7
4	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
5	Distributed Pressure Sensing Using an Embedded-Core Capillary Fiber and Optical Frequency Domain Reflectometry. IEEE Sensors Journal, 2021, 21, 360-365.	4.7	7
6	Femtosecond nonlinear refraction of 2D semi-metallic redox exfoliated ZrTe2 at 800â€‰nm. Applied Physics Letters, 2021, 118, .	3.3	13
7	Surface Plasmon Resonance Platforms for Chemical and Bio Sensing. , 2021, , .		2
8	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
9	Long-term environmental stability of nitrogen-healed black phosphorus. Applied Surface Science, 2021, 564, 150450.	6.1	7
10	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
11	Probing Polaritons in 2D Materials with Synchrotron Infrared Nanospectroscopy. Advanced Optical Materials, 2020, 8, 1901091.	7.3	26
12	Hyperâ€“Rayleigh scattering in 2D redox exfoliated semi-metallic ZrTe₂ transition metal dichalcogenide. Physical Chemistry Chemical Physics, 2020, 22, 27845-27849.	2.8	6
13	Spontaneous chemical functionalization via coordination of Au single atoms on monolayer MoS ₂. Science Advances, 2020, 6, .	10.3	56
14	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
15	Femtosecond Nonlinear Optical Properties of 2D Metallic NbS₂ in the Near Infrared. Journal of Physical Chemistry C, 2020, 124, 15425-15433.	3.1	27
16	Enhancement of the SHG in monolayer MoS2 by an epsilon-near-zero substrate. , 2020, , .		0
17	Edge phonons in layered orthorhombic GeS and GeSe monochalcogenides. Physical Review B, 2019, 100, .	3.2	22
18	Synthesis and Characterization of MoS2/WS2 Heterostructures by Second Harmonic Generation. , 2019, , .		0

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19	Fabrication and characterization of silicon nitride waveguides for mid-infrared applications. , 2019, , .		1
20	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
21	Raman spectroscopy in black phosphorus. Journal of Raman Spectroscopy, 2018, 49, 76-90.	2.5	115
22	Real-time optofluidic surface-enhanced Raman spectroscopy based on a graphene oxide/gold nanorod nanocomposite. Optics Express, 2018, 26, 22698.	3.4	11
23	Nonlinear Absorption and Optical Limiting Effect in Redox Exfoliated Layered Transition Metal Dichalcogenides. , 2018, , .		1
24	Optofluidic SERS in a Microcapillary Coated with a Graphene Oxide/Gold Nanorod Nanocomposite. , 2018, , .		0
25	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
26	Oxygen impact on the electronic and vibrational properties of black phosphorus probed by synchrotron infrared nanospectroscopy. 2D Materials, 2017, 4, 035028.	4.4	16
27	Microsecond switching of plasmonic nanorods in an all-fiber optofluidic component. Optica, 2017, 4, 864.	9.3	20
28	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
29	Graphene Oxide/Gold Nanorod Nanocomposite for Stable Surface-Enhanced Raman Spectroscopy. ACS Photonics, 2016, 3, 1027-1035.	6.6	40
30	Resonantly Increased Optical Frequency Conversion in Atomically Thin Black Phosphorus. Advanced Materials, 2016, 28, 10693-10700.	21.0	64
31	Edge phonons in black phosphorus. Nature Communications, 2016, 7, 12191.	12.8	70
32	GLASSY MATERIALS AND LIGHT: PART 1. Quimica Nova, 2016, , .	0.3	0
33	Photonics with Special Optical Fibers and Nanoparticles. , 2016, , .		0
34	GLASSY MATERIALS AND LIGHT: PART 2. Quimica Nova, 2016, , .	0.3	0
35	Linear and Nonlinear Optics in Two-Dimensional Materials and Nanocomposites. , 2016, , .		0
36	Analysis and Optimization of Graphene Based Waveguide Polarizers. , 2016, , .		1

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37	Graphene Based Waveguide Polarizers: In-Depth Physical Analysis and Relevant Parameters. Scientific Reports, 2015, 5, 16949.	3.3	57
38	All-fiber high repetition rate microfluidic dye laser. Optica, 2015, 2, 186.	9.3	41
39	Unusual Angular Dependence of the Raman Response in Black Phosphorus. ACS Nano, 2015, 9, 4270-4276.	14.6	301
40	Making graphene visible on transparent dielectric substrates: Brewster angle imaging. 2D Materials, 2015, 2, 035017.	4.4	12
41	Fabrication and Optical Characterization of Silica Optical Fibers Containing Gold Nanoparticles. ACS Applied Materials & Interfaces, 2015, 7, 370-375.	8.0	14
42	Integrated polarizers based on tapered highly birefringent photonic crystal fibers. Optics Express, 2014, 22, 17769.	3.4	4
43	All-fiber setup for temperature sensing based on a polymeric-core PCF with semiconductor nanocrystals. , 2013, , .		0
44	CNT Film Fabrication for Mode-Locked Er-Doped Fiber Lasers: The Droplet Method. IEEE Photonics Technology Letters, 2013, 25, 1007-1010.	2.5	14
45	Temperature response of an all-solid photonic bandgap fiber for sensing applications. Applied Optics, 2013, 52, 1461.	1.8	6
46	Quasi-phase-matched second harmonic generation in silicon nitride ring resonators controlled by static electric field. Optics Express, 2013, 21, 32690.	3.4	11
47	Modification of a photonic crystal fiber by selective collapse of the microstructure holes. , 2013, , .		0
48	Generation of Polarizing Sections in Highly Birefringent Photonic Crystal Fibers via Post-Processing. , 2013, , .		0
49	Fabrication and Electro-Optical Characterization of Aluminum Silicate Fiber Doped with Gold Nanoparticles. , 2013, , .		0
50	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
51	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
52	Corrections to "Temperature Sensing Using Colloidal-Core Photonic Crystal Fiber" [Jan 12 195-200]. IEEE Sensors Journal, 2012, 12, 832-832.	4.7	2
53	Electrically Controlled Silicon Nitride Ring Resonator for Quasi-phase Matched Second-harmonic Generation. , 2012, , .		3
54	Novel Sealing Technique for Practical Liquid-Core Photonic Crystal Fibers. IEEE Photonics Technology Letters, 2012, 24, 191-193.	2.5	14

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55	Temperature Sensing Using Colloidal-Core Photonic Crystal Fiber. IEEE Sensors Journal, 2012, 12, 195-200.	4.7	30
56	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
57	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
58	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
59	Post-processing multicore photonic crystal fibers for locally coupling selected core pairs. , 2011, , .		0
60	Numerical modeling of a birefringent photonic crystal fiber for discrete and distributed pressure sensing. , 2010, , .		0
61	Colloidal-core photonic crystal fiber incorporating CdSe quantum dots for temperature sensing. Proceedings of SPIE, 2010, , .	0.8	1
62	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
63	Efficient coupling between core and fluidic channel in a solid-core photonic crystal fiber. Proceedings of SPIE, 2010, , .	0.8	0
64	Sealed liquid-core photonic crystal fibers for practical nonlinear optics, nanophotonics, and sensing applications. , 2010, , .		3
65	Large hollow-core fiber random dye laser. , 2009, , .		0
66	All-fiber devices based on photonic crystal fibers with integrated electrodes. Optics Express, 2009, 17, 1660.	3.4	38
67	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
68	Modeling Long-Pass Filters Based on Fundamental-Mode Cutoff in Photonic Crystal Fibers. IEEE Photonics Technology Letters, 2009, 21, 112-114.	2.5	1
69	Response to pressure of a hollow core photonic crystal fiber for sensing applications. , 2009, , .		1
70	Random Laser Action in the Core of a Photonic Crystal Fiber. Optics and Photonics News, 2008, 19, 27.	0.5	4
71	Supercontinuum generation in a water-core photonic crystal fiber. Optics Express, 2008, 16, 9671.	3.4	123
72	Loss Mechanisms and Fluorescence in Photonic Crystal Fibers Filled with Liquids and Polymers. AIP Conference Proceedings, 2008, , .	0.4	1

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73	All-fiber Devices Based on Photonic Crystal Fibers with Integrated Electrodes. AIP Conference Proceedings, 2008, , .	0.4	0
74	Simple and Temperature-Insensitive Pressure Sensing Based on a Hollow-Core Photonic Crystal Fiber. AIP Conference Proceedings, 2008, , .	0.4	0
75	Evaporation in Water-Core Photonic Crystal Fibers. AIP Conference Proceedings, 2008, , .	0.4	2
76	Theoretical and experimental study of supercontinuum generation in a water-core PCF. AIP Conference Proceedings, 2008, , .	0.4	0
77	Visible to near-infrared continuum generation in a water-core photonic crystal fiber. AIP Conference Proceedings, 2008, , .	0.4	0
78	Creating and fixing a metal nanoparticle layer on the holes of microstructured fibers for plasmonic applications. , 2008, , .		2
79	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
80	Index-Guiding, Single-Mode, Liquid-Core, Liquid-Cladding Photonic Crystal Fibers. , 2007, , .		0
81	Random Laser Action inside a Photonic Crystal Fiber. , 2007, , .		1
82	Single-design-parameter microstructured optical fiber for chromatic dispersion tailoring and evanescent field enhancement. Optics Letters, 2007, 32, 3324.	3.3	27
83	Liquid-core, liquid-cladding photonic crystal fibers. Optics Express, 2007, 15, 11207.	3.4	59
84	Analysis of raman amplification in a practical, low-loss, photonic crystal fiber. , 2007, , .		1
85	Measurement of raman gain efficiency in a DCF and its application in optical amplification for the O-band. , 2007, , .		2
86	Random laser action inside a photonic crystal fiber. , 2007, , .		0
87	Random Fiber Laser. Physical Review Letters, 2007, 99, 153903.	7.8	251
88	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
89	Lateral access to the holes of photonic crystal fibers â€“ selective filling and sensing applications. Optics Express, 2006, 14, 8403.	3.4	132
90	Multiple, polarization diverse, idler wave generation in fibers from competing four-wave mixing processes. Optics Communications, 2006, 259, 856-860.	2.1	1

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91	All-fiber CW Raman continuum light source for ultrahigh resolution optical coherence tomography. , 2005, , .		0
92	Chirped pulse Raman amplification with compression in air-core photonic bandgap fiber. Optics Express, 2005, 13, 2828.	3.4	11
93	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
94	Simultaneous pulse train generation and wavelength conversion in a highly nonlinear fibre due to multiwave mixing. , 2005, , .		3
95	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
96	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
97	All-fibre Brillouin laser based on holey fibre yielding comb-like spectra. Optics Communications, 2004, 238, 185-189.	2.1	11
98	All-Fiber Format Compression of Frequency Chirped Pulses in Air-Guiding Photonic Crystal Fibers. Physical Review Letters, 2004, 93, 103901.	7.8	51
99	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
100	Optical coherence tomography using a continuous-wave, high-power, Raman continuum light source. Optics Express, 2004, 12, 5287.	3.4	91
101	Continuous-wave, totally fiber integrated optical parametric oscillator using holey fiber. Optics Letters, 2004, 29, 983.	3.3	86
102	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
103	Optical time-domain reflectometry of discrete fiber Raman amplifiers. IEEE Photonics Technology Letters, 2003, 15, 1064-1066.	2.5	2
104	Short-pulse, all-fiber, Raman laser with dispersion compensation in a holey fiber. Optics Letters, 2003, 28, 1891.	3.3	27
105	All-fiber chirped pulse amplification using highly-dispersive air-core photonic bandgap fiber. Optics Express, 2003, 11, 2832.	3.4	97
106	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
107	Experimental characterisation of Raman gain efficiency of holey fibre. Electronics Letters, 2003, 39, 424.	1.0	23
108	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

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109	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
110	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
111	4Ã— repetition-rate multiplication and Raman compression of pulses in the same optical fiber. Optics Letters, 2002, 27, 1262.	3.3	14
112	Copropagating and counterpropagating pumps in second-order-pumped discrete fiber Raman amplifiers. Optics Letters, 2002, 27, 1708.	3.3	17
113	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
114	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
115	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
116	Fiber Bragg grating (FBG) characterization and shaping by local pressure. Journal of Lightwave Technology, 2001, 19, 1206-1211.	4.6	72
117	Multi-wavelength, continuous wave fibre Raman ring laser operating at 1.55 [micro sign]m. Electronics Letters, 2001, 37, 825.	1.0	29
118	Dual wavelength pumped L- and U-band Raman amplifier. Electronics Letters, 2001, 37, 883.	1.0	21
119	Optical fibre modulator based on electrostatic attraction. Optics Communications, 2001, 190, 135-139.	2.1	1
120	Charge emission in thermal poling of glasses with carbon film anode. Journal of Non-Crystalline Solids, 2000, 273, 25-29.	3.1	10
121	Analysis of the signal polarization evolution with pump power in a fibre optical parametric amplifier. , 0, , .		0