Marco N Petrovich

List of Publications by Year
in descending order

143	2,893	172457	182427
papers	citations	29 h-index	51 g-index

144	144	144	1852
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Towards high-capacity fibre-optic communications at the speed of light in vacuum. Nature Photonics, 2013, 7, 279-284.	31.4	289
2	Hollow-core photonic bandgap fibers: technology and applications. Nanophotonics, 2013, 2, 315-340.	6.0	170
3	Micro-channels machined in microstructured optical fibers by femtosecond laser. Optics Express, 2007, 15, 8731.	3.4	118
4	Demonstration of amplified data transmission at 2 Âµm in a low-loss wide bandwidth hollow core photonic bandgap fiber. Optics Express, 2013, 21, 28559.	3.4	112
5	100 Gbit/s WDM transmission at 2 Âµm: transmission studies in both low-loss hollow core photonic bandgap fiber and solid core fiber. Optics Express, 2015, 23, 4946.	3.4	111
6	Methane detection at 1670-nm band using a hollow-core photonic bandgap fiber and a multiline algorithm. Optics Express, 2007, 15, 17570.	3.4	98
7	Antiresonant Hollow Core Fiber With an Octave Spanning Bandwidth for Short Haul Data Communications. Journal of Lightwave Technology, 2017, 35, 437-442.	4.6	96
8	Robustly single mode hollow core photonic bandgap fiber. Optics Express, 2008, 16, 4337.	3.4	92
9	Supercontinuum generation in non-silica fibers. Optical Fiber Technology, 2012, 18, 327-344.	2.7	89
10	Optimizing the usable bandwidth and loss through core design in realistic hollow-core photonic bandgap fibers. Optics Express, 2006, 14, 7974.	3.4	88
11	Intensity measurement bend sensors based on periodically tapered soft glass fibers. Optics Letters, 2011, 36, 558.	3.3	87
12	Ultralow thermal sensitivity of phase and propagation delay in hollow core optical fibres. Scientific Reports, 2015, 5, 15447.	3.3	75
13	High Capacity Mode-Division Multiplexed Optical Transmission in a Novel 37-cell Hollow-Core Photonic Bandgap Fiber. Journal of Lightwave Technology, 2014, 32, 854-863.	4.6	74
14	Low-loss and low-bend-sensitivity mid-infrared guidance in a hollow-coreâ€“photonic-bandgap fiber. Optics Letters, 2014, 39, 295.	3.3	65
15	High-Capacity Directly Modulated Optical Transmitter for 2-Î¼m Spectral Region. Journal of Lightwave Technology, 2015, 33, 1373-1379.	4.6	65
16	Multi-kilometer Long, Longitudinally Uniform Hollow Core Photonic Bandgap Fibers for Broadband Low Latency Data Transmission. Journal of Lightwave Technology, 2016, 34, 104-113.	4.6	64
17	Design of 7 and 19 cells core air-guiding photonic crystal fibers for low-loss, wide bandwidth and dispersion controlled operation. Optics Express, 2007, 15, 17577.	3.4	58
18	All-solid highly nonlinear singlemode fibers with a tailored dispersion profile. Optics Express, 2011, 19, 66.	3.4	52

#	Article	IF	Citations
19	Dispersion controlled highly nonlinear fibers for all-optical processing at telecoms wavelengths. Optical Fiber Technology, 2010, 16, 378-391.	2.7	51
20	How to make the propagation time through an optical fiber fully insensitive to temperature variations. Optica, 2017, 4, 659.	9.3	49
21	Fibre optical sensor for C2H2 gas using gas-filled photonic bandgap fibre reference cell. Sensors and Actuators B: Chemical, 2009, 139, 30-34.	7.8	43
22	Nonlinearity-Free Coherent Transmission in Hollow-Core Antiresonant Fiber. Journal of Lightwave Technology, 2019, 37, 909-916.	4.6	43
23	Dense WDM transmission at 2â€‰â€‰Î¼m enabled by an arrayed waveguide grating. Optics Letters, 2015, 40, 3308.	3.3	42
24	Gas Sensor Based on Photonic Crystal Fibres in the 2Î½3 and Î½2 + 2Î½3 Vibrational Bands of Methane. Sensors, 2009, 9, 6261-6272.	3.8	38
25	Low-loss Kagome hollow-core fibers operating from the near- to the mid-IR. Optics Letters, 2017, 42, 2571.	3.3	38
26	Large mode area silicon microstructured fiber with robust dual mode guidance. Optics Express, 2009, 17, 18076.	3.4	35
27	Novel Method for the Fabrication of Long Optical Fiber Tapers. IEEE Photonics Technology Letters, 2008, 20, 1264-1266.	2.5	34
28	Efficient white light generation in secondary cores of holey fibers. Optics Express, 2007, 15, 3729.	3.4	31
29	40 Gb/s WDM Transmission Over 1.15-km HC-PBGF Using an InP-Based Mach-Zehnder Modulator at 2 Î¼m. Journal of Lightwave Technology, 2016, 34, 1706-1711.	4.6	30
30	Near-zero dispersion, highly nonlinear lead-silicate W-type fiber for applications at 155Î¼m. Optics Express, 2010, 18, 15747.	3.4	29
31	Low-Loss and Low-Back-Reflection Hollow-Core to Standard Fiber Interconnection. IEEE Photonics Technology Letters, 2019, 31, 723-726.	2.5	27
32	Record Low-Loss 1.3dB/km Data Transmitting Antiresonant Hollow Core Fibre. , 2018, , .		25
33	Accurate modelling of fabricated hollow-core photonic bandgap fibers. Optics Express, 2015, 23, 23117.	3.4	24
34	Temperature insensitive fiber interferometry. Optics Letters, 2019, 44, 2768.	3.3	21
35	First Demonstration of 2Âµm Data Transmission in a Low-Loss Hollow Core Photonic Bandgap Fiber. , 2012, , .		18
36	Super-broadband on-chip continuous spectral translation unlocking coherent optical communications beyond conventional telecom bands. Nature Communications, 2022, 13, .	12.8	18

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37	Modal content in hypocycloid KagomÃ© hollow core photonic crystal fibers. Optics Express, 2016, 24, 15798.	3.4	17
38	Gamma irradiation of minimal latency Hollow-Core Photonic Bandgap Fibres. Journal of Instrumentation, 2013, 8, C12010-C12010.	1.2	16
39	Multi-Line Fit Model for the Detection of Methane at Î½2 + 2Î½3 Band using Hollow-Core Photonic Bandgap Fibres. Sensors, 2009, 9, 490-502.	3.8	15
40	Fast and broadband fiber dispersion measurement with dense wavelength sampling. Optics Express, 2014, 22, 943.	3.4	15
41	Accurate calibration of S^2 and interferometry based multimode fiber characterization techniques. Optics Express, 2015, 23, 10540.	3.4	15
42	Laser frequency stabilization and spectroscopy at 2051 nm using a compact CO₂-filled Kagome hollow core fiber gas-cell system. Optics Express, 2018, 26, 28621.	3.4	15
43	The Thermal Phase Sensitivity of Both Coated and Uncoated Standard and Hollow Core Fibers Down to Cryogenic Temperatures. Journal of Lightwave Technology, 2020, 38, 2477-2484.	4.6	15
44	Beam-Steering All-Optical Switch for Multi-Core Fibers. , 2017, , .		15
45	Demonstration of opposing thermal sensitivities in hollow-core fibers with open and sealed ends. Optics Letters, 2019, 44, 4367.	3.3	15
46	<title>Advances in gallium lanthanum sulphide glass for optical fiber and devices</title>. , 2001, 4204, 278.		14
47	Real-time prediction of structural and optical properties of hollow-core photonic bandgap fibers during fabrication. Optics Letters, 2013, 38, 1382.	3.3	14
48	Observation of laser pulse propagation in optical fibers with a SPAD camera. Scientific Reports, 2017, 7, 43302.	3.3	14
49	Hollow-core fibres for temperature-insensitive fibre optics and its demonstration in an Optoelectronic oscillator. Scientific Reports, 2018, 8, 18015.	3.3	12
50	First Demonstration of a Broadband 37-cell Hollow Core Photonic Bandgap Fiber and Its Application to High Capacity Mode Division Multiplexing. , 2013, , .		12
51	Wide-bandwidth, low-loss, 19-cell hollow core photonic band gap fiber and its potential for low latency data transmission. , 2012, , .		11
52	Understanding Wavelength Scaling in 19-Cell Core Hollow-Core Photonic Bandgap Fibers. , 2014, , .		11
53	Picometer-scale surface roughness measurements inside hollow glass fibres. Optics Express, 2014, 22, 29554.	3.4	11
54	Demonstration of an 11km Hollow Core Photonic Bandgap Fiber for Broadband Low-latency Data Transmission. , 2015, , .		11

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55	81 Gb/s WDM transmission at 2Î¼m over 1.15 km of low-loss hollow core photonic bandgap fiber. , 2014, , .		10
56	Anisotropic Superattenuation of Capillary Waves on Driven Glass Interfaces. Physical Review Letters, 2017, 119, 235501.	7.8	10
57	Resonant SRS Filtering Fiber for High Power Fiber Laser Applications. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-9.	2.9	10
58	Ce-doped SiO 2 optical fibers for remote radiation sensing and measurement. , 2009, , .		9
59	Phase regeneration of DPSK signals in a highly nonlinear lead-silicate W-type fiber. Optics Express, 2012, 20, 27419.	3.4	9
60	Phase sensitive amplification in a highly nonlinear lead-silicate fiber. Optics Express, 2012, 20, 1629.	3.4	9
61	Experimental Demonstration of Improved Equalization Algorithm for IM/DD Fast OFDM. IEEE Photonics Technology Letters, 2015, 27, 1780-1783.	2.5	9
62	A Tuneable Multi-Core to Single Mode Fiber Coupler. IEEE Photonics Technology Letters, 2017, 29, 591-594.	2.5	9
63	Optoelectronic oscillator incorporating hollow-core photonic bandgap fiber. Optics Letters, 2017, 42, 2647.	3.3	9
64	Determination of the mid-IR femtosecond surface-damage threshold of germanium. Applied Physics A: Materials Science and Processing, 2013, 113, 127-133.	2.3	8
65	EVROS: All-optical programmable disaggregated data centre interconnect utilizing hollow-core bandgap fibre. , 2015, , .		8
66	Data transmission through up to 74.8 km of hollow-core fiber with coherent and direct-detect transceivers. , 2015, , .		8
67	Dual hollow-core anti-resonant fibres. Proceedings of SPIE, 2016, , .	0.8	8
68	Nondestructive measurement of the roughness of the inner surface of hollow core-photonic bandgap fibers. Optics Letters, 2016, 41, 5086.	3.3	8
69	Analysis of modal interference in Photonic Bandgap Fibres. , 2010, , .		7
70	Overcoming the Challenges of Splicing Dissimilar Diameter Solid-Core and Hollow-Core Photonic Band Gap Fibers. , 2013, , .		7
71	Robust Low Loss Splicing of Hollow Core Photonic Bandgap Fiber to Itself. , 2013, , .		7
72	Detection of methane at 1670-nm band with a hollow-core photonic bandgap fiber. , 2008, , .		6

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73	First Demonstration of a 2-<inline-formula> <tex-math notation="TeX">$mu{m m}$ </tex-math> </inline-formula> OTDR and Its Use in Photonic Bandgap <inline-formula> <tex-math notation="TeX">${m CO}_{2}$ </tex-math> </inline-formula> Sensing Fiber. IEEE Photonics Technology Letters, 2014, 26, 889-892.	2.5	6
74	Cavity ring-down in a photonic bandgap fiber gas cell. , 2008, , .		6
75	Novel fabrication method of highly-nonlinear silica holey fibres. , 2006, , .		5
76	Hollow Core Photonic Bandgap fibers for Telecommunications: Opportunities and Potential Issues. , 2012, , .		5
77	30.7 Tb/s (96Ã—320 Gb/s) DP-32QAM transmission over 19-cell Photonic Band Gap Fiber. , 2013, , .		4
78	Wide-bandwidth, low-loss, 19-cell hollow core photonic band gap fiber and its potential for low latency data transmission. , 2012, , .		4
79	First Investigation of Longitudinal Defects in Hollow Core Photonic Bandgap Fibers. , 2014, , .		4
80	Robustly single mode hollow core photonic bandgap fiber. , 2008, , .		3
81	Photonic bandgap fiber optical correlation spectroscopy gas sensor. Proceedings of SPIE, 2008, , .	0.8	3
82	A single-mode, high index-contrast, lead silicate glass fibre with high nonlinearity, broadband near-zero dispersion at telecommunication wavelengths. , 2010, , .		3
83	Emerging Optical Fibre Technologies with Potential Defence Applications. , 2012, , .		3
84	Microstructured fibers for high power applications. , 2005, , .		2
85	Comparison of Mode Properties of 7 and 19 Cells Core Hollow-Core Photonic Crystal Fibers. , 2007, , .		2
86	Bend sensors based on periodically tapered soft glass fibers. , 2011, , .		2
87	Detailed study of macrobending effects in a wide transmission bandwidth hollow-core photonic bandgap fiber. , 2016, , .		2
88	Real-Time Modal Analysis via Wavelength- Swept Spatial and Spectral (S²) Imaging. IEEE Photonics Technology Letters, 2016, , 1-1.	2.5	2
89	Spontaneous Raman scattering in hollow core photonic crystal fibres. , 2017, , .		2
90	Novel hollow core fibers for ultra-high power delivery. , 2017, , .		2

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91	Non-invasive Excitation of Meter-scale Electric Discharges in Gas-filled Hollow-core Photonic Crystal Fibers. , 2018, , .		2
92	Flat, Broadband Supercontinuum Generation at Low Pulse Energies in a Dispersion-Tailored Lead-Silicate Fibre. , 2011, , .		2
93	Accurate Loss and Surface Mode Modeling in Fabricated Hollow-Core Photonic Bandgap Fibers. , 2014, , .		2
94	First Demonstration of a Low Loss 37-cell Hollow Core Photonic Bandgap Fiber and its Use for Data Transmission. , 2013, , .		2
95	Virtual Draw of Tubular Hollow-Core Fibers. , 2018, , .		2
96	Growth of Ammonium Chloride on Cleaved End-Facets of Hollow Core Fibers. , 2020, , .		2
97	Possible Future Applications of Photonic Bandgap Fiber in Non-Repeatered Transmission Systems. , 2007, , .		1
98	Control of modal properties and modal effects in air guiding photonic bandgap fibres. , 2009, , .		1
99	Microstructured optical fibers for gas sensing: design, fabrication, and post-fab processing. , 2009, , .		1
100	Applications of highly nonlinear dispersion tailored lead silicate fibres for high speed optical communications. , 2010, , .		1
101	Towards real-time mode content characterization of multimode fibers. , 2014, , .		1
102	Up to 64QAM (30 Gbit/s) directly-modulated and directly-detected OFDM at 2 μm wavelength. , 2014, , .		1
103	High sensitivity gas detection using Hollow Core Photonic Bandgap Fibres designed for mid-IR operation. , 2014, , .		1
104	Hollow Core Photonic Bandgap Fibers for Mid-IR Applications. , 2014, , .		1
105	High sensitivity methane and ethane detection using low-loss mid-IR hollow-core photonic bandgap fibers. Proceedings of SPIE, 2014, , .	0.8	1
106	Novel fluid dynamics model to predict draw of hollow core photonic band-gap fibres. , 2014, , .		1
107	Photonic bandgap fibres for low-latency data transmission. , 2015, , .		1
108	Optoelectronic oscillator with low temperature induced frequency drift. , 2016, , .		1

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109	Design and characterisation of SRS filtering optical fibre for pulsed fibre laser beam delivery. , 2017, , .		1
110	Ultralow thermal sensitivity of phase and propagation delay in hollow-core fibers. , 2018, , .		1
111	S2 Measurement of Higher Order Mode Content in Low Loss Hypocycloid KagomÃ© Hollow Core Photonic Crystal Fiber. , 2016, , .		1
112	Phase Sensitive Amplification in a Highly Nonlinear Lead-Silicate Fibre. , 2011, , .		1
113	Recent Advances in Microstructured Fibers for Power Delivery. , 2009, , .		1
114	Mid-infrared Transmission Properties of Step index and Large Mode Area ZnSe Microstructured Optical Fibers. , 2012, , .		1
115	Accurate Modelling of Hollow Core Photonic Bandgap Fibre. , 2014, , .		1
116	Inspection of Defect-Induced Mode Coupling in Hollow-Core Photonic Bandgap Fibers Using Time-of-Flight. , 2015, , .		1
117	High Capacity, Low Latency Data Transmission Using Hollow Core-Photonic Bandgap Fibers. , 2016, , .		1
118	Comparison between the Optical Performance of Photonic Bandgap and Antiresonant Hollow Core Fibers after Long-Term Exposure to the Atmosphere. , 2022, , .		1
119	Holey fibre delivered radiation for laser curing and trimming of direct write components. , 2006, , .		0
120	Microstructured fibres: a positive impact on defence technology?. , 2006, 6397, 639702.		0
121	RGB generation in secondary cores of microstructured fibres. , 2007, , .		0
122	Femtosecond Ti:sapphire laser fabrication of micro-channels in microstructured optical fibres. , 2007, , .		0
123	RGB generation by four-wave mixing in small-core holey fibers. Proceedings of SPIE, 2007, , .	0.8	0
124	Hollow core photonic bandgap fibre for truly single mode operation. , 2008, , .		0
125	Fabrication of metre-long fibre tapers. , 2008, , .		0
126	Advanced fibre designs for high power laser beam delivery and generation. , 2009, , .		0

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127	Multi-coupling gap system modeling for methane detection using hollow-core photonic bandgap fibers. , 2009, , .		0
128	Recent advances in microstructured fibers for laser delivery and generation. , 2010, , .		0
129	Low Loss Amorphous Silicon Microstructured Optical Fiber with Large Mode Area Behavior. , 2010, , .		0
130	Hollow-Bottle Optical Microresonators. , 2011, , .		0
131	Development of low loss, wide bandwidth hollow core photonic bandgap fibres for telecom applications. , 2012, , .		0
132	Recent Advances in Hollow-Core Photonic Bandgap Fibres. , 2014, , .		0
133	Low Loss, Tightly Coilable, Hollow Core Photonic Bandgap Fibers for Mid-IR Applications. , 2014, , .		0
134	Development of large core hollow core photonic bandgap fibres for telecommunications applications. , 2014, , .		0
135	Measuring the group velocity dispersion of higher order modes in hollow core photonic bandgap fibre. , 2015, , .		0
136	40 Gbps WDM transmission over 1.15 km HC-PBGF using the first InP-based Mach Zehnder modulator at 2 μm. , 2015, , .		0
137	Demonstration of long lengths of longitudinally uniform hollow core Photonic Bandgap fibre and their demonstration for low latency data transmission. , 2015, , .		0
138	Recent advances in hollow fiber technology for telecoms applications. , 2016, , .		0
139	Coherent Population Trapping in Cs-filled Kagome Hollow Core Fibers. , 2018, , .		0
140	Photonic crystal fiber for industrial laser delivery. , 2005, , .		0
141	Predicting Structural and Optical Properties of Hollow-Core Photonic Bandgap Fibers from Second Stage Preforms. , 2013, , .		0
142	Hollow Core Fiber Technology for Data Transmission. , 2014, , .		0
143	Roughness measurements inside hollow glass fibers. , 2016, , .		0