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	Comparison between the Optical Performance of Photonic Bandgap and Antiresonant Hollow Core Fibers after Long-Term Exposure to the Atmosphere. , 2022, , .		1
2	Super-broadband on-chip continuous spectral translation unlocking coherent optical communications beyond conventional telecom bands. Nature Communications, 2022, 13, .	12.8	18
3	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
4	Growth of Ammonium Chloride on Cleaved End-Facets of Hollow Core Fibers. , 2020, , .		2
5	Low-Loss and Low-Back-Reflection Hollow-Core to Standard Fiber Interconnection. IEEE Photonics Technology Letters, 2019, 31, 723-726.	2.5	27
6	Nonlinearity-Free Coherent Transmission in Hollow-Core Antiresonant Fiber. Journal of Lightwave Technology, 2019, 37, 909-916.	4.6	43
7	Temperature insensitive fiber interferometry. Optics Letters, 2019, 44, 2768.	3.3	21
8	Demonstration of opposing thermal sensitivities in hollow-core fibers with open and sealed ends. Optics Letters, 2019, 44, 4367.	3.3	15
9	Hollow-core fibres for temperature-insensitive fibre optics and its demonstration in an Optoelectronic oscillator. Scientific Reports, 2018, 8, 18015.	3.3	12
10	Ultralow thermal sensitivity of phase and propagation delay in hollow-core fibers. , 2018, , .		1
11	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
12	Record Low-Loss 1.3dB/km Data Transmitting Antiresonant Hollow Core Fibre. , 2018, , .		25
13	Coherent Population Trapping in Cs-filled Kagome Hollow Core Fibers. , 2018, , .		0
14	Non-invasive Excitation of Meter-scale Electric Discharges in Gas-filled Hollow-core Photonic Crystal Fibers. , 2018, , .		2
15	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
16	Virtual Draw of Tubular Hollow-Core Fibers. , 2018, , .		2
17	A Tuneable Multi-Core to Single Mode Fiber Coupler. IEEE Photonics Technology Letters, 2017, 29, 591-594.	2.5	9
18	Design and characterisation of SRS filtering optical fibre for pulsed fibre laser beam delivery. , 2017, , .		1

#	Article	IF	Citations
19	Observation of laser pulse propagation in optical fibers with a SPAD camera. Scientific Reports, 2017, 7, 43302.	3.3	14
20	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
21	Anisotropic Superattenuation of Capillary Waves on Driven Glass Interfaces. Physical Review Letters, 2017, 119, 235501.	7.8	10
22	Spontaneous Raman scattering in hollow core photonic crystal fibres. , 2017, , .		2
23	Low-loss Kagome hollow-core fibers operating from the near- to the mid-IR. Optics Letters, 2017, 42, 2571.	3.3	38
24	How to make the propagation time through an optical fiber fully insensitive to temperature variations. Optica, 2017, 4, 659.	9.3	49
25	Novel hollow core fibers for ultra-high power delivery. , 2017, , .		2
26	Beam-Steering All-Optical Switch for Multi-Core Fibers. , 2017, , .		15
27	Optoelectronic oscillator incorporating hollow-core photonic bandgap fiber. Optics Letters, 2017, 42, 2647.	3.3	9
28	Modal content in hypocycloid KagomÃ© hollow core photonic crystal fibers. Optics Express, 2016, 24, 15798.	3.4	17
29	Detailed study of macrobending effects in a wide transmission bandwidth hollow-core photonic bandgap fiber. , 2016, , .		2
30	Optoelectronic oscillator with low temperature induced frequency drift. , 2016, , .		1
31	Recent advances in hollow fiber technology for telecoms applications. , 2016, , .		0
32	Dual hollow-core anti-resonant fibres. Proceedings of SPIE, 2016, , .	0.8	8
33	Real-Time Modal Analysis via Wavelength- Swept Spatial and Spectral (S²) Imaging. IEEE Photonics Technology Letters, 2016, , 1-1.	2.5	2
34	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
35	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
36	S2 Measurement of Higher Order Mode Content in Low Loss Hypocycloid KagomÃ© Hollow Core Photonic Crystal Fiber. , 2016, , .		1

#	Article	IF	Citations
37	Nondestructive measurement of the roughness of the inner surface of hollow core-photonic bandgap fibers. Optics Letters, 2016, 41, 5086.	3.3	8
38	High Capacity, Low Latency Data Transmission Using Hollow Core-Photonic Bandgap Fibers. , 2016, , .		1
39	Roughness measurements inside hollow glass fibers. , 2016, , .		0
40	Photonic bandgap fibres for low-latency data transmission. , 2015, , .		1
41	EVROS: All-optical programmable disaggregated data centre interconnect utilizing hollow-core bandgap fibre. , 2015, , .		8
42	Ultralow thermal sensitivity of phase and propagation delay in hollow core optical fibres. Scientific Reports, 2015, 5, 15447.	3.3	75
43	Demonstration of an 11km Hollow Core Photonic Bandgap Fiber for Broadband Low-latency Data Transmission. , 2015, , .		11
44	Measuring the group velocity dispersion of higher order modes in hollow core photonic bandgap fibre. , 2015, , .		0
45	40 Gbps WDM transmission over 1.15 km HC-PBGF using the first InP-based Mach Zehnder modulator at 2 μm. , 2015, , .		0
46	Demonstration of long lengths of longitudinally uniform hollow core Photonic Bandgap fibre and their demonstration for low latency data transmission. , 2015, , .		0
47	Data transmission through up to 74.8 km of hollow-core fiber with coherent and direct-detect transceivers. , 2015, , .		8
48	High-Capacity Directly Modulated Optical Transmitter for 2-Î¼m Spectral Region. Journal of Lightwave Technology, 2015, 33, 1373-1379.	4.6	65
49	Accurate calibration of S^2 and interferometry based multimode fiber characterization techniques. Optics Express, 2015, 23, 10540.	3.4	15
50	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
51	Dense WDM transmission at 2â€‰â€‰Î¼m enabled by an arrayed waveguide grating. Optics Letters, 2015, 40, 3308.	3.3	42
52	Accurate modelling of fabricated hollow-core photonic bandgap fibers. Optics Express, 2015, 23, 23117.	3.4	24
53	Experimental Demonstration of Improved Equalization Algorithm for IM/DD Fast OFDM. IEEE Photonics Technology Letters, 2015, 27, 1780-1783.	2.5	9
54	Inspection of Defect-Induced Mode Coupling in Hollow-Core Photonic Bandgap Fibers Using Time-of-Flight. , 2015, , .		1

#	Article	IF	Citations
55	81 Gb/s WDM transmission at 2Î¼m over 1.15 km of low-loss hollow core photonic bandgap fiber. , 2014, , .		10
56	Towards real-time mode content characterization of multimode fibers. , 2014, , .		1
57	Up to 64QAM (30 Gbit/s) directly-modulated and directly-detected OFDM at 2 μm wavelength. , 2014, , .		1
58	High sensitivity gas detection using Hollow Core Photonic Bandgap Fibres designed for mid-IR operation. , 2014, , .		1
59	Recent Advances in Hollow-Core Photonic Bandgap Fibres. , 2014, , .		0
60	Hollow Core Photonic Bandgap Fibers for Mid-IR Applications. , 2014, , .		1
61	Understanding Wavelength Scaling in 19-Cell Core Hollow-Core Photonic Bandgap Fibers. , 2014, , .		11
62	Low-loss and low-bend-sensitivity mid-infrared guidance in a hollow-coreâ€“photonic-bandgap fiber. Optics Letters, 2014, 39, 295.	3.3	65
63	Fast and broadband fiber dispersion measurement with dense wavelength sampling. Optics Express, 2014, 22, 943.	3.4	15
64	Picometer-scale surface roughness measurements inside hollow glass fibres. Optics Express, 2014, 22, 29554.	3.4	11
65	High sensitivity methane and ethane detection using low-loss mid-IR hollow-core photonic bandgap fibers. Proceedings of SPIE, 2014, , .	0.8	1
66	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
67	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
68	Low Loss, Tightly Coilable, Hollow Core Photonic Bandgap Fibers for Mid-IR Applications. , 2014, , .		0
69	Development of large core hollow core photonic bandgap fibres for telecommunications applications. , 2014, , .		0
70	Novel fluid dynamics model to predict draw of hollow core photonic band-gap fibres. , 2014, , .		1
71	Accurate Loss and Surface Mode Modeling in Fabricated Hollow-Core Photonic Bandgap Fibers. , 2014, , .		2
72	Accurate Modelling of Hollow Core Photonic Bandgap Fibre. , 2014, , .		1

#	Article	IF	Citations
73	Hollow Core Fiber Technology for Data Transmission. , 2014, , .		0
74	First Investigation of Longitudinal Defects in Hollow Core Photonic Bandgap Fibers. , 2014, , .		4
75	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
76	Towards high-capacity fibre-optic communications at the speed of light in vacuum. Nature Photonics, 2013, 7, 279-284.	31.4	289
77	Real-time prediction of structural and optical properties of hollow-core photonic bandgap fibers during fabrication. Optics Letters, 2013, 38, 1382.	3.3	14
78	Overcoming the Challenges of Splicing Dissimilar Diameter Solid-Core and Hollow-Core Photonic Band Gap Fibers. , 2013, , .		7
79	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
80	Hollow-core photonic bandgap fibers: technology and applications. Nanophotonics, 2013, 2, 315-340.	6.0	170
81	Gamma irradiation of minimal latency Hollow-Core Photonic Bandgap Fibres. Journal of Instrumentation, 2013, 8, C12010-C12010.	1.2	16
82	Robust Low Loss Splicing of Hollow Core Photonic Bandgap Fiber to Itself. , 2013, , .		7
83	30.7 Tb/s (96Ã—320 Gb/s) DP-32QAM transmission over 19-cell Photonic Band Gap Fiber. , 2013, , .		4
84	First Demonstration of a Broadband 37-cell Hollow Core Photonic Bandgap Fiber and Its Application to High Capacity Mode Division Multiplexing. , 2013, , .		12
85	First Demonstration of a Low Loss 37-cell Hollow Core Photonic Bandgap Fiber and its Use for Data Transmission. , 2013, , .		2
86	Predicting Structural and Optical Properties of Hollow-Core Photonic Bandgap Fibers from Second Stage Preforms. , 2013, , .		0
87	Emerging Optical Fibre Technologies with Potential Defence Applications. , 2012, , .		3
88	First Demonstration of 2Âµm Data Transmission in a Low-Loss Hollow Core Photonic Bandgap Fiber. , 2012, , .		18
89	Phase regeneration of DPSK signals in a highly nonlinear lead-silicate W-type fiber. Optics Express, 2012, 20, 27419.	3.4	9
90	Phase sensitive amplification in a highly nonlinear lead-silicate fiber. Optics Express, 2012, 20, 1629.	3.4	9

#	Article	IF	Citations
91	Development of low loss, wide bandwidth hollow core photonic bandgap fibres for telecom applications. , 2012, , .		0
92	Supercontinuum generation in non-silica fibers. Optical Fiber Technology, 2012, 18, 327-344.	2.7	89
93	Wide-bandwidth, low-loss, 19-cell hollow core photonic band gap fiber and its potential for low latency data transmission. , 2012, , .		11
94	Hollow Core Photonic Bandgap fibers for Telecommunications: Opportunities and Potential Issues. , 2012, , .		5
95	Wide-bandwidth, low-loss, 19-cell hollow core photonic band gap fiber and its potential for low latency data transmission. , 2012, , .		4
96	Mid-infrared Transmission Properties of Step index and Large Mode Area ZnSe Microstructured Optical Fibers. , 2012, , .		1
97	All-solid highly nonlinear singlemode fibers with a tailored dispersion profile. Optics Express, 2011, 19, 66.	3.4	52
98	Intensity measurement bend sensors based on periodically tapered soft glass fibers. Optics Letters, 2011, 36, 558.	3.3	87
99	Bend sensors based on periodically tapered soft glass fibers. , 2011, , .		2
100	Hollow-Bottle Optical Microresonators. , 2011, , .		0
101	Phase Sensitive Amplification in a Highly Nonlinear Lead-Silicate Fibre. , 2011, , .		1
102	Flat, Broadband Supercontinuum Generation at Low Pulse Energies in a Dispersion-Tailored Lead-Silicate Fibre. , 2011, , .		2
103	Recent advances in microstructured fibers for laser delivery and generation. , 2010, , .		0
104	Low Loss Amorphous Silicon Microstructured Optical Fiber with Large Mode Area Behavior. , 2010, , .		0
105	Dispersion controlled highly nonlinear fibers for all-optical processing at telecoms wavelengths. Optical Fiber Technology, 2010, 16, 378-391.	2.7	51
106	A single-mode, high index-contrast, lead silicate glass fibre with high nonlinearity, broadband near-zero dispersion at telecommunication wavelengths. , 2010, , .		3
107	Near-zero dispersion, highly nonlinear lead-silicate W-type fiber for applications at 155Î¼m. Optics Express, 2010, 18, 15747.	3.4	29
108	Applications of highly nonlinear dispersion tailored lead silicate fibres for high speed optical communications. , 2010, , .		1

#	Article	IF	Citations
109	Analysis of modal interference in Photonic Bandgap Fibres. , 2010, , .		7
110	Control of modal properties and modal effects in air guiding photonic bandgap fibres. , 2009, , .		1
111	Advanced fibre designs for high power laser beam delivery and generation. , 2009, , .		0
112	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
113	Microstructured optical fibers for gas sensing: design, fabrication, and post-fab processing. , 2009, , .		1
114	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
115	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
116	Large mode area silicon microstructured fiber with robust dual mode guidance. Optics Express, 2009, 17, 18076.	3.4	35
117	Multi-coupling gap system modeling for methane detection using hollow-core photonic bandgap fibers. , 2009, , .		0
118	Ce-doped SiO 2 optical fibers for remote radiation sensing and measurement. , 2009, , .		9
119	Recent Advances in Microstructured Fibers for Power Delivery. , 2009, , .		1
120	Novel Method for the Fabrication of Long Optical Fiber Tapers. IEEE Photonics Technology Letters, 2008, 20, 1264-1266.	2.5	34
121	Robustly single mode hollow core photonic bandgap fiber. Optics Express, 2008, 16, 4337.	3.4	92
122	Robustly single mode hollow core photonic bandgap fiber. , 2008, , .		3
123	Hollow core photonic bandgap fibre for truly single mode operation. , 2008, , .		0
124	Detection of methane at 1670-nm band with a hollow-core photonic bandgap fiber. , 2008, , .		6
125	Photonic bandgap fiber optical correlation spectroscopy gas sensor. Proceedings of SPIE, 2008, , .	0.8	3
126	Fabrication of metre-long fibre tapers. , 2008, , .		0

#	Article	IF	Citations
127	Cavity ring-down in a photonic bandgap fiber gas cell. , 2008, , .		6
128	RGB generation in secondary cores of microstructured fibres. , 2007, , .		0
129	Femtosecond Ti:sapphire laser fabrication of micro-channels in microstructured optical fibres. , 2007, , .		0
130	Possible Future Applications of Photonic Bandgap Fiber in Non-Repeatered Transmission Systems. , 2007, , .		1
131	Comparison of Mode Properties of 7 and 19 Cells Core Hollow-Core Photonic Crystal Fibers. , 2007, , .		2
132	RGB generation by four-wave mixing in small-core holey fibers. Proceedings of SPIE, 2007, , .	0.8	0
133	Efficient white light generation in secondary cores of holey fibers. Optics Express, 2007, 15, 3729.	3.4	31
134	Micro-channels machined in microstructured optical fibers by femtosecond laser. Optics Express, 2007, 15, 8731.	3.4	118
135	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
136	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
137	Optimizing the usable bandwidth and loss through core design in realistic hollow-core photonic bandgap fibers. Optics Express, 2006, 14, 7974.	3.4	88
138	Holey fibre delivered radiation for laser curing and trimming of direct write components. , 2006, , .		0
139	Microstructured fibres: a positive impact on defence technology?. , 2006, 6397, 639702.		0
140	Novel fabrication method of highly-nonlinear silica holey fibres. , 2006, , .		5
141	Microstructured fibers for high power applications. , 2005, , .		2
142	Photonic crystal fiber for industrial laser delivery. , 2005, , .		0
143	<title>Advances in gallium lanthanum sulphide glass for optical fiber and devices</title>. , 2001, 4204, 278.		14