

# Federica Poli

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7889341/publications.pdf>

Version: 2024-02-01

127  
papers

1,385  
citations

394421

19  
h-index

361022

35  
g-index

129  
all docs

129  
docs citations

129  
times ranked

776  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tailoring of Flattened Dispersion in Highly Nonlinear Photonic Crystal Fibers. IEEE Photonics Technology Letters, 2004, 16, 1065-1067.	2.5	156
2	Dispersion properties of square-lattice photonic crystal fibers. Optics Express, 2004, 12, 941.	3.4	107
3	Characterization of microstructured optical fibers for wideband dispersion compensation. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2003, 20, 1958.	1.5	75
4	Toward A Highly Specific DNA Biosensor: PNA-Modified Suspended-Core Photonic Crystal Fibers. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 967-972.	2.9	72
5	Polarization splitter based on a square-lattice photonic-crystal fiber. Optics Letters, 2006, 31, 441.	3.3	68
6	Amplification properties of Er/sub 3+/-doped photonic crystal fibers. Journal of Lightwave Technology, 2003, 21, 782-788.	4.6	64
7	Single-mode regime of square-lattice photonic crystal fibers. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2005, 22, 1655.	1.5	52
8	Confinement loss and nonlinearity analysis of air-guiding modified honeycomb photonic bandgap fibers. IEEE Photonics Technology Letters, 2006, 18, 508-510.	2.5	42
9	Design of all-solid leakage channel fibers with large mode area and low bending loss. Optics Express, 2009, 17, 4913.	3.4	38
10	Study of raman amplification properties in triangular photonic crystal fibers. Journal of Lightwave Technology, 2003, 21, 2247-2254.	4.6	37
11	Design of Erbium-Doped Triangular Photonic-Crystal-Fiber-Based Amplifiers. IEEE Photonics Technology Letters, 2004, 16, 2027-2029.	2.5	37
12	Thermal Effects on the Single-Mode Regime of Distributed Modal Filtering Rod Fiber. Journal of Lightwave Technology, 2012, 30, 3494-3499.	4.6	37
13	All-Silica Hollow-Core Microstructured Bragg Fibers for Biosensor Application. IEEE Sensors Journal, 2008, 8, 1280-1286.	4.7	35
14	Cut-off analysis of 19-cell Yb-doped double-cladding rod-type photonic crystal fibers. Optics Express, 2011, 19, 9896.	3.4	27
15	Modeling of Photonic Crystal Fiber Raman Amplifiers. Journal of Lightwave Technology, 2004, 22, 1707-1713.	4.6	26
16	All-plastic optical-fiber level sensor. Microwave and Optical Technology Letters, 2005, 46, 520-522.	1.4	26
17	S-band depressed-cladding erbium-doped fiber amplifier with double-pass configuration. Optics Letters, 2006, 31, 3228.	3.3	26
18	Photonic Crystal Fibers. , 2007, , .		26

#	ARTICLE	IF	CITATIONS
19	Analysis of the Modal Content Into Large-Mode-Area Photonic Crystal Fibers Under Heat Load. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 323-330.	2.9	26
20	Dispersion Engineering of Highly Nonlinear Chalcogenide Suspended-Core Fibers. IEEE Photonics Journal, 2015, 7, 1-8.	2.0	25
21	Four different diode lasers comparison on soft tissues surgery: a preliminary <i>in vivo</i> study. Laser Therapy, 2016, 25, 105-114.	0.3	21
22	Optical parametric amplification in all-silica triangular-core photonic crystal fibers. Applied Physics B: Lasers and Optics, 2005, 81, 251-255.	2.2	19
23	Single-Mode Regime in Large-Mode-Area Rare-Earth-Doped Rod-Type PCFs. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 54-60.	2.9	19
24	Single-mode analysis of Yb-doped double-cladding distributed spectral filtering photonic crystal fibers. Optics Express, 2010, 18, 27197.	3.4	18
25	Hybrid Ytterbium-doped large-mode-area photonic crystal fiber amplifier for long wavelengths. Optics Express, 2012, 20, 6010.	3.4	18
26	Numerical Modeling of S-Band EDFA Based on Distributed Fiber Loss. Journal of Lightwave Technology, 2008, 26, 2168-2174.	4.6	17
27	Thermal modeling of gain competition in Yb-doped large-mode-area photonic-crystal fiber amplifier. Optics Express, 2015, 23, 18638.	3.4	17
28	Single-Mode Propagation in Yb-Doped Large Mode Area Fibers With Reduced Cladding Symmetry. IEEE Photonics Technology Letters, 2014, 26, 2454-2457.	2.5	15
29	Suppression of Higher-Order Modes by Segmented Core Doping in Rod-Type Photonic Crystal Fibers. Journal of Lightwave Technology, 2009, 27, 4935-4942.	4.6	14
30	Mode discrimination criterion for effective differential amplification in Yb-doped fiber design for high power operation. Optics Express, 2017, 25, 29013.	3.4	14
31	Theory of thermo-optic instabilities in dual-core fiber amplifiers. Optics Letters, 2018, 43, 4775.	3.3	12
32	Microfabrication of polymer microneedle arrays using two-photon polymerization. Journal of Photochemistry and Photobiology B: Biology, 2022, 229, 112424.	3.8	12
33	Static and dynamic mode instabilities in dual-core fiber amplifiers. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 757.	2.1	11
34	Design of photonic-crystal and wire waveguide interface. Journal of Lightwave Technology, 2005, 23, 2740-2745.	4.6	9
35	Guiding Properties of Silica/Air Hollow-Core Bragg Fibers. Journal of Lightwave Technology, 2008, 26, 1877-1884.	4.6	9
36	Single-Mode Design Guidelines for 19-Cell Double-Cladding Photonic Crystal Fibers. Journal of Lightwave Technology, 2012, 30, 1909-1914.	4.6	9

#	ARTICLE	IF	CITATIONS
37	Numerical design for efficiently coupling conventional and photonic-crystal waveguides. <i>Microwave and Optical Technology Letters</i> , 2004, 42, 196-199.	1.4	8
38	Disilicate Dental Ceramic Surface Preparation by 1070 nm Fiber Laser: Thermal and Ultrastructural Analysis. <i>Bioengineering</i> , 2018, 5, 10.	3.5	8
39	Thermal Effects on Modal Properties of Dual-Core Yb-Doped Fibers. <i>Journal of Lightwave Technology</i> , 2019, 37, 1075-1083.	4.6	8
40	Electromagnetic field confined and tailored with a few air holes in a photonic-crystal fiber. <i>Applied Physics B: Lasers and Optics</i> , 2005, 81, 409-414.	2.2	7
41	Air-guiding photonic crystal fibers with modified honeycomb lattice. , 0, , .		7
42	Numerical analysis of hollow core photonic band gap fibers with modified honeycomb lattice. <i>Optical and Quantum Electronics</i> , 2007, 38, 903-912.	3.3	7
43	Full-vector modeling of thermally-driven gain competition in Yb-doped reduced symmetry photonic-crystal fiber. <i>Optical and Quantum Electronics</i> , 2016, 48, 1.	3.3	7
44	Multipump flattened-gain Raman amplifiers based on photonic-crystal fibers. <i>IEEE Photonics Technology Letters</i> , 2005, 17, 2556-2558.	2.5	6
45	Confinement loss spectral behavior in hollow-core Bragg fibers. <i>Optics Letters</i> , 2007, 32, 3164.	3.3	6
46	Scaling properties of guided acoustic-wave Brillouin scattering in single-mode fibers. <i>Optics Express</i> , 2021, 29, 15528.	3.4	6
47	Nanosecond pulsed fiber laser irradiation for enhanced zirconia crown adhesion: Morphological, chemical, thermal and mechanical analysis. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2021, 219, 112189.	3.8	6
48	New design of single-mode large-mode-area photonic crystal fibers. , 2005, 5950, 209.		5
49	Optical parametric amplification in dispersion-flattened highly nonlinear photonic crystal fibers. , 2005, , .		4
50	All-silica double-pass S+C+L band EDFA. <i>Electronics Letters</i> , 2007, 43, 329.	1.0	4
51	Low-cost level and pressure plastic optical fiber sensor. , 2006, 6189, 559.		3
52	Tunability of erbium-doped fibre ring laser based on bending loss of active fibre. <i>Electronics Letters</i> , 2007, 43, 500.	1.0	3
53	Simultaneous liquid level and refractive index measurements with a POF-based sensor. , 2007, , .		3
54	Doped fiber lasers: From telecom to industrial applications. , 2008, , .		3

#	ARTICLE	IF	CITATIONS
55	High brilliance fiber lasers for the scribing of photovoltaic modules. , 2009, , .		3
56	Air-suspended solid-core fibers for sensing. , 2009, , .		3
57	Long period grating-based fiber optic sensor for label-free DNA detection. , 2011, , .		3
58	Use of 1070 nm fiber lasers in oral surgery: preliminary <i>ex vivo</i> study with FBG temperature monitoring. Laser Therapy, 2017, 26, 311-318.	0.3	3
59	Cutoff properties of large-mode-area photonic crystal fibers. , 0, , .		2
60	Bending influence on depressed-cladding EDFA gain spectrum. , 0, , .		2
61	Square-Lattice Photonic Crystal Fiber Cutoff Properties. , 2006, , .		2
62	Bending-induced single-mode behaviour of a polarizing double-clad Yb-doped photonic crystal fiber. , 2010, , .		2
63	Comparison of thermally-induced single-mode regime changes in Yb-doped large mode area photonic crystal fibers. , 2013, , .		2
64	Thermal effect-resilient design of large mode area double-cladding Yb-doped photonic crystal fibers. Proceedings of SPIE, 2013, , .	0.8	2
65	Large mode area aperiodic fiber designs for robust singlemode emission under high thermal load. , 2015, , .		2
66	Chalcogenide suspended-core fibers for supercontinuum generation in the mid-infrared. , 2015, , .		2
67	Mode Phase Variation and Sensitivity to Thermal Load in Three-Core Optical Fibers. Journal of Lightwave Technology, 2020, 38, 2400-2405.	4.6	2
68	Gain flatness in photonic crystal fiber Raman amplifiers. , 2005, , .		1
69	Spectral Behavior of Integrated Antiresonant Reflecting Hollow-Core Waveguides. Journal of Lightwave Technology, 2007, 25, 2599-2604.	4.6	1
70	Single air-hole ring polygonal photonic crystal fibers with reduced bending loss and field distortion. , 2008, , .		1
71	Guided mode cutoff in rare-earth doped rod-type PCFs. , 2008, , .		1
72	Bio-sensor based on a hollow-core Bragg fiber. , 2008, , .		1

#	ARTICLE	IF	CITATIONS
73	Guiding and amplification properties of rod-type photonic crystal fibers with sectioned core doping. Proceedings of SPIE, 2009, , .	0.8	1
74	Guiding properties of kagome-lattice hollow-core fibers. , 2010, , .		1
75	DNA recognition by peptide nucleic acid-modified PCFs: from models to real samples. , 2010, , .		1
76	Recent status and prospects of the EU-funded ALPINE project. Proceedings of SPIE, 2011, , .	0.8	1
77	Single-mode regime of 19-cell Yb-doped double-cladding photonic crystal fibers. , 2011, , .		1
78	Double Tilted Fiber Bragg Grating for label-free DNA detection. , 2011, , .		1
79	Thermal-induced refractive index change effects on distributed modal filtering properties of rod-type photonic crystal fibers. , 2012, , .		1
80	Avoided-crossing based modal cut-off analysis of 19-cell double-cladding photonic crystal fibers. Proceedings of SPIE, 2012, , .	0.8	1
81	Microstructured optical fiber Bragg grating sensor for DNA detection. Proceedings of SPIE, 2013, , .	0.8	1
82	Double-cladding photonic crystal fibers with reduced cladding symmetry for Tm-doped lasers. Proceedings of SPIE, 2014, , .	0.8	1
83	Inner cladding influence on large mode area photonic crystal fiber properties under severe heat load. , 2016, , .		1
84	Hard dental tissues laser welding: a new help for fractured teeth? A preliminary <i>ex vivo</i> study. Laser Therapy, 2018, 27, 105-110.	0.3	1
85	Thermo-optical numerical modal analysis of multicore fibers for high power lasers and amplifiers. Optical Fiber Technology, 2022, 70, 102857.	2.7	1
86	Scanning near-field optical microscope for characterization of single mode fibers. , 2005, , .		0
87	Polarization selective coupling in three-core holey fibers. , 0, , .		0
88	In- and out-coupling of light in photonic-crystal and conventional dielectric waveguides of arbitrary width. , 0, , .		0
89	Modified Honeycomb Photonic Bandgap Fiber Effectively Single-Mode Regime: A Numerical Analysis. , 2006, , .		0
90	From S- to C-band amplification in a depressed-cladding EDFA. , 2006, , .		0

#	ARTICLE	IF	CITATIONS
91	Scanning Near-Field Microscopy of Photonic Crystal Fibers. , 2006, , .		0
92	Nonlinear photonic crystal fiber with high birefringence made of silicate glass. , 2006, , .		0
93	Analysis of the dependence of the guided-mode field distribution on the silica bridges in hollow-core Bragg fibers. , 2007, , .		0
94	Surface mode free and highly birefringent single-mode hollow core photonic bandgap fibers. , 2007, , .		0
95	Spectral Behavior and Guided-to-Surface Mode Transition of Arch-Shaped Hollow-Core Waveguides. , 2007, , .		0
96	Finite-element based photonic crystal fiber analysis: From solid to hollow core fibers. , 2008, , .		0
97	Fundamental and high-order mode bending loss in leakage channel fibers. , 2008, , .		0
98	Dynamic behaviour of an Ytterbium-doped rodlike PCF laser. , 2009, , .		0
99	Guided mode gain competition in Yb-doped rod-type photonic crystal fibers. , 2009, , .		0
100	Octagonal Large-Mode-Area Leakage Channel Fiber with Reduced Bending Loss. , 2010, , .		0
101	Higher-order mode suppression in rod-type photonic crystal fibers with sectioned doping and enlarged core. , 2010, , .		0
102	Hybrid large mode area photonic crystal fiber for distributed spectral filtering and single-mode operation. Proceedings of SPIE, 2011, , .	0.8	0
103	Effective area of a bent polarizing double-clad Yb-doped photonic crystal fiber. , 2011, , .		0
104	Thermal effects in Yb-doped double-cladding Distributed Modal Filtering rod-type fibers. , 2012, , .		0
105	Anti-symmetric hybrid photonic crystal fibers with enhanced filtering and bending properties. , 2012, , .		0
106	Ytterbium-doped large-mode-area photonic crystal fiber amplifier with gain shaping for use at long wavelengths. Proceedings of SPIE, 2012, , .	0.8	0
107	Tm-doped Rod-type Photonic Crystal Fibers with Symmetry-Free Cladding. , 2014, , .		0
108	Thermo-optical effects in large mode area photonic crystal fibers. , 2014, , .		0

#	ARTICLE	IF	CITATIONS
109	Yb-doped large mode area fibers with reduced cladding symmetry. Proceedings of SPIE, 2015, , .	0.8	0
110	Highly nonlinear chalcogenide suspended-core fibers for applications in the mid-infrared. Proceedings of SPIE, 2015, , .	0.8	0
111	Modelling of thermal effects and gain competition in Yb-doped large mode area photonic crystal fibers. , 2016, , .		0
112	Thermal effects and gain competition in Yb-doped large mode area fibers for high-power applications. , 2016, , .		0
113	Inner cladding influence on mode interaction in symmetry-free photonic crystal fibers under heat load. Optical and Quantum Electronics, 2017, 49, 1.	3.3	0
114	Gain competition in Yb-doped symmetry-free photonic crystal fibers under severe heat load. , 2017, , .		0
115	1070 nm Fiber laser and soft tissues oral surgery: Ex vivo study with FBG temperature recording. , 2017, , .		0
116	Improved performances of photonic crystal fibers for high power laser operation. , 2017, , .		0
117	Thermal induced dynamics of gain competition in Yb-doped Symmetry-Free Photonic Crystal Fibers. , 2017, , .		0
118	Guidance properties and thermal effects in 9-core Yb-doped fiber for high power applications. , 2019, , .		0
119	Modal Properties of Yb-Doped 4-Core Fibers under Heat Load. , 2019, , .		0
120	Heat Load Influence on Supermodes in Yb-Doped Four-Core Fibers. Journal of Lightwave Technology, 2021, 39, 263-269.	4.6	0
121	Highly Birefringent Photonic Crystal Fiber Made of Silicate Glass. , 2006, , .		0
122	Yb-doped rod-type photonic crystal fibers for single-mode amplification. , 2009, , .		0
123	Design of an amplifier model accounting for thermal effect in fully aperiodic large pitch fibers. , 2018, , .		0
124	Ultrastructural analysis of dental ceramic surface processed by a 1070 nm fiber laser. , 2018, , .		0
125	Guidance properties and phase shift of a 9-core fiber amplifier for high power operation in presence of consistent thermal load. , 2019, , .		0
126	Thermo-optic instabilities in asymmetric dual-core amplifiers. Journal of the Optical Society of America B: Optical Physics, 2020, 37, 1494.	2.1	0



#	ARTICLE	IF	CITATIONS
127	Power scaling of normal-dispersion continuum generation using higher-order modes in microstructured optical fibers. <i>Optics Letters</i> , 2022, 47, 698.	3.3	0