Luca Vincetti

List of Publications by Year
in descending order

90 papers	2,408 citations	201674 27 h-index	206112 48 g-index
90 all docs	90 docs citations	90 times ranked	1235 citing authors

#	Article	IF	Citations
1	Complex FEM modal solver of optical waveguides with PML boundary conditions. Optical and Quantum Electronics, 2001, 33, 359-371.	3.3	163
2	Hypocycloid-shaped hollow-core photonic crystal fiber Part I: Arc curvature effect on confinement loss. Optics Express, 2013, 21, 28597.	3.4	150
3	Leakage properties of photonic crystal fibers. Optics Express, 2002, 10, 1314.	3.4	135
4	Waveguiding mechanism in tube lattice fibers. Optics Express, 2010, 18, 23133.	3.4	135
5	Holey fiber analysis through the finite-element method. IEEE Photonics Technology Letters, 2002, 14, 1530-1532.	2.5	134
6	Multi-meter fiber-delivery and pulse self-compression of milli-Joule femtosecond laser and fiber-aided laser-micromachining. Optics Express, 2014, 22, 10735.	3.4	120
7	Hollow-Core Fiber Technology: The Rising of â€œGas Photonicsâ€. Fibers, 2019, 7, 16.	4.0	118
8	Flexible tube lattice fibers for terahertz applications. Optics Express, 2013, 21, 3388.	3.4	111
9	Lamb-Dicke spectroscopy of atoms in a hollow-core photonic crystal fibre. Nature Communications, 2014, 5, 4096.	12.8	79
10	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
11	Hypocycloid-shaped hollow-core photonic crystal fiber Part II: Cladding effect on confinement and bend loss. Optics Express, 2013, 21, 28609.	3.4	71
12	Amplification properties of Er/sub 3+/ -doped photonic crystal fibers. Journal of Lightwave Technology, 2003, 21, 782-788.	4.6	64
13	Extra loss due to Fano resonances in inhibited coupling fibers based on a lattice of tubes. Optics Express, 2012, 20, 14350.	3.4	60
14	Low-loss single-mode hybrid-lattice hollow-core photonic-crystal fibre. Light: Science and Applications, 2021, 10, 7.	16.6	56
15	Perturbation analysis of dispersion properties in photonic crystal fibers through the finite element method. Journal of Lightwave Technology, 2002, 20, 1433-1442.	4.6	54
16	Ultra low-loss hypocycloid-core Kagome hollow-core photonic crystal fiber for green spectral-range applications. Optics Letters, 2014, 39, 6245.	3.3	54
17	Empirical formulas for calculating loss in hollow core tube lattice fibers. Optics Express, 2016, 24, 10313.	3.4	44
18	Finite-element full-vectorial propagation analysis for three-dimensional z-varying optical waveguides. Journal of Lightwave Technology, 1998, 16, 703-714.	4.6	43

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19	Confinement loss and nonlinearity analysis of air-guiding modified honeycomb photonic bandgap fibers. IEEE Photonics Technology Letters, 2006, 18, 508-510.	2.5	42
20	Exact evaluation of the Jones matrix of a fiber in the presence of polarization mode dispersion of any order. Journal of Lightwave Technology, 2001, 19, 1898-1909.	4.6	40
21	Numerical analysis of plastic hollow core microstructured fiber for Terahertz applications. Optical Fiber Technology, 2009, 15, 398-401.	2.7	40
22	Study of raman amplification properties in triangular photonic crystal fibers. Journal of Lightwave Technology, 2003, 21, 2247-2254.	4.6	37
23	Hollow core photonic band gap fiber for THz applications. Microwave and Optical Technology Letters, 2009, 51, 1711-1714.	1.4	32
24	Full-vector finite-element beam propagation method for anisotropic optical device analysis. IEEE Journal of Quantum Electronics, 2000, 36, 1392-1401.	1.9	31
25	A simple and useful model for Jones matrix to evaluate higher order polarization-mode dispersion effects. IEEE Photonics Technology Letters, 2001, 13, 1176-1178.	2.5	31
26	Perfectly matched anisotropic layers for optical waveguide analysis through the finite-element beam-propagation method. Microwave and Optical Technology Letters, 1999, 23, 67-69.	1.4	30
27	Single-mode propagation in triangular tube lattice hollow-core terahertz fibers. Optics Communications, 2010, 283, 979-984.	2.1	27
28	Terahertz Tube Lattice Fibers With Octagonal Symmetry. IEEE Photonics Technology Letters, 2010, 22, 972-974.	2.5	25
29	An integrated RF energy harvester for UHF wireless powering applications. , 2013, , .		25
30	A simple analytical model for confinement loss estimation in hollow-core Tube Lattice Fibers. Optics Express, 2019, 27, 5230.	3.4	23
31	Optimized inhibited-coupling Kagome fibers at Yb-Nd:Yag (85â€‰â€‰dB/km) and Ti:Sa (30â€‰dB/km) ranges. Optics Letters, 2018, 43, 1598.	3.3	22
32	Superradiance from lattice-confined atoms inside hollow core fibre. Communications Physics, 2019, 2, .	5.3	22
33	Confinement Loss in Kagome and Tube Lattice Fibers: Comparison and Analysis. Journal of Lightwave Technology, 2012, 30, 1470-1474.	4.6	21
34	Three-dimensional finite-element beam propagation method: assessments and developments. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2000, 17, 1124.	1.5	20
35	Elliptical hollow core tube lattice fibers for terahertz applications. Optical Fiber Technology, 2013, 19, 31-34.	2.7	20
36	A Novel Approach to Î²-Decay: PANDORA, a New Experimental Setup for Future In-Plasma Measurements. Universe, 2022, 8, 80.	2.5	19

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37	Numerical Modeling of S-Band EDFA Based on Distributed Fiber Loss. Journal of Lightwave Technology, 2008, 26, 2168-2174.	4.6	17
38	Ultra-Large Core Size Hypocycloid-Shape Inhibited Coupling Kagome Fibers for High-Energy Laser Beam Handling. Journal of Lightwave Technology, 2015, 33, 3630-3634.	4.6	17
39	Inhibited coupling guiding hollow fibers for label-free DNA detection. Optics Express, 2017, 25, 26215.	3.4	17
40	Tailoring modal properties of inhibited-coupling guiding fibers by cladding modification. Scientific Reports, 2019, 9, 1376.	3.3	17
41	Confinement Losses in Honeycomb Fibers. IEEE Photonics Technology Letters, 2004, 16, 2048-2050.	2.5	15
42	Fusion splice between tapered inhibited coupling hypocycloid-core Kagome fiber and SMF. Optics Express, 2016, 24, 14642.	3.4	13
43	Hollow Core Inhibited Coupling Fibers for Biological Optical Sensing. Journal of Lightwave Technology, 2019, 37, 2598-2604.	4.6	12
44	Broadband printed antenna for radiofrequency energy harvesting. , 2012, , .		11
45	Nonlinear finite-element semivectorial propagation method for three-dimensional optical waveguides. IEEE Photonics Technology Letters, 1999, 11, 209-211.	2.5	10
46	Hollow-Core Fiber-Based Biosensor: A Platform for Lab-in-Fiber Optical Biosensors for DNA Detection. Sensors, 2022, 22, 5144.	3.8	10
47	Fano Resonances in Polygonal Tube Fibers. Journal of Lightwave Technology, 2012, 30, 31-37.	4.6	9
48	Finite-element formulation for full-vectorial propagation analysis in three-dimensional optical waveguides. IEEE Photonics Technology Letters, 1997, 9, 1244-1246.	2.5	8
49	Comparison of the jones matrix analytical models applied to optical system affected by high-order pmd. Journal of Lightwave Technology, 2003, 21, 1456-1464.	4.6	7
50	Air-guiding photonic crystal fibers with modified honeycomb lattice. , 0, , .		7
51	Numerical analysis of hollow core photonic band gap fibers with modified honeycomb lattice. Optical and Quantum Electronics, 2007, 38, 903-912.	3.3	7
52	Reconfigurable RF Energy Harvester with Customized Differential PCB Antenna. Journal of Low Power Electronics and Applications, 2015, 5, 257-273.	2.0	7
53	Overview on finite-element time-domain approaches for optical propagation analysis. Optical and Quantum Electronics, 2003, 35, 1005-1023.	3.3	6
54	Low Profile Wideband 3D Antenna for Roof-Top LTE Vehicular Applications. , 2019, , .		5

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55	Analytical evaluation of optical system impairments caused by high-order polarization-mode dispersion effects. Microwave and Optical Technology Letters, 2001, 31, 449-453.	1.4	4
56	Wide bandgap air-guiding modified honeycomb photonic crystal fibers. , 0, , .		3
57	Microstrip array antenna for fire-detection applications. Microwave and Optical Technology Letters, 2007, 49, 2279-2282.	1.4	3
58	Elliptical hollow tube waveguides. Proceedings of SPIE, 2012, , .	0.8	3
59	Analytical Formulas for Dispersion and Effective Area in Hollow-Core Tube Lattice Fibers. Fibers, 2021, 9, 58.	4.0	3
60	Mesh Truncation in Finite Element Modal Analysis of Dielectric Waveguides. Electromagnetics, 2002, 22, 331-343.	0.7	2
61	Microstrip array antenna for fire-detection applications. , 2007, , .		2
62	Hollow core fibre for THz applications. Digest / IEEE Antennas and Propagation Society International Symposium, 2009, , .	0.0	2
63	Electromagnetic analysis of PD detection in GIS systems. , 2012, , .		2
64	Fano resonances in kagome fibers. Proceedings of SPIE, 2012, , .	0.8	2
65	Confinement loss scaling law analysis in tube lattice fibers for terahertz applications. , 2014, , .		2
66	Scaling Laws in Tube Lattice Fibers. , 2015, , .		2
67	Comparison among first-order PMD compensation techniques. , 2001, , .		1
68	Truncation of finite-element mesh for modal analysis of dielectric waveguides. Microwave and Optical Technology Letters, 2002, 32, 178-182.	1.4	1
69	Numerical Analysis of Propagating and Radiating Properties of Hollow Core Photonic Band Gap Fibres for THz Applications. IEEE Transactions on Antennas and Propagation, 2010, 58, 2465-2468.	5.1	1
70	Electromagnetic analysis of the radiated field by Gas Insulated Switchgears for fault detection. , 2012, , .		1
71	Bending loss in tube lattice fibers for terahertz applications. , 2012, , .		1
72	Splicing tapered inhibited-coupling hypocycloid-core Kagome fiber to SMF fibers. , 2015, , .		1

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73	Low cost 3D tin sheet multiband sharkâ€fin antenna for LTE MIMO vehicular application. Microwave and Optical Technology Letters, 2020, 62, 3876-3880.	1.4	1
74	A Capacitance PCB Sensor for Granular Material with Increased Accuracy. , 2021, , 1-1.		1
75	Millimeter Wave Automotive Antenna for 5G Communications. , 2021, , .		1
76	Thermo-optical numerical modal analysis of multicore fibers for high power lasers and amplifiers. Optical Fiber Technology, 2022, 70, 102857.	2.7	1
77	Modified Honeycomb Photonic Bandgap Fiber Effectively Single-Mode Regime: A Numerical Analysis. , 2006, , .		0
78	Fundamental and high-order mode bending loss in leakage channel fibers. , 2008, , .		0
79	Octagonal Large-Mode-Area Leakage Channel Fiber with Reduced Bending Loss. , 2010, , .		0
80	Inhibited coupling hollow-core photonic crystal fiber. Proceedings of SPIE, 2014, , .	0.8	0
81	Integrated RF-DC converter and PCB antenna for UHF wireless powering applications. IOP Conference Series: Materials Science and Engineering, 2014, 67, 012010.	0.6	0
82	Circular Tube lattice fibers for terahertz applications. , 2014, , .		0
83	Inhibited coupling kagome fibers with ultra-large hollow-core size for high energy ultrafast laser applications. , 2015, , .		0
84	Triple-cup hypocycloid-core inhibited coupling Kagome hollow-core photonic crystal fiber. , 2015, , .		0
85	Fano resonance in inhibited coupling Kagome fiber. , 2015, , .		0
86	Mid-IR HCPCF Gas-Laser Emitting at 4.6 Î¼m. , 2019, , .		0
87	Hollow-Core Fibers with Specific Modal Operation and Low Loss in the Short-Wavelength Range. , 2020, , .		0
88	Non-Idealities in Hollow Core Inhibited Coupling Fibers. , 2020, , .		0
89	Analytical Estimation of Confinement Loss in Tube Lattice Fibers. , 2018, , .		0
90	Guidance properties and phase shift of a 9-core fiber amplifier for high power operation in presence of consistent thermal load. , 2019, , .		0