

Marcos Ar Franco

List of Publications by Year in descending order

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85
papers

1,247
citations

471061

17
h-index

377514

34
g-index

86
all docs

86
docs citations

86
times ranked

1103
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 1 | Microstructured-core optical fibre for evanescent sensing applications. Optics Express, 2006, 14, 13056. | 1.7 | 254 |
| 2 | Ultrahigh-sensitivity temperature fiber sensor based on multimode interference. Applied Optics, 2012, 51, 3236. | 0.9 | 116 |
| 3 | Terahertz optical fibers [Invited]. Optics Express, 2020, 28, 16089. | 1.7 | 108 |
| 4 | 3D Printed Hollow-Core Terahertz Fibers. Fibers, 2018, 6, 43. | 1.8 | 76 |
| 5 | Multimode interference tapered fiber refractive index sensors. Applied Optics, 2012, 51, 5941. | 0.9 | 70 |
| 6 | Microstructured Optical Fiber for Residual Dispersion Compensation Over $S + C + L + U$ Wavelength Bands. IEEE Photonics Technology Letters, 2008, 20, 751-753. | 1.3 | 51 |
| 7 | Bragg gratings in surface-core fibers: Refractive index and directional curvature sensing. Optical Fiber Technology, 2017, 34, 86-90. | 1.4 | 41 |
| 8 | Curvature and Temperature Discrimination Using Multimode Interference Fiber Optic Structures—A Proof of Concept. Journal of Lightwave Technology, 2012, 30, 3569-3575. | 2.7 | 36 |
| 9 | Photonic-crystal fiber-based pressure sensor for dual environment monitoring. Applied Optics, 2014, 53, 3668. | 0.9 | 36 |
| 10 | Efficient and short-range light coupling to index-matched liquid-filled hole in a solid-core photonic crystal fiber. Optics Express, 2011, 19, 24687. | 1.7 | 34 |
| 11 | Simplifying the design of microstructured optical fibre pressure sensors. Scientific Reports, 2017, 7, 2990. | 1.6 | 32 |
| 12 | Detailed analysis of the longitudinal acousto-optical resonances in a fiber Bragg modulator. Optics Express, 2013, 21, 6997. | 1.7 | 30 |
| 13 | Integration of bow-tie plasmonic nano-antennas on tapered fibers. Optics Express, 2017, 25, 8986. | 1.7 | 29 |
| 14 | Single-design-parameter microstructured optical fiber for chromatic dispersion tailoring and evanescent field enhancement. Optics Letters, 2007, 32, 3324. | 1.7 | 27 |
| 15 | Intensity liquid level sensor based on multimode interference and fiber Bragg grating. Measurement Science and Technology, 2016, 27, 125104. | 1.4 | 22 |
| 16 | Curvature and Vibration Sensing Based on Core Diameter Mismatch Structures. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 2120-2128. | 2.4 | 21 |
| 17 | Macro bending SMS fiber-optic anemometer and flow sensor. Optical Fiber Technology, 2019, 52, 101981. | 1.4 | 18 |
| 18 | All-fiber circular polarization beam splitter based on helically twisted twin-core photonic crystal fiber coupler. Optical Fiber Technology, 2020, 58, 102285. | 1.4 | 17 |

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|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 19 | Sensitivity Analysis of Different Shapes of a Plastic Optical Fiber-Based Immunosensor for Escherichia coli: Simulation and Experimental Results. Sensors, 2017, 17, 2944. | 2.1 | 15 |
| 20 | Finite element analysis of anisotropic optical waveguide with arbitrary index profile. IEEE Transactions on Magnetics, 1999, 35, 1546-1549. | 1.2 | 14 |
| 21 | Side-Polished Microstructured Optical Fiber for Temperature Sensor Application. IEEE Photonics Technology Letters, 2007, 19, 1738-1740. | 1.3 | 14 |
| 22 | Metal-Filled Embedded-Core Capillary Fibers as Highly Sensitive Temperature Sensors. , 2018, 2, 1-4. | | 13 |
| 23 | Modal analysis of anisotropic diffused-channel waveguide by a scalar finite element method. IEEE Transactions on Magnetics, 1998, 34, 2783-2786. | 1.2 | 12 |
| 24 | Automatic mesh generation for 3D electromagnetic field analysis by FD-TD method. IEEE Transactions on Magnetics, 1998, 34, 3383-3386. | 1.2 | 12 |
| 25 | Numerical and experimental analysis of polarization properties from hybrid PCFs across different photonic bandgaps. Optical Fiber Technology, 2012, 18, 462-469. | 1.4 | 11 |
| 26 | Numerical characterization of piezoelectric resonant transducer modes for acoustic wave excitation in optical fibers. Measurement Science and Technology, 2013, 24, 094020. | 1.4 | 10 |
| 27 | Analysis and optimization of an all-fiber device based on photonic crystal fiber with integrated electrodes. Optics Express, 2010, 18, 2842. | 1.7 | 9 |
| 28 | Spectral bandwidth analysis of high sensitivity refractive index sensor based on multimode interference fiber device. Proceedings of SPIE, 2012, , . | 0.8 | 9 |
| 29 | 3D-printed terahertz Bragg fiber. , 2015, , . | | 8 |
| 30 | Azimuthally asymmetric tubular lattice hollow-core optical fiber. Journal of the Optical Society of America B: Optical Physics, 2021, 38, F23. | 0.9 | 8 |
| 31 | Ultrahigh-sensitivity temperature fiber sensor based on multimode interference. Applied Optics, 2012, 51, 2542. | 2.1 | 8 |
| 32 | Exploring THz hollow-core fiber designs manufactured by 3D printing. , 2017, , . | | 7 |
| 33 | Angle-Resolved Hollow-Core Fiber-Based Curvature Sensing Approach. Fibers, 2021, 9, 72. | 1.8 | 7 |
| 34 | Numerical and experimental analysis of the modulation of fiber Bragg gratings by low-frequency complex acoustic waves. Optical Fiber Technology, 2016, 30, 17-22. | 1.4 | 6 |
| 35 | Exposed-core fiber multimode interference sensor. Results in Optics, 2021, 5, 100125. | 0.9 | 6 |
| 36 | A simple procedure for impedance matching and tuning of microwave couplers for an electron linear accelerator. IEEE Transactions on Microwave Theory and Techniques, 2001, 49, 562-564. | 2.9 | 5 |

| # | ARTICLE | IF | CITATIONS |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 37 | Tunable Single-Polarization Single-Mode Microstructured Polymer Optical Fiber. Journal of Lightwave Technology, 2011, 29, 2372-2378. | 2.7 | 5 |
| 38 | MATHEMATICA notebook for computing tetrahedral finite element shape functions and matrices for the Helmholtz equation. IEEE Transactions on Magnetics, 1998, 34, 3387-3390. | 1.2 | 4 |
| 39 | Integrated polarizers based on tapered highly birefringent photonic crystal fibers. Optics Express, 2014, 22, 17769. | 1.7 | 4 |
| 40 | Analysis of highly birefringent photonic crystal fibers with squeezed rectangular lattices. Microwave and Optical Technology Letters, 2008, 50, 1083-1086. | 0.9 | 3 |
| 41 | Refractive index sensor based on terahertz multimode interference fiber device. , 2013, , . | | 3 |
| 42 | Single-polarization single-mode hollow core photonic bandgap fiber for gyroscope applications. Proceedings of SPIE, 2015, , . | 0.8 | 3 |
| 43 | Optical sensing with antiresonant capillary fibers. , 2017, , . | | 3 |
| 44 | Some studies on the registration of particles on Makrofol E. International Journal of Radiation Applications and Instrumentation Part D, Nuclear Tracks and Radiation Measurements, 1986, 12, 193-196. | 0.6 | 2 |
| 45 | Numerical and Experimental Studies for a High Pressure Photonic Crystal Fiber Based Sensor. AIP Conference Proceedings, 2008, , . | 0.3 | 2 |
| 46 | Thermal tunability of photonic bandgaps in photonic crystal fibers selectively filled with nematic liquid crystal. Proceedings of SPIE, 2010, , . | 0.8 | 2 |
| 47 | Hybrid photonic crystal fiber sensing of high hydrostatic pressure. , 2011, , . | | 2 |
| 48 | A new approach to obtain single-polarization hollow-core photonic bandgap fiber. , 2013, , . | | 2 |
| 49 | Modelling the bandwidth behaviour of fibre Bragg gratings excited by low-frequency acoustic waves. , 2013, , . | | 2 |
| 50 | Ultra-broadband and compact polarization splitter for sensing applications. , 2016, , . | | 2 |
| 51 | DWDM 40 Gb/s Long Haul Transmission Using PCF for Dispersion Compensation. , 2010, , . | | 2 |
| 52 | Dispersion Properties of Microstructured Optical Fiber with 12-Fold Quasicrystal Lattice of Holes. , 2007, , . | | 1 |
| 53 | Effect of Coupling between Fundamental and Cladding Modes on Bending Losses in Single-Polarization Single-Mode Photonic Crystal Fiber. AIP Conference Proceedings, 2008, , . | 0.3 | 1 |
| 54 | Polymer optical fibers for Terahertz: Low loss propagation and high evanescent field. , 2013, , . | | 1 |

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| 55 | Spiral broadband plasmonic nano-antennas. , 2013, , . | | 1 |
| 56 | Enhancement of refractive index sensitivity of the in-line Mach-Zehnder interferometer through bending. , 2013, , . | | 1 |
| 57 | High sensitivity high temperature sensor based on SMS structure with large-core all-solid bandgap fiber as the multimode section. Proceedings of SPIE, 2014, , . | 0.8 | 1 |
| 58 | Enhanced Terahertz transmission through 3D non-spherical terajets. Proceedings of SPIE, 2015, , . | 0.8 | 1 |
| 59 | Surface-core fiber gratings. , 2015, , . | | 1 |
| 60 | Hydrostatic pressure sensing with surface-core fibers. , 2015, , . | | 1 |
| 61 | Strong power transfer between photonic bandgaps of hybrid photonic crystal fibers. Optical Fiber Technology, 2015, 22, 36-41. | 1.4 | 1 |
| 62 | LPFG based fiber optic sensor for magnetic field measurement. Proceedings of SPIE, 2017, , . | 0.8 | 1 |
| 63 | 3D numerical investigation of double-core optical fiber properties modulated by flexural acoustic waves. , 2017, , . | | 1 |
| 64 | 3D numerical analysis of the acousto-optical modulation in a double-core optical fiber. , 2018, , . | | 1 |
| 65 | Pressure Induced Single-Polarization Single-Mode Microstructured Polymer Optical Fiber. , 2010, , . | | 1 |
| 66 | <title>Photonic crystal fiber for chromatic dispersion compensation</title>. , 2004, , . | | 0 |
| 67 | Highly birefringent photonic crystal fiber with squeezed hexagonal and rectangular lattices. , 0, , . | | 0 |
| 68 | Opto-Mechanical Response of a Suspended-Slab-Core Optical Fiber. AIP Conference Proceedings, 2008, , . | 0.3 | 0 |
| 69 | Dual-concentric-core microstructured optical fiber with selective filling of hole for chromatic dispersion compensation. , 2008, , . | | 0 |
| 70 | Modeling residual thermal stress-induced integrated optical waveguides on Bi¹²GeO²⁰ substrate for electrooptic modulation application. , 2009, , . | | 0 |
| 71 | Multiphysics analysis of an all-photonic crystal fiber device. , 2009, , . | | 0 |
| 72 | Residual thermal stress-induced integrated optical waveguides on Bi 12 GeO 20 substrate. Proceedings of SPIE, 2010, , . | 0.8 | 0 |

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|----|-----------------------------------------------------------------------------------------------------------------------------------|-----|-----------|
| 73 | Side-hole photonic crystal fibers. , 2010, , . | | 0 |
| 74 | Polarization analysis across different photonic bandgaps of Hybrid Photonic Crystal Fibers. , 2011, , . | | 0 |
| 75 | All-Solid Photonic Bandgap Fibers for Pressure Sensing. , 2013, , . | | 0 |
| 76 | A bent in-line Mach-Zehnder interferometer sensor to increase refractive index sensitivity. , 2013, , . | | 0 |
| 77 | Generation of Polarizing Sections in Highly Birefringent Photonic Crystal Fibers via Post-Processing. , 2013, , . | | 0 |
| 78 | Numerical Characterization of an Acousto-Optic Ring Sensor for Measuring D-Glucose Concentrations. , 2013, , . | | 0 |
| 79 | Dual-environment pressure sensor using a photonic-crystal fiber. Proceedings of SPIE, 2014, , . | 0.8 | 0 |
| 80 | Diamond-like carbon thin film for tuned high sensitivity etched fiber Bragg grating refractometer. Proceedings of SPIE, 2015, , . | 0.8 | 0 |
| 81 | Curvature sensitivity enhancement of fused fiber taper. , 2017, , . | | 0 |
| 82 | Modeling of magnetostrictive optical modulator for application as a magnetic field sensor. , 2017, , . | | 0 |
| 83 | Nano-antennas on tapered fiber: A new and flexible approach. , 2017, , . | | 0 |
| 84 | Minimalist Optical Fiber Design: capillary-like fibers. , 2018, , . | | 0 |
| 85 | Study of a THz Hollow-core Fiber for Sample Reflectance Analysis. , 2019, , . | | 0 |