

# Lorenzo Rosa

## List of Publications by Year in descending order

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Version: 2024-02-01

111  
papers

2,886  
citations

236925

25  
h-index

175258

52  
g-index

112  
all docs

112  
docs citations

112  
times ranked

3383  
citing authors

#	ARTICLE	IF	CITATIONS
1	TiO <sub>2</sub> /Au/TiO <sub>2</sub> plasmonic photocatalyst with enhanced photocatalytic activity and stability under visible-light irradiation. <i>Catalysis Today</i> , 2022, 397-399, 257-264.	4.4	7
2	Thermo-optical numerical modal analysis of multicore fibers for high power lasers and amplifiers. <i>Optical Fiber Technology</i> , 2022, 70, 102857.	2.7	1
3	Analytical Formulas for Dispersion and Effective Area in Hollow-Core Tube Lattice Fibers. <i>Fibers</i> , 2021, 9, 58.	4.0	3
4	A Preliminary Study of a Graphene Fractal Sierpinski Antenna. <i>IOP Conference Series: Materials Science and Engineering</i> , 2020, 840, 012003.	0.6	1
5	Non-Idealities in Hollow Core Inhibited Coupling Fibers. , 2020, , .		0
6	Mode Phase Variation and Sensitivity to Thermal Load in Three-Core Optical Fibers. <i>Journal of Lightwave Technology</i> , 2020, 38, 2400-2405.	4.6	2
7	Micro-manipulation of nanodiamonds containing NV centers for quantum applications. <i>Diamond and Related Materials</i> , 2020, 106, 107840.	3.9	10
8	Plasmonic nanopapers: flexible, stable and sensitive multiplex PUF tags for unclonable anti-counterfeiting applications. <i>Nanoscale</i> , 2020, 12, 9471-9480.	5.6	60
9	Reassessing the projections of the World Water Development Report. <i>Npj Clean Water</i> , 2019, 2, .	8.0	1,095
10	Phase controlled SERS enhancement. <i>Scientific Reports</i> , 2019, 9, 744.	3.3	17
11	Hollow Core Inhibited Coupling Fibers for Biological Optical Sensing. <i>Journal of Lightwave Technology</i> , 2019, 37, 2598-2604.	4.6	12
12	Chlorination disadvantages and alternative routes for biofouling control in reverse osmosis desalination. <i>Npj Clean Water</i> , 2019, 2, .	8.0	71
13	Nitrogen-vacancy centers in diamond for nanoscale magnetic resonance imaging applications. <i>Beilstein Journal of Nanotechnology</i> , 2019, 10, 2128-2151.	2.8	25
14	Complex Permittivity Measurements of Hydraulic Oil at UHF and Microwave Frequencies. , 2019, , .		2
15	Guidance properties and thermal effects in 9-core Yb-doped fiber for high power applications. , 2019, , .		0
16	A simple analytical model for confinement loss estimation in hollow-core Tube Lattice Fibers. <i>Optics Express</i> , 2019, 27, 5230.	3.4	23
17	Guidance properties and phase shift of a 9-core fiber amplifier for high power operation in presence of consistent thermal load. , 2019, , .		0
18	Analytical Estimation of Confinement Loss in Tube Lattice Fibers. , 2018, , .		0

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19	Size-controlled gold nanoparticles on octahedral anatase particles as efficient plasmonic photocatalyst. <i>Applied Catalysis B: Environmental</i> , 2017, 206, 393-405.	20.2	52
20	Cup-Shaped Nanoantenna Arrays for Zeptoliter Volume Biochemistry and Plasmonic Sensing in the Visible Wavelength Range. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 19082-19091.	8.0	4
21	Advances in diamond nanofabrication for ultrasensitive devices. <i>Microsystems and Nanoengineering</i> , 2017, 3, 17061.	7.0	37
22	Gain competition in Yb-doped symmetry-free photonic crystal fibers under severe heat load. , 2017, , .		0
23	Improved performances of photonic crystal fibers for high power laser operation. , 2017, , .		0
24	Thermal induced dynamics of gain competition in Yb-doped Symmetry-Free Photonic Crystal Fibers. , 2017, , .		0
25	Mode discrimination criterion for effective differential amplification in Yb-doped fiber design for high power operation. <i>Optics Express</i> , 2017, 25, 29013.	3.4	14
26	Nano-Magnetic Resonance Imaging (Nano-MRI) Gives Personalized Medicine a New Perspective. <i>Biomedicines</i> , 2017, 5, 7.	3.2	18
27	Latest Advances in the Generation of Single Photons in Silicon Carbide. <i>Technologies</i> , 2016, 4, 16.	5.1	7
28	Modelling of thermal effects and gain competition in Yb-doped large mode area photonic crystal fibers. , 2016, , .		0
29	Thermal effects and gain competition in Yb-doped large mode area fibers for high-power applications. , 2016, , .		0
30	Femtosecond laser-induced hard X-ray generation in air from a solution flow of Au nano-sphere suspension using an automatic positioning system. <i>Optics Express</i> , 2016, 24, 19994.	3.4	11
31	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
32	Towards Single Biomolecule Imaging via Optical Nanoscale Magnetic Resonance Imaging. <i>Small</i> , 2015, 11, 4229-4236.	10.0	11
33	Novel plasmonic materials to improve thin film solar cells efficiency. , 2015, , .		0
34	Asymmetric gold nanodimer arrays: electrostatic self-assembly and SERS activity. <i>Journal of Materials Chemistry A</i> , 2015, 3, 240-249.	10.3	63
35	Electrically Driven Quantum Light Sources. <i>Advanced Optical Materials</i> , 2015, 3, 1012-1033.	7.3	48
36	Thermal modeling of gain competition in Yb-doped large-mode-area photonic-crystal fiber amplifier. <i>Optics Express</i> , 2015, 23, 18638.	3.4	17

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37	Reversible gating of smart plasmonic molecular traps using thermoresponsive polymers for single-molecule detection. <i>Nature Communications</i> , 2015, 6, 8797.	12.8	83
38	Simulation and Measurement of Solar Harvesting Enhancement of Silver Plasmonic Nanoparticles on GaSb Nanodots. <i>Journal of Photonics</i> , 2014, 2014, 1-7.	1.0	6
39	SERS scaling rules. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 117, 647-650.	2.3	7
40	Mono- and bi-metallic plasmonic photocatalysts for degradation of organic compounds under UV and visible light irradiation. <i>Catalysis Today</i> , 2014, 230, 131-137.	4.4	71
41	Scaling Rules of SERS Intensity. <i>Advanced Optical Materials</i> , 2014, 2, 382-388.	7.3	44
42	Engineering gold alloys for plasmonics. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 117, 641-645.	2.3	21
43	Tunable Raman Selectivity via Randomization of a Rectangular Pattern of Nanodisks. <i>ACS Photonics</i> , 2014, 1, 1006-1012.	6.6	16
44	Long-range interaction of localized surface plasmons in periodic and random patterns of Au nanoparticles. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 115, 409-414.	2.3	12
45	Scaling rules for Surface Enhanced Raman Scattering. , 2014, , .		0
46	Optical constants of gold-silver-copper alloy system. , 2014, , .		0
47	Chiral plasmonic nanostructures: experimental and numerical tools. , 2013, , .		9
48	Additional Enhancement of Electric Field in Surface-Enhanced Raman Scattering due to Fresnel Mechanism. <i>Scientific Reports</i> , 2013, 3, 2335.	3.3	54
49	Fabrication of nanoparticles for generation of force and torque at nanoscale. , 2013, , .		0
50	Optical properties of periodic/random pattern of Au nanodiscs. , 2013, , .		0
51	Arrays of Arbitrarily Shaped Nanoparticles: Overlay-Errorless Direct Ion Write. <i>Advanced Optical Materials</i> , 2013, 1, 456-459.	7.3	15
52	Plasmonic Gas Sensor. , 2013, , .		3
53	Randomization of gold nano-brick arrays: a tool for SERS enhancement. <i>Optics Express</i> , 2013, 21, 13502.	3.4	53
54	Augmented sensitivity of an IR-absorption gas sensor employing a metal hole array. <i>Optical Materials Express</i> , 2013, 3, 968.	3.0	34

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55	Optoplasmonics: hybridization in 3D. , 2013, , .		0
56	Surface enhanced infrared absorption measurements with micro metal hole array. , 2013, , .		0
57	Ion-beam and plasma etching of a conical-pores photonic crystal for thin-film solar cell. Proceedings of SPIE, 2013, , .	0.8	2
58	3D nano-structures for laser nano-manipulation. Beilstein Journal of Nanotechnology, 2013, 4, 534-541.	2.8	18
59	Selective enhancement of infrared absorption with metal hole arrays. Optical Materials Express, 2012, 2, 1367.	3.0	46
60	Design and fabrication of LMA low-bending loss leakage channel fibers. , 2012, , .		0
61	Tailoring plasmonic field enhancement in spatial and spectral domains. , 2012, , .		1
62	Surface plasmon resonances in periodic and random patterns of gold nano-disks for broadband light harvesting. Optics Express, 2012, 20, 11466.	3.4	150
63	Additional enhancement in surface-enhanced Raman scattering due to excitation geometry. Proceedings of SPIE, 2012, , .	0.8	0
64	Plasmonic nano-structures for opto-mechanical and sensing applications. , 2012, , .		0
65	Light enhancement in surface-enhanced Raman scattering at oblique incidence. Photonic Sensors, 2012, 2, 283-288.	5.0	20
66	3D-Tailored Gold Nanoparticles for Light Field Enhancement and Harvesting over Visible-IR Spectral Range. Journal of Physical Chemistry C, 2011, 115, 5251-5256.	3.1	22
67	Novel plasmonic applications in physics and chemistry. , 2011, , .		0
68	Limitation on Effective Area of Bent Large-Mode-Area Leakage Channel Fibers. Journal of Lightwave Technology, 2011, 29, 2609-2615.	4.6	25
69	Sculpturing of photonic crystals by ion beam lithography: towards complete photonic bandgap at visible wavelengths. Optics Express, 2011, 19, 5802.	3.4	45
70	FDTD modeling to enhance the performance of an organic solar cell embedded with gold nanoparticles. Optical Materials Express, 2011, 1, 1326.	3.0	28
71	Mechanism of fine ripple formation on surfaces of (semi)transparent materials via a half-wavelength cavity feedback. Nanotechnology, 2011, 22, 055304.	2.6	96
72	SierpinÅski fractal plasmonic nanoantennas. Physica Status Solidi - Rapid Research Letters, 2011, 5, 175-177.	2.4	31

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73	Tailoring plasmonic nanoparticles and fractal patterns. Proceedings of SPIE, 2011, , .	0.8	4
74	Localized photocatalysis by Au-titania plasmonics. , 2011, , .		0
75	Alumina-embedded Au nanowires for SERS sensing. , 2011, , .		0
76	Simple suppression technique for higher-order mode amplification in bent large mode area triple-cladding fibers. , 2010, , .		0
77	Octagonal Large-Mode-Area Leakage Channel Fiber with Reduced Bending Loss. , 2010, , .		0
78	Surface defect mediated electron hopping between nanoparticles separated by a nano-gap. Physica Status Solidi - Rapid Research Letters, 2010, 4, 244-246.	2.4	19
79	Tailoring spectral position and width of field enhancement by focused ion-beam patterning of plasmonic nanoparticles. Physica Status Solidi - Rapid Research Letters, 2010, 4, 262-264.	2.4	15
80	Effective area limit of large-mode-area solid-core photonic bandgap fibers for fiber laser applications. Optical Fiber Technology, 2010, 16, 409-418.	2.7	35
81	Optimization of large-mode-area tapered-index multi-core fibers with high differential mode bending loss for Ytterbium-doped fiber applications. , 2010, , .		2
82	Limitation on effective area of large-mode-area leakage channel fibers under bent condition. , 2010, , .		0
83	Ripple-patterned substrates for light enhancement applications. Proceedings of SPIE, 2010, , .	0.8	9
84	Realistic Squared-Rods Circular F-Doped Large-Mode- Area Leakage Channel Fibers with Low Bending Loss. , 2010, , .		0
85	Design of all-solid leakage channel fibers with large mode area and low bending loss. Optics Express, 2009, 17, 4913.	3.4	38
86	Genetic-Algorithm Assisted Design of C-Band CROW-Miniaturized PCW Interleaver. Journal of Lightwave Technology, 2009, 27, 2678-2687.	4.6	16
87	Genetic-Algorithm Assisted Design of C-band Photonic-Crystal Waveguide Interleavers Using Ring Resonators. , 2009, , .		0
88	Effect of Rod Inaccuracy on Genetic-Algorithm-Designed C-Band Photonic-Crystal Waveguide Interleavers. , 2009, , .		0
89	Design of single-mode leakage channel fibers with large-mode-area and low bending loss. , 2008, , .		0
90	Fundamental and high-order mode bending loss in leakage channel fibers. , 2008, , .		0

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91	Design and Optimization of Devices for C-band Photonic-Crystal Waveguide Interleaver with Flattened Pass-band. , 2008, , .		0
92	Modelling leaky photonic wires: A mode solver comparison. Optical and Quantum Electronics, 2007, 38, 731-759.	3.3	36
93	Harmonic and intermodulation distortion modeling in IM-DD multi-band radio over fiber links exploiting injection locked lasers. Optical and Quantum Electronics, 2007, 38, 869-876.	3.3	1
94	Square-Lattice Photonic Crystal Fiber Cutoff Properties. , 2006, , .		2
95	Modified Honeycomb Photonic Bandgap Fiber Effectively Single-Mode Regime: A Numerical Analysis. , 2006, , .		0
96	Numerical Approaches for the Analysis of Optical Devices. , 2006, , .		0
97	Patch Array Antenna for UWB Radar Applications. , 2006, , .		4
98	Polarization splitter based on a square-lattice photonic-crystal fiber. Optics Letters, 2006, 31, 441.	3.3	68
99	Distortion Performance Prediction in Multi-Band Radio over Fiber Systems Exploiting Direct Laser Modulation. , 2006, , .		4
100	Tunability of the gain spectrum in an erbium-doped fiber with depressed-cladding. , 2006, , .		2
101	Intermodulation Distortion Modelling in IM-DD Multi-Band Radio over Fibre Links. , 2006, , .		0
102	Optical parametric amplification in dispersion-flattened highly nonlinear photonic crystal fibers. , 2005, , .		4
103	Optical parametric amplification in all-silica triangular-core photonic crystal fibers. Applied Physics B: Lasers and Optics, 2005, 81, 251-255.	2.2	19
104	Design of photonic-crystal and wire waveguide interface. Journal of Lightwave Technology, 2005, 23, 2740-2745.	4.6	9
105	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
106	Multipump flattened-gain Raman amplifiers based on photonic-crystal fibers. IEEE Photonics Technology Letters, 2005, 17, 2556-2558.	2.5	6
107	Photonic crystal fiber based polarization splitter. , 0, , .		1
108	Polarization selective coupling in three-core holey fibers. , 0, , .		0

#	ARTICLE	IF	CITATIONS
109	Test pattern for microwave dielectric properties of SrBi/sub 2/Ta/sub 2/O/sub 9/. , 0, , .		0
110	In- and out-coupling of light in photonic-crystal and conventional dielectric waveguides of arbitrary width. , 0, , .		0
111	Cutoff properties of large-mode-area photonic crystal fibers. , 0, , .		2