

Lorenzo Rosa

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6802739/publications.pdf>

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	Reassessing the projections of the World Water Development Report. <i>Npj Clean Water</i> , 2019, 2, .	8.0	1,095
2	Surface plasmon resonances in periodic and random patterns of gold nano-disks for broadband light harvesting. <i>Optics Express</i> , 2012, 20, 11466.	3.4	150
3	Mechanism of fine ripple formation on surfaces of (semi)transparent materials via a half-wavelength cavity feedback. <i>Nanotechnology</i> , 2011, 22, 055304.	2.6	96
4	Reversible gating of smart plasmonic molecular traps using thermoresponsive polymers for single-molecule detection. <i>Nature Communications</i> , 2015, 6, 8797.	12.8	83
5	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
6	Chlorination disadvantages and alternative routes for biofouling control in reverse osmosis desalination. <i>Npj Clean Water</i> , 2019, 2, .	8.0	71
7	Polarization splitter based on a square-lattice photonic-crystal fiber. <i>Optics Letters</i> , 2006, 31, 441.	3.3	68
8	Asymmetric gold nanodimer arrays: electrostatic self-assembly and SERS activity. <i>Journal of Materials Chemistry A</i> , 2015, 3, 240-249.	10.3	63
9	Plasmonic nanopapers: flexible, stable and sensitive multiplex PLIF tags for unclonable anti-counterfeiting applications. <i>Nanoscale</i> , 2020, 12, 9471-9480.	5.6	60
10	Additional Enhancement of Electric Field in Surface-Enhanced Raman Scattering due to Fresnel Mechanism. <i>Scientific Reports</i> , 2013, 3, 2335.	3.3	54
11	Randomization of gold nano-brick arrays: a tool for SERS enhancement. <i>Optics Express</i> , 2013, 21, 13502.	3.4	53
12	Single-mode regime of square-lattice photonic crystal fibers. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2005, 22, 1655.	1.5	52
13	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
14	Electrically Driven Quantum Light Sources. <i>Advanced Optical Materials</i> , 2015, 3, 1012-1033.	7.3	48
15	Selective enhancement of infrared absorption with metal hole arrays. <i>Optical Materials Express</i> , 2012, 2, 1367.	3.0	46
16	Sculpturing of photonic crystals by ion beam lithography: towards complete photonic bandgap at visible wavelengths. <i>Optics Express</i> , 2011, 19, 5802.	3.4	45
17	Scaling Rules of SERS Intensity. <i>Advanced Optical Materials</i> , 2014, 2, 382-388.	7.3	44
18	Design of all-solid leakage channel fibers with large mode area and low bending loss. <i>Optics Express</i> , 2009, 17, 4913.	3.4	38

#	ARTICLE	IF	CITATIONS
19	Advances in diamond nanofabrication for ultrasensitive devices. <i>Microsystems and Nanoengineering</i> , 2017, 3, 17061.	7.0	37
20	Modelling leaky photonic wires: A mode solver comparison. <i>Optical and Quantum Electronics</i> , 2007, 38, 731-759.	3.3	36
21	Effective area limit of large-mode-area solid-core photonic bandgap fibers for fiber laser applications. <i>Optical Fiber Technology</i> , 2010, 16, 409-418.	2.7	35
22	Augmented sensitivity of an IR-absorption gas sensor employing a metal hole array. <i>Optical Materials Express</i> , 2013, 3, 968.	3.0	34
23	SierpinÅski fractal plasmonic nanoantennas. <i>Physica Status Solidi - Rapid Research Letters</i> , 2011, 5, 175-177.	2.4	31
24	FDTD modeling to enhance the performance of an organic solar cell embedded with gold nanoparticles. <i>Optical Materials Express</i> , 2011, 1, 1326.	3.0	28
25	Limitation on Effective Area of Bent Large-Mode-Area Leakage Channel Fibers. <i>Journal of Lightwave Technology</i> , 2011, 29, 2609-2615.	4.6	25
26	Nitrogen-vacancy centers in diamond for nanoscale magnetic resonance imaging applications. <i>Beilstein Journal of Nanotechnology</i> , 2019, 10, 2128-2151.	2.8	25
27	A simple analytical model for confinement loss estimation in hollow-core Tube Lattice Fibers. <i>Optics Express</i> , 2019, 27, 5230.	3.4	23
28	3D-Tailored Gold Nanoparticles for Light Field Enhancement and Harvesting over Visible-IR Spectral Range. <i>Journal of Physical Chemistry C</i> , 2011, 115, 5251-5256.	3.1	22
29	Engineering gold alloys for plasmonics. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 117, 641-645.	2.3	21
30	Light enhancement in surface-enhanced Raman scattering at oblique incidence. <i>Photonic Sensors</i> , 2012, 2, 283-288.	5.0	20
31	Optical parametric amplification in all-silica triangular-core photonic crystal fibers. <i>Applied Physics B: Lasers and Optics</i> , 2005, 81, 251-255.	2.2	19
32	Surface defect mediated electron hopping between nanoparticles separated by a nano-gap. <i>Physica Status Solidi - Rapid Research Letters</i> , 2010, 4, 244-246.	2.4	19
33	3D nano-structures for laser nano-manipulation. <i>Beilstein Journal of Nanotechnology</i> , 2013, 4, 534-541.	2.8	18
34	Nano-Magnetic Resonance Imaging (Nano-MRI) Gives Personalized Medicine a New Perspective. <i>Biomedicines</i> , 2017, 5, 7.	3.2	18
35	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
36	Phase controlled SERS enhancement. <i>Scientific Reports</i> , 2019, 9, 744.	3.3	17

#	ARTICLE	IF	CITATIONS
37	Genetic-Algorithm Assisted Design of C-Band CROW-Miniaturized PCW Interleaver. Journal of Lightwave Technology, 2009, 27, 2678-2687.	4.6	16
38	Tunable Raman Selectivity via Randomization of a Rectangular Pattern of Nanodisks. ACS Photonics, 2014, 1, 1006-1012.	6.6	16
39	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
40	Arrays of Arbitrarily Shaped Nanoparticles: Overlay-Errorless Direct Ion Write. Advanced Optical Materials, 2013, 1, 456-459.	7.3	15
41	Mode discrimination criterion for effective differential amplification in Yb-doped fiber design for high power operation. Optics Express, 2017, 25, 29013.	3.4	14
42	Long-range interaction of localized surface plasmons in periodic and random patterns of Au nanoparticles. Applied Physics A: Materials Science and Processing, 2014, 115, 409-414.	2.3	12
43	Hollow Core Inhibited Coupling Fibers for Biological Optical Sensing. Journal of Lightwave Technology, 2019, 37, 2598-2604.	4.6	12
44	Towards Single Biomolecule Imaging via Optical Nanoscale Magnetic Resonance Imaging. Small, 2015, 11, 4229-4236.	10.0	11
45	Femtosecond laser-induced hard X-ray generation in air from a solution flow of Au nano-sphere suspension using an automatic positioning system. Optics Express, 2016, 24, 19994.	3.4	11
46	Micro-manipulation of nanodiamonds containing NV centers for quantum applications. Diamond and Related Materials, 2020, 106, 107840.	3.9	10
47	Design of photonic-crystal and wire waveguide interface. Journal of Lightwave Technology, 2005, 23, 2740-2745.	4.6	9
48	Ripple-patterned substrates for light enhancement applications. Proceedings of SPIE, 2010, , .	0.8	9
49	Chiral plasmonic nanostructures: experimental and numerical tools. , 2013, , .		9
50	SERS scaling rules. Applied Physics A: Materials Science and Processing, 2014, 117, 647-650.	2.3	7
51	Latest Advances in the Generation of Single Photons in Silicon Carbide. Technologies, 2016, 4, 16.	5.1	7
52	Full-vector modeling of thermally-driven gain competition in Yb-doped reduced symmetry photonic-crystal fiber. Optical and Quantum Electronics, 2016, 48, 1.	3.3	7
53	TiO ₂ /Au/TiO ₂ plasmonic photocatalyst with enhanced photocatalytic activity and stability under visible-light irradiation. Catalysis Today, 2022, 397-399, 257-264.	4.4	7
54	Multipump flattened-gain Raman amplifiers based on photonic-crystal fibers. IEEE Photonics Technology Letters, 2005, 17, 2556-2558.	2.5	6

#	ARTICLE	IF	CITATIONS
55	Simulation and Measurement of Solar Harvesting Enhancement of Silver Plasmonic Nanoparticles on GaSb Nanodots. Journal of Photonics, 2014, 2014, 1-7.	1.0	6
56	Optical parametric amplification in dispersion-flattened highly nonlinear photonic crystal fibers. , 2005, , .		4
57	Patch Array Antenna for UWB Radar Applications. , 2006, , .		4
58	Distortion Performance Prediction in Multi-Band Radio over Fiber Systems Exploiting Direct Laser Modulation. , 2006, , .		4
59	Tailoring plasmonic nanoparticles and fractal patterns. Proceedings of SPIE, 2011, , .	0.8	4
60	Cup-Shaped Nanoantenna Arrays for Zeptoliter Volume Biochemistry and Plasmonic Sensing in the Visible Wavelength Range. ACS Applied Materials & Interfaces, 2017, 9, 19082-19091.	8.0	4
61	Plasmonic Gas Sensor. , 2013, , .		3
62	Analytical Formulas for Dispersion and Effective Area in Hollow-Core Tube Lattice Fibers. Fibers, 2021, 9, 58.	4.0	3
63	Cutoff properties of large-mode-area photonic crystal fibers. , 0, , .		2
64	Square-Lattice Photonic Crystal Fiber Cutoff Properties. , 2006, , .		2
65	Tunability of the gain spectrum in an erbium-doped fiber with depressed-cladding. , 2006, , .		2
66	Optimization of large-mode-area tapered-index multi-core fibers with high differential mode bending loss for Ytterbium-doped fiber applications. , 2010, , .		2
67	Ion-beam and plasma etching of a conical-pores photonic crystal for thin-film solar cell. Proceedings of SPIE, 2013, , .	0.8	2
68	Complex Permittivity Measurements of Hydraulic Oil at UHF and Microwave Frequencies. , 2019, , .		2
69	Mode Phase Variation and Sensitivity to Thermal Load in Three-Core Optical Fibers. Journal of Lightwave Technology, 2020, 38, 2400-2405.	4.6	2
70	Photonic crystal fiber based polarization splitter. , 0, , .		1
71	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
72	Tailoring plasmonic field enhancement in spatial and spectral domains. , 2012, , .		1

#	ARTICLE	IF	CITATIONS
73	A Preliminary Study of a Graphene Fractal Sierpinski Antenna. IOP Conference Series: Materials Science and Engineering, 2020, 840, 012003.	0.6	1
74	Thermo-optical numerical modal analysis of multicore fibers for high power lasers and amplifiers. Optical Fiber Technology, 2022, 70, 102857.	2.7	1
75	Polarization selective coupling in three-core holey fibers. , 0, , .		0
76	Test pattern for microwave dielectric properties of SrBi/sub 2/Ta/sub 2/O/sub 9/. , 0, , .		0
77	In- and out-coupling of light in photonic-crystal and conventional dielectric waveguides of arbitrary width. , 0, , .		0
78	Modified Honeycomb Photonic Bandgap Fiber Effectively Single-Mode Regime: A Numerical Analysis. , 2006, , .		0
79	Numerical Approaches for the Analysis of Optical Devices. , 2006, , .		0
80	Intermodulation Distortion Modelling in IM-DD Multi-Band Radio over Fibre Links. , 2006, , .		0
81	Design of single-mode leakage channel fibers with large-mode-area and low bending loss. , 2008, , .		0
82	Fundamental and high-order mode bending loss in leakage channel fibers. , 2008, , .		0
83	Genetic-Algorithm Assisted Design of C-band Photonic-Crystal Waveguide Interleavers Using Ring Resonators. , 2009, , .		0
84	Simple suppression technique for higher-order mode amplification in bent large mode area triple-cladding fibers. , 2010, , .		0
85	Octagonal Large-Mode-Area Leakage Channel Fiber with Reduced Bending Loss. , 2010, , .		0
86	Limitation on effective area of large-mode-area leakage channel fibers under bent condition. , 2010, , .		0
87	Novel plasmonic applications in physics and chemistry. , 2011, , .		0
88	Localized photocatalysis by Au-titania plasmonics. , 2011, , .		0
89	Alumina-embedded Au nanowires for SERS sensing. , 2011, , .		0
90	Design and fabrication of LMA low-bending loss leakage channel fibers. , 2012, , .		0

#	ARTICLE	IF	CITATIONS
91	Additional enhancement in surface-enhanced Raman scattering due to excitation geometry. Proceedings of SPIE, 2012, , .	0.8	0
92	Plasmonic nano-structures for opto-mechanical and sensing applications. , 2012, , .		0
93	Fabrication of nanoparticles for generation of force and torque at nanoscale. , 2013, , .		0
94	Optical properties of periodic/random pattern of Au nanodiscs. , 2013, , .		0
95	Optoplasmonics: hybridization in 3D. , 2013, , .		0
96	Surface enhanced infrared absorption measurements with micro metal hole array. , 2013, , .		0
97	Scaling rules for Surface Enhanced Raman Scattering. , 2014, , .		0
98	Novel plasmonic materials to improve thin film solar cells efficiency. , 2015, , .		0
99	Modelling of thermal effects and gain competition in Yb-doped large mode area photonic crystal fibers. , 2016, , .		0
100	Thermal effects and gain competition in Yb-doped large mode area fibers for high-power applications. , 2016, , .		0
101	Gain competition in Yb-doped symmetry-free photonic crystal fibers under severe heat load. , 2017, , .		0
102	Improved performances of photonic crystal fibers for high power laser operation. , 2017, , .		0
103	Thermal induced dynamics of gain competition in Yb-doped Symmetry-Free Photonic Crystal Fibers. , 2017, , .		0
104	Guidance properties and thermal effects in 9-core Yb-doped fiber for high power applications. , 2019, , .		0
105	Non-Idealities in Hollow Core Inhibited Coupling Fibers. , 2020, , .		0
106	Design and Optimization of Devices for C-band Photonic-Crystal Waveguide Interleaver with Flattened Pass-band. , 2008, , .		0
107	Effect of Rod Inaccuracy on Genetic-Algorithm-Designed C-Band Photonic-Crystal Waveguide Interleavers. , 2009, , .		0
108	Realistic Squared-Rods Circular F-Doped Large-Mode- Area Leakage Channel Fibers with Low Bending Loss. , 2010, , .		0

#	ARTICLE	IF	CITATIONS
109	Optical constants of gold-silver-copper alloy system. , 2014, , .		0
110	Analytical Estimation of Confinement Loss in Tube Lattice Fibers. , 2018, , .		0
111	Guidance properties and phase shift of a 9-core fiber amplifier for high power operation in presence of consistent thermal load. , 2019, , .		0