NicolÃ² Maccaferri

List of Publications by Year
in descending order

71 papers	2,159 citations	236925 25 h-index	233421 45 g-index
75 all docs	75 docs citations	75 times ranked	2390 citing authors

#	Article	IF	Citations
1	Ultrasensitive and label-free molecular-level detection enabled by light phase control in magnetoplasmonic nanoantennas. Nature Communications, 2015, 6, 6150.	12.8	172
2	Machine Learning in Nanoscience: Big Data at Small Scales. Nano Letters, 2020, 20, 2-10.	9.1	138
3	Plasmonic Nanopores for Single-Molecule Detection and Manipulation: Toward Sequencing Applications. Nano Letters, 2019, 19, 7553-7562.	9.1	118
4	Tuning the Magneto-Optical Response of Nanosize Ferromagnetic Ni Disks Using the Phase of Localized Plasmons. Physical Review Letters, 2013, 111, 167401.	7.8	111
5	Nanoscale magnetophotonics. Journal of Applied Physics, 2020, 127, .	2.5	95
6	Magnetoplasmonic Design Rules for Active Magneto-Optics. Nano Letters, 2014, 14, 7207-7214.	9.1	94
7	Magnetic Control of the Chiroptical Plasmonic Surfaces. Nano Letters, 2018, 18, 302-307.	9.1	85
8	Resonant Enhancement of Magneto-Optical Activity Induced by Surface Plasmon Polariton Modes Coupling in 2D Magnetoplasmonic Crystals. ACS Photonics, 2015, 2, 1769-1779.	6.6	69
9	Anisotropic Nanoantenna-Based Magnetoplasmonic Crystals for Highly Enhanced and Tunable Magneto-Optical Activity. Nano Letters, 2016, 16, 2533-2542.	9.1	67
10	Hyperbolic Meta-Antennas Enable Full Control of Scattering and Absorption of Light. Nano Letters, 2019, 19, 1851-1859.	9.1	62
11	Recent advances in plasmonic nanocavities for single-molecule spectroscopy. Nanoscale Advances, 2021, 3, 633-642.	4.6	61
12	On-Demand Intracellular Delivery of Single Particles in Single Cells by 3D Hollow Nanoelectrodes. Nano Letters, 2019, 19, 722-731.	9.1	59
13	Enhanced magnetic modulation of light polarization exploiting hybridization with multipolar dark plasmons in magnetoplasmonic nanocavities. Light: Science and Applications, 2020, 9, 49.	16.6	54
14	Active Magnetoplasmonic Ruler. Nano Letters, 2015, 15, 3204-3211.	9.1	48
15	Hybrid Ni/SiO2/Au dimer arrays for high-resolution refractive index sensing. Nanophotonics, 2018, 7, 905-912.	6.0	48
16	Hyperbolic dispersion metasurfaces for molecular biosensing. Nanophotonics, 2020, 10, 295-314.	6.0	48
17	Enhanced Raman Investigation of Cell Membrane and Intracellular Compounds by 3D Plasmonic Nanoelectrode Arrays. Advanced Science, 2018, 5, 1800560.	11.2	47
18	Ultrafast all-optical switching enabled by epsilon-near-zero-tailored absorption in metal-insulator nanocavities. Communications Physics, 2020, 3, .	5.3	47

#	Article	IF	Citations
19	Hybrid plasmonic lattices with tunable magneto-optical activity. Optics Express, 2016, 24, 3652.	3.4	40
20	Polarization conversion-based molecular sensing using anisotropic plasmonic metasurfaces. Nanoscale, 2016, 8, 10576-10581.	5.6	39
21	Scanning Probe Photonic Nanojet Lithography. ACS Applied Materials & Interfaces, 2017, 9, 32386-32393.	8.0	36
22	Polarizability and magnetoplasmonic properties of magnetic general nanoellipsoids. Optics Express, 2013, 21, 9875.	3.4	34
23	Magnetophotonics for sensing and magnetometry toward industrial applications. Journal of Applied Physics, 2021, 130, .	2.5	34
24	Hybrid plasmonic nanostructures based on controlled integration of MoS2 flakes on metallic nanoholes. Nanoscale, 2018, 10, 17105-17111.	5.6	32
25	Plasmonic zero mode waveguide for highly confined and enhanced fluorescence emission. Nanoscale, 2018, 10, 17362-17369.	5.6	30
26	Î»-DNA through Porous Materialsâ€"Surface-Enhanced Raman Scattering in a Simple Plasmonic Nanopore. Journal of Physical Chemistry C, 2020, 124, 22663-22670.	3.1	28
27	Magneto-Optical Activity in Nonmagnetic Hyperbolic Nanoparticles. Physical Review Letters, 2021, 127, 217402.	7.8	26
28	Coupling phenomena and collective effects in resonant meta-atoms supporting both plasmonic and (opto-)magnetic functionalities: an overview on properties and applications [Invited]. Journal of the Optical Society of America B: Optical Physics, 2019, 36, E112.	2.1	25
29	Enhanced Optical Spectroscopy for Multiplexed DNA and Protein-Sequencing with Plasmonic Nanopores: Challenges and Prospects. Analytical Chemistry, 2022, 94, 503-514.	6.5	25
30	Particle trapping and beaming using a 3D nanotip excited with a plasmonic vortex. Optics Letters, 2020, 45, 823.	3.3	24
31	Effects of a nonâ€absorbing substrate on the magnetoâ€optical Kerr response of plasmonic ferromagnetic nanodisks. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 1067-1075.	1.8	23
32	Live Intracellular Biorthogonal Imaging by Surface Enhanced Raman Spectroscopy using Alkyne-Silver Nanoparticles Clusters. Scientific Reports, 2018, 8, 12652.	3.3	23
33	Electron Energy Loss Spectroscopy of Bright and Dark Modes in Hyperbolic Metamaterial Nanostructures. Advanced Optical Materials, 2020, 8, 2000277.	7.3	23
34	Enhanced Nonlinear Emission from Single Multilayered Metalâ€"Dielectric Nanocavities Resonating in the Near-Infrared. ACS Photonics, 2021, 8, 512-520.	6.6	23
35	Designer Bloch plasmon polariton dispersion in grating-coupled hyperbolic metamaterials. APL Photonics, 2020, 5, 076109.	5.7	20
36	Near- and Mid-Infrared Graphene-Based Photonic Architectures for Ultrafast and Low-Power Electro-Optical Switching and Ultra-High Resolution Imaging. ACS Applied Nano Materials, 2020, 3, 12218-12230.	5.0	20

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37	A hybrid metalâ€“dielectric zero mode waveguide for enhanced single molecule detection. Chemical Communications, 2019, 55, 9725-9728.	4.1	19
38	Site-selective functionalization of plasmonic nanopores for enhanced fluorescence emission rate and FÃ¶rster resonance energy transfer. Nanoscale Advances, 2019, 1, 2454-2461.	4.6	19
39	Intracellular Recording of Human Cardiac Action Potentials on Market-Available Multielectrode Array Platforms. Frontiers in Bioengineering and Biotechnology, 2020, 8, 66.	4.1	19
40	Bioâ€Assisted Tailored Synthesis of Plasmonic Silver Nanorings and Siteâ€Selective Deposition on Graphene Arrays. Advanced Optical Materials, 2020, 8, 1901583.	7.3	18
41	Site-Selective Integration of MoS₂ Flakes on Nanopores by Means of Electrophoretic Deposition. ACS Omega, 2019, 4, 9294-9300.	3.5	16
42	Two-state switchable plasmonic tweezers for dynamic manipulation of nano-objects. Nanoscale, 2020, 12, 8574-8581.	5.6	15
43	Magnetoplasmonic control of plasmonic vortices. Applied Physics Letters, 2017, 111, .	3.3	14
44	Tunable magnetoplasmonics in lattices of Ni/SiO2/Au dimers. Scientific Reports, 2019, 9, 9907.	3.3	14
45	Plasmon Hybridization in Compressible Metalâ€“Insulatorâ€“Metal Nanocavities: An Optical Approach for Sensing Deep Subâ€Wavelength Deformation. Advanced Optical Materials, 2020, 8, 2000609.	7.3	14
46	Field-resolved detection of the temporal response of a single plasmonic antenna in the mid-infrared. Optica, 2021, 8, 898.	9.3	14
47	FÃ¶rster-Resonance Energy Transfer between Diffusing Molecules and a Functionalized Plasmonic Nanopore. Physical Review Applied, 2020, 14, .	3.8	10
48	Chasing Plasmons in Flatland. Nano Letters, 2019, 19, 7549-7552.	9.1	9
49	Directional Plasmonic Excitation by Helical Nanotips. Nanomaterials, 2021, 11, 1333.	4.1	9
50	Magnetic control of particle trapping in a hybrid plasmonic nanopore. Applied Physics Letters, 2021, 118, 193102.	3.3	9
51	Speeding up Nanoscience and Nanotechnology with Ultrafast Plasmonics. Nano Letters, 2020, 20, 5593-5596.	9.1	8
52	Electrophoretic Deposition of WS2 Flakes on Nanoholes Arraysâ€”Role of Used Suspension Medium. Materials, 2019, 12, 3286.	2.9	7
53	Nanoporous gold decorated with silver nanoparticles as large area efficient SERS substrate. , 2017, , .		2
54	All-Dielectric and Magnetoplasmonic Nanoantenna Surfaces for the Dynamic Chiroptics. , 2019, , .		1

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55	Modern Magnetophotonic Materials and their Applications: introduction to special issue. Optical Materials Express, 2022, 12, 2087.	3.0	1
56	Helical light emission from plasmonic vortices via magnetic tapered tip. Journal of Physics: Conference Series, 2018, 961, 012001.	0.4	0
57	Field-Resolved Response of Plasmonic Antennas. , 2019, , .		0
58	Nonlinear optical response of metal-dielectric nanocavities resonating in the near-infrared. , 2021, , .		0
59	Broadband tuning of the magneto-optical response of hybrid metal-insulator nanoparticles enabled by hyperbolic electric and magnetic modes. , 2021, , .		0
60	Ultrafast opto-acoustic modulation of light reflectance in metal-insulator-metal epsilon-near-zero nanocavities. , 2021, , .		0
61	Enhanced second-harmonic generation by single metalâ€“insulator multilayered nanocavities with axial symmetry resonating in the near-infrared. , 2021, , .		0
62	Hyperbolic dispersion metasurfaces for molecular biosensing. , 2021, , 301-320.		0
63	Magneto-optics in hyperbolic nanomaterials. , 2021, , .		0
64	Tunable magneto-optics in hyperbolic nanoparticles. , 2021, , .		0
65	Magnetoplasmonic crystals based on anisotropic nanoantennas. , 2016, , .		0
66	Magnetic control of the chiroptical plasmonic surfaces (Conference Presentation). , 2018, , .		0
67	Fabrication and optical characterization of hyperbolic nanoparticles on a transparent substrate. , 2019, , .		0
68	Plasmonic nanopore prepared on MoS2 membrane - hybrid nanostructures based on site selective deposition. , 2019, , .		0
69	FRET characterization of hollow plasmonic nanoantennas. , 2019, , .		0
70	Amplification of Magneto-Optical Activity via Hybridization with Dark Plasmons. , 2020, , .		0
71	Magneto-optics in type-II hyperbolic metamaterial nanoantennas. , 2021, , .		0