Remo Proietti Zaccaria

List of Publications by Year
in descending order

131	6,335	87723	69108
papers	citations	38 h-index	77 g-index

131	131	131	10101
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Quasi-BIC laser enabled by high-contrast grating resonator for gas detection. Nanophotonics, 2022, 11, 297-304.	2.9	33
2	Binder-free nanostructured germanium anode for high resilience lithium-ion battery. Electrochimica Acta, 2022, 411, 139832.	2.6	14
3	Photoinduced transient symmetry breaking in plasmonic structures for ultrafast nanophotonics. , 2022, , .		0
4	Allâ€Optical Reconfiguration of Ultrafast Dichroism in Gold Metasurfaces. Advanced Optical Materials, 2022, 10, .	3.6	6
5	Ultrafast Plasmonics Beyond the Perturbative Regime: Breaking the Electronic-Optical Dynamics Correspondence. Nano Letters, 2022, 22, 2748-2754.	4.5	11
6	Sustainable lithium-ion batteries based on metal-free tannery waste biochar. Green Chemistry, 2022, 24, 4119-4129.	4.6	16
7	Disentangling the Temporal Dynamics of Nonthermal Electrons in Photoexcited Gold Nanostructures. Laser and Photonics Reviews, 2021, 15, 2100017.	4.4	10
8	Nanoporous Metals: From Plasmonic Properties to Applications in Enhanced Spectroscopy and Photocatalysis. ACS Nano, 2021, 15, 6038-6060.	7.3	120
9	Plasmomechanical Systems: Principles and Applications. Advanced Functional Materials, 2021, 31, 2103706.	7.8	18
10	All-Optically Reconfigurable Plasmonic Metagrating for Ultrafast Diffraction Management. Nano Letters, 2021, 21, 1345-1351.	4.5	19
11	Photonic Cavity Effects for Enhanced Efficiency in Layered Perovskite-Based Light-Emitting Diodes. Nanomaterials, 2021, 11, 2947.	1.9	3
12	Galvanic Replacement Reaction as a Route to Prepare Nanoporous Aluminum for UV Plasmonics. Nanomaterials, 2020, 10, 102.	1.9	20
13	Transient optical symmetry breaking for ultrafast broadband dichroism in plasmonic metasurfaces. Nature Photonics, 2020, 14, 723-727.	15.6	48
14	Ultra-compact organic vertical-cavity laser with high-contrast grating feedback for gas detection. IEEE Sensors Journal, 2020, , 1-1.	2.4	2
15	Controlling Light, Heat, and Vibrations in Plasmonics and Phononics. Advanced Optical Materials, 2020, 8, 2001225.	3.6	46
16	Photoinduced Temperature Gradients in Subâ€Wavelength Plasmonic Structures: The Thermoplasmonics of Nanocones. Advanced Optical Materials, 2020, 8, 2000568.	3.6	14
17	Plasmon Hybridization in Compressible Metalâ€“Insulatorâ€“Metal Nanocavities: An Optical Approach for Sensing Deep Subâ€Wavelength Deformation. Advanced Optical Materials, 2020, 8, 2000609.	3.6	14
18	Textured nanofibrils drive microglial phenotype. Biomaterials, 2020, 257, 120177.	5.7	3

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19	Towards enhanced sodium storage of anatase TiO₂via a dual-modification approach of Mo doping combined with AlF₃ coating. Nanoscale, 2020, 12, 15896-15904.	2.8	11
20	Novel Plasmonic Nanocavities for Optical Trappingâ€Assisted Biosensing Applications. Advanced Optical Materials, 2020, 8, 1901481.	3.6	70
21	Bottomâ€Gate Approach for All Basic Logic Gates Implementation by a Singleâ€Type IGZOâ€Based MOS Transistor with Reduced Footprint. Advanced Science, 2020, 7, 1901224.	5.6	4
22	Tuning temperature gradients in subwavelength plasmonic nanocones with tilted illumination. Optics Letters, 2020, 45, 5472.	1.7	6
23	Metallic Nanoporous Aluminumâ€“Magnesium Alloy for UV-Enhanced Spectroscopy. Journal of Physical Chemistry C, 2019, 123, 20287-20296.	1.5	27
24	Damage Formation in Sn Film Anodes of Na-Ion Batteries. Journal of Physical Chemistry C, 2019, 123, 15244-15250.	1.5	14
25	A Comprehensive Understanding of Lithiumâ€“Sulfur Battery Technology. Advanced Functional Materials, 2019, 29, 1901730.	7.8	267
26	Interband Transitions Are More Efficient Than Plasmonic Excitation in the Ultrafast Melting of Electromagnetically Coupled Au Nanoparticles. Journal of Physical Chemistry C, 2019, 123, 16943-16950.	1.5	19
27	Facile Synthesis of Highly Graphitized Carbon via Reaction of CaC2 with Sulfur and Its Application for Lithium/Sodium-Ion Batteries. ACS Omega, 2019, 4, 8312-8317.	1.6	13
28	Planar Aperiodic Arrays as Metasurfaces for Optical Near-Field Patterning. ACS Nano, 2019, 13, 5646-5654.	7.3	8
29	Nitrogen-doped single walled carbon nanohorns enabling effective utilization of Ge nanocrystals for next generation lithium ion batteries. Electrochimica Acta, 2019, 298, 89-96.	2.6	17
30	Insight on the Failure Mechanism of Sn Electrodes for Sodium-Ion Batteries: Evidence of Pore Formation during Sodiation and Crack Formation during Desodiation. ACS Applied Energy Materials, 2019, 2, 860-866.	2.5	18
31	Hybridâ€State Dynamics of Dye Molecules and Surface Plasmon Polaritons under Ultrastrong Coupling Regime. Laser and Photonics Reviews, 2018, 12, 1700176.	4.4	25
32	Surface and interface engineering of anatase TiO2 anode for sodium-ion batteries through Al2O3 surface modification and wise electrolyte selection. Journal of Power Sources, 2018, 384, 18-26.	4.0	15
33	Nitrogen-Doped Single-Walled Carbon Nanohorns as a Cost-Effective Carbon Host toward High-Performance Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2018, 10, 5551-5559.	4.0	57
34	Gold nanoparticles functionalized by rhodamine B isothiocyanate: A new tool to control plasmonic effects. Journal of Colloid and Interface Science, 2018, 513, 10-19.	5.0	43
35	4. Battery Materials. , 2018, , 75-260.		0
36	Strongly Coupled Hybrid States: Dynamics of Strongly Coupled Hybrid States by Transient Absorption Spectroscopy (Adv. Funct. Mater. 48/2018). Advanced Functional Materials, 2018, 28, 1870342.	7.8	6

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37	Dynamics of Strongly Coupled Hybrid States by Transient Absorption Spectroscopy. Advanced Functional Materials, 2018, 28, 1801761.	7.8	17
38	Nanostructured anode materials. Physical Sciences Reviews, 2018, 3, .	0.8	0
39	Plasmon Controlled Shaping of Metal Nanoparticle Aggregates by Femtosecond Laser-Induced Melting. Journal of Physical Chemistry Letters, 2018, 9, 5002-5008.	2.1	20
40	Engineering 3D Multi-Branched Nanostructures for Ultra- Sensing Applications. , 2018, , .		0
41	Hotâ€Spot Engineering in 3D Multiâ€Branched Nanostructures: Ultrasensitive Substrates for Surfaceâ€Enhanced Raman Spectroscopy. Advanced Optical Materials, 2017, 5, 1600836.	3.6	32
42	Thermo-plasmonics: playing with temperature at the nanoscale (Conference Presentation). , 2017, , .		0
43	Perovskite Nanopillar Array Based Tandem Solar Cell. ACS Photonics, 2017, 4, 2025-2035.	3.2	24
44	Multimode Coherent Hybrid States: Ultrafast Investigation of Double Rabi Splitting between Surface Plasmons and Sulforhodamine 101 Dyes. Advanced Optical Materials, 2017, 5, 1600857.	3.6	12
45	Facile synthesis of Geâ€“MWCNT nanocomposite electrodes for high capacity lithium ion batteries. Journal of Materials Chemistry A, 2017, 5, 19721-19728.	5.2	19
46	Controlling the Heat Dissipation in Temperature-Matched Plasmonic Nanostructures. Nano Letters, 2017, 17, 5472-5480.	4.5	27
47	Fabrication of Gold-Coated Ultra-Thin Anodic Porous Alumina Substrates for Augmented SERS. Materials, 2016, 9, 403.	1.3	19
48	Dynamics of Strong Coupling between Jâ€Aggregates and Surface Plasmon Polaritons in Subwavelength Hole Arrays. Advanced Functional Materials, 2016, 26, 6198-6205.	7.8	40
49	High temperature nanoplasmonics. , 2016, , .		0
50	Tuning the Composition of Alloy Nanoparticles Through Laser Mixing: The Role of Surface Plasmon Resonance. Journal of Physical Chemistry C, 2016, 120, 12810-12818.	1.5	37
51	Strong Coupling: Dynamics of Strong Coupling between J-Aggregates and Surface Plasmon Polaritons in Subwavelength Hole Arrays (Adv. Funct. Mater. 34/2016). Advanced Functional Materials, 2016, 26, 6197-6197.	7.8	1
52	Next-generation textiles: from embedded supercapacitors to lithium ion batteries. Journal of Materials Chemistry A, 2016, 4, 16771-16800.	5.2	111
53	Broadband absorption enhancement in plasmonic nanoshells-based ultrathin microcrystalline-Si solar cells. Scientific Reports, 2016, 6, 24539.	1.6	38
54	Dynamics of Strong Coupling between CdSe Quantum Dots and Surface Plasmon Polaritons in Subwavelength Hole Array. Journal of Physical Chemistry Letters, 2016, 7, 4648-4654.	2.1	34

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55	The role of Rabi splitting tuning in the dynamics of strongly coupled J-aggregates and surface plasmon polaritons in nanohole arrays. Nanoscale, 2016, 8, 13445-13453.	2.8	40
56	Plasmonic Color-Graded Nanosystems with Achromatic Subwavelength Architectures for Light Filtering and Advanced SERS Detection. ACS Applied Materials & Interfaces, 2016, 8, 8024-8031.	4.0	35
57	Butterfly wing color: A photonic crystal demonstration. Optics and Lasers in Engineering, 2016, 76, 70-73.	2.0	14
58	Spatially, Temporally, and Quantitatively Controlled Delivery of Broad Range of Molecules into Selected Cells through Plasmonic Nanotubes. Advanced Materials, 2015, 27, 7145-7149.	11.1	93
59	Stacked optical antennas for plasmon propagation in a 5 nm-confined cavity. Scientific Reports, 2015, 5, 11237.	1.6	9
60	3D vertical nanostructures for enhanced infrared plasmonics. Scientific Reports, 2015, 5, 16436.	1.6	53
61	A Photonic Crystal Explanation For a Butterfly Wing Color. , 2015, , .		0
62	High Temperature Nanoplasmonics: The Key Role of Nonlinear Effects. ACS Photonics, 2015, 2, 115-120.	3.2	53
63	Novel Plasmonic Probes and Smart Superhydrophobic Devices, New Tools for Forthcoming Spectroscopies at the Nanoscale. NATO Science for Peace and Security Series B: Physics and Biophysics, 2015, , 209-235.	0.2	1
64	Hybridization in Three Dimensions: A Novel Route toward Plasmonic Metamolecules. Nano Letters, 2015, 15, 5200-5207.	4.5	39
65	The phototransduction machinery in the rod outer segment has a strong efficacy gradient. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E2715-24.	3.3	25
66	Detection of single amino acid mutation in human breast cancer by disordered plasmonic self-similar chain. Science Advances, 2015, 1, e1500487.	4.7	58
67	Light-trapping in photon enhanced thermionic emitters. Optics Express, 2015, 23, A1220.	1.7	14
68	Direct Synthesis of Carbon-Doped TiO₂â€“Bronze Nanowires as Anode Materials for High Performance Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2015, 7, 25139-25146.	4.0	65
69	3D Plasmonic nanostar structures for recyclable SERS applications. , 2015, , .		0
70	Plasmonic Moon: A Fano-Like Approach for Squeezing the Magnetic Field in the Infrared. Nano Letters, 2015, 15, 6128-6134.	4.5	32
71	Squeezing Terahertz Light into Nanovolumes: Nanoantenna Enhanced Terahertz Spectroscopy (NETS) of Semiconductor Quantum Dots. Nano Letters, 2015, 15, 386-391.	4.5	86
72	Perovskite nanowire based multijunction solar cell. , 2015, , .		2

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73	High Temperature Plasmonics: Optical Effects on Different Nanostructures. , 2015, , .		0
74	Coil-type Fano Resonances: a Plasmonic Approach to Magnetic Sub-diffraction Confinement. , 2015, , .		0
75	Heating processes in plasmonic resonances: a non-linear temperature dependent permittivity model. Proceedings of SPIE, 2014, , .	0.8	0
76	Direct determination of the resonance properties of metallic conical nanoantennas. Optics Letters, 2014, 39, 571.	1.7	15
77	Dark and bright modes manipulation for plasmon-triggered photonic devices. Proceedings of SPIE, 2014, , .	0.8	3
78	The magic of nanoplasmonics: from superhydrophobic and 3D suspended devices for SERS/TERS-like applications to hot-electrons based nanoscopy. , 2014, , .		0
79	Review on recent progress of nanostructured anode materials for Li-ion batteries. Journal of Power Sources, 2014, 257, 421-443.	4.0	1,794
80	3D Nanostar Dimers with a Subâ€10â€nm Gap for Singleâ€/Fewâ€Molecule Surfaceâ€Enhanced Raman Scattering. Advanced Materials, 2014, 26, 2353-2358.	11.1	263
81	Dark to Bright Mode Conversion on Dipolar Nanoantennas: A Symmetry-Breaking Approach. ACS Photonics, 2014, 1, 310-314.	3.2	64
82	Fano Coil-Type Resonance for Magnetic Hot-Spot Generation. Nano Letters, 2014, 14, 3166-3171.	4.5	85
83	Selective on site separation and detection of molecules in diluted solutions with super-hydrophobic clusters of plasmonic nanoparticles. Nanoscale, 2014, 6, 8208-8225.	2.8	48
84	Pushing the High-Energy Limit of Plasmonics. ACS Nano, 2014, 8, 9239-9247.	7.3	57
85	Bimetallic 3D Nanostar Dimers in Ring Cavities: Recyclable and Robust Surface-Enhanced Raman Scattering Substrates for Signal Detection from Few Molecules. ACS Nano, 2014, 8, 7986-7994.	7.3	101
86	Plasmon resonance tuning in metal nanostars for surface enhanced Raman scattering. Nanotechnology, 2014, 25, 235303.	1.3	49
87	Suitable photo-resists for two-photon polymerization using femtosecond fiber lasers. Microelectronic Engineering, 2014, 121, 135-138.	1.1	10
88	Metal Structures as Advanced Materials in Nanotechnology. , 2014, , 615-669.		1
89	Reflection-mode TERS on Insulin Amyloid Fibrils with Top-Visual AFM Probes. Plasmonics, 2013, 8, 25-33.	1.8	30
90	Terahertz Dipole Nanoantenna Arrays: Resonance Characteristics. Plasmonics, 2013, 8, 133-138.	1.8	35

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91	Plasmon based biosensor for distinguishing different peptides mutation states. Scientific Reports, 2013, 3, 1792.	1.6	68
92	Hot-electron nanoscopy using adiabatic compression of surface plasmons. Nature Nanotechnology, 2013, 8, 845-852.	15.6	239
93	Plasmonic nanostars for SERS application. Microelectronic Engineering, 2013, 111, 247-250.	1.1	19
94	Design and top-down fabrication of metallic L-shape gap nanoantennas supporting plasmon-polariton modes. Microelectronic Engineering, 2013, 111, 91-95.	1.1	7
95	3D Hollow Nanostructures as Building Blocks for Multifunctional Plasmonics. Nano Letters, 2013, 13, 3553-3558.	4.5	149
96	Deep Ultraviolet Plasmon Resonance in Aluminum Nanoparticle Arrays. ACS Nano, 2013, 7, 5834-5841.	7.3	170
97	Interplay between electric and magnetic effect in adiabatic polaritonic systems. Optics Express, 2013, 21, 7538.	1.7	19
98	Molding of Plasmonic Resonances in Metallic Nanostructures: Dependence of the Non-Linear Electric Permittivity on System Size and Temperature. Materials, 2013, 6, 4879-4910.	1.3	123
99	Increased performance in genetic manipulation by modeling the dielectric properties of the rodent brain. , 2013, 2013, 1615-8.		3
100	Mapping the local dielectric response at the nanoscale by means of plasmonic force spectroscopy. Optics Express, 2012, 20, 29626.	1.7	7
101	Surface plasmon polariton compression through radially and linearly polarized source. Optics Letters, 2012, 37, 545.	1.7	51
102	Superhydrophobicity, plasmonics and Raman spectroscopy for few/single molecule detection down to attomolar concentration. , 2012, , .		0
103	Direct Imaging of DNA Fibers: The Visage of Double Helix. Nano Letters, 2012, 12, 6453-6458.	4.5	73
104	Optical phonon modes in ordered core-shell CdSe/CdS nanorod arrays. Physical Review B, 2012, 85, .	1.1	16
105	Optimization and characterization of Au cuboid nanostructures as a SERS device for sensing applications. Microelectronic Engineering, 2012, 97, 189-192.	1.1	19
106	Surface enhanced Raman scattering substrate based on gold-coated anodic porous alumina template. Microelectronic Engineering, 2012, 97, 383-386.	1.1	30
107	Optimization of surface plasmon polariton generation in a nanocone through linearly polarized laser beams. Microelectronic Engineering, 2012, 97, 204-207.	1.1	8
108	Fabrication and characterization of a nanoantenna-based Raman device for ultrasensitive spectroscopic applications. Microelectronic Engineering, 2012, 98, 424-427.	1.1	15

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109	Fabrication of large-area ordered and reproducible nanostructures for SERS biosensor application. Analyst, The, 2012, 137, 1785.	1.7	82
110	Fully analytical description of adiabatic compression in dissipative polaritonic structures. Physical Review B, 2012, 86, .	1.1	38
111	Nanoplasmonic structures for biophotonic applications: SERS overview. Annalen Der Physik, 2012, 524, 620-636.	0.9	18
112	High-performance and site-directed in utero electroporation by a triple-electrode probe. Nature Communications, 2012, 3, 960.	5.8	110
113	Multi-scheme approach for efficient surface plasmon polariton generation in metallic conical tips on AFM-based cantilevers. Optics Express, 2011, 19, 22268.	1.7	42
114	Extremely large extinction efficiency and field enhancement in terahertz resonant dipole nanoantennas. Optics Express, 2011, 19, 26088.	1.7	60
115	Single-mode operation regime for 12-fold index-guiding quasicrystal optical fibers. Applied Physics B: Lasers and Optics, 2010, 100, 499-503.	1.1	14
116	Validity of the V parameter for photonic quasi-crystal fibers. Optics Letters, 2010, 35, 1064.	1.7	28
117	Photonic quasicrystals exhibit zero-transmission regions due to translational arrangement of constituent parts. Physical Review B, 2009, 79, .	1.1	24
118	Multi-shot interference approach for any kind of Bravais lattice. Applied Physics B: Lasers and Optics, 2008, 93, 251-256.	1.1	6
119	Optical polarizer made of uniaxially aligned short single-wall carbon nanotubes embedded in a polymer film. Physical Review B, 2008, 77, .	1.1	62
120	Manipulating full photonic band gaps in two dimensional birefringent photonic crystals. Optics Express, 2008, 16, 14812.	1.7	30
121	Manipulation of light transmission through sub-wavelength hole array. Journal of Optics, 2007, 9, S450-S457.	1.5	6
122	Tunable Fano resonance in photonic crystal slabs. Optics Express, 2006, 14, 8812.	1.7	52
123	Modelling of open quantum devices within the closed-system paradigm. AIP Conference Proceedings, 2005, , .	0.3	0
124	Cross beam lithography (FIB+EBL) and dip pen nanolithography for nanoparticle conductivity measurements. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 2806.	1.6	13
125	Generalized Weylâ€“Wigner formalism for the simulation of open quantum devices: a density-matrix approach. Semiconductor Science and Technology, 2004, 19, S257-S259.	1.0	4
126	Monte Carlo simulation of hot-carrier phenomena in open quantum devices: A kinetic approach. Applied Physics Letters, 2004, 84, 139-141.	1.5	8

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127	Modeling of open quantum devices within the closed-system paradigm. Physical Review B, 2004, 70, .	1.1	4
128	Shape precompensation in two-photon laser nanowriting of photonic lattices. Applied Physics Letters, 2004, 85, 3708-3710.	1.5	85
129	Highâ€Frequency Light Rectification by Nanoscale Plasmonic Conical Antenna in Pointâ€Contactâ€Insulatorâ€Metal Architecture. Advanced Energy Materials, 0, , 2103785.	10.2	9
130	Improved Efficiency of Lightâ€Emitting Diodes by Plasmonic Nanopatterning of the Chargeâ€Transfer Layer. Advanced Optical Materials, 0, , 2200156.	3.6	1
131	Heat and Temperature Localization via Fabryâ€“PÃ©rot Resonances at the Tip of a Nanofocusing Cone. Advanced Optical Materials, 0, , 2200746.	3.6	1