

Denis Garoli

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4990046/publications.pdf>

Version: 2024-02-01

114
papers

2,361
citations

218381

26
h-index

253896

43
g-index

118
all docs

118
docs citations

118
times ranked

2952
citing authors

#	ARTICLE	IF	CITATIONS
1	SERS discrimination of single DNA bases in single oligonucleotides by electro-plasmonic trapping. Nature Communications, 2019, 10, 5321.	5.8	151
2	Microscopic View on a Chemical Vapor Deposition Route to Boron-Doped Graphene Nanostructures. Chemistry of Materials, 2013, 25, 1490-1495.	3.2	130
3	Nanoporous Metals: From Plasmonic Properties to Applications in Enhanced Spectroscopy and Photocatalysis. ACS Nano, 2021, 15, 6038-6060.	7.3	120
4	Plasmonic Nanopores for Single-Molecule Detection and Manipulation: Toward Sequencing Applications. Nano Letters, 2019, 19, 7553-7562.	4.5	118
5	Detecting COVID-19 from Breath: A Game Changer for a Big Challenge. ACS Sensors, 2021, 6, 1408-1417.	4.0	88
6	Plasmonic meta-electrodes allow intracellular recordings at network level on high-density CMOS-multi-electrode arrays. Nature Nanotechnology, 2018, 13, 965-971.	15.6	78
7	Multiplexed Discrimination of Single Amino Acid Residues in Polypeptides in a Single SERS Hot Spot. Angewandte Chemie - International Edition, 2020, 59, 11423-11431.	7.2	71
8	Novel Plasmonic Nanocavities for Optical Trapping-Assisted Biosensing Applications. Advanced Optical Materials, 2020, 8, 1901481.	3.6	70
9	Recent advances in plasmonic nanocavities for single-molecule spectroscopy. Nanoscale Advances, 2021, 3, 633-642.	2.2	61
10	Nanoporous gold plasmonic structures for sensing applications. Optics Express, 2011, 19, 13164.	1.7	58
11	Electrolyte-gated carbon nanotube field-effect transistor-based biosensors: Principles and applications. Applied Physics Reviews, 2021, 8, 041325.	5.5	49
12	Ultrafast all-optical switching enabled by epsilon-near-zero-tailored absorption in metal-insulator nanocavities. Communications Physics, 2020, 3, .	2.0	47
13	Nanoporous gold metamaterials for high sensitivity plasmonic sensing. Nanoscale Horizons, 2019, 4, 1153-1157.	4.1	46
14	Beaming of Helical Light from Plasmonic Vortices via Adiabatically Tapered Nanotip. Nano Letters, 2016, 16, 6636-6643.	4.5	45
15	Boosting infrared energy transfer in 3D nanoporous gold antennas. Nanoscale, 2017, 9, 915-922.	2.8	42
16	Sunscreen tests: Correspondence between in vitro data and values reported by the manufacturers. Journal of Dermatological Science, 2008, 52, 193-204.	1.0	36
17	Optical vortex beam generator at nanoscale level. Scientific Reports, 2016, 6, 29547.	1.6	35
18	Effect of Ni Doping on the MoS2 Structure and Its Hydrogen Evolution Activity in Acid and Alkaline Electrolytes. Surfaces, 2019, 2, 531-545.	1.0	34

#	ARTICLE	IF	CITATIONS
19	Mirrors for Space Telescopes: Degradation Issues. Applied Sciences (Switzerland), 2020, 10, 7538.	1.3	33
20	Hybrid plasmonic nanostructures based on controlled integration of MoS2 flakes on metallic nanoholes. Nanoscale, 2018, 10, 17105-17111.	2.8	32
21	Fractal-Like Plasmonic Metamaterial with a Tailorable Plasma Frequency in the near-Infrared. ACS Photonics, 2018, 5, 3408-3414.	3.2	32
22	Plasmonic zero mode waveguide for highly confined and enhanced fluorescence emission. Nanoscale, 2018, 10, 17362-17369.	2.8	30
23	<i>In Vitro</i> Evaluation of Sunscreens: An Update for the Clinicians. ISRN Dermatology, 2012, 2012, 1-4.	1.9	28
24	Helicity locking of chiral light emitted from a plasmonic nanotaper. Nanoscale, 2017, 9, 6965-6969.	2.8	28
25	λ-DNA through Porous Materialsâ€”Surface-Enhanced Raman Scattering in a Simple Plasmonic Nanopore. Journal of Physical Chemistry C, 2020, 124, 22663-22670.	1.5	28
26	Effectiveness of different substrate materials for in vitro sunscreen tests. Journal of Dermatological Science, 2009, 56, 89-98.	1.0	27
27	Metallic Nanoporous Aluminumâ€”Magnesium Alloy for UV-Enhanced Spectroscopy. Journal of Physical Chemistry C, 2019, 123, 20287-20296.	1.5	27
28	Bilayer holey plasmonic vortex lenses for the far field transmission of pure orbital angular momentum light states. Optics Letters, 2014, 39, 4899.	1.7	26
29	Enhanced Optical Spectroscopy for Multiplexed DNA and Protein-Sequencing with Plasmonic Nanopores: Challenges and Prospects. Analytical Chemistry, 2022, 94, 503-514.	3.2	25
30	Coreactant electrochemiluminescence at nanoporous gold electrodes. Electrochimica Acta, 2018, 277, 168-175.	2.6	24
31	Pump-probe spectroscopy study of ultrafast temperature dynamics in nanoporous gold. Physical Review B, 2019, 99, .	1.1	24
32	Particle trapping and beaming using a 3D nanotip excited with a plasmonic vortex. Optics Letters, 2020, 45, 823.	1.7	24
33	Patterned nanoporous-gold thin layers: Structure control and tailoring of plasmonic properties. Microporous and Mesoporous Materials, 2012, 163, 153-159.	2.2	23
34	Live Intracellular Biorthogonal Imaging by Surface Enhanced Raman Spectroscopy using Alkyne-Silver Nanoparticles Clusters. Scientific Reports, 2018, 8, 12652.	1.6	23
35	Extraordinary optical transmission in one-dimensional gold gratings: near- and far-field analysis. Applied Optics, 2011, 50, 4529.	2.1	22
36	Reflectance measurements and optical constants in the extreme ultraviolet-vacuum ultraviolet regions for SiC with a different C/Si ratio. Applied Optics, 2006, 45, 5642.	2.1	20

#	ARTICLE	IF	CITATIONS
37	Galvanic Replacement Reaction as a Route to Prepare Nanoporous Aluminum for UV Plasmonics. <i>Nanomaterials</i> , 2020, 10, 102.	1.9	20
38	Transmittance and optical constants of Pr films in the 4â€“1600eV spectral range. <i>Journal of Applied Physics</i> , 2008, 103, .	1.1	19
39	Growth and optical properties of silver nanostructures obtained on connected anodic aluminum oxide templates. <i>Nanotechnology</i> , 2012, 23, 325604.	1.3	19
40	A hybrid metalâ€“dielectric zero mode waveguide for enhanced single molecule detection. <i>Chemical Communications</i> , 2019, 55, 9725-9728.	2.2	19
41	Site-selective functionalization of plasmonic nanopores for enhanced fluorescence emission rate and FÃ¶rster resonance energy transfer. <i>Nanoscale Advances</i> , 2019, 1, 2454-2461.	2.2	19
42	Thermoplasmonic Effect of Surface-Enhanced Infrared Absorption in Vertical Nanoantenna Arrays. <i>Journal of Physical Chemistry C</i> , 2018, 122, 13072-13081.	1.5	18
43	Bioâ€“Assisted Tailored Synthesis of Plasmonic Silver Nanorings and Siteâ€“Selective Deposition on Graphene Arrays. <i>Advanced Optical Materials</i> , 2020, 8, 1901583.	3.6	18
44	Plasmomechanical Systems: Principles and Applications. <i>Advanced Functional Materials</i> , 2021, 31, 2103706.	7.8	18
45	Focusing dynamics on circular distributed tapered metallic waveguides by means of plasmonic vortex lenses. <i>Optics Letters</i> , 2012, 37, 4516.	1.7	17
46	Transmittance and optical constants of Eu films from 8.3 to 1400 eV. <i>Journal of Applied Physics</i> , 2008, 104, .	1.1	16
47	Design, fabrication and characterization of plasmonic gratings for SERS. <i>Microelectronic Engineering</i> , 2011, 88, 2717-2720.	1.1	16
48	Site-Selective Integration of MoS ₂ Flakes on Nanopores by Means of Electrophoretic Deposition. <i>ACS Omega</i> , 2019, 4, 9294-9300.	1.6	16
49	Optical constants of Yb films in the 23-1700 eV range. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2007, 24, 3691.	0.8	15
50	Transmittance and optical constants of Ce films in the 6â€“1200eV spectral range. <i>Journal of Applied Physics</i> , 2008, 103, .	1.1	15
51	Two-state switchable plasmonic tweezers for dynamic manipulation of nano-objects. <i>Nanoscale</i> , 2020, 12, 8574-8581.	2.8	15
52	Wedge nanostructures for plasmonic nanofocusing. <i>Optics Express</i> , 2012, 20, 16224.	1.7	14
53	Sub-wavelength confinement of the orbital angular momentum of light probed by plasmonic nanorods resonances. <i>Optics Express</i> , 2014, 22, 26302.	1.7	14
54	Magnetoplasmonic control of plasmonic vortices. <i>Applied Physics Letters</i> , 2017, 111, .	1.5	14

#	ARTICLE	IF	CITATIONS
55	Metal-Modified Montmorillonite as Plasmonic Microstructure for Direct Protein Detection. <i>Sensors</i> , 2021, 21, 2655.	2.1	14
56	Detection of small-sized DNA fragments in a glassy nanopore by utilization of CRISPR-Cas12a as a converter system. <i>Analyst</i> , The, 2022, 147, 905-914.	1.7	14
57	Preparation of tetrapod-like ZnO/TiO ₂ core-shell nanostructures as photocatalytic powder. <i>Crystal Research and Technology</i> , 2011, 46, 885-890.	0.6	13
58	Nanoporous gold leaves: preparation, optical characterization and plasmonic behavior in the visible and mid-infrared spectral regions. <i>Optical Materials Express</i> , 2015, 5, 2246.	1.6	13
59	Optical constants in the EUV soft x-ray (5Å-152 nm) spectral range of B 4 C thin films deposited by different deposition techniques. , 2006, 6317, 286.		12
60	Dependence of the damage in optical metal/dielectric coatings on the energy of ions in irradiation experiments for space qualification. <i>Scientific Reports</i> , 2021, 11, 3429.	1.6	12
61	Synthesis of heteroepitaxial 3C-SiC by means of PLD. <i>Applied Physics A: Materials Science and Processing</i> , 2011, 105, 225-231.	1.1	11
62	Zirconia based functional sol-gel resist for UV and high resolution lithography. <i>Microelectronic Engineering</i> , 2013, 110, 436-440.	1.1	10
63	Förster-Resonance Energy Transfer between Diffusing Molecules and a Functionalized Plasmonic Nanopore. <i>Physical Review Applied</i> , 2020, 14, .	1.5	10
64	FIB lithography of nanoporous gold slits for extraordinary transmission. <i>Microelectronic Engineering</i> , 2012, 98, 419-423.	1.1	9
65	Modified three-dimensional nanoantennas for infrared hydrogen detection. <i>Microelectronic Engineering</i> , 2016, 162, 105-109.	1.1	9
66	Adaptive nanopores: A bioinspired label-free approach for protein sequencing and identification. <i>Nano Research</i> , 2021, 14, 328-333.	5.8	9
67	Directional Plasmonic Excitation by Helical Nanotips. <i>Nanomaterials</i> , 2021, 11, 1333.	1.9	9
68	Magnetic control of particle trapping in a hybrid plasmonic nanopore. <i>Applied Physics Letters</i> , 2021, 118, 193102.	1.5	9
69	High-Frequency Light Rectification by Nanoscale Plasmonic Conical Antenna in Point-Contact-Insulator-Metal Architecture. <i>Advanced Energy Materials</i> , 0, , 2103785.	10.2	9
70	Thin film and multilayer coating development for the extreme ultraviolet spectral region. <i>Radiation Physics and Chemistry</i> , 2006, 75, 1966-1971.	1.4	8
71	In situ real-time investigation of hydrogen-induced structural and optical changes in palladium thin films. <i>Journal of Alloys and Compounds</i> , 2017, 704, 303-310.	2.8	8
72	3D nanoporous antennas as a platform for high sensitivity IR plasmonic sensing. <i>Optics Express</i> , 2019, 27, 25912.	1.7	8

#	ARTICLE	IF	CITATIONS
73	Nanoporous gold Application to extraordinary optical transmission of light. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2013, 31, 012601.	0.6	7
74	Development of a complete plasmonic grating-based sensor and its application for self-assembled monolayer detection. Applied Optics, 2014, 53, 5969.	0.9	7
75	Directly patternable high refractive index ferroelectric sol-gel resist. Materials Chemistry and Physics, 2015, 164, 63-70.	2.0	7
76	Electrophoretic Deposition of WS ₂ Flakes on Nanoholes Arrays Role of Used Suspension Medium. Materials, 2019, 12, 3286.	1.3	7
77	Nanofocusing on circularly distributed tapered metallic waveguides by means of plasmonic vortex lenses. Applied Optics, 2015, 54, 1161.	0.9	6
78	Directly nanopatternable nanoporous titania Application to cell growth engineering. Microelectronic Engineering, 2016, 155, 102-106.	1.1	6
79	Optimizing FRET on Aluminum Surfaces via Controlled Attachment of Fluorescent Dyes. ACS Omega, 2018, 3, 18867-18876.	1.6	6
80	Progress report on a 14.4-nm micro-exposure tool based on a laser-produced-plasma: debris mitigation system results and other issues. , 2007, , .		5
81	Fabrication of nano-rocket-tips for plasmonic nanofocusing. Microelectronic Engineering, 2011, 88, 2530-2532.	1.1	5
82	Nanoscale thermal gradients activated by antenna-enhanced molecular absorption in the mid-infrared. Applied Physics Letters, 2019, 114, 023105.	1.5	5
83	VUV reflectance measurements and optical constants of SiC thin films. Journal of Electron Spectroscopy and Related Phenomena, 2005, 144-147, 987-992.	0.8	4
84	Space applications of Si/B 4 C multilayer coatings at extreme ultra-violet region; comparison with standard Mo/Si coatings. , 2005, 5901, 161.		4
85	Crystalline 3C-SiC Deposited by PLD Using Different Manufactured Targets. , 2010, , .		4
86	Structural characterization of lead zirconate titanate thin films prepared on different electrodes and on silicon substrates. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2011, 29, 061505.	0.9	4
87	Multilayers for directed energy accelerated lightsails. Communications Materials, 2022, 3, .	2.9	4
88	Simbol-X Hard X-ray Focusing Mirrors: Results Obtained During the Phase A Study. , 2009, , .		3
89	X-ray absorption study of silicon carbide thin film deposited by pulsed laser deposition. Journal of Electron Spectroscopy and Related Phenomena, 2011, 184, 240-244.	0.8	3
90	Fabrication of metamaterials in the optical spectral range. Microelectronic Engineering, 2011, 88, 1951-1954.	1.1	3

#	ARTICLE	IF	CITATIONS
91	Optical and structural properties of low thickness lead zirconate titanate films on sapphire substrates prepared via sol-gel method. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2012, 30, 051512.	0.9	3
92	Photonic Cavity Effects for Enhanced Efficiency in Layered Perovskite-Based Light-Emitting Diodes. Nanomaterials, 2021, 11, 2947.	1.9	3
93	Determination of the transmittance and extinction coefficient of Yb films in the 23-1700 eV range. , 2006, , .		2
94	Realization of a radiometric head for measurements of ultraviolet total erythemal effective irradiance. Applied Optics, 2007, 46, 4977.	2.1	2
95	Characterization of the optical constants of materials from the visible to the soft x-rays. Proceedings of SPIE, 2008, , .	0.8	2
96	Transmittance and optical constants of evaporated Pr, Eu, and Tm films in the 4-1600 eV spectral range. Proceedings of SPIE, 2008, , .	0.8	2
97	Spectroscopic study of In_2S_3 prepared via PLD at 1064 nm. Crystal Research and Technology, 2011, 46, 784-788.	0.6	2
98	Nanoporous gold decorated with silver nanoparticles as large area efficient SERS substrate. , 2017, , .		2
99	Absolute spectral response measurements of different photodiodes useful for applications in the UV spectral region. , 2004, , .		1
100	Design and Parametrical Analysis of Metamaterial Stacks in the Visible Spectral Range. Journal of Computational and Theoretical Nanoscience, 2012, 9, 448-455.	0.4	1
101	Engineered/tailored nanoporous gold structures for infrared plasmonics. Proceedings of SPIE, 2015, , .	0.8	1
102	Transmittance and extinction coefficient of Ce films measured in situ in the extreme ultraviolet and soft x-rays. , 2006, 6317, 239.		0
103	Enabling deposition of hard x-ray reflective coatings as an industrial manufacturing process. , 2009, , .		0
104	Plasmonic nanofocusing by means of metal coated dielectric nanowedges. Proceedings of SPIE, 2012, , .	0.8	0
105	Nanoporous gold leaves: preparation, optical characterization, and biosensing capabilities. , 2015, , .		0
106	Sub-wavelength confinement of the orbital angular momentum of light probed by plasmonic nanoantennae resonances. , 2015, , .		0
107	Far field beaming of Orbital Angular Momentum light states. Proceedings of SPIE, 2015, , .	0.8	0
108	In situ study of structural and optical properties of Pd thin film during hydrogen exposure. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
109	Helical light emission from plasmonic vortices via magnetic tapered tip. Journal of Physics: Conference Series, 2018, 961, 012001.	0.3	0
110	Multiplexed Discrimination of Single Amino Acid Residues in Polypeptides in a Single SERS Hot Spot. Angewandte Chemie, 2020, 132, 11520-11528.	1.6	0
111	Efficient OAM generation at the nanoscale level by means of plasmonic vortex lens. , 2017, , .		0
112	Multilayer coatings for multiband spectral observations. , 2017, , .		0
113	Fractal plasmonic metamaterial with tunable properties in the near-infrared. , 2018, , .		0
114	Plasmonic nanopore prepared on MoS2 membrane - hybrid nanostructures based on site selective deposition. , 2019, , .		0