Nicola Coppede

List of Publications by Year
in descending order

74 papers	1,509 citations	361296 20 h-index	330025 37 g-index
76 all docs	76 docs citations	76 times ranked	2107 citing authors

#	Article	IF	Citations
1	New opportunities for organic electronics and bioelectronics: ions in action. Chemical Science, 2013, 4, 1395.	3.7	140
2	Human stress monitoring through an organic cotton-fiber biosensor. Journal of Materials Chemistry B, 2014, 2, 5620-5626.	2.9	107
3	A single cotton fiber organic electrochemical transistor for liquid electrolyte saline sensing. Journal of Materials Chemistry, 2012, 22, 23830.	6.7	99
4	Superhydrophobic Surfaces as Smart Platforms for the Analysis of Diluted Biological Solutions. ACS Applied Materials & Interfaces, 2012, 4, 3213-3224.	4.0	95
5	An in vivo biosensing, biomimetic electrochemical transistor with applications in plant science and precision farming. Scientific Reports, 2017, 7, 16195.	1.6	67
6	In Vivo Phenotyping for the Early Detection of Drought Stress in Tomato. Plant Phenomics, 2019, 2019, 6168209.	2.5	60
7	Ion selective textile organic electrochemical transistor for wearable sweat monitoring. Organic Electronics, 2020, 78, 105579.	1.4	57
8	Liposome sensing and monitoring by organic electrochemical transistors integrated in microfluidics. Biochimica Et Biophysica Acta - General Subjects, 2013, 1830, 4374-4380.	1.1	53
9	Enzymatic sensing with laccase-functionalized textile organic biosensors. Organic Electronics, 2017, 40, 51-57.	1.4	49
10	Diffusion Driven Selectivity in Organic Electrochemical Transistors. Scientific Reports, 2014, 4, 4297.	1.6	48
11	Organic electrochemical transistors monitoring micelle formation. Chemical Science, 2012, 3, 3432.	3.7	45
12	Irreversible evolution of eumelanin redox states detected by an organic electrochemical transistor: en route to bioelectronics and biosensing. Journal of Materials Chemistry B, 2013, 1, 3843.	2.9	45
13	Ambipolar copper phthalocyanine transistors with carbon nanotube array electrodes. Applied Physics Letters, 2011, 98, .	1.5	44
14	Controlling field-effect mobility in pentacene-based transistors by supersonic molecular-beam deposition. Applied Physics Letters, 2006, 88, 132106.	1.5	39
15	Development of an In Vivo Sensor to Monitor the Effects of Vapour Pressure Deficit (VPD) Changes to Improve Water Productivity in Agriculture. Sensors, 2019, 19, 4667.	2.1	33
16	Polymorphism and Phase Control in Titanyl Phthalocyanine Thin Films Grown by Supersonic Molecular Beam Depositionâ€. Journal of Physical Chemistry A, 2007, 111, 12550-12558.	1.1	32
17	A theoretical model for the time varying current in organic electrochemical transistors in a dynamic regime. Organic Electronics, 2016, 35, 59-64.	1.4	23
18	Silica diatom shells tailored with Au nanoparticles enable sensitive analysis of molecules for biological, safety and environment applications. Nanoscale Research Letters, 2018, 13, 94.	3.1	23

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19	All-Polymeric Pressure Sensors Based on PEDOT:PSS-Modified Polyurethane Foam. ACS Applied Polymer Materials, 2021, 3, 1563-1572.	2.0	23
20	Controlled Polymorphism in Titanyl Phthalocyanine on Mica by Hyperthermal Beams: A Micro-Raman Analysis. Journal of Physical Chemistry C, 2010, 114, 7038-7044.	1.5	21
21	The correlation between gate dielectric, film growth, and charge transport in organic thin film transistors: the case of vacuum-sublimed tetracene thin films. Journal of Materials Chemistry C, 2013, 1, 967-976.	2.7	20
22	Low Temperature Sensing Properties of a Nano Hybrid Material Based on ZnO Nanotetrapods and Titanyl Phthalocyanine. Sensors, 2013, 13, 3445-3453.	2.1	20
23	Superhydrophobic lab-on-chip measures secretome protonation state and provides a personalized risk assessment of sporadic tumour. Npj Precision Oncology, 2018, 2, 26.	2.3	20
24	Microtexturing of the Conductive PEDOT:PSS Polymer for Superhydrophobic Organic Electrochemical Transistors. BioMed Research International, 2014, 2014, 1-10.	0.9	19
25	Selective response inversion to NO₂and acetic acid in ZnO and CdS nanocomposite gas sensor. Nanotechnology, 2014, 25, 365502.	1.3	19
26	Cortical-like mini-columns of neuronal cells on zinc oxide nanowire surfaces. Scientific Reports, 2019, 9, 4021.	1.6	18
27	Hybrid n-TiO2-CuPc gas sensors sensitive to reducing species, synthesized by cluster and supersonic beam deposition. Sensors and Actuators B: Chemical, 2007, 126, 214-220.	4.0	17
28	Hybrid titaniaâ€“zincphthalocyanine nanostructured multilayers with novel gas sensing properties. Sensors and Actuators B: Chemical, 2008, 130, 405-410.	4.0	17
29	Geometrical Patterning of Super-Hydrophobic Biosensing Transistors Enables Space and Time Resolved Analysis of Biological Mixtures. Scientific Reports, 2016, 6, 18992.	1.6	17
30	Smart composites materials: A new idea to add gas-sensing properties to commercial carbon-fibers by functionalization with ZnO nanowires. Sensors and Actuators B: Chemical, 2017, 245, 166-170.	4.0	17
31	Emerging Designs of Electronic Devices in Biomedicine. Micromachines, 2020, 11, 123.	1.4	14
32	A Biomimetic, Biocompatible OECT Sensor for the Realâ€Time Measurement of Concentration and Saturation of Ions in Plant Sap. Advanced Electronic Materials, 2022, 8, .	2.6	14
33	SuMBE based organic thin film transistors. Synthetic Metals, 2004, 146, 291-295.	2.1	12
34	Growth and characterization of Î²-Ga2O3 nanowires obtained on not-catalyzed and Au/Pt catalyzed substrates. Journal of Crystal Growth, 2017, 457, 255-261.	0.7	12
35	Sub-Micron Scale Optical Read/Write/Erase on Azo-Polymethacrylate Thin Films by Scanning Near-Field Optical Microscopy. Molecular Crystals and Liquid Crystals, 2003, 398, 33-43.	0.4	11
36	Supersonic molecular beams deposition of Î±-quaterthiophene: Enhanced growth control and devices performances. Organic Electronics, 2009, 10, 521-526.	1.4	11

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37	Ambipolar organic thin film transistors based on a soluble pentacene derivative. Applied Physics Letters, 2011, 99, 023304.	1.5	11
38	Facile synthesis of hierarchical CuO nanostructures with enhanced photocatalytic activity. Crystal Research and Technology, 2014, 49, 594-598.	0.6	11
39	Liquid electrolyte positioning along the device channel influences the operation of Organic Electro-Chemical Transistors. Organic Electronics, 2014, 15, 3016-3023.	1.4	10
40	A mathematical model of OECTs with variable internal geometry. Sensors and Actuators A: Physical, 2020, 304, 111894.	2.0	10
41	OFET for gas sensing based on SuMBE grown pentacene films. Solid-State Electronics, 2008, 52, 417-421.	0.8	8
42	Turning carbon fiber into a stress-sensitive composite material. Journal of Materials Chemistry A, 2016, 4, 10486-10492.	5.2	8
43	Towards In Vivo Monitoring of Ions Accumulation in Trees: Response of an in Planta Organic Electrochemical Transistor Based Sensor to Water Flux Density, Light and Vapor Pressure Deficit Variation. Applied Sciences (Switzerland), 2021, 11, 4729.	1.3	8
44	Titanyl phthalocyanine ambipolar thin film transistors making use of carbon nanotube electrodes. Nanotechnology, 2014, 25, 485703.	1.3	7
45	A biocompatible pressure sensor based on a 3D-printed scaffold functionalized with PEDOT:PSS for biomedical applications. Organic Electronics, 2021, 96, 106204.	1.4	7
46	Directionally Selective Sensitization of ZnO Nanorods by TiOPc: A Novel Approach to Functionalized Nanosystems. Journal of Physical Chemistry C, 2012, 116, 8223-8229.	1.5	6
47	Tailoring Chemometric Models on Blood-Derived Cultures Secretome to Assess Personalized Cancer Risk Score. Cancers, 2020, 12, 1362.	1.7	6
48	An integrated platform for in vitro single-site cell electroporation: Controlled delivery and electrodes functionalization. Sensors and Actuators B: Chemical, 2012, 170, 182-188.	4.0	5
49	Transforming diatomaceous earth into sensing devices by surface modification with gold nanoparticles. Micro and Nano Engineering, 2019, 2, 29-34.	1.4	5
50	Near-field microscopy investigation of laser-deposited coated conductors. Applied Surface Science, 2003, 208-209, 599-603.	3.1	4
51	Laser ablation of ceramic oxides in the presence of a RF pulsed oxygen plasma. Surface and Coatings Technology, 2004, 180-181, 591-595.	2.2	4
52	Organic bioelectronics. , 2013, , 597-617.		4
53	Tailoring super-hydrophobic properties of electrochemical biosensor for early cancer detection. MRS Advances, 2016, 1, 3545-3552.	0.5	4
54	Charge-separation enhancement in inverted polymer solar cells by molecular-level triple heterojunction: NiO-np:P3HT:PCBM. Nanotechnology, 2017, 28, 035403.	1.3	4

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55	Introducing State Variables in Organic Electrochemical Transistors With Application to Biophysical Systems. IEEE Sensors Journal, 2019, 19, 11753-11758.	2.4	4
56	Solid state dye sensitized solar cells based on supersonic beam deposition of organic, inorganic cluster assembled, and nanohybrid materials. Journal of Renewable and Sustainable Energy, 2010, 2, 053106.	0.8	3
57	Multiscale modification of the conductive PEDOT:PSS polymer for the analysis of biological mixtures in a super-hydrophobic drop. Microelectronic Engineering, 2016, 158, 80-84.	1.1	3
58	Structural and morphological phase control by supersonic beams on titanyl phthalocyanine: An investigation on the growth. Organic Electronics, 2016, 32, 15-20.	1.4	3
59	Methylglyoxal Adducts Levels in Blood Measured on Dried Spot by Portable Near-Infrared Spectroscopy. Nanomaterials, 2021, 11, 2432.	1.9	3
60	Novel nano-hybrid gas sensor based on n-TiO2 functionalized by phthalocyanines via supersonic beam co-deposition: Performance and application to automotive air quality. , 2008, , .		2
61	The issue of pseudoreplication when applying a statistical exploratory approach to extract relevant features from ToFâ€SIMS spectra. Surface and Interface Analysis, 2013, 45, 1197-1205.	0.8	2
62	LASER DEPOSITION OF YBCO FILMS ONTO Niâ€“BASED SUBSTRATES. International Journal of Modern Physics B, 2003, 17, 745-750.	1.0	1
63	Deposition from Supersonic Beams (SuMBE): a Kinetic Approach for Controlling Thin Film Properties. AIP Conference Proceedings, 2005, , .	0.3	1
64	An enhanced platform for cell electroporation: controlled delivery and electrodes functionalization. Procedia Engineering, 2010, 5, 45-48.	1.2	1
65	Experimental and Numerical Study of Pentacene Molecular Beam Seeded in the Free Jet of Helium. , 2011, , .		1
66	Comparative Bioaffinity Studies for In-Vitro Cell Assays on MEMS-Based Devices. Lecture Notes in Electrical Engineering, 2010, , 83-87.	0.3	1
67	Optimizing Nozzle Geometry for Controlling Properties of Molecular Beam with Heavy Organic Molecules. , 2011, , .		0
68	Organic electrochemical transistors operating with electrolytes of increasing complexity for (Bio)sensing. , 2012, , .		0
69	Multi-Technique Characterization through Multivariate Statistical Analysis of Copper Phthalocyanine Kinetic Activated Growth by Supersonic Molecular Beam Deposition. Journal of Physical Chemistry C, 2014, 118, 10883-10892.	1.5	0
70	Detection of nanoâ€structured particles with organic electrochemical transistors. Physica Status Solidi C: Current Topics in Solid State Physics, 2015, 12, 164-167.	0.8	0
71	FIRB "SQUARE" PROJECT: NANO-STRUCTURED SENSORS FOR THE DETECTION OF THE POLLUTING IC ENGINE EXHAUST GASES AND FOR INDOOR AIR QUALITY MONITORING. , 2008, , .		0
72	Functionalized ZnO nanostructures for gas sensing and photovoltaic applications. Acta Crystallographica Section A: Foundations and Advances, 2011, 67, C536-C537.	0.3	0

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73	Textile electrochemical biosensor for plant science and precision farming. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, C1013-C1013.	0.0	0
74	Crystal growth of nanostructured zinc oxide nanorods from the seed layer. Materials Science-Poland, 2018, 36, 477-482.	0.4	0