## Giuseppe Maruccio

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/1277936/publications.pdf

Version: 2024-02-01

148 papers 3,349 citations

32 h-index 52 g-index

153 all docs

153 docs citations

times ranked

153

5075 citing authors

#	Article	IF	CITATIONS
1	Charge transport and intrinsic fluorescence in amyloid-like fibrils. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 18019-18024.	7.1	192
2	Electrostatic spin crossover effect in polar magnetic molecules. Nature Materials, 2009, 8, 813-817.	<b>27.</b> 5	148
3	Field Effect Transistor Based on a Modified DNA Base. Nano Letters, 2003, 3, 479-483.	9.1	125
4	Colloidal Arenethiolate-Capped PbS Quantum Dots: Optoelectronic Properties, Self-Assembly, and Application in Solution-Cast Photovoltaics. Journal of Physical Chemistry C, 2013, 117, 13305-13317.	3.1	112
5	Projecting the nanoworld: Concepts, results and perspectives of molecular electronics. Journal of Materials Chemistry, 2004, 14, 542.	6.7	108
6	Lab-on-Chip for Exosomes and Microvesicles Detection and Characterization. Sensors, 2018, 18, 3175.	3.8	107
7	Intrinsic optical nonlinearity in colloidal seeded grown CdSe/CdS nanostructures: Photoinduced screening of the internal electric field. Physical Review B, 2008, 78, .	3.2	91
8	Towards Protein Field-Effect Transistors: Report and Model of a Prototype. Advanced Materials, 2005, 17, 816-822.	21.0	84
9	Biosensors for the Detection of Food Pathogens. Foods, 2014, 3, 511-526.	4.3	82
10	Advances in Plant Disease Detection and Monitoring: From Traditional Assays to In-Field Diagnostics. Sensors, 2021, 21, 2129.	3.8	76
11	Electronic rectification in protein devices. Applied Physics Letters, 2003, 82, 472-474.	3.3	73
12	Solid-State Molecular Rectifier Based on Self-Organized Metalloproteins. Advanced Materials, 2002, 14, 1453-1457.	21.0	68
13	Amyloid-like Fibrils in Elastin-Related Polypeptides: Structural Characterization and Elastic Properties. Biomacromolecules, 2008, 9, 796-803.	5.4	68
14	Cytomechanical and topological investigation of MCF-7 cells by scanning force microscopy. Nanotechnology, 2009, 20, 055103.	2.6	62
15	Key Enabling Technologies for Point-of-Care Diagnostics. Sensors, 2018, 18, 3607.	3.8	61
16	EIS microfluidic chips for flow immunoassay and ultrasensitive cholera toxin detection. Lab on A Chip, 2011, 11, 658-663.	6.0	59
17	An innovative, fast and facile soft-template approach for the fabrication of porous PDMS forÂoil–water separation. Journal of Materials Chemistry A, 2017, 5, 23785-23793.	10.3	59
18	Toward quantum-dot cellular automata units: thiolated-carbazole linked bisferrocenes. Nanoscale, 2012, 4, 813-823.	5.6	58

#	Article	IF	Citations
19	Sperm selection in assisted reproduction: A review of established methods and cutting-edge possibilities. Biotechnology Advances, 2020, 40, 107498.	11.7	52
20	Wavelength control from 1.25 to 1.4â€,î¼m in InxGa1â^xxAs quantum dot structures grown by metal organic chemical vapor deposition. Applied Physics Letters, 2001, 78, 1382-1384.	3.3	50
21	Cell chips as new tools for cell biology – results, perspectives and opportunities. Lab on A Chip, 2013, 13, 3789.	6.0	50
22	Hybrid molecular electronic devices based on modified deoxyguanosines. Nanotechnology, 2002, 13, 398-403.	2.6	47
23	Automatic transwell assay by an EIS cell chip to monitor cell migration. Lab on A Chip, 2011, 11, 4081.	6.0	45
24	Nano-electronics and spintronics with nanoparticles. Journal of Physics: Conference Series, 2011, 292, 012002.	0.4	44
25	Continuous-Flow Production of Injectable Liposomes via a Microfluidic Approach. Materials, 2017, 10, 1411.	2.9	42
26	Protein Conduction and Negative Differential Resistance in Large-Scale Nanojunction Arrays. Small, 2007, 3, 1184-1188.	10.0	40
27	AlN on polysilicon piezoelectric cantilevers for sensors/actuators. Microelectronic Engineering, 2009, 86, 1204-1207.	2.4	39
28	Portable gliadin-immunochip for contamination control on the food production chain. Talanta, 2015, 142, 57-63.	5.5	38
29	A multipurpose biochip for food pathogen detection. Analytical Methods, 2016, 8, 3055-3060.	2.7	37
30	Tunneling Magnetoresistance with Sign Inversion in Junctions Based on Iron Oxide Nanocrystal Superlattices. ACS Nano, 2011, 5, 1731-1738.	14.6	34
31	Development of a lab-on-a-chip method for rapid assay of Xylella fastidiosa subsp. pauca strain CoDiRO. Scientific Reports, 2018, 8, 7376.	3.3	34
32	Polymer nanofibers by soft lithography. Applied Physics Letters, 2005, 87, 123109.	3.3	32
33	On-chip screening for prostate cancer: an EIS microfluidic platform for contemporary detection of free and total PSA. Analyst, The, 2013, 138, 5404.	3.5	32
34	Towards pancreatic cancer diagnosis using EIS biochips. Lab on A Chip, 2013, 13, 730.	6.0	32
35	Correlation Effects in Wave Function Mapping of Molecular Beam Epitaxy Grown Quantum Dots. Nano Letters, 2007, 7, 2701-2706.	9.1	31
36	Tunable Near-Infrared Localized Surface Plasmon Resonance of F, In-Codoped CdO Nanocrystals. ACS Applied Materials & Diterfaces, 2019, 11, 39921-39929.	8.0	31

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37	Real-time monitoring of copper ions-induced cytotoxicity by EIS cell chips. Biosensors and Bioelectronics, 2010, 25, 2711-2716.	10.1	30
38	Picomolar detection of retinol binding protein 4 for early management of type II diabetes. Biosensors and Bioelectronics, 2019, 128, 122-128.	10.1	29
39	Polydopamine-Coated Magnetic Iron Oxide Nanoparticles: From Design to Applications. Nanomaterials, 2022, 12, 1145.	4.1	29
40	LSMO – growing opportunities by PLD and applications in spintronics. Journal of Physics: Conference Series, 2011, 292, 012003.	0.4	27
41	Diamond graphitization by laser-writing for all-carbon detector applications. Diamond and Related Materials, 2017, 75, 25-33.	3.9	26
42	Femtomolar Biodetection by a Compact Core–Shell 3D Chiral Metamaterial. Nano Letters, 2021, 21, 6179-6187.	9.1	26
43	Dielectric investigation of high-k yttrium copper titanate thin films. Journal of Materials Chemistry C, 2016, 4, 1080-1087.	5 <b>.</b> 5	24
44	An Innovative Porous Nanocomposite Material for the Removal of Phenolic Compounds from Aqueous Solutions. Nanomaterials, 2018, 8, 334.	4.1	24
45	Simultaneous detection of multiple lower genital tract pathogens by an impedimetric immunochip. Biosensors and Bioelectronics, 2016, 79, 9-14.	10.1	22
46	A nanobiosensor to detect single hybridization events. Analyst, The, 2009, 134, 2458.	3.5	21
47	All-electrochemical approach for the assembly of platinum nanoparticles/polypyrrole nanowire composite with electrocatalytic effect on dopamine oxidation. Journal of Solid State Electrochemistry, 2017, 21, 3495-3504.	2.5	21
48	Optical response of oxygen deficient La 0.7 Sr 0.3 MnO 3 thin films deposited by pulsed laser deposition. Thin Solid Films, 2013, 545, 592-600.	1.8	20
49	Fabrication of interconnected multilevel channels in a monolithic SU-8 structure using a LOR sacrificial layer. Microelectronic Engineering, 2016, 164, 30-35.	2.4	20
50	Dependence of the emission wavelength on the internal electric field in quantum-dot laser structures grown by metal–organic chemical-vapor deposition. Applied Physics Letters, 2001, 79, 1435-1437.	3.3	19
51	Nanotechnology approaches to self-organized bio-molecular devices. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 1229-1235.	2.7	19
52	Planar nanotips as probes for transport experiments in molecules. Microelectronic Engineering, 2003, 67-68, 838-844.	2.4	19
53	Exploiting GISAXS for the Study of a 3D Ordered Superlattice of Self-Assembled Colloidal Iron Oxide Nanocrystals. Crystal Growth and Design, 2012, 12, 5505-5512.	3.0	19
54	Imaging correlated wave functions of few-electron quantum dots: Theory and scanning tunneling spectroscopy experiments. Journal of Applied Physics, 2007, 101, 081714.	2.5	18

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55	Flexible piezoelectric cantilevers fabricated on polyimide substrate. Microelectronic Engineering, 2012, 98, 603-606.	2.4	16
56	A simple approach to synthetize folic acid decorated magnetite @SiO $<$ sub $>$ 2 $<$ /sub $>$ nanostructures for hyperthermia applications. Journal of Materials Chemistry B, 2017, 5, 7547-7556.	5.8	16
57	Optimization of SAW and EIS sensors suitable for environmental particulate monitoring. Microelectronic Engineering, 2018, 202, 31-36.	2.4	16
58	Nano-scaled Biomolecular Field-Effect Transistors: Prototypes and Evaluations. Electroanalysis, 2004, 16, 1853-1862.	2.9	15
59	Characterization of surface graphitic electrodes made by excimer laser on CVD diamond. Diamond and Related Materials, 2016, 65, 137-143.	3.9	15
60	Simplified preparation and characterization of magnetic hydroxyapatite-based nanocomposites. Materials Science and Engineering C, 2017, 76, 1166-1174.	7.3	15
61	Synthesis and Characterization of Mixed Iron-Manganese Oxide Nanoparticles and Their Application for Efficient Nickel Ion Removal from Aqueous Samples. Journal of Analytical Methods in Chemistry, 2017, 2017, 1-9.	1.6	15
62	The fabrication of sub-10 nm planar electrodes and their use for a molecule-based transistor. Nanotechnology, 2004, 15, 807-811.	2.6	14
63	Development of EIS cell chips and their application for cell analysis. Microelectronic Engineering, 2009, 86, 1477-1480.	2.4	14
64	Retention of nativelike conformation by proteins embedded in high external electric fields. Journal of Chemical Physics, 2005, 122, 181102.	3.0	13
65	Field-Emission Breakdown and Electromigration in Insulated Planar Nanoscopic Contacts. IEEE Transactions on Electron Devices, 2006, 53, 2958-2964.	3.0	13
66	Electrical and optical properties of ITO and ITO/Cr-doped ITO films. Applied Physics A: Materials Science and Processing, 2010, 101, 753-758.	2.3	13
67	Protein transistors strike gold. Nature Nanotechnology, 2012, 7, 147-148.	31.5	13
68	Interaction-tailored organization of large-area colloidal assemblies. Beilstein Journal of Nanotechnology, 2018, 9, 1582-1593.	2.8	13
69	Advances in the Development of Innovative Sensor Platforms for Field Analysis. Micromachines, 2020, 11, 491.	2.9	13
70	Rectification in Supramolecular Zinc Porphyrin/Fulleropyrrolidine Dyads Selfâ€Organized on Gold(111). ChemPhysChem, 2009, 10, 2633-2641.	2.1	12
71	Wavefunction Mapping of Immobilized InP Semiconductor Nanocrystals. Small, 2009, 5, 808-812.	10.0	12
72	Pectobacterium atrosepticum Biosensor for Monitoring Blackleg and Soft Rot Disease of Potato. Biosensors, 2020, 10, 64.	4.7	12

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73	Nanoarchitectonics of highly sensitive and with large working range 3D piezoresistive microporous foam based on carbon nanotubes and elastomer. Journal of Colloid and Interface Science, 2022, 607, 1436-1445.	9.4	12
74	A Protein-Based Three Terminal Electronic Device. Annals of the New York Academy of Sciences, 2003, 1006, 187-197.	3.8	11
75	Biomechanical and proteomic analysis of INF- β-treated astrocytes. Nanotechnology, 2009, 20, 455106.	2.6	11
76	Improved photovoltaic performances by post-deposition acidic treatments on tetrapod shaped colloidal nanocrystal solids. Nanotechnology, 2012, 23, 305403.	2.6	11
77	Nanomechanical and electrical properties of Nb thin films deposited on Pb substrates by pulsed laser deposition as a new concept photocathode for superconductor cavities. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment. 2015. 804. 132-136.	1.6	11
78	Non-Biofouling Fluorinated Block Copolymer Coatings for Contact Lenses. Science of Advanced Materials, 2015, 7, 1387-1394.	0.7	11
79	Structural characterization of ultrathin Cr-doped ITO layers deposited by double-target pulsed laser ablation. Journal Physics D: Applied Physics, 2011, 44, 365403.	2.8	10
80	Facile synthesis of 3D flower-like Pt nanostructures on polypyrrole nanowire matrix for enhanced methanol oxidation. RSC Advances, 2018, 8, 10367-10375.	3.6	10
81	Self-chemisorption of azurin on functionalized oxide surfaces for the implementation of biomolecular devices. Materials Science and Engineering C, 2004, 24, 563-567.	7.3	9
82	Resonant Electron Tunneling Through Azurin in Air and Liquid by Scanning Tunneling Microscopy. IEEE Nanotechnology Magazine, 2005, 4, 637-640.	2.0	9
83	Surface chemistry of arenethiolate-capped PbS quantum dots and application as colloidally stable photovoltaic ink. Thin Solid Films, 2014, 560, 2-9.	1.8	9
84	One step preparation of quantum dot-embedded lipid nanovesicles by a microfluidic device. RSC Advances, 2015, 5, 98576-98582.	3.6	9
85	Excitation and time resolved spectroscopy of SAW harmonics up to GHz regime in photolithographed GaAs devices. Journal of Micromechanics and Microengineering, 2017, 27, 125002.	2.6	9
86	Dielectrical performance of high-k yttrium copper titanate thin films for electronic applications. Journal of Materials Science: Materials in Electronics, 2018, 29, 7090-7098.	2.2	9
87	Performance of the diamond active target prototype for the PADME experiment at the DA <mmi:math altimg="si3.gif" display="inline" id="mml10" overflow="scroll" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>i </mml:mi>NE BTF. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 898,</mmi:math>	1.6	9
88	The Impact of Career Insight in the Relation with Social Networks and Career Self-Management: Preliminary Evidences from the Italian Contamination Lab. Sustainability, 2019, 11, 5996.	3.2	9
89	Identification and time-resolved study of ferrimagnetic spin-wave modes in a microwave cavity in the strong-coupling regime. Physical Review B, 2020, 101, .	3.2	9
90	Nanoplasmonic Biosensing Approach for Endotoxin Detection in Pharmaceutical Field. Chemosensors, 2021, 9, 10.	3.6	9

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91	Transistors based on the Guanosine molecule (a DNA base). Microelectronics Journal, 2003, 34, 961-963.	2.0	8
92	Ambipolar transistors based on azurin proteins. IET Nanobiotechnology, 2004, 151, 173.	2.1	8
93	Self-assembling of proteins and enzymes at nanoscale for biodevice applications. IET Nanobiotechnology, 2004, 151, 101.	2.1	8
94	Ageing of solid-state protein films: Behavior of azurin at ambient conditions. Chemical Physics Letters, 2005, 404, 59-62.	2.6	8
95	Fabrication of a Hydrogenated Amorphous Silicon Detector in 3-D Geometry and Preliminary Test on Planar Prototypes. Instruments, 2021, 5, 32.	1.8	8
96	Validation of a Lab-on-Chip Assay for Measuring Sorafenib Effectiveness on HCC Cell Proliferation. International Journal of Molecular Sciences, 2021, 22, 13090.	4.1	8
97	Charge transport in disordered films of non-redox proteins. Journal of Chemical Physics, 2006, 125, 021103.	3.0	7
98	SFM study of the surface of halogen-bonded hybrid co-crystals containing long-chain perfluorocarbons. CrystEngComm, 2009, 11, 510-515.	2.6	7
99	Optical analysis of Cr-doped ITO films deposited by double-target laser ablation. Journal of Luminescence, 2015, 162, 155-163.	3.1	7
100	Centrifugation Force and Time Alter CASA Parameters and Oxidative Status of Cryopreserved Stallion Sperm. Biology, 2020, 9, 22.	2.8	7
101	Detection of Ampelovirus and Nepovirus by Lab-on-a-Chip: A Promising Alternative to ELISA Test for Large Scale Health Screening of Grapevine. Biosensors, 2022, 12, 147.	4.7	7
102	Azurin for Biomolecular Electronics: a Reliability Study. Japanese Journal of Applied Physics, 2005, 44, 6864-6866.	1.5	6
103	Single electron tunneling in large scale nanojunction arrays with bisferrocene–nanoparticle hybrids. Nanoscale, 2012, 4, 2311.	5.6	6
104	Investigation of high-kyttrium copper titanate thin films as alternative gate dielectrics. Journal Physics D: Applied Physics, 2016, 49, 405303.	2.8	6
105	Sustainable chitosan-based electrical responsive scaffolds for tissue engineering applications. Sustainable Materials and Technologies, 2021, 28, e00260.	3.3	5
106	Miniaturized Sensors for Detection of Ethanol in Water Based on Electrical Impedance Spectroscopy and Resonant Perturbation Methodâ€"A Comparative Study. Sensors, 2022, 22, 2742.	3.8	5
107	La <sub>0.7</sub> Sr <sub>0.3</sub> MnO <sub>3</sub> thin films deposited by pulsed laser ablation for spintronic applications. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1817-1820.	1.8	4
108	Micro- and nanotechnology-based approaches to detect pathogenic agents in food., 2017,, 475-510.		4

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109	Fabrication of sub-10 nm planar nanotips for transport experiments of biomolecules. Materials Science and Engineering C, 2003, 23, 889-892.	7.3	3
110	Study of the surface morphology of a cholesteryl tethering system for lipidic bilayers. Biochimica Et Biophysica Acta - Biomembranes, 2005, 1714, 93-102.	2.6	3
111	Rectifying behaviour of self assembled porphyrin/fullerene dyads on Au(111). Journal of Physics: Conference Series, 2007, 61, 795-799.	0.4	3
112	Fabrication and transport of large-scale molecular tunnel-junction arrays. Microelectronic Engineering, 2007, 84, 1585-1588.	2.4	3
113	Disposable plastic microreactors for genomic analyses. Biomedical Microdevices, 2009, 11, 1289-1295.	2.8	3
114	RF and microwave dielectric response investigation of high-k yttrium copper titanate ceramic for electronic applications. Microelectronic Engineering, 2018, 194, 15-18.	2.4	3
115	Dielectric and Ferroelectric Response of Multiphase Biâ€Feâ€O Ceramics. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800584.	1.8	3
116	Testing of planar hydrogenated amorphous silicon sensors with charge selective contacts for the construction of 3D-detectors. Journal of Instrumentation, 2022, 17, C03033.	1.2	3
117	Resonant electron tunneling through azurin in air and liquid by scanning tunneling microscopy. , 0, , .		2
118	Electron beam and mechanical lithographies as enabling factors for organic-based device fabrication. Materials Science and Engineering C, 2005, 25, 848-852.	7.3	2
119	Effects of high external electric fields on protein conformation. , 2005, , .		2
120	Interconnection of specific nano-objects by electron beam lithography — A controllable method. Materials Science and Engineering C, 2008, 28, 299-302.	7.3	2
121	Scanning Tunneling Spectroscopy of Semiconductor Quantum Dots and Nanocrystals. Nanoscience and Technology, 2010, , 183-216.	1.5	2
122	Morphological Study of CdSe Nanocrystals Passivated with a Low Band Gap Rod-Coil Diblock Copolymer for Hybrid Solar Cells. Advances in Science and Technology, 0, , .	0.2	2
123	Non-conventional photocathodes based on Cu thin films deposited on Y substrate by sputtering. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 752, 27-32.	1.6	2
124	Nanoelectronic Devices Based on Proteins. Nanostructure Science and Technology, 2009, , 139-166.	0.1	2
125	Metalloprotein-based field-effect transistor: a prototype. , 0, , .		1
126	Evolution of morphology and structure of Pb thin films grown by pulsed laser deposition at different substrate temperatures. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2014, 32, 020604.	2.1	1

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127	Colloidal lithography fabrication of tunable plasmonic nanostructures. , 2015, , .		1
128	Lab on chip for life science: From medical diagnostics to food quality control. , 2018, , .		1
129	Frequency and time domain analysis of surface acoustic wave propagation on a piezoelectric gallium arsenide substrate: A computational insight. Journal of Intelligent Material Systems and Structures, 2019, 30, 801-812.	2.5	1
130	Spintronics at the Molecular Scale $\hat{a} \in \text{``Progresses'}$ and Opportunities. Journal of Spintronics and Magnetic Nanomaterials, 2012, 1, 3-10.	0.2	1
131	Assembly of Iron Oxide Nanocrystal Superstructures. Science of Advanced Materials, 2013, 5, 2015-2020.	0.7	1
132	Effect of the internal electric fields in Quantum Dot laser structures grown by Metal Organic Chemical Vapor Deposition. Materials Research Society Symposia Proceedings, 2002, 722, 1151.	0.1	0
133	Resonant tunnelling leakage in planar metal–oxide–metal nanojunctions. Materials Science and Engineering C, 2003, 23, 1039-1042.	7.3	O
134	Open issues for lasing at $1.3\hat{l}$ /4m in MOCVD-grown quantum dots. Physica Status Solidi (B): Basic Research, 2003, 238, 349-352.	1.5	0
135	Fabrication of sub-10 nm planar nanotips for transport experiments of biomolecules. Materials Science and Engineering C, 2003, , .	7.3	0
136	Hybrid molecular electronic (HME) transistor based on deoxyguanosine derivatives., 2003,,.		0
137	Fabrication of nanoelectrodes for hybrid molecular-electronic devices. , 0, , .		0
138	Nano-Bio Electronic Devices Based on DNA Bases and Proteins. , 2004, , 225-250.		0
139	Metalloprotein-based electronic nanodevices. , 2006, , 9-23.		O
140	Mechanical Behaviour of Hybrid Polymer/Semiconductor Microtubes. Ferroelectrics, 2009, 391, 168-174.	0.6	0
141	Nanofabrication for Molecular Scale Devices. , 0, , .		O
142	DNA sensors with impedimetric and magnetoresistive transduction $\$\#x2014;$ A comparison study. , 2014, , .		0
143	Rapid method for the interconnection of single nano-objects. Materials Research Express, 2015, 2, 055011.	1.6	0
144	Low cost lithographic fabrication of tunable plasmonic nanostructures. , 2017, , .		0

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145	High-k YCTO thin films for electronics. , 2018, , .		0
146	Organised Colloidal Metal Nanoparticles for LSPR Refractive Index Transducers. Lecture Notes in Electrical Engineering, 2019, , 173-179.	0.4	0
147	Lab-on-chip platform for on-field analysis of Grapevine leafroll-associated virus 3., 0,,.		0
148	International Conference "Trends in Spintronics and Nanomagnetism" (TSN-2010). Journal of Physics: Conference Series, 2011, 292, 011001.	0.4	0