Davide F Ricci

List of Publications by Year
in descending order

97 papers	2,263 citations	236925 25 h-index	243625 44 g-index
101 all docs	101 docs citations	101 times ranked	3303 citing authors

#	Article	IF	Citations
1	Atomic Force Microscopy: Application to Investigation of <i>Escherichia coli</i> Morphology before and after Exposure to Cefodizime. Antimicrobial Agents and Chemotherapy, 1998, 42, 18-22.	3.2	140
2	Pyrolysis of waste polypropylene for the synthesis of carbon nanotubes. Journal of Analytical and Applied Pyrolysis, 2012, 94, 91-98.	5.5	118
3	Highly Stable Glassy Carbon Interfaces for Long-Term Neural Stimulation and Low-Noise Recording of Brain Activity. Scientific Reports, 2017, 7, 40332.	3.3	116
4	Piezoelectric Polymer Transducer Arrays for Flexible Tactile Sensors. IEEE Sensors Journal, 2013, 13, 4022-4029.	4.7	106
5	Improved nanocomposite materials for biosensor applications investigated by electrochemical impedance spectroscopy. Sensors and Actuators B: Chemical, 2005, 109, 221-226.	7.8	92
6	Microstructure Origin of the Conductivity Differences in Aggregated CuS Films of Different Thickness. Langmuir, 2003, 19, 766-771.	3.5	86
7	PEDOT-CNT-Coated Low-Impedance, Ultra-Flexible, and Brain-Conformable Micro-ECoG Arrays. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2015, 23, 342-350.	4.9	83
8	Carbon nanotube composite coating of neural microelectrodes preferentially improves the multiunit signal-to-noise ratio. Journal of Neural Engineering, 2011, 8, 066013.	3.5	79
9	Tattoo Conductive Polymer Nanosheets for Skinâ€Contact Applications. Advanced Healthcare Materials, 2015, 4, 983-990.	7.6	79
10	Superior Electrochemical Performance of Carbon Nanotubes Directly Grown on Sharp Microelectrodes. ACS Nano, 2011, 5, 2206-2214.	14.6	70
11	Smaller, softer, lower-impedance electrodes for human neuroprosthesis: a pragmatic approach. Frontiers in Neuroengineering, 2014, 7, 8.	4.8	66
12	Polymer-Based Photocatalytic Hydrogen Generation. Journal of Physical Chemistry C, 2012, 116, 10944-10949.	3.1	65
13	Flexible sensing systems based on polysilicon thin film transistors technology. Sensors and Actuators B: Chemical, 2013, 179, 114-124.	7.8	62
14	Conformable polyimide-based Î¼ECoGs: Bringing the electrodes closer to the signal source. Biomaterials, 2020, 255, 120178.	11.4	58
15	Ultraflexible Tactile Piezoelectric Sensor Based on Low-Temperature Polycrystalline Silicon Thin-Film Transistor Technology. IEEE Sensors Journal, 2015, 15, 3819-3826.	4.7	56
16	Biologically Compatible Neural Interface To Safely Couple Nanocoated Electrodes to the Surface of the Brain. ACS Nano, 2013, 7, 3887-3895.	14.6	48
17	Mechanical and morphological properties of living 3T6 cells probed via scanning force microscopy. , 1997, 36, 165-171.		42
18	Evaluation of poly(vinyl alcohol) hydrogels as a component of hybrid artificial tissues. Journal of Materials Science: Materials in Medicine, 1995, 6, 71-75.	3.6	41

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19	Recognizing and Avoiding Artifacts in Atomic Force Microscopy Imaging. Methods in Molecular Biology, 2011, 736, 31-43.	0.9	40
20	Mechanics and actuation properties of bucky gel-based electroactive polymers. Sensors and Actuators B: Chemical, 2011, 156, 949-953.	7.8	33
21	Cross-linking super-growth carbon nanotubes to boost the performance of bucky gel actuators. Carbon, 2011, 49, 2253-2257.	10.3	32
22	In Vivo Dopamine Detection and Single Unit Recordings Using Intracortical Glassy Carbon Microelectrode Arrays. MRS Advances, 2018, 3, 1629-1634.	0.9	31
23	Recognizing and Avoiding Artifacts in AFM Imaging. , 2004, 242, 25-38.		30
24	Scanning force microscopy on live cultured cells: Imaging and forceâ€versusâ€distance investigations. Journal of Microscopy, 1994, 176, 254-261.	1.8	29
25	Multiâ€walled carbon nanotubes plastic actuator. Physica Status Solidi (B): Basic Research, 2009, 246, 2820-2823.	1.5	29
26	pHEMA Encapsulated PEDOT-PSS-CNT Microsphere Microelectrodes for Recording Single Unit Activity in the Brain. Frontiers in Neuroscience, 2016, 10, 151.	2.8	29
27	A study of the effect of different catalysts for the efficient CVD growth of carbon nanotubes on silicon substrates. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 37, 6-10.	2.7	27
28	Cortical control of objectâ€specific grasp relies on adjustments of both activity and effective connectivity: a common marmoset study. Journal of Physiology, 2017, 595, 7203-7221.	2.9	27
29	Glassy carbon MEMS for novel origami-styled 3D integrated intracortical and epicortical neural probes. Journal of Micromechanics and Microengineering, 2018, 28, 065009.	2.6	27
30	Single walled carbon nanohorns composite for neural sensing and stimulation. Sensors and Actuators B: Chemical, 2018, 271, 280-288.	7.8	26
31	Incorporation of Silicon Carbide and Diamondâ€Like Carbon as Adhesion Promoters Improves In Vitro and In Vivo Stability of Thinâ€Film Glassy Carbon Electrocorticography Arrays. Advanced Biology, 2018, 2, 1700081.	3.0	24
32	A New Drug Delivery System Based on Tauroursodeoxycholic Acid and PEDOT. Chemistry - A European Journal, 2019, 25, 2322-2329.	3.3	23
33	Multilayer poly(3,4-ethylenedioxythiophene)-dexamethasone and poly(3,4-ethylenedioxythiophene)-polystyrene sulfonate-carbon nanotubes coatings on glassy carbon microelectrode arrays for controlled drug release. Biointerphases, 2017, 12, 031002.	1.6	23
34	Engineered mesenchymal cell-based patches as controlled VEGF delivery systems to induce extrinsic angiogenesis. Acta Biomaterialia, 2016, 42, 127-135.	8.3	21
35	Biochemically Controlled Release of Dexamethasone Covalently Bound to PEDOT. Chemistry - A European Journal, 2018, 24, 10300-10305.	3.3	19
36	Morphology and conductivity in poly(ortho-anisidine)/carbon nanotubes nanocomposite films. Thin Solid Films, 2004, 468, 17-22.	1.8	18

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37	Daptomycin Morphostructural Damage in Bacillus cereus Visualized by Atomic Force Microscopy. Journal of Chemotherapy, 2002, 14, 336-341.	1.5	17
38	Chemical vapour deposited carbon nanotube coated microelectrodes for intracortical neural recording. Physica Status Solidi (B): Basic Research, 2010, 247, 2703-2707.	1.5	17
39	Parylene-Coated Ionic Liquidâ€"Carbon Nanotube Actuators for User-Safe Haptic Devices. ACS Applied Materials & Interfaces, 2015, 7, 15542-15550.	8.0	16
40	Differences in the susceptibility of Streptococcus pyogenes to rokitamycin and erythromycin A revealed by morphostructural atomic force microscopy. Journal of Antimicrobial Chemotherapy, 2002, 50, 457-460.	3.0	15
41	Increasing the maximum strain and efficiency of bucky gel actuators by pyrrole oxidative polymerization on carbon nanotubes dispersed in an ionic liquid. Carbon, 2012, 50, 4506-4511.	10.3	15
42	Independent Component Decomposition of Human Somatosensory Evoked Potentials Recorded by Micro-Electrocorticography. International Journal of Neural Systems, 2017, 27, 1650052.	5.2	15
43	Significant strain and force improvements of single-walled carbon nanotube actuator: A metal chalcogenides approach. Sensors and Actuators B: Chemical, 2016, 230, 673-683.	7.8	14
44	Endothelial cell adhesion on bioerodable polymers. Journal of Materials Science: Materials in Medicine, 2001, 12, 613-619.	3.6	13
45	Thymol-Induced Alterations in Candida albicans Imaged by Atomic Force Microscopy. Methods in Molecular Biology, 2011, 736, 401-410.	0.9	12
46	Scanning electron microscopy and atomic force microscopy of alkanethiol monolayers on gold. Thin Solid Films, 1994, 243, 431-436.	1.8	11
47	Gold nanoparticles self-assembled onto passivated glass substrates: Tuning the transition from 2D to 1D structures. Superlattices and Microstructures, 2008, 44, 608-616.	3.1	11
48	Piezoelectric polymer transducer arrays for flexible tactile sensors. , 2012, , .		11
49	Poly(ionic liquid)-carbon nanotubes self-supported, highly electroconductive composites and their application in electroactive devices. Composites Science and Technology, 2015, 117, 364-370.	7.8	11
50	The neuron-transistor junction: linking equivalent electric circuit models to microscopic descriptions. Thin Solid Films, 1996, 284-285, 772-775.	1.8	10
51	Langmuir films of thiolated gold nanoparticles transferred onto functionalized substrate: 2-D local organization. Materials Science and Engineering C, 2002, 22, 187-191.	7.3	10
52	Performance improvement in bucky gel actuators by chemical modifications of carbon nanotubes. Physica Status Solidi - Rapid Research Letters, 2010, 4, 64-66.	2.4	10
53	Ultra-flexible and brain-conformable micro-electrocorticography device with low impedance PEDOT-carbon nanotube coated microelectrodes. , 2013, , .		8
54	Rapid Identification of Cortical Motor Areas in Rodents by High-Frequency Automatic Cortical Stimulation and Novel Motor Threshold Algorithm. Frontiers in Neuroscience, 2017, 11, 580.	2.8	8

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55	Spectral Power in Marmoset Frontal Motor Cortex during Natural Locomotor Behavior. Cerebral Cortex, 2021, 31, 1077-1089.	2.9	8
56	Investigation on the surface orientation of cylindrical microdomains in styrene-butadiene-styrene triblock copolymers by scanning force microscopy/transmission electron microscopy. Macromolecular Rapid Communications, 1995, 16, 919-925.	3.9	7
57	Benchmarking bucky gel actuators: Chemically modified commercial carbon nanotubes versus super-growth carbon nanotubes. Physica Status Solidi (B): Basic Research, 2010, 247, 3055-3058.	1.5	7
58	How the Atomic Force Microscope Works?. Methods in Molecular Biology, 2011, 736, 3-18.	0.9	7
59	Growth Cones of Living Neurons Probed by Atomic Force Microscopy. , 2004, 242, 125-140.		6
60	A route to fabricate nanocontacts by X-ray lithography for the realization of single electron transistors and highly sensitive biosensors. Materials Letters, 2006, 60, 3682-3685.	2.6	6
61	Direct transfer of CVD-grown transparent SWCNT networks from growth substrate to polymer. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 2430-2433.	2.7	6
62	Improvement of polypyrrole and carbon nanotube coâ€deposition techniques for high chargeâ€transfer electrodes. Physica Status Solidi (B): Basic Research, 2009, 246, 2469-2472.	1.5	6
63	Optimization of the interaction between ethylenevinyl alcohol copolymers and human endothelial cells. Journal of Materials Science: Materials in Medicine, 1996, 7, 8-12.	3.6	5
64	A study of the transient current during the formation of titanium oxide nanodots by AFM anodic oxidation. Surface Science, 2007, 601, 4910-4914.	1.9	5
65	Imaging Bacterial Shape, Surface, and Appendages Before and After Treatment with Antibiotics. Methods in Molecular Biology, 2011, 736, 391-399.	0.9	5
66	Langmuir-Blodgett films of antibodies as mediators of endothelial cell adhesion on polyurethanes. Journal of Biomaterials Science, Polymer Edition, 1999, 10, 295-304.	3.5	4
67	CVD synthesis of single wall carbon nanotubes devoted to ULSI electronic applications. Physica Status Solidi (B): Basic Research, 2006, 243, 3077-3081.	1.5	4
68	Patterning surface oxide nanostructures using atomic force microscope local anodic oxidation. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 1941-1943.	2.7	4
69	Driving the self assembly of gold nanoparticle structures using highly oriented PTFE templates. Superlattices and Microstructures, 2008, 44, 599-607.	3.1	4
70	Geometry dependent performance of bucky gel actuators: Increasing operating frequency by miniaturization. Physica Status Solidi (B): Basic Research, 2012, 249, 2361-2364.	1.5	4
71	Nanostructured microsphere coated with living cells and tethered with low-stiffness wire: A possible solution to brain tissue reactions. , 2015, , .		4
72	The Growth Cones of Living Neurons Probed by the Atomic Force Microscope. Methods in Molecular Biology, 2011, 736, 243-257.	0.9	4

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73	Parylene coated carbon nanotube actuators for tactile stimulation. , 2015, , .		3
74	The electrolyte layer composition: A key element for improving the performance of carbon nanotube actuator. Sensors and Actuators B: Chemical, 2016, 222, 1073-1082.	7.8	3
75	Improved long-term stability of thin-film glassy carbon electrodes through the use of silicon carbide and amorphous carbon. , 2017, , .		3
76	Imaging Methods in Atomic Force Microscopy. , 2004, 242, 13-24.		2
77	Exâ€situ synthesized nickel nanoparticles for multiâ€walled carbon nanotube growth on high aspect ratio substrates. Physica Status Solidi (B): Basic Research, 2008, 245, 1923-1926.	1.5	2
78	Atomic Force Microscope nanolithography on titanium: Influence of the anodic voltage waveform on the formation of oxide nanodots. Superlattices and Microstructures, 2008, 44, 670-676.	3.1	2
79	Bucky gel actuators optimization towards haptic applications. Proceedings of SPIE, 2014, , .	0.8	2
80	A Compact and Autoclavable System for Acute Extracellular Neural Recording and Brain Pressure Monitoring for Humans. IEEE Transactions on Biomedical Circuits and Systems, 2015, 9, 50-59.	4.0	2
81	Measurement Methods in Atomic Force Microscopy. Methods in Molecular Biology, 2011, 736, 19-29.	0.9	2
82	How the atomic force microscope works. Methods in Molecular Biology, 2004, 242, 3-12.	0.9	2
83	Imaging Bacterial Shape, Surface, and Appendages Before and After Treatments With Antibiotics. , 2004, 242, 179-188.		1
84	Morphostructural Damage and the Inhibition of Bacterial Adhesiveness of<i>Staphylococcus aureus</i>and<i>Moraxella catarrhalis</i>Induced by Moxifloxacin. Journal of Chemotherapy, 2003, 15, 543-550.	1.5	1
85	Investigating Schottky Barriers Effects in Carbon Nanotube FETs. AIP Conference Proceedings, 2005, , .	0.4	1
86	Comparison between Two Implementations of iCub's Fingertip. Procedia Engineering, 2012, 47, 1231-1234.	1.2	1
87	Actuators based on intrinsic conductive polymers/carbon nanoparticles nanocomposites. , 2013, , .		1
88	Fast Electrophysiological Mapping of Rat Cortical Motor Representation on a Time Scale of Minutes during Skin Stimulation. Neuroscience, 2019, 414, 245-254.	2.3	1
89	Scanning tunneling microscopy imaging of organic layers on graphite. , 1992, , .		0
90	Atomic Force Microscopy: Theory and Practice in Bacteria Morphostructural Analysis. , 2001, 48, 199-207.		0

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91	Fabrication of Field Effect Transistors based on carbon nanotubes made by LASER ablation. AIP Conference Proceedings, 2004, , .	0.4	0
92	Hybrid Nanostructures: Organic Interconnections and Device Applications. , 2006, , .		0
93	Singleâ€walled carbon nanotube networks growth optimization. Physica Status Solidi (B): Basic Research, 2009, 246, 2473-2476.	1.5	0
94	Linear and bending actuation of bucky gel. Proceedings of SPIE, 2011, , .	0.8	0
95	Improving dry carbon nanotube actuators by chemical modifications, material hybridization, and proper engineering. Proceedings of SPIE, 2013, , .	0.8	0
96	Carbon nanotubes plastic actuator: Towards lightweight, low-voltage haptic devices. , 2014, , .		0
97	Cross-linked carbon nanotubes buckygel actuators: an in-depth study. Proceedings of SPIE, 2015, , .	0.8	0