Flavia Vitale

List of Publications by Year
in descending order

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40 papers	2,246 citations	331670 21 h-index	330143 37 g-index
43 all docs	43 docs citations	43 times ranked	4173 citing authors

#	Article	IF	Citations
1	Toward Nanotechnology-Enabled Approaches against the COVID-19 Pandemic. ACS Nano, 2020, 14, 6383-6406.	14.6	455
2	Neural Stimulation and Recording with Bidirectional, Soft Carbon Nanotube Fiber Microelectrodes. ACS Nano, 2015, 9, 4465-4474.	14.6	246
3	Biocompatible Carbon Nanotubeâ€“Chitosan Scaffold Matching the Electrical Conductivity of the Heart. ACS Nano, 2014, 8, 9822-9832.	14.6	187
4	Two-Dimensional Ti₃C₂ MXene for High-Resolution Neural Interfaces. ACS Nano, 2018, 12, 10419-10429.	14.6	173
5	Development of a neural interface for high-definition, long-term recording in rodents and nonhuman primates. Science Translational Medicine, 2020, 12, .	12.4	145
6	Photodynamic Therapy Based on Graphene and MXene in Cancer Theranostics. Frontiers in Bioengineering and Biotechnology, 2019, 7, 295.	4.1	100
7	Fluidic Microactuation of Flexible Electrodes for Neural Recording. Nano Letters, 2018, 18, 326-335.	9.1	84
8	Dissolution of Monocrystalline Silicon Nanomembranes and Their Use as Encapsulation Layers and Electrical Interfaces in Water-Soluble Electronics. ACS Nano, 2017, 11, 12562-12572.	14.6	82
9	Graphene and other 2D materials: a multidisciplinary analysis to uncover the hidden potential as cancer theranostics. Theranostics, 2020, 10, 5435-5488.	10.0	80
10	MXene-infused bioelectronic interfaces for multiscale electrophysiology and stimulation. Science Translational Medicine, 2021, 13, eabf8629.	12.4	68
11	2D MXenes with antiviral and immunomodulatory properties: A pilot study against SARS-CoV-2. Nano Today, 2021, 38, 101136.	11.9	63
12	Intracranial EEG fluctuates over months after implanting electrodes in human brain. Journal of Neural Engineering, 2017, 14, 056011.	3.5	60
13	A micro-scale printable nanoclip for electrical stimulation and recording in small nerves. Journal of Neural Engineering, 2017, 14, 036006.	3.5	52
14	A Gelâ€Free Ti₃C₂T_xâ€Based Electrode Array for Highâ€Density, Highâ€Resolution Surface Electromyography. Advanced Materials Technologies, 2020, 5, 2000325.	5.8	39
15	A multiscale, biophysical model of flowâ€induced red blood cell damage. AICHE Journal, 2014, 60, 1509-1516.	3.6	34
16	Washable, Sewable, All-Carbon Electrodes and Signal Wires for Electronic Clothing. Nano Letters, 2021, 21, 7093-7099.	9.1	34
17	Wireless, battery-free, and fully implantable electrical neurostimulation in freely moving rodents. Microsystems and Nanoengineering, 2021, 7, 62.	7.0	34
18	Ti₃C₂T_x MXene Flakes for Optical Control of Neuronal Electrical Activity. ACS Nano, 2021, 15, 14662-14671.	14.6	32

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19	In Vivo Restoration of Myocardial Conduction With Carbon Nanotube Fibers. Circulation: Arrhythmia and Electrophysiology, 2019, 12, e007256.	4.8	30
20	Multimodal in vivo recording using transparent graphene microelectrodes illuminates spatiotemporal seizure dynamics at the microscale. Communications Biology, 2021, 4, 136.	4.4	28
21	Biocompatibility studies of macroscopic fibers made from carbon nanotubes: Implications for carbon nanotube macrostructures in biomedical applications. Carbon, 2021, 173, 462-476.	10.3	25
22	Bioelectronics: the promise of leveraging the body's circuitry to treat disease. Bioelectronics in Medicine, 2018, 1, 3-7.	2.0	22
23	Microfabricated intracortical extracellular matrix-microelectrodes for improving neural interfaces. Microsystems and Nanoengineering, 2018, 4, 30.	7.0	22
24	Gels, jets, mosquitoes, and magnets: a review of implantation strategies for soft neural probes. Journal of Neural Engineering, 2020, 17, 041002.	3.5	17
25	Neurophotonic Tools for Microscopic Measurements and Manipulation: Status Report. Neurophotonics, 2022, 9, 013001.	3.3	17
26	Biomimetic extracellular matrix coatings improve the chronic biocompatibility of microfabricated subdural microelectrode arrays. PLoS ONE, 2018, 13, e0206137.	2.5	16
27	Fabrication of Ti₃C₂ MXene Microelectrode Arrays for In Vivo Neural Recording. Journal of Visualized Experiments, 2020, , .	0.3	15
28	A microwell-based impedance sensor on an insertable microneedle for real-time in vivo cytokine detection. Microsystems and Nanoengineering, 2021, 7, 96.	7.0	12
29	Biomedical Applications of MXenes. , 2019, , 503-524.		11
30	Design and Validation of a Multi-Point Injection Technology for MR-Guided Convection Enhanced Delivery in the Brain. Frontiers in Medical Technology, 2021, 3, 725844.	2.5	11
31	Spatiotemporal evolution of focal epileptiform activity from surface and laminar field recordings in cat neocortex. Journal of Neurophysiology, 2018, 119, 2068-2081.	1.8	9
32	Time Evolution of the Skinâ€“Electrode Interface Impedance under Different Skin Treatments. Sensors, 2021, 21, 5210.	3.8	9
33	Functional Deficits in Mice Expressing Human Interleukin 8. Comparative Medicine, 2020, 70, 205-215.	1.0	5
34	Emerging approaches for sensing and modulating neural activity enabled by nanocarbons and carbides. Current Opinion in Biotechnology, 2021, 72, 76-85.	6.6	5
35	Bioengineering applications for hearing restoration: emerging biologically inspired and biointegrated designs. Current Opinion in Biotechnology, 2021, 72, 131-138.	6.6	5
36	Vitamin C-reduced graphene oxide improves the performance and stability of multimodal neural microelectrodes. IScience, 2022, 25, 104652.	4.1	5

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37	Low-temperature H<inf>2</inf>O<inf>2</inf>-powered actuators for biorobotics: Thermodynamic and kinetic analysis. , 2010, , .		4
38	Analysis of a Gas Supply Unit Based on Hydrogen Peroxide Decomposition for Wearable Robotic Applications. Industrial & Engineering Chemistry Research, 2013, 52, 8946-8952.	3.7	4
39	Multimodal, Multiscale Insights into Hippocampal Seizures Enabled by Transparent, Graphene-Based Microelectrode Arrays. ENeuro, 2022, 9, ENEURO.0386-21.2022.	1.9	2
40	Numerical prediction of blood damage in membrane-based biomedical assist devices. , 2020, , 127-156.		0