Denis Scaini

List of Publications by Year
in descending order

52 papers	2,952 citations	218381 26 h-index	174990 52 g-index
52 all docs	52 docs citations	52 times ranked	5279 citing authors

#	Article	IF	Citations
1	Carbon nanotubes might improve neuronal performance by favouring electrical shortcuts. Nature Nanotechnology, 2009, 4, 126-133.	15.6	473
2	Safety Assessment of Graphene-Based Materials: Focus on Human Health and the Environment. ACS Nano, 2018, 12, 10582-10620.	7.3	438
3	Graphene-Based Interfaces Do Not Alter Target Nerve Cells. ACS Nano, 2016, 10, 615-623.	7.3	208
4	Graphene Oxide Nanosheets Reshape Synaptic Function in Cultured Brain Networks. ACS Nano, 2016, 10, 4459-4471.	7.3	133
5	Spinal Cord Explants Use Carbon Nanotube Interfaces To Enhance Neurite Outgrowth and To Fortify Synaptic Inputs. ACS Nano, 2012, 6, 2041-2055.	7.3	127
6	From 2D to 3D: novel nanostructured scaffolds to investigate signalling in reconstructed neuronal networks. Scientific Reports, 2015, 5, 9562.	1.6	125
7	Single-layer graphene modulates neuronal communication and augments membrane ion currents. Nature Nanotechnology, 2018, 13, 755-764.	15.6	120
8	Î±-Synuclein Amyloids Hijack Prion Protein to Gain Cell Entry, Facilitate Cell-to-Cell Spreading and Block Prion Replication. Scientific Reports, 2017, 7, 10050.	1.6	105
9	Mechanical cues control mutant p53 stability through a mevalonateâ€“RhoA axis. Nature Cell Biology, 2018, 20, 28-35.	4.6	104
10	3D meshes of carbon nanotubes guide functional reconnection of segregated spinal explants. Science Advances, 2016, 2, e1600087.	4.7	84
11	Quantitative Study of the Effect of Coverage on the Hybridization Efficiency of Surface-Bound DNA Nanostructures. Nano Letters, 2008, 8, 4134-4139.	4.5	64
12	Carbon Nanotube Scaffolds Instruct Human Dendritic Cells: Modulating Immune Responses by Contacts at the Nanoscale. Nano Letters, 2013, 13, 6098-6105.	4.5	54
13	Adhesion to Carbon Nanotube Conductive Scaffolds Forces Action-Potential Appearance in Immature Rat Spinal Neurons. PLoS ONE, 2013, 8, e73621.	1.1	53
14	Mutant p53 induces Golgi tubulo-vesiculation driving a prometastatic secretome. Nature Communications, 2020, 11, 3945.	5.8	52
15	Nanomaterials at the neural interface. Current Opinion in Neurobiology, 2018, 50, 50-55.	2.0	49
16	Advances in Nano Neuroscience: From Nanomaterials to Nanotools. Frontiers in Neuroscience, 2018, 12, 953.	1.4	46
17	PEDOT:PSS Interfaces Support the Development of Neuronal Synaptic Networks with Reduced Neuroglia Response In vitro. Frontiers in Neuroscience, 2015, 9, 521.	1.4	45
18	Enzyme-catalyzed functionalization of poly(L-lactic acid) for drug delivery applications. Process Biochemistry, 2017, 59, 77-83.	1.8	42

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19	BDNF impact on synaptic dynamics: extra or intracellular long-term release differently regulates cultured hippocampal synapses. Molecular Brain, 2020, 13, 43.	1.3	42
20	Primate cathelicidin orthologues display different structures and membrane interactions. Biochemical Journal, 2009, 417, 727-735.	1.7	40
21	Cellobiose dehydrogenase functionalized urinary catheter as novel antibiofilm system. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 1448-1456.	1.6	34
22	Mapping mechanical properties of living cells at nanoscale using intrinsic nanopipetteâ€“sample force interactions. Nanoscale, 2021, 13, 6558-6568.	2.8	33
23	Activation of human aortic valve interstitial cells by local stiffness involves YAP-dependent transcriptional signaling. Biomaterials, 2018, 181, 268-279.	5.7	31
24	Exploiting natural polysaccharides to enhance in vitro bio-constructs of primary neurons and progenitor cells. Acta Biomaterialia, 2018, 73, 285-301.	4.1	28
25	Sculpting neurotransmission during synaptic development by 2D nanostructured interfaces. Nanomedicine: Nanotechnology, Biology, and Medicine, 2018, 14, 2521-2532.	1.7	28
26	Electron Transfer Mediating Properties of Hydrocarbons as a Function of Chain Length: A Differential Scanning Conductive Tip Atomic Force Microscopy Investigation. ACS Nano, 2008, 2, 507-515.	7.3	27
27	Enzymatic Functionalization of HMLS-Polyethylene Terephthalate Fabrics Improves the Adhesion to Rubber. ACS Sustainable Chemistry and Engineering, 2017, 5, 6456-6465.	3.2	27
28	Nanostructures to Engineer 3D Neuralâ€Interfaces: Directing Axonal Navigation toward Successful Bridging of Spinal Segments. Advanced Functional Materials, 2018, 28, 1700550.	7.8	26
29	Quantification of Circulating Cancer Biomarkers via Sensitive Topographic Measurements on Single Binder Nanoarrays. ACS Omega, 2017, 2, 2618-2629.	1.6	23
30	Carbon Nanotubes, Directly Grown on Supporting Surfaces, Improve Neuronal Activity in Hippocampal Neuronal Networks. Advanced Biology, 2019, 3, e1800286.	3.0	23
31	Functional rewiring across spinal injuries via biomimetic nanofiber scaffolds. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 25212-25218.	3.3	23
32	Oriented Immobilization of Prion Protein DemonstratedviaPrecise Interfacial Nanostructure Measurements. ACS Nano, 2010, 4, 6607-6616.	7.3	21
33	Grapheneâ€Based Nanomaterials for Neuroengineering: Recent Advances and Future Prospective. Advanced Functional Materials, 2021, 31, 2104887.	7.8	21
34	Interfacing Neurons with Nanostructured Electrodes Modulates Synaptic Circuit Features. Advanced Biology, 2020, 4, e2000117.	3.0	17
35	Prion Protein Interaction with Soil Humic Substances: Environmental Implications. PLoS ONE, 2014, 9, e100016.	1.1	16
36	Iron-mediated interaction of alpha synuclein with lipid raft model membranes. Nanoscale, 2020, 12, 7631-7640.	2.8	16

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37	Synthetic prions and other human neurodegenerative proteinopathies. Virus Research, 2015, 207, 25-37.	1.1	15
38	Transparent carbon nanotubes promote the outgrowth of enthorinoâ€dentate projections in lesioned organ slice cultures. Developmental Neurobiology, 2020, 80, 316-331.	1.5	15
39	Short-term angiotensin II treatment regulates cardiac nanomechanicsviamicrotubule modifications. Nanoscale, 2020, 12, 16315-16329.	2.8	15
40	Myoblast Adhesion, Proliferation and Differentiation on Human Elastin-Like Polypeptide (HELP) Hydrogels. Journal of Applied Biomaterials and Functional Materials, 2017, 15, 43-53.	0.7	14
41	InÂvitro myogenesis induced by human recombinant elastin-like proteins. Biomaterials, 2015, 67, 240-253.	5.7	13
42	Polystyrene Nanopillars with Inbuilt Carbon Nanotubes Enable Synaptic Modulation and Stimulation in Interfaced Neuronal Networks. Advanced Materials Interfaces, 2021, 8, 2002121.	1.9	13
43	Tuning Neuronal Circuit Formation in 3D Polymeric Scaffolds by Introducing Graphene at the Bio/Material Interface. Advanced Biology, 2020, 4, 1900233.	3.0	12
44	Atomic force microscopy based nanoassay: a new method to study Î±-Synuclein-dopamine bioaffinity interactions. Scientific Reports, 2014, 4, 5366.	1.6	10
45	The mechanisms of humic substances self-assembly with biological molecules: The case study of the prion protein. PLoS ONE, 2017, 12, e0188308.	1.1	10
46	Mechanical Stabilization Effect of Water on a Membrane-like System. Journal of the American Chemical Society, 2007, 129, 2636-2641.	6.6	9
47	Biofilms produced by Burkholderia cenocepacia: influence of media and solid supports on composition of matrix exopolysaccharides. Microbiology (United Kingdom), 2016, 162, 283-294.	0.7	8
48	Hybrid Interfaces Made of Nanotubes and Backbone-Altered Dipeptides Tune Neuronal Network Architecture. ACS Chemical Neuroscience, 2020, 11, 162-172.	1.7	5
49	The Atomic Force Microscopy as a Lithographic Tool: Nanografting of DNA Nanostructures for Biosensing Applications. Methods in Molecular Biology, 2011, 749, 209-221.	0.4	5
50	Carbon Nanotubes Substrates Alleviate Pro-Calcific Evolution in Porcine Valve Interstitial Cells. Nanomaterials, 2021, 11, 2724.	1.9	5
51	Bidirectional Modulation of Neuronal Cells Electrical and Mechanical Properties Through Pristine and Functionalized Graphene Substrates. Frontiers in Neuroscience, 2021, 15, 811348.	1.4	3
52	Substrate roughness influence on the order of nanografted Self-Assembled Monolayers. Chemical Physics Letters, 2022, 803, 139819.	1.2	2