Rylie A Green

List of Publications by Year
in descending order

66 papers	3,612 citations	201385 27 h-index	182168 51 g-index
70 all docs	70 docs citations	70 times ranked	3848 citing authors

#	Article	IF	Citations
1	The influence of physicochemical properties on the processibility of conducting polymers: A bioelectronics perspective. Acta Biomaterialia, 2022, 139, 259-279.	4.1	18
2	Flexible Networks of Patterned Conducting Polymer Nanowires for Fully Polymeric Bioelectronics. Advanced NanoBiomed Research, 2022, 2, 2100102.	1.7	2
3	Harnessing the 2D Structureâ€Enabled Viscoelasticity of Grapheneâ€Based Hydrogel Membranes for Chronic Neural Interfacing. Small Methods, 2022, 6, e2200022.	4.6	12
4	Stretchable, Fully Polymeric Electrode Arrays for Peripheral Nerve Stimulation. Advanced Science, 2021, 8, 2004033.	5.6	34
5	Self-Assembling Hydrogel Structures for Neural Tissue Repair. ACS Biomaterials Science and Engineering, 2021, 7, 4136-4163.	2.6	66
6	Mind the gap: State-of-the-art technologies and applications for EEG-based brainâ€“computer interfaces. APL Bioengineering, 2021, 5, 031507.	3.3	28
7	Biomimetic Approaches Towards Device-Tissue Integration. , 2021, , 1-26.		0
8	Adaptive biomimicry: design of neural interfaces with enhanced biointegration. Current Opinion in Biotechnology, 2021, 72, 62-68.	3.3	6
9	Flexible Nanowire Conductive Elastomers for Applications in Fully Polymeric Bioelectronic Devices [*]. , 2021, 2021, 5872-5875.		1
10	Possibilities in bioelectronics: Super humans or science fiction?. APL Bioengineering, 2021, 5, 040401.	3.3	5
11	Electrochemical and mechanical performance of reduced graphene oxide, conductive hydrogel, and electrodeposited Ptâ€“Ir coated electrodes: an active<i>in vitro</i>study. Journal of Neural Engineering, 2020, 17, 016015.	1.8	22
12	Actively controlled local drug delivery using conductive polymer-based devices. Applied Physics Letters, 2020, 116, .	1.5	48
13	Hydrogels for 3D Neural Tissue Models: Understanding Cell-Material Interactions at a Molecular Level. Frontiers in Bioengineering and Biotechnology, 2020, 8, 601704.	2.0	19
14	Stretchable bioelectronics: Mitigating the challenges of the percolation threshold in conductive elastomers. APL Materials, 2020, 8, .	2.2	9
15	Subthreshold Electrical Stimulation for Controlling Protein-Mediated Impedance Increases in Platinum Cochlear Electrode. IEEE Transactions on Biomedical Engineering, 2020, 67, 3510-3520.	2.5	8
16	Electrochemical and biological performance of chronically stimulated conductive hydrogel electrodes. Journal of Neural Engineering, 2020, 17, 026018.	1.8	36
17	3D Cell Culture Systems for the Development of Neural Interfaces. , 2020, , 201-236.		2
18	Considerations for hydrogel applications to neural bioelectronics. Journal of Materials Chemistry B, 2019, 7, 1625-1636.	2.9	54

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19	Conductive elastomer composites for fully polymeric, flexible bioelectronics. Biomaterials Science, 2019, 7, 1372-1385.	2.6	57
20	An Improved in vitro Model of Cortical Tissue. Frontiers in Neuroscience, 2019, 13, 1349.	1.4	8
21	Tissue engineered hydrogels supporting 3D neural networks. Acta Biomaterialia, 2019, 95, 269-284.	4.1	40
22	Elastic and conductive hydrogel electrodes. Nature Biomedical Engineering, 2019, 3, 9-10.	11.6	43
23	Comparing perilymph proteomes across species. Laryngoscope, 2018, 128, E47-E52.	1.1	11
24	Living Bioelectronics: Strategies for Developing an Effective Longâ€Term Implant with Functional Neural Connections. Advanced Functional Materials, 2018, 28, 1702969.	7.8	60
25	Tailoring 3D hydrogel systems for neuronal encapsulation in living electrodes. Journal of Polymer Science, Part B: Polymer Physics, 2018, 56, 273-287.	2.4	22
26	The potential of conductive hydrogel electrodes at the neural interface: an interview with Rylie Green. Bioelectronics in Medicine, 2018, 1, 227-229.	2.0	0
27	Stimulation of peripheral nerves using conductive hydrogel electrodes*. , 2018, 2018, 5475-5478.		3
28	Are â€˜next generationâ€™ bioelectronics being designed using old technologies?. Bioelectronics in Medicine, 2018, 1, 171-174.	2.0	5
29	Interpenetrating Conducting Hydrogel Materials for Neural Interfacing Electrodes. Advanced Healthcare Materials, 2017, 6, 1601177.	3.9	90
30	A living electrode construct for incorporation of cells into bionic devices. MRS Communications, 2017, 7, 487-495.	0.8	37
31	Conductive Hydrogel Electrodes for Delivery of Long-Term High Frequency Pulses. Frontiers in Neuroscience, 2017, 11, 748.	1.4	29
32	Influence of Biphasic Stimulation on Olfactory Ensheathing Cells for Neuroprosthetic Devices. Frontiers in Neuroscience, 2016, 10, 432.	1.4	7
33	Mechanisms for Imparting Conductivity to Nonconductive Polymeric Biomaterials. Macromolecular Bioscience, 2016, 16, 1103-1121.	2.1	12
34	In situ formation of poly(vinyl alcohol)â€"heparin hydrogels for mild encapsulation and prolonged release of basic fibroblast growth factor and vascular endothelial growth factor. Journal of Tissue Engineering, 2016, 7, 204173141667713.	2.3	25
35	Understanding the cochlear implant environment by mapping perilymph proteomes from different species. , 2016, 2016, 5237-5240.		1
36	Biofunctionalization of conductive hydrogel coatings to support olfactory ensheathing cells at implantable electrode interfaces. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 712-722.	1.6	11

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37	Conducting Polymers for Neural Prosthetic and Neural Interface Applications. Advanced Materials, 2015, 27, 7620-7637.	11.1	297
38	Producing 3D neuronal networks in hydrogels for living bionic device interfaces. , 2015, 2015, 2600-3.		11
39	Freestanding, soft bioelectronics. , 2015, , .		2
40	In vitro biological assessment of electrode materials for neural interfaces. , 2015, , .		3
41	CHAPTER 8. Bioactive Conducting Polymers for Optimising the Neural Interface. RSC Smart Materials, 2014, , 192-220.	0.1	0
42	Effects of dopants on the biomechanical properties of conducting polymer films on platinum electrodes. Journal of Biomedical Materials Research - Part A, 2014, 102, 2743-2754.	2.1	77
43	Conductive hydrogels with tailored bioactivity for implantable electrode coatings. Acta Biomaterialia, 2014, 10, 1216-1226.	4.1	102
44	Stiffness quantification of conductive polymers for bioelectrodes. Journal of Polymer Science, Part B: Polymer Physics, 2014, 52, 666-675.	2.4	29
45	Improving Cochlear Implant Properties Through Conductive Hydrogel Coatings. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2014, 22, 411-418.	2.7	62
46	The biological and electrical trade-offs related to the thickness of conducting polymers for neural applications. Acta Biomaterialia, 2014, 10, 3048-3058.	4.1	36
47	Organic electrode coatings for next-generation neural interfaces. Frontiers in Neuroengineering, 2014, 7, 15.	4.8	211
48	Integrated electrode and high density feedthrough system for chip-scale implantable devices. Biomaterials, 2013, 34, 6109-6118.	5.7	28
49	A low-maintenance, primary cell culture model for the assessment of carbon nanotube toxicity. Toxicological and Environmental Chemistry, 2013, 95, 1129-1144.	0.6	8
50	Thin film hydrophilic electroactive polymer coatings for bioelectrodes. Journal of Materials Chemistry B, 2013, 1, 3803.	2.9	26
51	Living electrodes: Tissue engineering the neural interface. , 2013, 2013, 6957-60.		25
52	Challenges of therapeutic delivery using conducting polymers. Therapeutic Delivery, 2012, 3, 421-427.	1.2	11
53	Conductive Hydrogels: Mechanically Robust Hybrids for Use as Biomaterials. Macromolecular Bioscience, 2012, 12, 494-501.	2.1	168
54	Substrate dependent stability of conducting polymer coatings on medical electrodes. Biomaterials, 2012, 33, 5875-5886.	5.7	175

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55	Electrochemical stability of poly(ethylene dioxythiophene) electrodes. , 2011, , .		2
56	Direct local polymerization of poly(3,4-ethylenedioxythiophene) in rat cortex. Progress in Brain Research, 2011, 194, 263-271.	0.9	12
57	Bio-synthetic Encapsulation Systems for Organ Engineering: Focus on Diabetes. , 2011, , 363-381.		1
58	Cytotoxicity of implantable microelectrode arrays produced by laser micromachining. Biomaterials, 2010, 31, 886-893.	5.7	30
59	Impact of co-incorporating laminin peptide dopants and neurotrophic growth factors on conducting polymer properties. Acta Biomaterialia, 2010, 6, 63-71.	4.1	163
60	Conducting polymer-hydrogels for medical electrode applications. Science and Technology of Advanced Materials, 2010, 11, 014107.	2.8	221
61	Development of bioactive conducting polymers for neural interfaces. Expert Review of Medical Devices, 2010, 7, 35-49.	1.4	64
62	Cell attachment functionality of bioactive conducting polymers for neural interfaces. Biomaterials, 2009, 30, 3637-3644.	5.7	238
63	Novel neural interface for implant electrodes: improving electroactivity of polypyrrole through MWNT incorporation. Journal of Materials Science: Materials in Medicine, 2008, 19, 1625-1629.	1.7	60
64	Conducting polymers for neural interfaces: Challenges in developing an effective long-term implant. Biomaterials, 2008, 29, 3393-3399.	5.7	677
65	Novel Neural Interface for Vision Prosthesis Electrodes: Improving Electrical and Mechanical Properties through Layering. , 2007, , .		8
66	Advances in Retinal Neuroprosthetics. , 0, , 337-356.		14