Ellis Meng

List of Publications by Year
in descending order

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101	4,158	126858	118793
papers	citations	33 h-index	62 g-index

102	102	102	4589
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Micromachined Thermal Flow Sensorsâ€"A Review. Micromachines, 2012, 3, 550-573.	1.4	371
2	Flexible parylene-based multielectrode array technology for high-density neural stimulation and recording. Sensors and Actuators B: Chemical, 2008, 132, 449-460.	4.0	295
3	High strain biocompatible polydimethylsiloxane-based conductive graphene and multiwalled carbon nanotube nanocomposite strain sensors. Applied Physics Letters, 2013, 102, .	1.5	174
4	Chronically Implanted Pressure Sensors: Challenges and State of the Field. Sensors, 2014, 14, 20620-20644.	2.1	148
5	Flexible, Penetrating Brain Probes Enabled by Advances in Polymer Microfabrication. Micromachines, 2016, 7, 180.	1.4	147
6	Micromachining of Parylene C for bioMEMS. Polymers for Advanced Technologies, 2016, 27, 564-576.	1.6	142
7	A passive MEMS drug delivery pump for treatment of ocular diseases. Biomedical Microdevices, 2009, 11, 959-970.	1.4	140
8	Plasma removal of Parylene C. Journal of Micromechanics and Microengineering, 2008, 18, 045004.	1.5	133
9	An implantable MEMS micropump system for drug delivery in small animals. Biomedical Microdevices, 2012, 14, 483-496.	1.4	133
10	Materials for microfabricated implantable devices: a review. Lab on A Chip, 2015, 15, 4256-4272.	3.1	126
11	An electrochemical intraocular drug delivery device. Sensors and Actuators A: Physical, 2008, 143, 41-48.	2.0	123
12	Novel flexible Parylene neural probe with 3D sheath structure for enhancing tissue integration. Lab on A Chip, 2013, 13, 554-561.	3.1	102
13	Review of polymer MEMS micromachining. Journal of Micromechanics and Microengineering, 2016, 26, 013001.	1.5	101
14	A Parylene Bellows Electrochemical Actuator. Journal of Microelectromechanical Systems, 2010, 19, 215-228.	1.7	97
15	Techniques and Considerations in the Microfabrication of Parylene C Microelectromechanical Systems. Micromachines, 2018, 9, 422.	1.4	97
16	A biocompatible Parylene thermal flow sensing array. Sensors and Actuators A: Physical, 2008, 144, 18-28.	2.0	93
17	A review for the peripheral nerve interface designer. Journal of Neuroscience Methods, 2020, 332, 108523.	1.3	78
18	Wafer-Level Parylene Packaging With Integrated RF Electronics for Wireless Retinal Prostheses. Journal of Microelectromechanical Systems, 2010, 19, 735-742.	1.7	72

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19	A review of implantable biosensors for closed-loop glucose control and other drug delivery applications. International Journal of Pharmaceutics, 2018, 544, 319-334.	2.6	72
20	MEMS-enabled implantable drug infusion pumps for laboratory animal research, preclinical, and clinical applications. Advanced Drug Delivery Reviews, 2012, 64, 1628-1638.	6.6	70
21	Micro- and nano-fabricated implantable drug-delivery systems. Therapeutic Delivery, 2012, 3, 1457-1467.	1.2	65
22	Insight: implantable medical devices. Lab on A Chip, 2014, 14, 3233.	3.1	59
23	Mini Drug Pump for Ophthalmic Use. Current Eye Research, 2010, 35, 192-201.	0.7	58
24	A wireless implantable micropump for chronic drug infusion against cancer. Sensors and Actuators A: Physical, 2016, 239, 18-25.	2.0	58
25	A refillable microfabricated drug delivery device for treatment of ocular diseases. Lab on A Chip, 2008, 8, 1027.	3.1	56
26	Implantable micromechanical parylene-based pressure sensors for unpowered intraocular pressure sensing. Journal of Micromechanics and Microengineering, 2007, 17, 1931-1938.	1.5	54
27	MEMS: Enabled Drug Delivery Systems. Advanced Healthcare Materials, 2015, 4, 969-982.	3.9	54
28	A Parylene Neural Probe Array for Multi-Region Deep Brain Recordings. Journal of Microelectromechanical Systems, 2020, 29, 499-513.	1.7	40
29	Parylene-based integrated wireless single-channel neurostimulator. Sensors and Actuators A: Physical, 2011, 166, 193-200.	2.0	39
30	Long-term stability of intracortical recordings using perforated and arrayed Parylene sheath electrodes. Journal of Neural Engineering, 2016, 13, 066020.	1.8	39
31	Electron-beam lithography for polymer bioMEMS with submicron features. Microsystems and Nanoengineering, 2016, 2, 16053.	3.4	39
32	High-Efficiency MEMS Electrochemical Actuators and Electrochemical Impedance Spectroscopy Characterization. Journal of Microelectromechanical Systems, 2012, 21, 1197-1208.	1.7	37
33	A MEMS electrochemical bellows actuator for fluid metering applications. Biomedical Microdevices, 2013, 15, 37-48.	1.4	35
34	Silicon couplers for microfluidic applications. Fresenius' Journal of Analytical Chemistry, 2001, 371, 270-275.	1.5	32
35	Matrigel coatings for <scp>P</scp>arylene sheath neural probes. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 357-368.	1.6	32
36	Acutein vivotesting of a conformal polymer microelectrode array for multi-region hippocampal recordings. Journal of Neural Engineering, 2018, 15, 016017.	1.8	30

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37	An Electrochemically Actuated MEMS Device for Individualized Drug Delivery: an In Vitro Study. Advanced Healthcare Materials, 2013, 2, 1170-1178.	3.9	29
38	Wireless programmable electrochemical drug delivery micropump with fully integrated electrochemical dosing sensors. Biomedical Microdevices, 2015, 17, 74.	1.4	29
39	Parylene-Based Cuff Electrode With Integrated Microfluidics for Peripheral Nerve Recording, Stimulation, and Drug Delivery. Journal of Microelectromechanical Systems, 2019, 28, 36-49.	1.7	29
40	Recent advances in neural interfacesâ€"Materials chemistry to clinical translation. MRS Bulletin, 2020, 45, 655-668.	1.7	29
41	Low-cost carbon thick-film strain sensors for implantable applications. Journal of Micromechanics and Microengineering, 2010, 20, 095028.	1.5	26
42	A Parylene MEMS Electrothermal Valve. Journal of Microelectromechanical Systems, 2009, 18, 1184-1197.	1.7	25
43	An Electrochemical Impedance-Based Thermal Flow Sensor for Physiological Fluids. Journal of Microelectromechanical Systems, 2016, 25, 1015-1024.	1.7	25
44	Characterization and Modification of Adhesion in Dry and Wet Environments in Thin-Film Parylene Systems. Journal of Microelectromechanical Systems, 2018, 27, 874-885.	1.7	24
45	Mini drug pump for ophthalmic use. Transactions of the American Ophthalmological Society, 2009, 107, 60-70.	1.4	24
46	Epoxy-less packaging methods for electrical contact to parylene-based flat flexible cables. , 2011, , .		23
47	Implantable MEMS drug delivery device for cancer radiation reduction. , 2010, , .		21
48	Mechanical Properties of Thin-Film Paryleneâ€"Metalâ€"Parylene Devices. Frontiers in Mechanical Engineering, 2015, 1, .	0.8	21
49	A comparison of insertion methods for surgical placement of penetrating neural interfaces. Journal of Neural Engineering, 2021, 18, 041003.	1.8	21
50	A 512-Channel Multi-Layer Polymer-Based Neural Probe Array. Journal of Microelectromechanical Systems, 2020, 29, 1054-1058.	1.7	19
51	Parylene-Based Electrochemical-MEMS Force Sensor for Studies of Intracortical Probe Insertion Mechanics. Journal of Microelectromechanical Systems, 2015, 24, 1534-1544.	1.7	18
52	Integrated and reusable in-plane microfluidic interconnects. Sensors and Actuators B: Chemical, 2008, 132, 531-539.	4.0	17
53	Kirigami Strain Sensors Microfabricated From Thin-Film Parylene C. Journal of Microelectromechanical Systems, 2018, 27, 1082-1088.	1.7	17
54	REVERSIBLE THERMOSENSITIVE GLUE FOR RETINAL IMPLANTS. Retina, 2007, 27, 938-942.	1.0	16

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55	Parylene MEMS patency sensor for assessment of hydrocephalus shunt obstruction. Biomedical Microdevices, 2016, 18, 87.	1.4	15
56	Acute in vivo testing of a polymer cuff electrode with integrated microfluidic channels for stimulation, recording, and drug delivery on rat sciatic nerve. Journal of Neuroscience Methods, 2020, 336, 108634.	1.3	15
57	Acceleration techniques for recombination of gases in electrolysis microactuators with NafionÂ®-coated electrocatalyst. Sensors and Actuators B: Chemical, 2015, 221, 914-922.	4.0	14
58	Development of biocompatible parylene neurocages. , 2004, 2004, 2542-5.		13
59	A low power, on demand electrothermal valve for wireless drug delivery applications. Lab on A Chip, 2010, 10, 101-110.	3.1	13
60	A subnanowatt microbubble pressure sensor based on electrochemical impedance transduction in a flexible all-Parylene package. , 2011, , .		13
61	A microfluidic platform with integrated flow sensing for focal chemical stimulation of cells and tissue. Sensors and Actuators B: Chemical, 2011, 152, 267-276.	4.0	13
62	Impedance-Based Force Transduction Within Fluid-Filled Parylene Microstructures. Journal of Microelectromechanical Systems, 2011, 20, 1098-1108.	1.7	13
63	An Electrochemical Microbubble-Based MEMS Pressure Sensor. Journal of Microelectromechanical Systems, 2016, 25, 144-152.	1.7	13
64	Parylene-Based Electrochemical-MEMS Transducers. Journal of Microelectromechanical Systems, 2010, 19, 1352-1361.	1.7	12
65	Additive Processes for Polymeric Materials. MEMS Reference Shelf, 2011, , 193-271.	0.6	12
66	Liquid Encapsulation in Parylene Microstructures Using Integrated Annular-Plate Stiction Valves. Micromachines, 2011, 2, 356-368.	1.4	11
67	Micro- and nano-fabricated implantable drug-delivery systems: current state and future perspectives. Therapeutic Delivery, 2014, 5, 1167-1170.	1.2	11
68	An Electrochemical Investigation of the Impact of Microfabrication Techniques on Polymer-Based Microelectrode Neural Interfaces. Journal of Microelectromechanical Systems, 2015, 24, 801-809.	1.7	10
69	Annealing effects on flexible multi-layered parylene-based sensors. , 2014, , .		9
70	A microbubble pressure transducer with bubble nucleation core. , 2014, , .		9
71	Development of an anatomically conformal parylene neural probe array for multi-region hippocampal recordings. , 2017, , .		9
72	Emerging micro- and nanotechnologies at the interface of engineering, science, and medicine for the development of novel drug delivery devices and systems. Advanced Drug Delivery Reviews, 2012, 64, 1545-1546.	6.6	8

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73	Chronic multi-region recording from the rat hippocampus in vivo with a flexible Parylene-based multi-electrode array. , 2017, 2017, 1716-1719.		8
74	An implantable microelectrode array for chronic in vivo epiretinal stimulation of the rat retina. Journal of Micromechanics and Microengineering, 2020, 30, 124001.	1.5	8
75	Electrochemically-based dose measurement for closed-loop drug delivery applications. , 2011, , .		6
76	Passive, wireless transduction of electrochemical impedance across thin-film microfabricated coils using reflected impedance. Biomedical Microdevices, 2017, 19, 87.	1.4	6
77	A calorimetric flow sensor for ultra-low flow applications using electrochemical impedance. , 2018, , .		6
78	A Modular Heat-Shrink-Packaged Check Valve With High Pressure Shutoff. Journal of Microelectromechanical Systems, 2011, 20, 1163-1173.	1.7	5
79	Design, fabrication, and characterization of an electrochemically-based dose tracking system for closed-loop drug delivery. , 2012, 2012, 519-22.		5
80	Application of Parylene-Based Flexible Multi-Electrode Array for Recording From Subcortical Brain Regions From Behaving Rats. , 2018, 2018, 4599-4602.		5
81	Bonding Methods for Chip Integration with Parylene Devices. Journal of Micromechanics and Microengineering, 2021, 31, .	1.5	5
82	Parylene-based encapsulated fluid MEMS sensors. , 2009, 2009, 1039-41.		4
83	A dual mode microbubble pressure and flow sensor. , 2016, , .		4
84	An electrochemical-based thermal flow sensor. , 2016, , .		3
85	A Continuous, Drift-Compensated Impedimetric Thermal Flow Sensor for in Vivo Applications. , 2019, , .		3
86	A Continuous, Impedimetric Parylene Flow Sensor. Journal of Microelectromechanical Systems, 2021, 30, 456-470.	1.7	3
87	Integrated flow sensing for focal biochemical stimulation. , 2008, , .		2
88	Improved process for high yield 3D inclined SU-8 structures on soda lime substrate towards applications in optogenetic studies. , 2012, , .		2
89	Perforated 2×2 Parylene sheath electrode array for chronic intracortical recording. , 2013, , .		2
90	MEMS electrochemical patency sensor for detection of hydrocephalus shunt obstruction. , 2015, , .		2

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91	Testing a Multi-Sensor System For Hydrocephalus Monitoring in External Ventricular Drains. , 2019, , .		2
92	Fluid Temperature Measurement in Aqueous Solution via Electrochemical Impedance. Journal of Microelectromechanical Systems, 2019, 28, 1060-1067.	1.7	2
93	A Reusable In-Plane Polymer Integrated Microfluidic Interconnect. , 2007, , .		1
94	Implantable MEMS drug delivery pumps for small animal research. , 2009, 2009, 6696-8.		1
95	On-demand wireless infusion rate control in an implantable micropump for patient-tailored treatment of chronic conditions. , 2014, 2014, 882-5.		1
96	Fabrication of flexible polymer bio-MEMS with submicron features. , 2017, , .		1
97	Fine-Pitch Bonding Methods for Integrating Asics with Flexible Polymer Mems. , 2019, , .		1
98	Interfacing with the Peripheral Nervous System. Journal of Neuroscience Methods, 2020, 340, 108745.	1.3	1
99	A portable multi-sensor module for monitoring external ventricular drains. Biomedical Microdevices, 2021, 23, 45.	1.4	1
100	Asymmetric Microelectrodes for Nanoliter Bubble Generation via Electrolysis. Journal of Microelectromechanical Systems, 2022, 31, 106-115.	1.7	1
101	Polymer BioMEMS for implantable drug delivery systems. , 2009, , .		0