

Ellis Meng

List of Publications by Year in descending order

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101
papers

4,158
citations

126858

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118793

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102
all docs

102
docs citations

102
times ranked

4589
citing authors

#	ARTICLE	IF	CITATIONS
1	Asymmetric Microelectrodes for Nanoliter Bubble Generation via Electrolysis. Journal of Microelectromechanical Systems, 2022, 31, 106-115.	1.7	1
2	Bonding Methods for Chip Integration with Parylene Devices. Journal of Micromechanics and Microengineering, 2021, 31, .	1.5	5
3	A comparison of insertion methods for surgical placement of penetrating neural interfaces. Journal of Neural Engineering, 2021, 18, 041003.	1.8	21
4	A Continuous, Impedimetric Parylene Flow Sensor. Journal of Microelectromechanical Systems, 2021, 30, 456-470.	1.7	3
5	A portable multi-sensor module for monitoring external ventricular drains. Biomedical Microdevices, 2021, 23, 45.	1.4	1
6	A review for the peripheral nerve interface designer. Journal of Neuroscience Methods, 2020, 332, 108523.	1.3	78
7	Recent advances in neural interfaces—Materials chemistry to clinical translation. MRS Bulletin, 2020, 45, 655-668.	1.7	29
8	Interfacing with the Peripheral Nervous System. Journal of Neuroscience Methods, 2020, 340, 108745.	1.3	1
9	A 512-Channel Multi-Layer Polymer-Based Neural Probe Array. Journal of Microelectromechanical Systems, 2020, 29, 1054-1058.	1.7	19
10	A Parylene Neural Probe Array for Multi-Region Deep Brain Recordings. Journal of Microelectromechanical Systems, 2020, 29, 499-513.	1.7	40
11	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
12	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
13	A Continuous, Drift-Compensated Impedimetric Thermal Flow Sensor for in Vivo Applications. , 2019, , .		3
14	Testing a Multi-Sensor System For Hydrocephalus Monitoring in External Ventricular Drains. , 2019, , .		2
15	Fine-Pitch Bonding Methods for Integrating Asics with Flexible Polymer Mem. , 2019, , .		1
16	Fluid Temperature Measurement in Aqueous Solution via Electrochemical Impedance. Journal of Microelectromechanical Systems, 2019, 28, 1060-1067.	1.7	2
17	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
18	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

#	ARTICLE	IF	CITATIONS
19	Acute in vivo testing of a conformal polymer microelectrode array for multi-region hippocampal recordings. <i>Journal of Neural Engineering</i> , 2018, 15, 016017.	1.8	30
20	Kirigami Strain Sensors Microfabricated From Thin-Film Parylene C. <i>Journal of Microelectromechanical Systems</i> , 2018, 27, 1082-1088.	1.7	17
21	Techniques and Considerations in the Microfabrication of Parylene C Microelectromechanical Systems. <i>Micromachines</i> , 2018, 9, 422.	1.4	97
22	Application of Parylene-Based Flexible Multi-Electrode Array for Recording From Subcortical Brain Regions From Behaving Rats. , 2018, 2018, 4599-4602.		5
23	A calorimetric flow sensor for ultra-low flow applications using electrochemical impedance. , 2018, , .		6
24	Characterization and Modification of Adhesion in Dry and Wet Environments in Thin-Film Parylene Systems. <i>Journal of Microelectromechanical Systems</i> , 2018, 27, 874-885.	1.7	24
25	Development of an anatomically conformal parylene neural probe array for multi-region hippocampal recordings. , 2017, , .		9
26	Fabrication of flexible polymer bio-MEMS with submicron features. , 2017, , .		1
27	Passive, wireless transduction of electrochemical impedance across thin-film microfabricated coils using reflected impedance. <i>Biomedical Microdevices</i> , 2017, 19, 87.	1.4	6
28	Chronic multi-region recording from the rat hippocampus in vivo with a flexible Parylene-based multi-electrode array. , 2017, 2017, 1716-1719.		8
29	Flexible, Penetrating Brain Probes Enabled by Advances in Polymer Microfabrication. <i>Micromachines</i> , 2016, 7, 180.	1.4	147
30	Matrigel coatings for parylene sheath neural probes. <i>Journal of Biomedical Materials Research - Part B Applied Biomaterials</i> , 2016, 104, 357-368.	1.6	32
31	Long-term stability of intracortical recordings using perforated and arrayed Parylene sheath electrodes. <i>Journal of Neural Engineering</i> , 2016, 13, 066020.	1.8	39
32	Electron-beam lithography for polymer bioMEMS with submicron features. <i>Microsystems and Nanoengineering</i> , 2016, 2, 16053.	3.4	39
33	A dual mode microbubble pressure and flow sensor. , 2016, , .		4
34	An electrochemical-based thermal flow sensor. , 2016, , .		3
35	Parylene MEMS patency sensor for assessment of hydrocephalus shunt obstruction. <i>Biomedical Microdevices</i> , 2016, 18, 87.	1.4	15
36	An Electrochemical Impedance-Based Thermal Flow Sensor for Physiological Fluids. <i>Journal of Microelectromechanical Systems</i> , 2016, 25, 1015-1024.	1.7	25

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37	Micromachining of Parylene C for bioMEMS. <i>Polymers for Advanced Technologies</i> , 2016, 27, 564-576.	1.6	142
38	A wireless implantable micropump for chronic drug infusion against cancer. <i>Sensors and Actuators A: Physical</i> , 2016, 239, 18-25.	2.0	58
39	An Electrochemical Microbubble-Based MEMS Pressure Sensor. <i>Journal of Microelectromechanical Systems</i> , 2016, 25, 144-152.	1.7	13
40	Review of polymer MEMS micromachining. <i>Journal of Micromechanics and Microengineering</i> , 2016, 26, 013001.	1.5	101
41	MEMS: Enabled Drug Delivery Systems. <i>Advanced Healthcare Materials</i> , 2015, 4, 969-982.	3.9	54
42	Mechanical Properties of Thin-Film Paryleneâ€Metalâ€Parylene Devices. <i>Frontiers in Mechanical Engineering</i> , 2015, 1, .	0.8	21
43	MEMS electrochemical patency sensor for detection of hydrocephalus shunt obstruction. , 2015, , .		2
44	Parylene-Based Electrochemical-MEMS Force Sensor for Studies of Intracortical Probe Insertion Mechanics. <i>Journal of Microelectromechanical Systems</i> , 2015, 24, 1534-1544.	1.7	18
45	Wireless programmable electrochemical drug delivery micropump with fully integrated electrochemical dosing sensors. <i>Biomedical Microdevices</i> , 2015, 17, 74.	1.4	29
46	Materials for microfabricated implantable devices: a review. <i>Lab on A Chip</i> , 2015, 15, 4256-4272.	3.1	126
47	An Electrochemical Investigation of the Impact of Microfabrication Techniques on Polymer-Based Microelectrode Neural Interfaces. <i>Journal of Microelectromechanical Systems</i> , 2015, 24, 801-809.	1.7	10
48	Acceleration techniques for recombination of gases in electrolysis microactuators with Nafion®-coated electrocatalyst. <i>Sensors and Actuators B: Chemical</i> , 2015, 221, 914-922.	4.0	14
49	Micro- and nano-fabricated implantable drug-delivery systems: current state and future perspectives. <i>Therapeutic Delivery</i> , 2014, 5, 1167-1170.	1.2	11
50	Chronically Implanted Pressure Sensors: Challenges and State of the Field. <i>Sensors</i> , 2014, 14, 20620-20644.	2.1	148
51	On-demand wireless infusion rate control in an implantable micropump for patient-tailored treatment of chronic conditions. , 2014, 2014, 882-5.		1
52	Annealing effects on flexible multi-layered parylene-based sensors. , 2014, , .		9
53	A microbubble pressure transducer with bubble nucleation core. , 2014, , .		9
54	Insight: implantable medical devices. <i>Lab on A Chip</i> , 2014, 14, 3233.	3.1	59

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55	Novel flexible Parylene neural probe with 3D sheath structure for enhancing tissue integration. Lab on A Chip, 2013, 13, 554-561.	3.1	102
56	A MEMS electrochemical bellows actuator for fluid metering applications. Biomedical Microdevices, 2013, 15, 37-48.	1.4	35
57	Perforated Parylene sheath electrode array for chronic intracortical recording. , 2013, , .		2
58	An Electrochemically Actuated MEMS Device for Individualized Drug Delivery: an In Vitro Study. Advanced Healthcare Materials, 2013, 2, 1170-1178.	3.9	29
59	High strain biocompatible polydimethylsiloxane-based conductive graphene and multiwalled carbon nanotube nanocomposite strain sensors. Applied Physics Letters, 2013, 102, .	1.5	174
60	Design, fabrication, and characterization of an electrochemically-based dose tracking system for closed-loop drug delivery. , 2012, 2012, 519-22.		5
61	Micromachined Thermal Flow Sensors—A Review. Micromachines, 2012, 3, 550-573.	1.4	371
62	Improved process for high yield 3D inclined SU-8 structures on soda lime substrate towards applications in optogenetic studies. , 2012, , .		2
63	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
64	Micro- and nano-fabricated implantable drug-delivery systems. Therapeutic Delivery, 2012, 3, 1457-1467.	1.2	65
65	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
66	High-Efficiency MEMS Electrochemical Actuators and Electrochemical Impedance Spectroscopy Characterization. Journal of Microelectromechanical Systems, 2012, 21, 1197-1208.	1.7	37
67	An implantable MEMS micropump system for drug delivery in small animals. Biomedical Microdevices, 2012, 14, 483-496.	1.4	133
68	A Modular Heat-Shrink-Packaged Check Valve With High Pressure Shutoff. Journal of Microelectromechanical Systems, 2011, 20, 1163-1173.	1.7	5
69	Additive Processes for Polymeric Materials. MEMS Reference Shelf, 2011, , 193-271.	0.6	12
70	A subnanowatt microbubble pressure sensor based on electrochemical impedance transduction in a flexible all-Parylene package. , 2011, , .		13
71	Liquid Encapsulation in Parylene Microstructures Using Integrated Annular-Plate Stiction Valves. Micromachines, 2011, 2, 356-368.	1.4	11
72	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

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73	Parylene-based integrated wireless single-channel neurostimulator. Sensors and Actuators A: Physical, 2011, 166, 193-200.	2.0	39
74	Electrochemically-based dose measurement for closed-loop drug delivery applications. , 2011, , .		6
75	Epoxy-less packaging methods for electrical contact to parylene-based flat flexible cables. , 2011, , .		23
76	Impedance-Based Force Transduction Within Fluid-Filled Parylene Microstructures. Journal of Microelectromechanical Systems, 2011, 20, 1098-1108.	1.7	13
77	Mini Drug Pump for Ophthalmic Use. Current Eye Research, 2010, 35, 192-201.	0.7	58
78	Low-cost carbon thick-film strain sensors for implantable applications. Journal of Micromechanics and Microengineering, 2010, 20, 095028.	1.5	26
79	Wafer-Level Parylene Packaging With Integrated RF Electronics for Wireless Retinal Prostheses. Journal of Microelectromechanical Systems, 2010, 19, 735-742.	1.7	72
80	Implantable MEMS drug delivery device for cancer radiation reduction. , 2010, , .		21
81	A low power, on demand electrothermal valve for wireless drug delivery applications. Lab on A Chip, 2010, 10, 101-110.	3.1	13
82	Parylene-Based Electrochemical-MEMS Transducers. Journal of Microelectromechanical Systems, 2010, 19, 1352-1361.	1.7	12
83	A Parylene Bellows Electrochemical Actuator. Journal of Microelectromechanical Systems, 2010, 19, 215-228.	1.7	97
84	Parylene-based encapsulated fluid MEMS sensors. , 2009, 2009, 1039-41.		4
85	Implantable MEMS drug delivery pumps for small animal research. , 2009, 2009, 6696-8.		1
86	A passive MEMS drug delivery pump for treatment of ocular diseases. Biomedical Microdevices, 2009, 11, 959-970.	1.4	140
87	A Parylene MEMS Electrothermal Valve. Journal of Microelectromechanical Systems, 2009, 18, 1184-1197.	1.7	25
88	Polymer BioMEMS for implantable drug delivery systems. , 2009, , .		0
89	Mini drug pump for ophthalmic use. Transactions of the American Ophthalmological Society, 2009, 107, 60-70.	1.4	24
90	A biocompatible Parylene thermal flow sensing array. Sensors and Actuators A: Physical, 2008, 144, 18-28.	2.0	93

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91	An electrochemical intraocular drug delivery device. Sensors and Actuators A: Physical, 2008, 143, 41-48.	2.0	123
92	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
93	Integrated and reusable in-plane microfluidic interconnects. Sensors and Actuators B: Chemical, 2008, 132, 531-539.	4.0	17
94	Plasma removal of Parylene C. Journal of Micromechanics and Microengineering, 2008, 18, 045004.	1.5	133
95	A refillable microfabricated drug delivery device for treatment of ocular diseases. Lab on A Chip, 2008, 8, 1027.	3.1	56
96	Integrated flow sensing for focal biochemical stimulation. , 2008, , .		2
97	A Reusable In-Plane Polymer Integrated Microfluidic Interconnect. , 2007, , .		1
98	REVERSIBLE THERMOSENSITIVE GLUE FOR RETINAL IMPLANTS. Retina, 2007, 27, 938-942.	1.0	16
99	Implantable micromechanical parylene-based pressure sensors for unpowered intraocular pressure sensing. Journal of Micromechanics and Microengineering, 2007, 17, 1931-1938.	1.5	54
100	Development of biocompatible parylene neurocages. , 2004, 2004, 2542-5.		13
101	Silicon couplers for microfluidic applications. Fresenius' Journal of Analytical Chemistry, 2001, 371, 270-275.	1.5	32