Lawrence Kulinsky

List of Publications by Year
in descending order

62	1,266	430874	361022
papers	citations	18 h-index	35 g-index

63	63	63	1862
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Controlled Continuous Patterning of Polymeric Nanofibers on Three-Dimensional Substrates Using Low-Voltage Near-Field Electrospinning. Nano Letters, 2011, 11, 1831-1837.	9.1	209
2	Nanopore Technology for Biomedical Applications. Biomedical Microdevices, 1999, 2, 11-40.	2.8	172
3	Lab-on-a-CD: A Fully Integrated Molecular Diagnostic System. Journal of the Association for Laboratory Automation, 2016, 21, 323-355.	2.8	79
4	Mechanical characterizations of cast Poly(3,4-ethylenedioxythiophene):Poly(styrenesulfonate)/Polyvinyl Alcohol thin films. Synthetic Metals, 2011, 161, 2259-2267.	3.9	78
5	Carbon post-microarrays for glucose sensors. Biosensors and Bioelectronics, 2008, 23, 1637-1644.	10.1	76
6	Polymer actuator valves toward controlled drug delivery application. Biosensors and Bioelectronics, 2006, 21, 2094-2099.	10.1	75
7	Electrical conductivity of polymer blends of poly(3,4â€ethylenedioxythiophene): Poly(styrenesulfonate): Nâ€methylâ€2â€pyrrolidinone and polyvinyl alcohol. Journal of Applied Polymer Science, 2012, 125, 3134-3141.	2.6	51
8	Theoretical development and critical analysis of burst frequency equations for passive valves on centrifugal microfluidic platforms. Medical and Biological Engineering and Computing, 2013, 51, 525-535.	2.8	47
9	3-D Micro and Nano Technologies for Improvements in Electrochemical Power Devices. Micromachines, 2014, 5, 171-203.	2.9	39
10	Integrating Biosensors and Drug Delivery: A Step Closer Toward Scalable Responsive Drugâ€Delivery Systems. Advanced Materials, 2009, 21, 656-660.	21.0	33
11	Present Technology and Future Trends in Point-of-Care Microfluidic Diagnostics. Methods in Molecular Biology, 2013, 949, 3-23.	0.9	33
12	Suction-enhanced siphon valves for centrifugal microfluidic platforms. Microfluidics and Nanofluidics, 2012, 12, 345-354.	2.2	27
13	Surface and interface properties of alumina via model studies of microdesigned interfaces. Journal of the European Ceramic Society, 1999, 19, 2191-2209.	5.7	25
14	Capillary filling in centrifugally actuated microfluidic devices with dynamically evolving contact line motion. Journal of Applied Physics, 2009, 105, .	2.5	24
15	Design and implementation of fluidic micro-pulleys for flow control on centrifugal microfluidic platforms. Microfluidics and Nanofluidics, 2014, 16, 1117-1129.	2.2	22
16	Morphological evolution of pre-perturbed pore channels in sapphire. Acta Materialia, 1996, 44, 4115-4130.	7.9	21
17	Gating valve on spinning microfluidic platforms: A flow switch/control concept. Sensors and Actuators B: Chemical, 2014, 204, 149-158.	7.8	21
18	Improved conductivity of suspended carbon fibers through integration of C-MEMS and Electro-Mechanical Spinning technologies. Carbon, 2014, 71, 338-342.	10.3	21

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19	Fabrication of a Lab-on-Chip Device Using Material Extrusion (3D Printing) and Demonstration via Malaria-Ab ELISA. Micromachines, 2018, 9, 27.	2.9	17
20	Diffusion-Free Mediator Based Miniature Biofuel Cell Anode Fabricated on a Carbon-MEMS Electrode. Langmuir, 2012, 28, 14055-14064.	3.5	16
21	Development of integrated protection for a miniaturized drug delivery system. Smart Materials and Structures, 2007, 16, S295-S299.	3.5	14
22	A Computer-Controlled Near-Field Electrospinning Setup and Its Graphic User Interface for Precision Patterning of Functional Nanofibers on 2D and 3D Substrates. Journal of the Association for Laboratory Automation, 2012, 17, 302-308.	2.8	13
23	Step-Wise Deposition Process for Dielectrophoretic Formation of Conductive 50-Micron-Long Carbon Nanotube Bridges. Micromachines, 2020, 11, 371.	2.9	12
24	A novel micro/nano fabrication process based on the combined use of dielectrophoresis, electroosmotic flow, and electrodeposition for surface patterning. Journal of Micromechanics and Microengineering, 2015, 25, 115007.	2.6	11
25	A Novel Magnetic Active Valve for Lab-on-CD Technology. Journal of Microelectromechanical Systems, 2015, 24, 1322-1330.	2.5	11
26	PPyDEP: a new approach to microparticle manipulation employing polymer-based electrodes. Lab on A Chip, 2013, 13, 4642.	6.0	10
27	Guided routing on spinning microfluidic platforms. RSC Advances, 2015, 5, 8669-8679.	3.6	10
28	Hydrodynamic channeling as a controlled flow reversal mechanism for bidirectional AC electroosmotic pumping using glassy carbon microelectrode arrays. Journal of Micromechanics and Microengineering, 2019, 29, 075007.	2.6	10
29	Electrified lab on disc systems: A comprehensive review on electrokinetic applications. Biosensors and Bioelectronics, 2022, 214, 114381.	10.1	10
30	Fabrication of regular polystyrene foam structures with selective laser sintering. Materials Today Communications, 2017, 13, 346-353.	1.9	9
31	The use of polybutene for controlling the flow of liquids in centrifugal microfluidic systems. Microfluidics and Nanofluidics, 2016, 20, 1.	2.2	8
32	Utilization of electroactive polymer actuators in micromixing and in extended-life biosensor applications. Proceedings of SPIE, 2010, , .	0.8	7
33	Au/PPy Actuators for Active Micromixing and Mass Transport Enhancement. Micro and Nanosystems, 2009, 1, 2-11.	0.6	6
34	Capillary Flow-Driven and Magnetically Actuated Multi-Use Wax Valves for Controlled Sealing and Releasing of Fluids on Centrifugal Microfluidic Platforms. Micromachines, 2022, 13, 303.	2.9	6
35	Micromixing and flow manipulation with polymer microactuators. Microfluidics and Nanofluidics, 2011, 11, 405-416.	2.2	5
36	Fabrication of a Malaria-Ab ELISA Bioassay Platform with Utilization of Syringe-Based and 3D Printed Assay Automation. Micromachines, 2018, 9, 502.	2.9	5

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37	Guided Electrokinetic Assembly of Polystyrene Microbeads onto Photopatterned Carbon Electrode Arrays. ACS Applied Materials & Interfaces, 2020, 12, 35647-35656.	8.0	5
38	A Numerical Study of the Spring-Back Phenomenon in Bending with a Rebar Bending Machine. Advances in Mechanical Engineering, 2014, 6, 959207.	1.6	4
39	Comparison of Two-Dimensional and Three-Dimensional Carbon Electrode Geometries Affecting Bidirectional Electroosmotic Pumping. Journal of Micro and Nano-Manufacturing, 2019, 7, .	0.7	4
40	Controlled Patterning and Dimensional Control of Suspended Carbon Nanofibers. Advanced Materials Research, 0, 628, 43-49.	0.3	3
41	Fabrication of 3D polypyrrole microstructures and their utilization as electrodes in supercapacitors. Journal of Micromechanics and Microengineering, 2013, 23, 125029.	2.6	3
42	The Detachment Process and Release Efficiency of Polypyrrole/Gold Bilayer Actuators. Journal of Microelectromechanical Systems, 2015, 24, 1616-1621.	2.5	3
43	Novel fabrication technology for three-dimensional high surface area pyrolized structures. , 2010, , .		2
44	Electro-Mechanical Spinning: A new manufacturing technique for micro/nano-fabrication of carbon fibers. , 2013, , .		2
45	Fabrication of Carbon Nanotube Gas Sensor Using Stepwise Dielectrophoretic Deposition Onto Interdigitated Pyrolyzed Carbon Electrodes. Journal of Micro and Nano-Manufacturing, 2021, 9, .	0.7	2
46	Artificial Intelligence Algorithms Enable Automated Characterization of the Positive and Negative Dielectrophoretic Ranges of Applied Frequency. Micromachines, 2022, 13, 399.	2.9	2
47	Effects of Titanium Doping on Surface Properties of Alumina. Materials Research Society Symposia Proceedings, 1994, 357, 313.	0.1	1
48	Guided Healing of Damaged Microelectrodes via Electrokinetic Assembly of Conductive Carbon Nanotube Bridges. Micromachines, 2021, 12, 405.	2.9	1
49	Electrokinetic Propulsion of Polymer Microparticulates Along Glassy Carbon Electrode Array. Journal of Micro and Nano-Manufacturing, 2020, 8, .	0.7	1
50	Packaged Au-PPy valves for drug delivery systems. , 2006, 6168, 386.		0
51	Sensor-integrated polymer actuators for closed-loop drug delivery system. , 2006, 6172, 200.		0
52	System-based approach for an advanced drug delivery platform. , 2006, , .		0
53	Dielectrophoresis-assisted electroconductive polymer-based fabrication of high surface area electrodes. , 2014, , .		0
54	Special Section on Recent Advancements in Micro- and Nanoâ€manufacturing From the WCMNM2018â€”Part 1. Journal of Micro and Nano-Manufacturing, 2019, 7, .	0.7	0

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55	Special Issue on Remote Micro- and Nano-Manufacturing Science, Engineering, and Education. Journal of Micro and Nano-Manufacturing, 2021, 9, .	0.7	0
56	Personal Observations of the Effects of COVID-19 Pandemic on Micromanufacturing Research and Education in the United States. Journal of Micro and Nano-Manufacturing, 2021, 9, .	0.7	0
57	Microdesigned Interfaces: New Opportunities for Studies of Surfaces and Grain Boundaries. , 1998, , 229-238.		0
58	An Electrokinetically-Driven Microfabrication Process for Additive Manufacturing Applications. , 2015, , .		0
59	Joule Heating based Sublimation Thinning of Suspended Nanofibers. , 2015, , .		0
60	Effect of Carbon Microposts Integrated onto Asymmetric Electrodes for AC Electroosmotic Pumping. , 2018, , .		0
61	Special Section on Recent Advancements in Micro- and Nano-Manufacturing From the WCMNM2019. Journal of Micro and Nano-Manufacturing, 2020, 8, .	0.7	0
62	Elastic membrane enabled inward pumping for liquid manipulation on a centrifugal microfluidic platform. Biomicrofluidics, 2022, 16, 034105.	2.4	0