Joseph A Potkay

List of Publications by Year
in descending order

28 papers	1,199 citations	567281 15 h-index	610901 24 g-index
29 all docs	29 docs citations	29 times ranked	1133 citing authors

#	Article	IF	Citations
1	First-generation hybrid MEMS gas chromatograph. Lab on A Chip, 2005, 5, 1123.	6.0	205
2	Design, Fabrication, and Evaluation of Microfabricated Columns for Gas Chromatography. Analytical Chemistry, 2004, 76, 2629-2637.	6.5	154
3	High-performance temperature-programmed microfabricated gas chromatography columns. Journal of Microelectromechanical Systems, 2005, 14, 1039-1050.	2.5	109
4	Long term, implantable blood pressure monitoring systems. Biomedical Microdevices, 2008, 10, 379-392.	2.8	103
5	The promise of microfluidic artificial lungs. Lab on A Chip, 2014, 14, 4122-4138.	6.0	89
6	Bio-inspired, efficient, artificial lung employing air as the ventilating gas. Lab on A Chip, 2011, 11, 2901.	6.0	65
7	A Low-Power Pressure- and Temperature-Programmable Micro Gas Chromatography Column. Journal of Microelectromechanical Systems, 2007, 16, 1071-1079.	2.5	61
8	Characterization of an S-nitroso-N-acetylpenicillamineâ€“based nitric oxide releasing polymer from a translational perspective. International Journal of Polymeric Materials and Polymeric Biomaterials, 2016, 65, 769-778.	3.4	53
9	The effects of PEG-based surface modification of PDMS microchannels on long-term hemocompatibility. Journal of Biomedical Materials Research - Part A, 2014, 102, n/a-n/a.	4.0	45
10	In vitro evaluation and in vivo demonstration of a biomimetic, hemocompatible, microfluidic artificial lung. Lab on A Chip, 2015, 15, 1366-1375.	6.0	42
11	Stability of Polyethylene Glycol and Zwitterionic Surface Modifications in PDMS Microfluidic Flow Chambers. Langmuir, 2018, 34, 492-502.	3.5	40
12	Achieving 12 Hour Normothermic Ex Situ Heart Perfusion: An Experience of 40 Porcine Hearts. ASAIO Journal, 2016, 62, 470-476.	1.6	31
13	An Integrated Micro-Analytical System for Complex Vapor Mixtures. , 2007, , .		28
14	A small-scale, rolled-membrane microfluidic artificial lung designed towards future large area manufacturing. Biomicrofluidics, 2017, 11, 024113.	2.4	27
15	Design Analysis and Optimization of a Single-Layer PDMS Microfluidic Artificial Lung. IEEE Transactions on Biomedical Engineering, 2019, 66, 1082-1093.	4.2	24
16	A simple, closed-form, mathematical model for gas exchange in microchannel artificial lungs. Biomedical Microdevices, 2013, 15, 397-406.	2.8	23
17	Advancing 3D-Printed Microfluidics: Characterization of a Gas-Permeable, High-Resolution PDMS Resin for Stereolithography. Micromachines, 2021, 12, 1266.	2.9	18
18	Assessing and improving the biocompatibility of microfluidic artificial lungs. Acta Biomaterialia, 2020, 112, 190-201.	8.3	17

#	Article	IF	Citations
19	An Arterial Cuff Energy Scavenger For Implanted Microsystems. , 2008, , .		15
20	Low-Resistance, Concentric-Gated Pediatric Artificial Lung for End-Stage Lung Failure. ASAIO Journal, 2020, 66, 423-432.	1.6	14
21	A Hybrid Thermopneumatic and Electrostatic Microvalve with Integrated Position Sensing. Micromachines, 2012, 3, 379-395.	2.9	9
22	Reply to the â€˜Comment on â€œThe promise of microfluidic artificial lungsâ€â€™ by G. Wagner, A. Kaesler, U. Steinseifer, T. Schmitz-Rode and J. Arens, Lab Chip, 2016,16, DOI: 10.1039/C5LC01508A. Lab on A Chip, 2016, 16, 1274-1277.	6.0	8
23	A micro passive preconcentrator for micro gas chromatography. Analyst, The, 2020, 145, 7582-7594.	3.5	6
24	Advancing Front Oxygen Transfer Model for the Design of Microchannel Artificial Lungs. ASAIO Journal, 2020, 66, 1054-1062.	1.6	5
25	A high efficiency micromachined artificial lung. , 2009, , .		3
26	Toward a Servoregulation Controller to Automate CO2 Removal in Wearable Artificial Lungs. ASAIO Journal, 2021, Publish Ahead of Print, .	1.6	3
27	Micro vapor extractor for on-site determinations of volatile organic compounds in water and biofluids. , 2017, , .		1
28	A Parametric Analysis of Capillary Height in Single-Layer, Small-Scale Microfluidic Artificial Lungs. Micromachines, 2022, 13, 822.	2.9	1