Mehdi Javanmard

List of Publications by Citations

37 papers	561 citations	14 h-index	22 g-index
43 ext. papers	740 ext. citations	6 avg, IF	4.25 L-index

#	Paper	IF	Citations
37	Digital microfluidic assay for protein detection. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 2110-5	11.5	92
36	Microfluidic diagnostic tool for the developing world: contactless impedance flow cytometry. *Lab on A Chip*, **2012**, 12, 4499-507	7.2	50
35	A Review of Medication Adherence Monitoring Technologies. *Applied System Innovation*, **2018**, 1, 14	2.4	49
34	Toward point-of-care management of chronic respiratory conditions: Electrochemical sensing of nitrite content in exhaled breath condensate using reduced graphene oxide. *Microsystems and Nanoengineering*, **2017**, 3, 17022	7.7	45
33	Fully integrated wearable impedance cytometry platform on flexible circuit board with online smartphone readout. *Microsystems and Nanoengineering*, **2018**, 4, 20	7.7	28
32	Toward point-of-care assessment of patient response: a portable tool for rapidly assessing cancer drug efficacy using multifrequency impedance cytometry and supervised machine learning. *Microsystems and Nanoengineering*, **2019**, 5, 34	7.7	28
31	Electrical detection of protein biomarkers using bioactivated microfluidic channels. *Lab on A Chip*, **2009**, 9, 1429-34	7.2	27
30	Tunable control of antibody immobilization using electric field. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 1995-9	11.5	26
29	A portable battery powered microfluidic impedance cytometer with smartphone readout: towards personal health monitoring. *Biomedical Microdevices*, **2017**, 19, 36	3.7	23
28	Robust dipstick urinalysis using a low-cost, micro-volume slipping manifold and mobile phone platform. *Lab on A Chip*, **2016**, 16, 2069-78	7.2	19
27	Top-down fabrication meets bottom-up synthesis for nanoelectronic barcoding of microparticles. *Lab on A Chip*, **2017**, 17, 1939-1947	7.2	18
26	Portable Cytometry Using Microscale Electronic Sensing. *Sensors and Actuators B: Chemical*, **2016**, 224, 275-281	8.5	15
25	Processing gain and noise in multi-electrode impedance cytometers: Comprehensive electrical design methodology and characterization. *Sensors and Actuators B: Chemical*, **2017**, 241, 672-680	8.5	15
24	Magnetically Actuated Microfluidic Transistors: Miniaturized Micro-Valves Using Magnetorheological Fluids Integrated With Elastomeric Membranes. *Journal of Microelectromechanical Systems*, **2016**, 25, 922-928	2.5	14
23	Rapid Assessment of Surface Markers on Cancer Cells Using Immuno-Magnetic Separation and Multi-Frequency Impedance Cytometry for Targeted Therapy. *Scientific Reports*, **2020**, 10, 3015	4.9	12
22	Potential Microfluidic Devices for COVID-19 Antibody Detection at Point-of-Care (POC): A Review. *IEEE Sensors Journal*, **2021**, 21, 4007-4017	4	12
21	Electronic classification of barcoded particles for multiplexed detection using supervised machine learning analysis. *Talanta*, **2020**, 215, 120791	6.2	10

20	PicoMolar level detection of protein biomarkers based on electronic sizing of bead aggregates: theoretical and experimental considerations. *Biomedical Microdevices*, **2015**, 17, 119	3.7	9
19	Multiplexed actuation using ultra dielectrophoresis for proteomics applications: a comprehensive electrical and electrothermal design methodology. *Lab on A Chip*, **2014**, 14, 2105-14	7.2	8
18	Electronically actuated microfluidic valves with zero static-power consumption using electropermanent magnets. *Sensors and Actuators A: Physical*, **2019**, 296, 316-323	3.9	7
17	Electrical impedance as an indicator of microalgal cell health. *Scientific Reports*, **2020**, 10, 1251	4.9	7
16	Towards low-power wearable wireless sensors for molecular biomarker and physiological signal monitoring **2017**,		7
15	TSC: Trustworthy and Scalable Cytometry **2015**,		6
14	Multi-frequency impedance sensing for detection and sizing of DNA fragments. *Scientific Reports*, **2021**, 11, 6490	4.9	4
13	Multielectrode Sensing for Extraction of Signal From Noise in Impedance Cytometry. *IEEE Sensors Journal*, **2015**, 1-1	4	3
12	Multiwell Plate Impedance Analysis of a Nanowell Array Sensor for Label-Free Detection of Cytokines in Mouse Serum **2020**, 4, 1-4		3
11	A ten-minute, single step, label-free, sample-to-answer assay for qualitative detection of cytokines in serum at femtomolar levels. *Biomedical Microdevices*, **2020**, 22, 73	3.7	3
10	Improved Precision in Surface-Enhanced Raman Scattering Quantification of Analyte through Dual-Modality Multisite Sensing. *Analytical Chemistry*, **2019**, 91, 4323-4330	7.8	3
9	Functionalization of hybrid surface microparticles for in vitro cellular antigen classification. *Analytical and Bioanalytical Chemistry*, **2021**, 413, 555-564	4.4	3
8	Secure Point-of-Care Medical Diagnostics via Trusted Sensing and Cyto-Coded Passwords **2016**,		2
7	2D Magnetic Sensor Array for Real-time Cell Tracking and Multi-site Detection with Increased Robustness and Flow-rate **2019**,		2
6	Compact and automated particle counting platform using smartphone-microscopy. *Talanta*, **2021**, 228, 122244	6.2	2
5	Cytocoded passwords: BioMEMS based barcoding of biological samples for user authentication in microfluidic diagnostic devices. *Biomedical Microdevices*, **2018**, 20, 63	3.7	1
4	A microwell-based impedance sensor on an insertable microneedle for real-time in vivo cytokine detection.. *Microsystems and Nanoengineering*, **2021**, 7, 96	7.7	1
3	Towards In-Situ Environmental Monitoring: On-Chip Sample Preparation and Detection of Lead in Sediment Samples Using Graphene Oxide Sensor. *IEEE Sensors Journal*, **2020**, 20, 13787-13795	4	1

2 Electrochemical Detection of Nucleic Acids Using Graphene-Based Electrodes **2018**, 2, 1-4 1

1 Electronic Quantification of Protein Biomarkers Based on Bead Aggregate Sizing. *IEEE Sensors Journal*, **2015**, 15, 6763-6764 4