Nicole Hashemi

List of Publications by Year
in descending order

84 papers	2,306 citations	236612 25 h-index	233125 45 g-index
92 all docs	92 docs citations	92 times ranked	2958 citing authors

#	Article	IF	Citations
1	Microfluidic Organâ€onâ€aâ€Chip Technology for Advancement of Drug Development and Toxicology. Advanced Healthcare Materials, 2015, 4, 1426-1450.	3.9	164
2	Three-Dimensional Paper-Based Microfluidic Device for Assays of Protein and Glucose in Urine. Analytical Chemistry, 2013, 85, 10733-10737.	3.2	146
3	Study of Physically Transient Insulating Materials as a Potential Platform for Transient Electronics and Bioelectronics. Advanced Functional Materials, 2014, 24, 4135-4143.	7.8	127
4	Graphene as a flexible electrode: review of fabrication approaches. Journal of Materials Chemistry A, 2017, 5, 17777-17803.	5.2	113
5	Paper-based devices for energy applications. Renewable and Sustainable Energy Reviews, 2015, 52, 1453-1472.	8.2	92
6	Fiber Based Approaches as Medicine Delivery Systems. ACS Biomaterials Science and Engineering, 2016, 2, 1411-1431.	2.6	86
7	Optofluidic characterization of marine algae using a microflow cytometer. Biomicrofluidics, 2011, 5, 32009-320099.	1.2	79
8	Placentaâ€onâ€aâ€Chip: In Vitro Study of Caffeine Transport across Placental Barrier Using Liquid Chromatography Mass Spectrometry. Global Challenges, 2019, 3, 1800112.	1.8	75
9	Microflow Cytometer for optical analysis of phytoplankton. Biosensors and Bioelectronics, 2011, 26, 4263-4269.	5.3	69
10	Miniaturized biological and electrochemical fuel cells: challenges and applications. Physical Chemistry Chemical Physics, 2013, 15, 14147.	1.3	67
11	Drug transport across the human placenta: review of placenta-on-a-chip and previous approaches. Interface Focus, 2019, 9, 20190031.	1.5	65
12	Polycaprolactone Microfibrous Scaffolds to Navigate Neural Stem Cells. Biomacromolecules, 2016, 17, 3287-3297.	2.6	60
13	Advancement of Sensor Integrated Organ-on-Chip Devices. Sensors, 2021, 21, 1367.	2.1	60
14	On-chip development of hydrogel microfibers from round to square/ribbon shape. Journal of Materials Chemistry A, 2014, 2, 4878.	5.2	57
15	A paper-based microbial fuel cell operating under continuous flow condition. Technology, 2016, 04, 98-103.	1.4	54
16	The single-band red upconversion luminescence from morphology and size controllable Er3+/Yb3+ doped MnF2 nanostructures. Journal of Materials Chemistry C, 2014, 2, 1736.	2.7	51
17	The defect level and ideal thermal conductivity of graphene uncovered by residual thermal reffusivity at the 0 K limit. Nanoscale, 2015, 7, 10101-10110.	2.8	50
18	Switch on the high thermal conductivity of graphene paper. Nanoscale, 2016, 8, 17581-17597.	2.8	49

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19	The nonlinear dynamics of tapping mode atomic force microscopy with capillary force interactions. Journal of Applied Physics, 2008, 103, .	1.1	43
20	Study of a nanoscale water cluster by atomic force microscopy. Faraday Discussions, 2009, 141, 415-421.	1.6	39
21	In Situ Phytoplankton Analysis: Thereâ€™s Plenty of Room at the Bottom. Analytical Chemistry, 2012, 84, 839-850.	3.2	39
22	Microfibers as Physiologically Relevant Platforms for Creation of 3D Cell Cultures. Macromolecular Bioscience, 2017, 17, 1700279.	2.1	34
23	Artificial neural network as a predictive tool for emissions from heavy-duty diesel vehicles in Southern California. International Journal of Engine Research, 2007, 8, 321-336.	1.4	32
24	Mechanical and physical properties of poly(vinyl alcohol) microfibers fabricated by a microfluidic approach. RSC Advances, 2016, 6, 55343-55353.	1.7	32
25	Dynamic reversibility of hydrodynamic focusing for recycling sheath fluid. Lab on A Chip, 2010, 10, 1952.	3.1	31
26	Microfluidic Manufacturing of Alginate Fibers with Encapsulated Astrocyte Cells. ACS Applied Bio Materials, 2019, 2, 1603-1613.	2.3	29
27	High-Yield Production of Aqueous Graphene for Electrohydrodynamic Drop-on-Demand Printing of Biocompatible Conductive Patterns. Biosensors, 2020, 10, 6.	2.3	29
28	Photo-Cross-Linked Poly(ethylene glycol) Diacrylate Hydrogels: Spherical Microparticles to Bow Tie-Shaped Microfibers. ACS Applied Materials & Interfaces, 2019, 11, 18797-18807.	4.0	27
29	3D Microfibrous Scaffolds Selectively Promotes Proliferation and Glial Differentiation of Adult Neural Stem Cells: A Platform to Tune Cellular Behavior in Neural Tissue Engineering. Macromolecular Bioscience, 2019, 19, e1800236.	2.1	27
30	Physical-chemical hybrid transiency: A fully transient li-ion battery based on insoluble active materials. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 2021-2027.	2.4	26
31	Transient Electronics as Sustainable Systems: From Fundamentals to Applications. Advanced Sustainable Systems, 2022, 6, 2100057.	2.7	26
32	Intermolecular Interactions between Surfactants and Cationic Dyes and Effect on Antimicrobial Properties. Industrial & Engineering Chemistry Research, 2010, 49, 8347-8352.	1.8	24
33	Transient bioelectronics: Electronic properties of silver microparticle-based circuits on polymeric substrates subjected to mechanical load. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 1603-1610.	2.4	24
34	Designing highly structured polycaprolactone fibers using microfluidics. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 61, 530-540.	1.5	23
35	Viability of Neural Cells on 3D Printed Graphene Bioelectronics. Biosensors, 2019, 9, 112.	2.3	23
36	Enhancing the Conductivity of Cell-Laden Alginate Microfibers With Aqueous Graphene for Neural Applications. Frontiers in Materials, 2020, 7, .	1.2	20

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37	Manufacturing of poly(ethylene glycol diacrylate)-based hollow microvessels using microfluidics. RSC Advances, 2020, 10, 4095-4102.	1.7	19
38	Synthesis of Graphene Nanosheets through Spontaneous Sodiation Process. Journal of Carbon Research, 2018, 4, 42.	1.4	18
39	Synthesis of Er³⁺/Yb³⁺codoped NaMnF₃nanocubes with single-band red upconversion luminescence. RSC Advances, 2014, 4, 61891-61897.	1.7	17
40	Ionic electroactive polymer actuators as active microfluidic mixers. Analytical Methods, 2015, 7, 10217-10223.	1.3	17
41	Study of mechanics of physically transient electronics: A step toward controlled transiency. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 517-524.	2.4	17
42	Investigation of spray-coated silver-microparticle electrodes for ionic electroactive polymer actuators. Journal of Applied Physics, 2014, 115, .	1.1	16
43	Rapid prototyping of microchannels with surface patterns for fabrication of polymer fibers. RSC Advances, 2015, 5, 71203-71209.	1.7	16
44	Characterization of Chlorella vulgaris and Chlorella protothecoides using multi-pixel photon counters in a 3D focusing optofluidic system. RSC Advances, 2017, 7, 4402-4408.	1.7	16
45	Targeted Microfluidic Manufacturing to Mimic Biological Microenvironments: Cell-Encapsulated Hollow Fibers. ACS Macro Letters, 2021, 10, 732-736.	2.3	14
46	Recovery of Encapsulated Adult Neural Progenitor Cells from Microfluidic-Spun Hydrogel Fibers Enhances Proliferation and Neuronal Differentiation. ACS Omega, 2020, 5, 7910-7918.	1.6	12
47	A Microfluidic Reactor for Energy Applications. Open Journal of Applied Biosensor, 2012, 01, 21-25.	1.6	12
48	Behavior of Neural Cells Post Manufacturing and After Prolonged Encapsulation within Conductive Grapheneâ€Ładen Alginate Microfibers. Advanced Biology, 2021, 5, e2101026.	1.4	12
49	The dissipated power in atomic force microscopy due to interactions with a capillary fluid layer. Journal of Applied Physics, 2008, 104, .	1.1	10
50	Transient Biocompatible Polymeric Platforms for Long-Term Controlled Release of Therapeutic Proteins and Vaccines. Materials, 2016, 9, 321.	1.3	10
51	Controlled positioning of microbubbles and induced cavitation using a dual-frequency transducer and microfiber adhesion techniques. Ultrasonics Sonochemistry, 2018, 43, 114-119.	3.8	10
52	Microfluidic Seeding of Cells on the Inner Surface of Alginate Hollow Microfibers. Advanced Healthcare Materials, 2022, 11, e2102701.	3.9	10
53	Fluidâ€Induced Alignment of Carbon Nanofibers in Polymer Fibers. Macromolecular Materials and Engineering, 2017, 302, 1600544.	1.7	9
54	Multi-Pixel Photon Counters for Optofluidic Characterization of Particles and Microalgae. Biosensors, 2015, 5, 308-318.	2.3	7

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55	Shear at Fluid-Fluid Interfaces Affects the Surface Topologies of Alginate Microfibers. Clean Technologies, 2019, 1, 265-272.	1.9	7
56	Minute-sensitive real-time monitoring of neural cells through printed graphene microelectrodes. Biosensors and Bioelectronics, 2022, 210, 114284.	5.3	7
57	Hydrodynamic cavitation for scalable exfoliation of few-layered graphene nanosheets. Nanotechnology, 2021, 32, 505701.	1.3	6
58	Graphene Microelectrodes for Real-Time Impedance Spectroscopy of Neural Cells. ACS Applied Bio Materials, 2022, 5, 113-122.	2.3	6
59	Transport of Maternally Administered Pharmaceutical Agents Across the Placental Barrier In Vitro. ACS Applied Bio Materials, 2022, 5, 2273-2284.	2.3	5
60	Effects of graphene layer and gold nanoparticles on sensitivity of humidity sensors. Journal of Micromanufacturing, 2020, 3, 20-27.	0.6	4
61	Machine learning-assisted E-jet printing for manufacturing of organic flexible electronics. Biosensors and Bioelectronics, 2022, 212, 114418.	5.3	4
62	Exploring the Basins of Attraction of Tapping Mode Atomic Force Microscopy With Capillary Force Interactions. , 2007, , .		3
63	Basins of attraction of tapping mode atomic force microscopy with capillary force interactions. Applied Physics Letters, 2009, 94, 251902.	1.5	3
64	A microflow cytometer for optical analysis of phytoplankton. Proceedings of SPIE, 2012, , .	0.8	3
65	Study of Interfacial Interactions in Physically Transient Soft Layered Structures: A Step toward Understanding Interfacial Bonding and Failure in Soft Degradable Structures. Advanced Engineering Materials, 2017, 19, 1700139.	1.6	3
66	Recent Advances in Microfluidically Spun Microfibers for Tissue Engineering and Drug Delivery Applications. Annual Review of Analytical Chemistry, 2021, 14, 185-205.	2.8	3
67	Investigation of cavitation-induced damage on PDMS films. Analytical Methods, 2019, 11, 5038-5043.	1.3	2
68	Characterization of Astrocytic Response after Experiencing Cavitation In Vitro. Global Challenges, 2020, 4, 1900014.	1.8	2
69	Protein-assisted scalable mechanochemical exfoliation of few-layer biocompatible graphene nanosheets. Royal Society Open Science, 2021, 8, 200911.	1.1	2
70	How do neuroglial cells respond to ultrasound induced cavitation?. AIP Advances, 2021, 11, .	0.6	2
71	Capacitance of Flexible Polymer/Graphene Microstructures with High Mechanical Strength. 3D Printing and Additive Manufacturing, 2024, 11, 242-250.	1.4	2
72	A Compact Versatile Microbial Fuel Cell From Paper. , 2013, , .		1

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73	Characterization of Correlated Calcium Dynamics in Astrocytes in PCL Scaffold: Application of Wavelet Transform Coherence. Journal of Material Science & Engineering, 2018, 07, .	0.2	1
74	Progress of graphene devices for electrochemical biosensing in electrically excitable cells. Progress in Biomedical Engineering, 2021, 3, 022003.	2.8	1
75	An Analysis of Current and Future Wind Energy Gain Potential for Central Iowa. Journal of Thermal Engineering, 2015, 1, 245.	0.8	1
76	Electrochemical Characterization of Dopamine in Neural Cells with Flexible Biosensors. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 0, , 1-20.	1.3	1
77	A Fully Lagrangian Numerical Method for Calculating the Dynamics of Oscillating Micro and Nanoscale Objects Immersed in Fluid. , 2007, , 1009.		0
78	A microflow cytometer on a chip. , 2010, , .		0
79	Microflow Cytometer: Hydrodynamic Focusing and Separation of Sample Stream. , 2010, , .		0
80	Optofluidic Cytometry on a Chip. , 2012, , .		0
81	Using Shewanella Oneidensis MR1 as a Biocatalyst in a Microscale Microbial Fuel Cell. , 2013, , .		0
82	Ionic Electroactive Polymer Actuators for On-Chip Sample Processing Integrated With Microflow Cytometer. , 2013, , .		0
83	Characterization of Microscale Particles Using a Microfluidic Flow Cytometer Equipped With a Multi-Plex Photon Counter. , 2013, , .		0
84	Effect of a rotating frame on preventing bead aggregation in a microfluidic device. Advances in Bioscience and Biotechnology (Print), 2012, 03, 603-608.	0.3	0