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	Capacitance of Flexible Polymer/Graphene Microstructures with High Mechanical Strength. 3D Printing and Additive Manufacturing, 2024, 11, 242-250.	1.4	2
2	Transient Electronics as Sustainable Systems: From Fundamentals to Applications. Advanced Sustainable Systems, 2022, 6, 2100057.	2.7	26
3	Graphene Microelectrodes for Real-Time Impedance Spectroscopy of Neural Cells. ACS Applied Bio Materials, 2022, 5, 113-122.	2.3	6
4	Microfluidic Seeding of Cells on the Inner Surface of Alginate Hollow Microfibers. Advanced Healthcare Materials, 2022, 11, e2102701.	3.9	10
5	Transport of Maternally Administered Pharmaceutical Agents Across the Placental Barrier In Vitro. ACS Applied Bio Materials, 2022, 5, 2273-2284.	2.3	5
6	Minute-sensitive real-time monitoring of neural cells through printed graphene microelectrodes. Biosensors and Bioelectronics, 2022, 210, 114284.	5.3	7
7	Machine learning-assisted E-jet printing for manufacturing of organic flexible electronics. Biosensors and Bioelectronics, 2022, 212, 114418.	5.3	4
8	Advancement of Sensor Integrated Organ-on-Chip Devices. Sensors, 2021, 21, 1367.	2.1	60
9	Protein-assisted scalable mechanochemical exfoliation of few-layer biocompatible graphene nanosheets. Royal Society Open Science, 2021, 8, 200911.	1.1	2
10	Progress of graphene devices for electrochemical biosensing in electrically excitable cells. Progress in Biomedical Engineering, 2021, 3, 022003.	2.8	1
11	Targeted Microfluidic Manufacturing to Mimic Biological Microenvironments: Cell-Encapsulated Hollow Fibers. ACS Macro Letters, 2021, 10, 732-736.	2.3	14
12	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
13	Hydrodynamic cavitation for scalable exfoliation of few-layered graphene nanosheets. Nanotechnology, 2021, 32, 505701.	1.3	6
14	How do neuroglial cells respond to ultrasound induced cavitation?. AIP Advances, 2021, 11, .	0.6	2
15	Behavior of Neural Cells Post Manufacturing and After Prolonged Encapsulation within Conductive Grapheneâ€Laden Alginate Microfibers. Advanced Biology, 2021, 5, e2101026.	1.4	12
16	Enhancing the Conductivity of Cell-Laden Alginate Microfibers With Aqueous Graphene for Neural Applications. Frontiers in Materials, 2020, 7, .	1.2	20
17	Characterization of Astrocytic Response after Experiencing Cavitation In Vitro. Global Challenges, 2020, 4, 1900014.	1.8	2
18	Manufacturing of poly(ethylene glycol diacrylate)-based hollow microvessels using microfluidics. RSC Advances, 2020, 10, 4095-4102.	1.7	19

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19	High-Yield Production of Aqueous Graphene for Electrohydrodynamic Drop-on-Demand Printing of Biocompatible Conductive Patterns. Biosensors, 2020, 10, 6.	2.3	29
20	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
21	Effects of graphene layer and gold nanoparticles on sensitivity of humidity sensors. Journal of Micromanufacturing, 2020, 3, 20-27.	0.6	4
22	Investigation of cavitation-induced damage on PDMS films. Analytical Methods, 2019, 11, 5038-5043.	1.3	2
23	Shear at Fluid-Fluid Interfaces Affects the Surface Topologies of Alginate Microfibers. Clean Technologies, 2019, 1, 265-272.	1.9	7
24	Drug transport across the human placenta: review of placenta-on-a-chip and previous approaches. Interface Focus, 2019, 9, 20190031.	1.5	65
25	Viability of Neural Cells on 3D Printed Graphene Bioelectronics. Biosensors, 2019, 9, 112.	2.3	23
26	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
27	Microfluidic Manufacturing of Alginate Fibers with Encapsulated Astrocyte Cells. ACS Applied Bio Materials, 2019, 2, 1603-1613.	2.3	29
28	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
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	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
31	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
32	Synthesis of Graphene Nanosheets through Spontaneous Sodiation Process. Journal of Carbon Research, 2018, 4, 42.	1.4	18
33	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
34	Fluidâ€Induced Alignment of Carbon Nanofibers in Polymer Fibers. Macromolecular Materials and Engineering, 2017, 302, 1600544.	1.7	9
35	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
36	Graphene as a flexible electrode: review of fabrication approaches. Journal of Materials Chemistry A, 2017, 5, 17777-17803.	5.2	113

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37	Microfibers as Physiologically Relevant Platforms for Creation of 3D Cell Cultures. Macromolecular Bioscience, 2017, 17, 1700279.	2.1	34
38	Transient Biocompatible Polymeric Platforms for Long-Term Controlled Release of Therapeutic Proteins and Vaccines. Materials, 2016, 9, 321.	1.3	10
39	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
40	A paper-based microbial fuel cell operating under continuous flow condition. Technology, 2016, 04, 98-103.	1.4	54
41	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
42	Designing highly structured polycaprolactone fibers using microfluidics. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 61, 530-540.	1.5	23
43	Polycaprolactone Microfibrous Scaffolds to Navigate Neural Stem Cells. Biomacromolecules, 2016, 17, 3287-3297.	2.6	60
44	Switch on the high thermal conductivity of graphene paper. Nanoscale, 2016, 8, 17581-17597.	2.8	49
45	Fiber Based Approaches as Medicine Delivery Systems. ACS Biomaterials Science and Engineering, 2016, 2, 1411-1431.	2.6	86
46	Mechanical and physical properties of poly(vinyl alcohol) microfibers fabricated by a microfluidic approach. RSC Advances, 2016, 6, 55343-55353.	1.7	32
47	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
48	Multi-Pixel Photon Counters for Optofluidic Characterization of Particles and Microalgae. Biosensors, 2015, 5, 308-318.	2.3	7
49	Microfluidic Organâ€onâ€aâ€Chip Technology for Advancement of Drug Development and Toxicology. Advanced Healthcare Materials, 2015, 4, 1426-1450.	3.9	164
50	Ionic electroactive polymer actuators as active microfluidic mixers. Analytical Methods, 2015, 7, 10217-10223.	1.3	17
51	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
52	Paper-based devices for energy applications. Renewable and Sustainable Energy Reviews, 2015, 52, 1453-1472.	8.2	92
53	Rapid prototyping of microchannels with surface patterns for fabrication of polymer fibers. RSC Advances, 2015, 5, 71203-71209.	1.7	16
54	An Analysis of Current and Future Wind Energy Gain Potential for Central Iowa. Journal of Thermal Engineering, 2015, 1, 245.	0.8	1

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55	Synthesis of Er³⁺/Yb³⁺codoped NaMnF₃nanocubes with single-band red upconversion luminescence. RSC Advances, 2014, 4, 61891-61897.	1.7	17
56	Investigation of spray-coated silver-microparticle electrodes for ionic electroactive polymer actuators. Journal of Applied Physics, 2014, 115, .	1.1	16
57	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
58	On-chip development of hydrogel microfibers from round to square/ribbon shape. Journal of Materials Chemistry A, 2014, 2, 4878.	5.2	57
59	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
60	Three-Dimensional Paper-Based Microfluidic Device for Assays of Protein and Glucose in Urine. Analytical Chemistry, 2013, 85, 10733-10737.	3.2	146
61	Miniaturized biological and electrochemical fuel cells: challenges and applications. Physical Chemistry Chemical Physics, 2013, 15, 14147.	1.3	67
62	A Compact Versatile Microbial Fuel Cell From Paper. , 2013, , .		1
63	Using Shewanella Oneidensis MR1 as a Biocatalyst in a Microscale Microbial Fuel Cell. , 2013, , .		0
64	Ionic Electroactive Polymer Actuators for On-Chip Sample Processing Integrated With Microflow Cytometer. , 2013, , .		0
65	Characterization of Microscale Particles Using a Microfluidic Flow Cytometer Equipped With a Multi-Plex Photon Counter. , 2013, , .		0
66	Optofluidic Cytometry on a Chip. , 2012, , .		0
67	<i>In Situ</i> Phytoplankton Analysis: Thereâ€™s Plenty of Room at the Bottom. Analytical Chemistry, 2012, 84, 839-850.	3.2	39
68	A microflow cytometer for optical analysis of phytoplankton. Proceedings of SPIE, 2012, , .	0.8	3
69	A Microfluidic Reactor for Energy Applications. Open Journal of Applied Biosensor, 2012, 01, 21-25.	1.6	12
70	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
71	Microflow Cytometer for optical analysis of phytoplankton. Biosensors and Bioelectronics, 2011, 26, 4263-4269.	5.3	69
72	Optofluidic characterization of marine algae using a microflow cytometer. Biomicrofluidics, 2011, 5, 32009-320099.	1.2	79

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73	A microflow cytometer on a chip. , 2010, , .		0
74	Intermolecular Interactions between Surfactants and Cationic Dyes and Effect on Antimicrobial Properties. Industrial & Engineering Chemistry Research, 2010, 49, 8347-8352.	1.8	24
75	Microflow Cytometer: Hydrodynamic Focusing and Separation of Sample Stream. , 2010, , .		0
76	Dynamic reversibility of hydrodynamic focusing for recycling sheath fluid. Lab on A Chip, 2010, 10, 1952.	3.1	31
77	Basins of attraction of tapping mode atomic force microscopy with capillary force interactions. Applied Physics Letters, 2009, 94, 251902.	1.5	3
78	Study of a nanoscale water cluster by atomic force microscopy. Faraday Discussions, 2009, 141, 415-421.	1.6	39
79	The nonlinear dynamics of tapping mode atomic force microscopy with capillary force interactions. Journal of Applied Physics, 2008, 103, .	1.1	43
80	The dissipated power in atomic force microscopy due to interactions with a capillary fluid layer. Journal of Applied Physics, 2008, 104, .	1.1	10
81	A Fully Lagrangian Numerical Method for Calculating the Dynamics of Oscillating Micro and Nanoscale Objects Immersed in Fluid. , 2007, , 1009.		0
82	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
83	Exploring the Basins of Attraction of Tapping Mode Atomic Force Microscopy With Capillary Force Interactions. , 2007, , .		3
84	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