

# Mina Hoorfar

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

103  
papers

2,957  
citations

27  
h-index

52  
g-index

110  
ext. papers

4,012  
ext. citations

7  
avg, IF

5.92  
L-index

#	Paper	IF	Citations
103	A review on 3D printing functional brain model.. <i>Biomicrofluidics</i> , <b>2022</b> , 16, 011501	3.2	2
102	Comprehensive review of conventional and state-of-the-art detection methods of Cryptosporidium. <i>Journal of Hazardous Materials</i> , <b>2022</b> , 421, 126714	12.8	4
101	Template-Enabled Biofabrication of Thick 3D Tissues with Patterned Perfusable Macrochannels (Adv. Healthcare Mater. 7/2022). <i>Advanced Healthcare Materials</i> , <b>2022</b> , 11, 2270038	10.1	
100	Additively manufactured metallic biomaterials.. <i>Bioactive Materials</i> , <b>2022</b> , 15, 214-249	16.7	16
99	Neural Network-Based Optimization of an Acousto Microfluidic System for Submicron Bioparticle Separation.. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2022</b> , 10, 878398	5.8	1
98	Properties and Applications of Graphene and Its Derivatives in Biosensors for Cancer Detection: A Comprehensive Review. <i>Biosensors</i> , <b>2022</b> , 12, 269	5.9	2
97	On-chip-based electrochemical biosensor for the sensitive and label-free detection of Cryptosporidium.. <i>Scientific Reports</i> , <b>2022</b> , 12, 6957	4.9	2
96	Template-Enabled Biofabrication of Thick Three-Dimensional Tissues with Patterned Perfusable Macro-Channels.. <i>Advanced Healthcare Materials</i> , <b>2021</b> , e2102123	10.1	2
95	Exhaled Breath Analysis for Diabetes Diagnosis and Monitoring: Relevance, Challenges and Possibilities.. <i>Biosensors</i> , <b>2021</b> , 11,	5.9	4
94	Portable on-chip colorimetric biosensing platform integrated with a smartphone for label/PCR-free detection of Cryptosporidium RNA. <i>Scientific Reports</i> , <b>2021</b> , 11, 23192	4.9	1
93	Selective detection of VOCs using microfluidic gas sensor with embedded cylindrical microfeatures coated with graphene oxide. <i>Journal of Hazardous Materials</i> , <b>2021</b> , 424, 127566	12.8	3
92	Slip-bias extension test: A characterization tool for understanding and modeling the effect of clamping conditions in forming of woven fabrics. <i>Composite Structures</i> , <b>2021</b> , 260, 113529	5.3	2
91	Motion and deformation of migrating compound droplets in shear-thinning fluids in a microcapillary tube. <i>Physics of Fluids</i> , <b>2021</b> , 33, 053106	4.4	5
90	Additively Manufactured Gradient Porous Ti-6Al-4V Hip Replacement Implants Embedded with Cell-Laden Gelatin Methacryloyl Hydrogels. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 22110-22123	9.5	26
89	Performance optimization of a novel passive T-shaped micromixer with deformable baffles. <i>Chemical Engineering and Processing: Process Intensification</i> , <b>2021</b> , 163, 108369	3.7	5
88	Classification and Regression of Binary Hydrocarbon Mixtures using Single Metal Oxide Semiconductor Sensor With Application to Natural Gas Detection. <i>Sensors and Actuators B: Chemical</i> , <b>2021</b> , 326, 129012	8.5	10
87	Dielectrophoretic manipulation of particles on a microfluidics platform with planar tilted electrodes. <i>Sensors and Actuators B: Chemical</i> , <b>2021</b> , 329, 129204	8.5	7

86	Nanomaterial-based encapsulation for controlled gastrointestinal delivery of viable probiotic bacteria. <i>Nanoscale Advances</i> , <b>2021</b> , 3, 2699-2709	5.1	12
85	Hybrid Nanosystems for Biomedical Applications. <i>ACS Nano</i> , <b>2021</b> , 15, 2099-2142	16.7	43
84	High-throughput three-dimensional cellular platforms for screening biophysical microenvironmental signals <b>2021</b> , 125-152		
83	Anti-bacterial and wound healing-promoting effects of zinc ferrite nanoparticles. <i>Journal of Nanobiotechnology</i> , <b>2021</b> , 19, 38	9.4	25
82	Sheath-assisted versus sheathless dielectrophoretic particle separation. <i>Electrophoresis</i> , <b>2021</b> , 42, 1570-1577	3.7	0
81	Stretchable and Bioadhesive Gelatin Methacryloyl-Based Hydrogels Enabled by Dopamine Polymerization. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 40290-40301	9.5	12
80	Micron-sized particle separation with standing surface acoustic wave-Experimental and numerical approaches. <i>Ultrasonics Sonochemistry</i> , <b>2021</b> , 76, 105651	8.9	3
79	A selective polypyrrole-based sub-ppm impedimetric sensor for the detection of dissolved hydrogen sulfide and ammonia in a mixture. <i>Journal of Hazardous Materials</i> , <b>2021</b> , 416, 125892	12.8	6
78	Enhanced selectivity of microfluidic gas sensors by modifying microchannel geometry and surface chemistry with graphene quantum dots. <i>Sensors and Actuators B: Chemical</i> , <b>2021</b> , 342, 130050	8.5	8
77	Microfluidic On-Chip Production of Alginate Hydrogels Using Double Coflow Geometry. <i>ACS Omega</i> , <b>2021</b> , 6, 25964-25971	3.9	1
76	Potentiodynamic Electrochemical Impedance Spectroscopy of Polyaniline-Modified Pencil Graphite Electrodes for Selective Detection of Biochemical Trace Elements.. <i>Polymers</i> , <b>2021</b> , 14,	4.5	2
75	Microfluidic-Based Oxygen (O) Sensors for On-Chip Monitoring of Cell, Tissue and Organ Metabolism.. <i>Biosensors</i> , <b>2021</b> , 12,	5.9	4
74	Extrusion and Microfluidic-based Bioprinting to Fabricate Biomimetic Tissues and Organs. <i>Advanced Materials Technologies</i> , <b>2020</b> , 5, 1901044	6.8	57
73	Graphene/poly (methyl methacrylate) electrochemical impedance-transduced chemiresistor for detection of volatile organic compounds in aqueous medium. <i>Analytica Chimica Acta</i> , <b>2020</b> , 1109, 27-36	6.6	15
72	Nano-porous anodic alumina: fundamentals and applications in tissue engineering. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2020</b> , 31, 60	4.5	12
71	High Throughput Screening of Cell Mechanical Response Using a Stretchable 3D Cellular Microarray Platform. <i>Small</i> , <b>2020</b> , 16, e2000941	11	11
70	Fabrication of SnO Composite Nanofiber-Based Gas Sensor using the Electrospinning Method for Tetrahydrocannabinol (THC) Detection. <i>Micromachines</i> , <b>2020</b> , 11,	3.3	5
69	Toward a neurospheroid niche model: optimizing embedded 3D bioprinting for fabrication of neurospheroid brain-like co-culture constructs. <i>Biofabrication</i> , <b>2020</b> ,	10.5	16

68	Ferritin Nanocage Conjugated Hybrid Hydrogel for Tissue Engineering and Drug Delivery Applications. <i>ACS Biomaterials Science and Engineering</i> , <b>2020</b> , 6, 277-287	5.5	16
67	3D-Printed Ultra-Robust Surface-Doped Porous Silicone Sensors for Wearable Biomonitoring. <i>ACS Nano</i> , <b>2020</b> , 14, 1520-1532	16.7	76
66	Topical review on monitoring tetrahydrocannabinol in breath. <i>Journal of Breath Research</i> , <b>2020</b> , 14, 034002	0.2	6
65	Experimental characterization of the inter-ply shear behavior of dry and prepreg woven fabrics: Significance of mixed lubrication mode during thermoset composites processing. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2020</b> , 129, 105725	8.4	8
64	Sacrificial 3D printing of shrinkable silicone elastomers for enhanced feature resolution in flexible tissue scaffolds. <i>Acta Biomaterialia</i> , <b>2020</b> , 117, 261-272	10.8	14
63	Sheath-assisted focusing of microparticles on lab-on-a-chip platforms. <i>Electrophoresis</i> , <b>2020</b> , 41, 2188	3.6	6
62	Micro and nanoscale technologies in oral drug delivery. <i>Advanced Drug Delivery Reviews</i> , <b>2020</b> , 157, 37-62	28.5	45
61	Multiphase flow in microfluidics: From droplets and bubbles to the encapsulated structures. <i>Advances in Colloid and Interface Science</i> , <b>2020</b> , 282, 102208	14.3	29
60	Parametric study on the geometrical parameters of a lab-on-a-chip platform with tilted planar electrodes for continuous dielectrophoretic manipulation of microparticles. <i>Scientific Reports</i> , <b>2020</b> , 10, 11718	4.9	11
59	Integrated Sensors in Advanced Composites: A Critical Review. <i>Critical Reviews in Solid State and Materials Sciences</i> , <b>2020</b> , 45, 187-238	10.1	12
58	Exploiting Microfluidics for Extracellular Vesicle Isolation and Characterization: Potential Use for Standardized Embryo Quality Assessment. <i>Frontiers in Veterinary Science</i> , <b>2020</b> , 7, 620809	3.1	9
57	Selective detection of volatile organic compounds in microfluidic gas detectors based on "like dissolves like". <i>Scientific Reports</i> , <b>2019</b> , 9, 161	4.9	20
56	Bioinks and bioprinting technologies to make heterogeneous and biomimetic tissue constructs. <i>Materials Today Bio</i> , <b>2019</b> , 1, 100008	9.9	198
55	Permeability and mechanical properties of gradient porous PDMS scaffolds fabricated by 3D-printed sacrificial templates designed with minimal surfaces. <i>Acta Biomaterialia</i> , <b>2019</b> , 96, 149-160	10.8	73
54	Graphene-Coated Spandex Sensors Embedded into Silicone Sheath for Composites Health Monitoring and Wearable Applications. <i>Small</i> , <b>2019</b> , 15, e1804991	11	54
53	Challenges and opportunities in exosome research-Perspectives from biology, engineering, and cancer therapy. <i>APL Bioengineering</i> , <b>2019</b> , 3, 011503	6.6	188
52	Fluid Permeability of Graded Porosity Scaffolds Architected with Minimal Surfaces. <i>ACS Biomaterials Science and Engineering</i> , <b>2019</b> , 5, 1228-1237	5.5	28
51	A Nanostructured Microfluidic Artificial Olfaction for Organic Vapors Recognition. <i>Scientific Reports</i> , <b>2019</b> , 9, 19051	4.9	8

50	Label-Free Capacitive Biosensor for Detection of. <i>Sensors</i> , <b>2019</b> , 19,	3.8	27
49	A frameless picture frame test with embedded sensor: Mitigation of imperfections in shear characterization of woven fabrics. <i>Composite Structures</i> , <b>2019</b> , 211, 112-124	5.3	12
48	A review of sorting, separation and isolation of cells and microbeads for biomedical applications: microfluidic approaches. <i>Analyst, The</i> , <b>2018</b> , 144, 87-113	5	134
47	Low-cost ultra-stretchable strain sensors for monitoring human motion and bio-signals. <i>Sensors and Actuators A: Physical</i> , <b>2018</b> , 271, 182-191	3.9	53
46	Diffusion-based humidity control membrane for microfluidic-based gas detectors. <i>Analytica Chimica Acta</i> , <b>2018</b> , 1021, 103-112	6.6	12
45	3D-printed multimaterial composites tailored for compliancy and strain recovery. <i>Composite Structures</i> , <b>2018</b> , 184, 11-17	5.3	30
44	Analytical study of unsteady sedimentation analysis of spherical particle in Newtonian fluid media. <i>Thermal Science</i> , <b>2018</b> , 22, 847-855	1.2	3
43	Kinetic characterization of acetone monooxygenase from <i>Gordonia</i> sp. strain TY-5. <i>AMB Express</i> , <b>2018</b> , 8, 181	4.1	10
42	Development of a Sensing Platform for Nuisance Sewer Gas Monitoring: Hydrogen Sulfide Detection in Aqueous Versus Gaseous Samples. <i>IEEE Sensors Journal</i> , <b>2018</b> , 18, 7772-7778	4	7
41	Simulation of combustion in a porous-medium diesel engine. <i>Journal of Mechanical Science and Technology</i> , <b>2018</b> , 32, 2327-2337	1.6	5
40	Compressive characteristics of radially graded porosity scaffolds architected with minimal surfaces. <i>Materials Science and Engineering C</i> , <b>2018</b> , 92, 254-267	8.3	47
39	On-Chip Electronic Nose For Wine Tasting: A Digital Microfluidic Approach. <i>IEEE Sensors Journal</i> , <b>2017</b> , 17, 4322-4329	4	17
38	An electrohydrodynamic technique for rapid mixing in stationary droplets on digital microfluidic platforms. <i>Lab on A Chip</i> , <b>2017</b> , 17, 227-234	7.2	24
37	Characterization of channel coating and dimensions of microfluidic-based gas detectors. <i>Sensors and Actuators B: Chemical</i> , <b>2017</b> , 241, 55-64	8.5	23
36	Predicting permeability of regular tissue engineering scaffolds: scaling analysis of pore architecture, scaffold length, and fluid flow rate effects. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , <b>2017</b> , 20, 231-241	2.1	27
35	The relationships between deformation mechanisms and mechanical properties of additively manufactured porous biomaterials. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2017</b> , 70, 28-42	4.1	50
34	3D Printing-Based Integrated Water Quality Sensing System. <i>Sensors</i> , <b>2017</b> , 17,	3.8	17
33	A review of digital microfluidics as portable platforms for lab-on a-chip applications. <i>Lab on A Chip</i> , <b>2016</b> , 16, 2376-96	7.2	254

32	Integration of biosensors into digital microfluidics: Impact of hydrophilic surface of biosensors on droplet manipulation. <i>Biosensors and Bioelectronics</i> , <b>2016</b> , 81, 480-486	11.8	31
31	Highly selective multi-target 3D-printed microfluidic-based breath analyzer <b>2016</b> ,		3
30	Control of artificial human finger using wearable device and adaptive network-based fuzzy inference system <b>2016</b> ,		3
29	Additive manufacturing and mechanical characterization of graded porosity scaffolds designed based on triply periodic minimal surface architectures. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2016</b> , 62, 481-494	4.1	128
28	Integrated Decision Support System for Prognostic and Diagnostic Analyses of Water Distribution System Failures. <i>Water Resources Management</i> , <b>2016</b> , 30, 2831-2850	3.7	8
27	Laterally Confined Microfluidic Patterning of Cells for Engineering Spatially Defined Vascularization. <i>Small</i> , <b>2016</b> , 12, 5132-5139	11	18
26	Failure mechanisms of additively manufactured porous biomaterials: Effects of porosity and type of unit cell. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , <b>2015</b> , 50, 180-91	4.1	173
25	A dielectrophoretic-gravity driven particle focusing technique for digital microfluidic systems. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 204101	3.4	20
24	Gravity-driven hydrodynamic particle separation in digital microfluidic systems. <i>RSC Advances</i> , <b>2015</b> , 5, 35966-35975	3.7	13
23	Purification of a droplet using negative dielectrophoresis traps in digital microfluidics. <i>Microfluidics and Nanofluidics</i> , <b>2015</b> , 18, 483-492	2.8	12
22	Ultra-Portable Smartphone Controlled Integrated Digital Microfluidic System in a 3D-Printed Modular Assembly. <i>Micromachines</i> , <b>2015</b> , 6, 1289-1305	3.3	20
21	Microfluidics Integrated Biosensors: A Leading Technology towards Lab-on-a-Chip and Sensing Applications. <i>Sensors</i> , <b>2015</b> , 15, 30011-31	3.8	273
20	Systematic analysis of geometrical based unequal droplet splitting in digital microfluidics. <i>Journal of Micromechanics and Microengineering</i> , <b>2015</b> , 25, 055008	2	35
19	Online Drinking Water Quality Monitoring: Review on Available and Emerging Technologies. <i>Critical Reviews in Environmental Science and Technology</i> , <b>2014</b> , 44, 1370-1421	11.1	72
18	Investigating internal architecture effect in plastic deformation and failure for TPMS-based scaffolds using simulation methods and experimental procedure. <i>Materials Science and Engineering C</i> , <b>2014</b> , 43, 587-97	8.3	63
17	Effect of Gas Diffusion Layer Properties on Breakthrough Time and Pressure. <i>Transport in Porous Media</i> , <b>2014</b> , 105, 43-55	3.1	2
16	Reliability Assessment for Water Supply Systems under Uncertainties. <i>Journal of Water Resources Planning and Management - ASCE</i> , <b>2014</b> , 140, 468-479	2.8	38
15	Water distribution system failure: a framework for forensic analysis. <i>Environment Systems and Decisions</i> , <b>2014</b> , 34, 168-179	4.1	7

14	Evaluating Water Quality Failure Potential in Water Distribution Systems: A Fuzzy-TOPSIS-OWA-based Methodology. <i>Water Resources Management</i> , <b>2013</b> , 27, 2195-2216	3.7	28
13	Characterization of the geometry of negative dielectrophoresis traps for particle immobilization in digital microfluidic platforms. <i>Lab on A Chip</i> , <b>2013</b> , 13, 1823-30	7.2	20
12	A fuzzy rule-based approach for water quality assessment in the distribution network <b>2013</b> ,		2
11	Networked fuzzy belief rule-based system for spatiotemporal monitoring <b>2013</b> ,		1
10	Study of the effect of electric field and electroneutrality on transport of biomolecules in microreactors. <i>Microfluidics and Nanofluidics</i> , <b>2012</b> , 12, 279-294	2.8	6
9	Numerical study of the microdroplet actuation switching frequency in digital microfluidic biochips. <i>Microfluidics and Nanofluidics</i> , <b>2012</b> , 12, 295-305	2.8	4
8	Online monitoring of drinking water quality in a distribution network: a selection procedure for suitable water quality parameters and sensor devices. <i>International Journal of Systems Assurance Engineering and Management</i> , <b>2012</b> , 3, 323-337	1.3	9
7	Multicriteria information fusion using a fuzzy evidential rule-based framework <b>2012</b> ,		1
6	Interval belief structure rule-based system using extended fuzzy Dempster-Shafer inference <b>2011</b> ,		5
5	Electrohydrodynamic modeling of microdroplet transient dynamics in electrocapillary-based digital microfluidic devices. <i>Microfluidics and Nanofluidics</i> , <b>2011</b> , 10, 1019-1032	2.8	13
4	Evidential reasoning using extended fuzzy Dempster-Shafer theory for handling various facets of information deficiency. <i>International Journal of Intelligent Systems</i> , <b>2011</b> , 26, 731-758	8.4	17
3	Leakage detection and location in water distribution systems using a fuzzy-based methodology. <i>Urban Water Journal</i> , <b>2011</b> , 8, 351-365	2.3	41
2	A review of low-temperature H <sub>2</sub> S gas sensors: fabrication and mechanism. <i>New Journal of Chemistry</i> ,	3.6	7
1	Nano-scale Particle Separation with Tilted Standing Surface Acoustic Wave [Experimental and Numerical Approaches. <i>Particle and Particle Systems Characterization</i> , 2200057	3.1	