

Rahim Rahimi

List of Publications by Year in descending order

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61
papers

2,258
citations

279487

23
h-index

223531

46
g-index

61
all docs

61
docs citations

61
times ranked

2873
citing authors

#	ARTICLE	IF	CITATIONS
1	Highly Stretchable and Sensitive Unidirectional Strain Sensor via Laser Carbonization. ACS Applied Materials & Interfaces, 2015, 7, 4463-4470.	4.0	332
2	Smart Bandage for Monitoring and Treatment of Chronic Wounds. Small, 2018, 14, e1703509.	5.2	257
3	Highly Stretchable Potentiometric pH Sensor Fabricated via Laser Carbonization and Machining of Carbon~Polyaniline Composite. ACS Applied Materials & Interfaces, 2017, 9, 9015-9023.	4.0	146
4	A low-cost flexible pH sensor array for wound assessment. Sensors and Actuators B: Chemical, 2016, 229, 609-617.	4.0	138
5	Biodegradable Nanofibrous Polymeric Substrates for Generating Elastic and Flexible Electronics. Advanced Materials, 2014, 26, 5823-5830.	11.1	117
6	Integrated sensing and delivery of oxygen for next-generation smart wound dressings. Microsystems and Nanoengineering, 2020, 6, 46.	3.4	96
7	Direct Laser Writing of Porous-Carbon/Silver Nanocomposite for Flexible Electronics. ACS Applied Materials & Interfaces, 2016, 8, 16907-16913.	4.0	87
8	Flexible Sensors for Chronic Wound Management. IEEE Reviews in Biomedical Engineering, 2014, 7, 73-86.	13.1	76
9	Laser-enabled fabrication of flexible and transparent pH sensor with near-field communication for in-situ monitoring of wound infection. Sensors and Actuators B: Chemical, 2018, 267, 198-207.	4.0	60
10	Hierarchical Micro/Mesoporous Copper Structure with Enhanced Antimicrobial Property via Laser Surface Texturing. Advanced Materials Interfaces, 2020, 7, 1901890.	1.9	51
11	A pH-regulated drug delivery dermal patch for targeting infected regions in chronic wounds. Lab on A Chip, 2019, 19, 2265-2274.	3.1	47
12	Laser-Induced Mesoporous Nickel Oxide as a Highly Sensitive Nonenzymatic Glucose Sensor. ACS Applied Nano Materials, 2020, 3, 5260-5270.	2.4	46
13	Smart capsule for non-invasive sampling and studying of the gastrointestinal microbiome. RSC Advances, 2020, 10, 16313-16322.	1.7	45
14	Flexible Microneedle Array Patch for Chronic Wound Oxygenation and Biofilm Eradication. ACS Applied Bio Materials, 2021, 4, 5405-5415.	2.3	41
15	A Self-Powered, Real-Time, LoRaWAN IoT-Based Soil Health Monitoring System. IEEE Internet of Things Journal, 2021, 8, 9278-9293.	5.5	36
16	Rapid prototyping of a novel and flexible paper based oxygen sensing patch via additive inkjet printing process. RSC Advances, 2019, 9, 22695-22704.	1.7	30
17	A mass-customizable dermal patch with discrete colorimetric indicators for personalized sweat rate quantification. Microsystems and Nanoengineering, 2019, 5, 29.	3.4	30
18	A Wireless Implantable Strain Sensing Scheme Using Ultrasound Imaging of Highly Stretchable Zinc Oxide/Poly Dimethylacrylamide Nanocomposite Hydrogel. ACS Applied Bio Materials, 2020, 3, 4012-4024.	2.3	29

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19	Development of a nickel oxide/oxyhydroxide-modified printed carbon electrode as an all solid-state sensor for potentiometric phosphate detection. <i>New Journal of Chemistry</i> , 2019, 43, 18619-18628.	1.4	28
20	Highly Conductive Copper–Silver Bimodal Paste for Low-Cost Printed Electronics. <i>ACS Applied Electronic Materials</i> , 2021, 3, 3352-3364.	2.0	27
21	Laser-Enabled Processing of Stretchable Electronics on a Hydrolytically Degradable Hydrogel. <i>Advanced Healthcare Materials</i> , 2018, 7, e1800231.	3.9	26
22	A paper-based in vitro model for on-chip investigation of the human respiratory system. <i>Lab on A Chip</i> , 2016, 16, 4319-4325.	3.1	24
23	Printed Low-Cost PEDOT:PSS/PVA Polymer Composite for Radiation Sterilization Monitoring. <i>ACS Sensors</i> , 2022, 7, 960-971.	4.0	24
24	Comparison of Direct and Indirect Laser Ablation of Metallized Paper for Inexpensive Paper-Based Sensors. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 36332-36341.	4.0	23
25	Wireless Humidity Sensor for Smart Packaging via One-Step Laser-Induced Patterning and Nanoparticle Formation on Metallized Paper. <i>Advanced Electronic Materials</i> , 2022, 8, .	2.6	23
26	A biodegradable chipless sensor for wireless subsoil health monitoring. <i>Scientific Reports</i> , 2022, 12, 8011.	1.6	22
27	A sewing-enabled stitch-and-transfer method for robust, ultra-stretchable, conductive interconnects. <i>Journal of Micromechanics and Microengineering</i> , 2014, 24, 095018.	1.5	21
28	Roll-to-Roll (R2R) Production of Ultrasensitive, Flexible, and Transparent Pressure Sensors Based on Vertically Aligned Lead Zirconate Titanate and Graphene Nanoplatelets. <i>Advanced Materials Technologies</i> , 2019, 4, 1800425.	3.0	21
29	Battery-Less Wireless Chipless Sensor Tag for Subsoil Moisture Monitoring. <i>IEEE Sensors Journal</i> , 2021, 21, 6071-6082.	2.4	20
30	Electrochemical sensor for rapid detection of fentanyl using laser-induced porous carbon-electrodes. <i>Mikrochimica Acta</i> , 2022, 189, 198.	2.5	18
31	Flexible and transparent pH monitoring system with NFC communication for wound monitoring applications. , 2017, , .		17
32	Gradient-on-a-Chip with Reactive Oxygen Species Reveals Thresholds in the Nucleus Response of Cancer Cells Depending on the Matrix Environment. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 432-445.	2.6	17
33	A Janus-paper PDMS platform for air–liquid interface cell culture applications. <i>Journal of Micromechanics and Microengineering</i> , 2015, 25, 055015.	1.5	16
34	Laser-induced atmospheric Cu ₂ O formation on copper surface with enhanced electrochemical performance for non-enzymatic glucose sensing. <i>Journal of Materials Chemistry C</i> , 2021, 9, 14997-15010.	2.7	16
35	Small intestinal sampling capsule for inflammatory bowel disease type detection and management. <i>Lab on A Chip</i> , 2021, 22, 57-70.	3.1	16
36	Low-Cost Flexible Glass-Based pH Sensor via Cold Atmospheric Plasma Deposition. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 9697-9710.	4.0	16

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37	A Biodegradable Hybrid Micro/Nano Conductive Zinc Paste for Paper-Based Flexible Bioelectronics. <i>Advanced Materials Technologies</i> , 2022, 7, .	3.0	16
38	A lab-on-chip ultrasonic platform for real-time and nondestructive assessment of extracellular matrix stiffness. <i>Lab on A Chip</i> , 2020, 20, 778-788.	3.1	14
39	Laser Functionalization of Carbon Membranes for Effective Immobilization of Antimicrobial Silver Nanoparticles. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104109.	3.3	14
40	Directly embroidered microtubes for fluid transport in wearable applications. <i>Lab on A Chip</i> , 2017, 17, 1585-1593.	3.1	13
41	Roll-to-Roll Production of Novel Large-Area Piezoelectric Films for Transparent, Flexible, and Wearable Fabric Loudspeakers. <i>Advanced Materials Technologies</i> , 2020, 5, 2000296.	3.0	13
42	A Wireless Implantable Passive Intra-Abdominal Pressure Sensing Scheme via Ultrasonic Imaging of a Microfluidic Device. <i>IEEE Transactions on Biomedical Engineering</i> , 2021, 68, 747-758.	2.5	13
43	Laser-Assisted Nanotexturing and Silver Immobilization on Titanium Implant Surfaces to Enhance Bone Cell Mineralization and Antimicrobial Properties. <i>Langmuir</i> , 2022, 38, 4014-4027.	1.6	13
44	Wearable and Flexible Ozone Generating System for Treatment of Infected Dermal Wounds. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 458.	2.0	12
45	Wireless Sensor Network Utilizing Flexible Nitrate Sensors for Smart Farming. , 2019, , .		11
46	Steady-State and Transient Performance of Ion-Sensitive Electrodes Suitable for Wearable and Implantable Electro-Chemical Sensing. <i>IEEE Transactions on Biomedical Engineering</i> , 2022, 69, 96-107.	2.5	11
47	Inkjet-printed Solid-state Potentiometric Nitrate Ion Selective Electrodes for Agricultural Application. , 2019, , .		11
48	Cell Culture and Coculture for Oncological Research in Appropriate Microenvironments. <i>Current Protocols in Chemical Biology</i> , 2019, 11, e65.	1.7	10
49	A wireless chipless printed sensor tag for real-time radiation sterilization monitoring. <i>Journal of Materials Chemistry C</i> , 2022, 10, 9813-9822.	2.7	10
50	Improved performance of printed electrochemical sensors <i>via</i> cold atmospheric plasma surface modification. <i>Journal of Materials Chemistry C</i> , 2022, 10, 10562-10573.	2.7	10
51	Noninvasive assessment of microbial activity by realtime monitoring degradation of cellulose acetate via electrochemical impedance measurement. <i>Sensors and Actuators A: Physical</i> , 2021, 321, 112543.	2.0	8
52	Fabrication and characterization of implantable flushable electrodes for electric field-mediated drug delivery in a brain tissue-mimic agarose gel. <i>Electrophoresis</i> , 2018, 39, 2262-2269.	1.3	7
53	Flexible supercapacitor based on MnO ₂ coated laser carbonized electrodes. <i>Journal of Physics: Conference Series</i> , 2015, 660, 012044.	0.3	5
54	Skin Regeneration Using Dermal Substrates that Contain Autologous Cells and Silver Nanoparticles to Promote Antibacterial Activity: In Vitro Studies. <i>Military Medicine</i> , 2017, 182, 376-382.	0.4	5

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55	Laser-treated glass platform for rapid wicking-driven transport and particle separation in bio microfluidics. RSC Advances, 2019, 9, 19531-19538.	1.7	5
56	Laser-Enabled Fabrication Technologies for Low-Cost Flexible/Conformal Cutaneous Wound Interfaces. Microsystems and Nanosystems, 2016, , 207-226.	0.1	4
57	Smart Bandages: Smart Bandage for Monitoring and Treatment of Chronic Wounds (Small 33/2018). Small, 2018, 14, 1870150.	5.2	4
58	Yeast Metabolic Response as an Indicator of Radiation Damage in Biological Tissue. Advanced Biology, 2018, 2, 1800126.	3.0	4
59	Real-Time Tracking of a 3D-Printed Smart Capsule Using on-Board Near-Infrared Led Array. , 2019, , .		3
60	Correlated Effects of Radiation and Hot Carrier Degradation on the Performance of LDMOS Transistors. , 2022, , .		2
61	A facile fabrication technique for stretchable interconnects and transducers via laser carbonization. , 2015, , .		1