Feng Xu

List of Publications by Citations

257 papers	10,156 citations	57 h-index	91 g-index
272 ext. papers	12,530 ext. citations	8.4 avg, IF	6.65 L-index

#	Paper	IF	Citations
257	Advances in paper-based point-of-care diagnostics. *Biosensors and Bioelectronics*, **2014**, 54, 585-97	11.8	696
256	Functional and Biomimetic Materials for Engineering of the Three-Dimensional Cell Microenvironment. *Chemical Reviews*, **2017**, 117, 12764-12850	68.1	408
255	Novel Biocompatible Polysaccharide-Based Self-Healing Hydrogel. *Advanced Functional Materials*, **2015**, 25, 1352-1359	15.6	406
254	4D Bioprinting for Biomedical Applications. *Trends in Biotechnology*, **2016**, 34, 746-756	15.1	379
253	Household Fluorescent Lateral Flow Strip Platform for Sensitive and Quantitative Prognosis of Heart Failure Using Dual-Color Upconversion Nanoparticles. *ACS Nano*, **2017**, 11, 6261-6270	16.7	197
252	An integrated paper-based sample-to-answer biosensor for nucleic acid testing at the point of care. *Lab on A Chip*, **2016**, 16, 611-21	7.2	195
251	Three-dimensional magnetic assembly of microscale hydrogels. *Advanced Materials*, **2011**, 23, 4254-60	24	188
250	Upconversion nanoparticles based FRET aptasensor for rapid and ultrasenstive bacteria detection. *Biosensors and Bioelectronics*, **2017**, 90, 525-533	11.8	185
249	Engineering cell alignment in vitro. *Biotechnology Advances*, **2014**, 32, 347-65	17.8	169
248	Three-dimensional quick response code based on inkjet printing of upconversion fluorescent nanoparticles for drug anti-counterfeiting. *Nanoscale*, **2016**, 8, 10096-104	7.7	151
247	Advances in digital polymerase chain reaction (dPCR) and its emerging biomedical applications. *Biosensors and Bioelectronics*, **2017**, 90, 459-474	11.8	145
246	Recent advances of controlled drug delivery using microfluidic platforms. *Advanced Drug Delivery Reviews*, **2018**, 128, 3-28	18.5	142
245	A fully disposable and integrated paper-based device for nucleic acid extraction, amplification and detection. *Lab on A Chip*, **2017**, 17, 1270-1279	7.2	126
244	Recent Advances in Electrospun Nanofibrous Scaffolds for Cardiac Tissue Engineering. *Advanced Functional Materials*, **2015**, 25, 5726-5738	15.6	126
243	Engineering a Brain Cancer Chip for High-throughput Drug Screening. *Scientific Reports*, **2016**, 6, 25062	4.9	117
242	High-yield synthesis of strong photoluminescent N-doped carbon nanodots derived from hydrosoluble chitosan for mercury ion sensing via smartphone APP. *Biosensors and Bioelectronics*, **2016**, 79, 1-8	11.8	113
241	The assembly of cell-encapsulating microscale hydrogels using acoustic waves. *Biomaterials*, **2011**, 32, 7847-55	15.6	109

240	3D Spatiotemporal Mechanical Microenvironment: A Hydrogel-Based Platform for Guiding Stem Cell Fate. *Advanced Materials*, **2018**, 30, e1705911	24	108
239	Paper-based sample-to-answer molecular diagnostic platform for point-of-care diagnostics. *Biosensors and Bioelectronics*, **2015**, 74, 427-39	11.8	101
238	Biofriendly, Stretchable, and Reusable Hydrogel Electronics as Wearable Force Sensors. *Small*, **2018**, 14, e1801711	11	101
237	Paper: A promising material for human-friendly functional wearable electronics. *Materials Science and Engineering Reports*, **2017**, 112, 1-22	30.9	100
236	Hydrosoluble, UV-crosslinkable and injectable chitosan for patterned cell-laden microgel and rapid transdermal curing hydrogel in vivo. *Acta Biomaterialia*, **2015**, 22, 59-69	10.8	100
235	Bioactuators based on stimulus-responsive hydrogels and their emerging biomedical applications. *NPG Asia Materials*, **2019**, 11,	10.3	100
234	Low-cost bioanalysis on paper-based and its hybrid microfluidic platforms. *Talanta*, **2015**, 145, 43-54	6.2	99
233	The Role of Nanoparticle Design in Determining Analytical Performance of Lateral Flow Immunoassays. *Nano Letters*, **2017**, 17, 7207-7212	11.5	99
232	Vitrification and levitation of a liquid droplet on liquid nitrogen. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 4596-600	11.5	99
231	Portable microfluidic and smartphone-based devices for monitoring of cardiovascular diseases at the point of care. *Biotechnology Advances*, **2016**, 34, 305-20	17.8	93
230	Multiplexed instrument-free meningitis diagnosis on a polymer/paper hybrid microfluidic biochip. *Biosensors and Bioelectronics*, **2017**, 87, 865-873	11.8	93
229	Exosomes secreted by stem cells from human exfoliated deciduous teeth contribute to functional recovery after traumatic brain injury by shifting microglia M1/M2 polarization in rats. *Stem Cell Research and Therapy*, **2017**, 8, 198	8.3	93
228	Paper-based cell culture platform and its emerging biomedical applications. *Materials Today*, **2017**, 20, 32-44	21.8	87
227	Magnetically Actuated Droplet Manipulation and Its Potential Biomedical Applications. *ACS Applied Materials & Interfaces*, **2017**, 9, 1155-1166	9.5	80
226	Paper-based point-of-care immunoassays: Recent advances and emerging trends. *Biotechnology Advances*, **2020**, 39, 107442	17.8	80
225	Polydimethylsiloxane-Paper Hybrid Lateral Flow Assay for Highly Sensitive Point-of-Care Nucleic Acid Testing. *Analytical Chemistry*, **2016**, 88, 6254-64	7.8	78
224	Stem cell culture and differentiation in microfluidic devices toward organ-on-a-chip. *Future Science OA*, **2017**, 3, FSO187	2.7	77
223	Engineering the Surface of Smart Nanocarriers Using a pH-/Thermal-/GSH-Responsive Polymer Zipper for Precise Tumor Targeting Therapy In Vivo. *Advanced Materials*, **2017**, 29, 1702311	24	77

222	Recent Advances in Pen-Based Writing Electronics and their Emerging Applications. *Advanced Functional Materials*, **2016**, 26, 165-180	15.6	72
221	Lateral flow aptamer assay integrated smartphone-based portable device for simultaneous detection of multiple targets using upconversion nanoparticles. *Sensors and Actuators B: Chemical*, **2018**, 276, 48-56	8.5	72
220	Recent advances in siRNA delivery for cancer therapy using smart nanocarriers. *Drug Discovery Today*, **2018**, 23, 900-911	8.8	70
219	An integrated lateral flow assay for effective DNA amplification and detection at the point of care. *Analyst, The*, **2016**, 141, 2930-9	5	70
218	Multiplexed Instrument-Free Bar-Chart SpinChip Integrated with Nanoparticle-Mediated Magnetic Aptasensors for Visual Quantitative Detection of Multiple Pathogens. *Analytical Chemistry*, **2018**, 90, 9888-9896	7.8	70
217	Reduced graphene oxide functionalized nanofibrous silk fibroin matrices for engineering excitable tissues. *NPG Asia Materials*, **2018**, 10, 982-994	10.3	69
216	Recent advances in microfluidic platforms for single-cell analysis in cancer biology, diagnosis and therapy. *TrAC - Trends in Analytical Chemistry*, **2019**, 117, 13-26	14.6	68
215	Near-infrared light-regulated cancer theranostic nanoplatform based on aggregation-induced emission luminogen encapsulated upconversion nanoparticles. *Theranostics*, **2019**, 9, 246-264	12.1	68
214	Visual in□vivo degradation of injectable hydrogel by real-time and non-invasive tracking using carbon nanodots as fluorescent indicator. *Biomaterials*, **2017**, 145, 192-206	15.6	67
213	Pen-on-paper strategy for point-of-care testing: Rapid prototyping of fully written microfluidic biosensor. *Biosensors and Bioelectronics*, **2017**, 98, 478-485	11.8	67
212	Phenotypic and functional characterization of long-term cryopreserved human adipose-derived stem cells. *Scientific Reports*, **2015**, 5, 9596	4.9	66
211	Improved sensitivity of lateral flow assay using paper-based sample concentration technique. *Talanta*, **2016**, 152, 269-76	6.2	66
210	Advances in fabricating double-emulsion droplets and their biomedical applications. *Microfluidics and Nanofluidics*, **2015**, 19, 1071-1090	2.8	65
209	A portable and universal upconversion nanoparticle-based lateral flow assay platform for point-of-care testing. *Talanta*, **2019**, 201, 126-133	6.2	63
208	Sensitive biomolecule detection in lateral flow assay with a portable temperature-humidity control device. *Biosensors and Bioelectronics*, **2016**, 79, 98-107	11.8	63
207	Electrospun three-dimensional aligned nanofibrous scaffolds for tissue engineering. *Materials Science and Engineering C*, **2018**, 92, 995-1005	8.3	63
206	A programmable polymer library that enables the construction of stimuli-responsive nanocarriers containing logic gates. *Nature Chemistry*, **2020**, 12, 381-390	17.6	62
205	Advances and challenges of fully integrated paper-based point-of-care nucleic acid testing. *TrAC - Trends in Analytical Chemistry*, **2017**, 93, 37-50	14.6	61

204	Dextran-based hydrogel formed by thiol-Michael addition reaction for 3D cell encapsulation. *Colloids and Surfaces B: Biointerfaces*, **2015**, 128, 140-148	6	61
203	Improved Analytical Sensitivity of Lateral Flow Assay using Sponge for HBV Nucleic Acid Detection. *Scientific Reports*, **2017**, 7, 1360	4.9	59
202	Advances in paper-based sample pretreatment for point-of-care testing. *Critical Reviews in Biotechnology*, **2017**, 37, 411-428	9.4	58
201	A Hydrogel Microneedle Patch for Point-of-Care Testing Based on Skin Interstitial Fluid. *Advanced Healthcare Materials*, **2020**, 9, e1901201	10.1	57
200	Lateral Flow Assay Based on Paper-Hydrogel Hybrid Material for Sensitive Point-of-Care Detection of Dengue Virus. *Advanced Healthcare Materials*, **2017**, 6, 1600920	10.1	56
199	Facial Layer-by-Layer Engineering of Upconversion Nanoparticles for Gene Delivery: Near-Infrared-Initiated Fluorescence Resonance Energy Transfer Tracking and Overcoming Drug Resistance in Ovarian Cancer. *ACS Applied Materials & Interfaces*, **2017**, 9, 7941-7949	9.5	54
198	Recent Advances in 4D Bioprinting. *Biotechnology Journal*, **2020**, 15, e1900086	5.6	54
197	Ultrafast Photonic PCR Based on Photothermal Nanomaterials. *Trends in Biotechnology*, **2020**, 38, 637-649	15.1	53
196	Tough Magnetic Chitosan Hydrogel Nanocomposites for Remotely Stimulated Drug Release. *Biomacromolecules*, **2018**, 19, 3351-3360	6.9	52
195	Liquid Bandage Harvests Robust Adhesive, Hemostatic, and Antibacterial Performances as a First-Aid Tissue Adhesive. *Advanced Functional Materials*, **2020**, 30, 2001820	15.6	51
194	UV-crosslinkable and thermo-responsive chitosan hybrid hydrogel for NIR-triggered localized on-demand drug delivery. *Carbohydrate Polymers*, **2017**, 174, 904-914	10.3	49
193	Theranostics of Triple-Negative Breast Cancer Based on Conjugated Polymer Nanoparticles. *ACS Applied Materials & Interfaces*, **2018**, 10, 10634-10646	9.5	48
192	Engineering physical microenvironment for stem cell based regenerative medicine. *Drug Discovery Today*, **2014**, 19, 763-73	8.8	48
191	Chinese-Noodle-Inspired Muscle Myofiber Fabrication. *Advanced Functional Materials*, **2015**, 25, 5999-6008	15.6	48
190	Perspective: Fabrication of integrated organ-on-a-chip via bioprinting. *Biomicrofluidics*, **2017**, 11, 031301	3.2	47
189	Cryopreservation of Human Mesenchymal Stem Cells for Clinical Applications: Current Methods and Challenges. *Biopreservation and Biobanking*, **2015**, 13, 231-9	2.1	47
188	In situ normoxia enhances survival and proliferation rate of human adipose tissue-derived stromal cells without increasing the risk of tumourigenesis. *PLoS ONE*, **2015**, 10, e0115034	3.7	47
187	Cellular mechanosensing of the biophysical microenvironment: A review of mathematical models of biophysical regulation of cell responses. *Physics of Life Reviews*, **2017**, 22-23, 88-119	2.1	46

186	Heterostructured Silk-Nanofiber-Reduced Graphene Oxide Composite Scaffold for SH-SY5Y Cell Alignment and Differentiation. *ACS Applied Materials & Interfaces*, **2018**, 10, 39228-39237	9.5	46
185	Mechanoregulation of cardiac myofibroblast differentiation: implications for cardiac fibrosis and therapy. *American Journal of Physiology - Heart and Circulatory Physiology*, **2015**, 309, H532-42	5.2	45
184	Magnetically actuated cell-laden microscale hydrogels for probing strain-induced cell responses in three dimensions. *NPG Asia Materials*, **2016**, 8, e238-e238	10.3	42
183	Paracrine Effects of Adipose-Derived Stem Cells on Matrix Stiffness-Induced Cardiac Myofibroblast Differentiation via Angiotensin II Type 1 Receptor and Smad7. *Scientific Reports*, **2016**, 6, 33067	4.9	40
182	A review on advances in methods for modification of paper supports for use in point-of-care testing. *Mikrochimica Acta*, **2019**, 186, 521	5.8	40
181	Spatially modulated stiffness on hydrogels for soft and stretchable integrated electronics. *Materials Horizons*, **2020**, 7, 203-213	14.4	39
180	Microchannel Stiffness and Confinement Jointly Induce the Mesenchymal-Amoeboid Transition of Cancer Cell Migration. *Nano Letters*, **2019**, 19, 5949-5958	11.5	38
179	Multiple test zones for improved detection performance in lateral flow assays. *Sensors and Actuators B: Chemical*, **2017**, 243, 484-488	8.5	37
178	The potential health challenges of TiO2 nanomaterials. *Journal of Applied Toxicology*, **2015**, 35, 1086-101	4.1	37
177	Labeling and long-term tracking of bone marrow mesenchymal stem cells in vitro using NaYF4:Yb(3+),Er(3+) upconversion nanoparticles. *Acta Biomaterialia*, **2016**, 42, 199-208	10.8	36
176	Fully integrated microfluidic devices for qualitative, quantitative and digital nucleic acids testing at point of care. *Biosensors and Bioelectronics*, **2021**, 177, 112952	11.8	36
175	Pen-on-paper strategies for point-of-care testing of human health. *TrAC - Trends in Analytical Chemistry*, **2018**, 108, 50-64	14.6	36
174	Hydrogel-based methods for engineering cellular microenvironment with spatiotemporal gradients. *Critical Reviews in Biotechnology*, **2016**, 36, 553-65	9.4	35
173	Point-of-Care Periodontitis Testing: Biomarkers, Current Technologies, and Perspectives. *Trends in Biotechnology*, **2018**, 36, 1127-1144	15.1	35
172	Paper-based device with on-chip reagent storage for rapid extraction of DNA from biological samples. *Mikrochimica Acta*, **2017**, 184, 2141-2150	5.8	34
171	Eriodictyol inhibits high glucose-induced oxidative stress and inflammation in retinal ganglial cells. *Journal of Cellular Biochemistry*, **2019**, 120, 5644-5651	4.7	34
170	The Arabidopsis trichome is an active mechanosensory switch. *Plant, Cell and Environment*, **2017**, 40, 611-621	8.4	33
169	Smart Glove Integrated with Tunable MWNTs/PDMS Fibers Made of a One-Step Extrusion Method for Finger Dexterity, Gesture, and Temperature Recognition. *ACS Applied Materials & Interfaces* , **2020**, 12, 23764-23773	9.5	32

168	A stretchable, conformable, and biocompatible graphene strain sensor based on a structured hydrogel for clinical application. *Journal of Materials Chemistry A*, **2019**, 7, 27099-27109	13	32
167	Engineering the Cell Microenvironment Using Novel Photoresponsive Hydrogels. *ACS Applied Materials & Interfaces*, **2018**, 10, 12374-12389	9.5	31
166	Solvent-Free Fabrication of Carbon Nanotube/Silk Fibroin Electrospun Matrices for Enhancing Cardiomyocyte Functionalities. *ACS Biomaterials Science and Engineering*, **2020**, 6, 1630-1640	5.5	30
165	Capillary Origami Inspired Fabrication of Complex 3D Hydrogel Constructs. *Small*, **2016**, 12, 4492-500	11	29
164	A Controllable and Integrated Pump-enabled Microfluidic Chip and Its Application in Droplets Generating. *Scientific Reports*, **2017**, 7, 11319	4.9	29
163	Nanoscale integrin cluster dynamics controls cellular mechanosensing via FAKY397 phosphorylation. *Science Advances*, **2020**, 6, eaax1909	14.3	28
162	Controlled Drug Delivery Using Microdevices. *Current Pharmaceutical Biotechnology*, **2016**, 17, 772-87	2.6	28
161	Equipment-Free Quantitative Readout in Paper-Based Point-of-Care Testing. *Small Methods*, **2020**, 4, 1900459	12.8	28
160	BioPen: direct writing of functional materials at the point of care. *Scientific Reports*, **2014**, 4, 4872	4.9	27
159	Smartphone-Based Accurate Analysis of Retinal Vasculature towards Point-of-Care Diagnostics. *Scientific Reports*, **2016**, 6, 34603	4.9	27
158	Capillary blood for point-of-care testing. *Critical Reviews in Clinical Laboratory Sciences*, **2017**, 54, 294-308	9.4	27
157	Improved LFIAs for highly sensitive detection of BNP at point-of-care. *International Journal of Nanomedicine*, **2017**, 12, 4455-4466	7.3	27
156	Liquid on Paper: Rapid Prototyping of Soft Functional Components for Paper Electronics. *Scientific Reports*, **2015**, 5, 11488	4.9	26
155	Coarse-grained molecular dynamics studies of the translocation mechanism of polyarginines across asymmetric membrane under tension. *Scientific Reports*, **2015**, 5, 12808	4.9	26
154	Magnetic steering of liquid metal mobiles. *Soft Matter*, **2018**, 14, 3236-3245	3.6	25
153	Blood banking in living droplets. *PLoS ONE*, **2011**, 6, e17530	3.7	25
152	Environmentally Compatible Wearable Electronics Based on Ionically Conductive Organohydrogels for Health Monitoring with Thermal Compatibility, Anti-Dehydration, and Underwater Adhesion. *Small*, **2021**, 17, e2101151	11	24
151	Simultaneous arteriole and venule segmentation with domain-specific loss function on a new public database. *Biomedical Optics Express*, **2018**, 9, 3153-3166	3.5	23

150	Microfluidic Printing of Three-Dimensional Graphene Electroactive Microfibrous Scaffolds. *ACS Applied Materials & Interfaces*, **2020**, 12, 2049-2058	9.5	23
149	Selective enhancement of red emission from upconversion nanoparticles via surface plasmon-coupled emission. *RSC Advances*, **2015**, 5, 76825-76835	3.7	22
148	An approach to quantifying 3D responses of cells to extreme strain. *Scientific Reports*, **2016**, 6, 19550	4.9	22
147	Paper-based point-of-care testing for diagnosis of dengue infections. *Critical Reviews in Biotechnology*, **2017**, 37, 100-111	9.4	21
146	Non-invasive tracking of hydrogel degradation using upconversion nanoparticles. *Acta Biomaterialia*, **2017**, 55, 410-419	10.8	21
145	Electrohydrodynamic Rayleigh-Taylor instability in leaky dielectric fluids. *International Journal of Heat and Mass Transfer*, **2017**, 109, 690-704	4.9	21
144	Fabrication of Microscale Hydrogels with Tailored Microstructures based on Liquid Bridge Phenomenon. *ACS Applied Materials & Interfaces*, **2015**, 7, 11134-40	9.5	21
143	Spatiotemporally Controlled Photoresponsive Hydrogels: Design and Predictive Modeling from Processing through Application. *Advanced Functional Materials*, **2020**, 30, 2000639	15.6	21
142	Viscoelastic Cell Microenvironment: Hydrogel-Based Strategy for Recapitulating Dynamic ECM Mechanics. *Advanced Functional Materials*, **2021**, 31, 2100848	15.6	21
141	In vitro spatially organizing the differentiation in individual multicellular stem cell aggregates. *Critical Reviews in Biotechnology*, **2016**, 36, 20-31	9.4	20
140	Liquid wicking behavior in paper-like materials: mathematical models and their emerging biomedical applications. *Microfluidics and Nanofluidics*, **2018**, 22, 1	2.8	20
139	Trichomes as a natural biophysical barrier for plants and their bioinspired applications. *Soft Matter*, **2017**, 13, 5096-5106	3.6	19
138	Synergistic Effect of Matrix Stiffness and Inflammatory Factors on Osteogenic Differentiation of MSC. *Biophysical Journal*, **2019**, 117, 129-142	2.9	19
137	Sensitivity Enhancement of Nucleic Acid Lateral Flow Assays through a Physical-Chemical Coupling Method: Dissoluble Saline Barriers. *ACS Sensors*, **2019**, 4, 1691-1700	9.2	18
136	Ultrahigh-yield synthesis of N-doped carbon nanodots that down-regulate ROS in zebrafish. *Journal of Materials Chemistry B*, **2017**, 5, 7848-7860	7.3	18
135	Nanomaterial-based biosensors for measurement of lipids and lipoproteins towards point-of-care of cardiovascular disease. *Analyst, The*, **2017**, 142, 3309-3321	5	18
134	Polymeric Nitric Oxide Delivery Nanoplatforms for Treating Cancer, Cardiovascular Diseases, and Infection. *Advanced Healthcare Materials*, **2021**, 10, e2001550	10.1	18
133	Aligned Graphene Mesh-Supported Double Network Natural Hydrogel Conduit Loaded with Netrin-1 for Peripheral Nerve Regeneration. *ACS Applied Materials & Interfaces*, **2021**, 13, 112-122	9.5	18

132	The effect of report particle properties on lateral flow assays: A mathematical model. *Sensors and Actuators B: Chemical*, **2017**, 248, 699-707	8.5	17
131	Renewable epoxidized cardanol-based acrylate as a reactive diluent for UV-curable resins. *Polymers for Advanced Technologies*, **2018**, 29, 1852-1860	3.2	17
130	High-Throughput Non-Contact Vitrification of Cell-Laden Droplets Based on Cell Printing. *Scientific Reports*, **2015**, 5, 17928	4.9	17
129	In Vitro Platelet Adhesion of PNaAMPS/PAAm and PNaAMPS/PDMAAm Double-Network Hydrogels. *Macromolecular Chemistry and Physics*, **2015**, 216, 641-649	2.6	17
128	Assessment of tumourigenic potential in long-term cryopreserved human adipose-derived stem cells. *Journal of Tissue Engineering and Regenerative Medicine*, **2017**, 11, 2217-2226	4.4	16
127	Direct intercellular communications dominate the interaction between adipose-derived MSCs and myofibroblasts against cardiac fibrosis. *Protein and Cell*, **2015**, 6, 735-45	7.2	16
126	The effect of substrate stiffness on cancer cell volume homeostasis. *Journal of Cellular Physiology*, **2018**, 233, 1414-1423	7	16
125	The elastic fields of a compressible liquid inclusion. *Extreme Mechanics Letters*, **2018**, 22, 122-130	3.9	16
124	Blockade efficacy of MEK/ERK-dependent autophagy enhances PI3K/Akt inhibitor NVP-BKM120R therapeutic effectiveness in lung cancer cells. *Oncotarget*, **2016**, 7, 67277-67287	3.3	16
123	A Colorimetric Dermal Tattoo Biosensor Fabricated by Microneedle Patch for Multiplexed Detection of Health-Related Biomarkers. *Advanced Science*, **2021**, 8, e2103030	13.6	16
122	Gradient Mechanical Properties Facilitate Arabidopsis Trichome as Mechanosensor. *ACS Applied Materials & Interfaces*, **2016**, 8, 9755-61	9.5	16
121	Super-resolution imaging reveals changes in Escherichia coli SSB localization in response to DNA damage. *Genes To Cells*, **2019**, 24, 814-826	2.3	15
120	Engineering of microscale three-dimensional pancreatic islet models in vitro and their biomedical applications. *Critical Reviews in Biotechnology*, **2016**, 36, 619-29	9.4	15
119	Graphene-based field effect transistor in two-dimensional paper networks. *Analytica Chimica Acta*, **2016**, 917, 101-6	6.6	15
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117	A new method to amplify colorimetric signals of paper-based nanobiosensors for simple and sensitive pancreatic cancer biomarker detection. *Analyst, The*, **2020**, 145, 5113-5117	5	14
116	Ultrarapid Inductive Rewarming of Vitrified Biomaterials with Thin Metal Forms. *Annals of Biomedical Engineering*, **2018**, 46, 1857-1869	4.7	14
115	Differential Effects of Directional Cyclic Stretching on the Functionalities of Engineered Cardiac Tissues.. *ACS Applied Bio Materials*, **2019**, 2, 3508-3519	4.1	14

114	Improved Resolution and Fidelity of Droplet-Based Bioprinting by Upward Ejection. *ACS Biomaterials Science and Engineering*, **2019**, 5, 4112-4121	5.5	14
113	Graphene-enabled wearable sensors for healthcare monitoring. *Biosensors and Bioelectronics*, **2022**, 197, 113777	11.8	14
112	Deformation Hysteresis of Electrohydrodynamic Patterning on a Thin Polymer Film. *ACS Applied Materials & Interfaces*, **2016**, 8, 17668-75	9.5	14
111	Microstructural effects on permeability of Nitrocellulose membranes for biomedical applications. *Journal of Membrane Science*, **2020**, 595, 117502	9.6	14
110	A smartphone-based on-site nucleic acid testing platform at point-of-care settings. *Electrophoresis*, **2019**, 40, 914-921	3.6	14
109	Collective Wetting of a Natural Fibrous System and Its Application in Pump-Free Droplet Transfer. *Advanced Functional Materials*, **2017**, 27, 1606607	15.6	13
108	3D Conformal Modification of Electrospun Silk Nanofibers with Nanoscaled ZnO Deposition for Enhanced Photocatalytic Activity. *ACS Biomaterials Science and Engineering*, **2017**, 3, 2900-2906	5.5	13
107	Engineering extracellular matrix to improve drug delivery for cancer therapy. *Drug Discovery Today*, **2020**, 25, 1727-1734	8.8	13
106	In vitro diagnosis of DNA methylation biomarkers with digital PCR in breast tumors. *Analyst, The*, **2018**, 143, 3011-3020	5	13
105	An Integrated Stochastic Model of Matrix-Stiffness-Dependent Filopodial Dynamics. *Biophysical Journal*, **2016**, 111, 2051-2061	2.9	13
104	Thermal Pain in Teeth: Electrophysiology Governed by Thermomechanics. *Applied Mechanics Reviews*, **2014**, 66, 0308011-3080114	8.6	13
103	Cell mechanical microenvironment for cell volume regulation. *Journal of Cellular Physiology*, **2020**, 235, 4070-4081	7	13
102	Plasmon-Driven Ultrafast Photonic PCR. *Trends in Biochemical Sciences*, **2020**, 45, 174-175	10.3	13
101	Harnessing the Wide-range Strain Sensitivity of Bilayered PEDOT:PSS Films for Wearable Health Monitoring. *Matter*, **2021**, 4, 2886-2901	12.7	13
100	Mechanical microenvironments of living cells: a critical frontier in mechanobiology. *Acta Mechanica Sinica/Lixue Xuebao*, **2019**, 35, 265-269	2	12
99	Engineering mechanical microenvironment of macrophage and its biomedical applications. *Nanomedicine*, **2018**, 13, 555-576	5.6	12
98	Self-Propelled Hovercraft Based on Cold Leidenfrost Phenomenon. *Scientific Reports*, **2016**, 6, 28574	4.9	12
97	A volumetric meter chip for point-of-care quantitative detection of bovine catalase for food safety control. *Analytica Chimica Acta*, **2016**, 935, 207-12	6.6	12

96	The relationship between thiol-acrylate photopolymerization kinetics and hydrogel mechanics: An improved model incorporating photobleaching and thiol-Michael addition. *Journal of the Mechanical Behavior of Biomedical Materials*, **2018**, 88, 160-169	4.1	12
95	Materials with Tunable Optical Properties for Wearable Epidermal Sensing in Health Monitoring.. *Advanced Materials*, **2022**, e2109055	24	12
94	Methacrylated gelatin-embedded fabrication of 3D graphene-supported CoO nanoparticles for water splitting. *Nanoscale*, **2019**, 11, 6866-6875	7.7	11
93	Control of fibroblast shape in sequentially formed 3D hybrid hydrogels regulates cellular responses to microenvironmental cues. *NPG Asia Materials*, **2020**, 12,	10.3	11
92	Non-contact tensile viscoelastic characterization of microscale biological materials. *Acta Mechanica Sinica/Lixue Xuebao*, **2018**, 34, 589-599	2	11
91	Anisotropic conductive reduced graphene oxide/silk matrices promote post-infarction myocardial function by restoring electrical integrity. *Acta Biomaterialia*, **2021**, 139, 190-190	10.8	11
90	Numerical analysis of the Rayleigh Taylor instability in an electric field. *Journal of Fluid Mechanics*, **2016**, 792, 397-434	3.7	11
89	The protective effects of acupoint gel embedding on rats with myocardial ischemia-reperfusion injury. *Life Sciences*, **2018**, 211, 51-62	6.8	11
88	A modified energy transfer model for determination of upconversion emission of NaYF 4 :Yb,Er: Role of self-quenching effect. *Journal of Luminescence*, **2017**, 185, 292-297	3.8	10
87	Paper-based capacitive sensors for identification and quantification of chemicals at the point of care. *Talanta*, **2017**, 165, 419-428	6.2	10
86	Matrix stiffness controls cardiac fibroblast activation through regulating YAP via AT R. *Journal of Cellular Physiology*, **2020**, 235, 8345-8357	7	10
85	An improved detection limit and working range of lateral flow assays based on a mathematical model. *Analyst, The*, **2018**, 143, 2775-2783	5	10
84	Regulation of Cell Behavior by Hydrostatic Pressure. *Applied Mechanics Reviews*, **2019**, 71, 0408031-040803	8.6	10
83	Recent advances in bitterness evaluation methods. *Analytical Methods*, **2012**, 4, 599	3.2	10
82	Liquid Plasticine Integrated with Isoelectric Focusing for Miniaturized Protein Analysis. *Analytical Chemistry*, **2020**, 92, 9048-9056	7.8	9
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