Xiaolong Luo

List of Publications by Citations

39 papers	951 citations	17 h-index	30 g-index
43 ext. papers	1,081 ext. citations	5.1 avg, IF	4 L-index

#	Paper	IF	Citations
39	In situ quantitative visualization and characterization of chitosan electrodeposition with paired sidewall electrodes. *Soft Matter*, **2010**, 6, 3177	3.6	130
38	Mechanism of anodic electrodeposition of calcium alginate. *Soft Matter*, **2011**, 7, 5677	3.6	86
37	Biofabrication: programmable assembly of polysaccharide hydrogels in microfluidics as biocompatible scaffolds. *Journal of Materials Chemistry*, **2012**, 22, 7659		71
36	Chitosan-mediated in situ biomolecule assembly in completely packaged microfluidic devices. *Lab on A Chip*, **2006**, 6, 1315-21	7.2	63
35	Biocompatible multi-address 3D cell assembly in microfluidic devices using spatially programmable gel formation. *Lab on A Chip*, **2011**, 11, 2316-8	7.2	56
34	Electroaddressing Functionalized Polysaccharides as Model Biofilms for Interrogating Cell Signaling. *Advanced Functional Materials*, **2012**, 22, 519-528	15.6	52
33	In situ generation of pH gradients in microfluidic devices for biofabrication of freestanding, semi-permeable chitosan membranes. *Lab on A Chip*, **2010**, 10, 59-65	7.2	50
32	Programmable assembly of a metabolic pathway enzyme in a pre-packaged reusable bioMEMS device. *Lab on A Chip*, **2008**, 8, 420-30	7.2	49
31	Biofabrication of stratified biofilm mimics for observation and control of bacterial signaling. *Biomaterials*, **2012**, 33, 5136-43	15.6	39
30	Anisotropic, Mesoporous Microfluidic Frameworks with Scalable, Aligned Cellulose Nanofibers. *ACS Applied Materials & Interfaces*, **2018**, 10, 7362-7370	9.5	33
29	Optically clear alginate hydrogels for spatially controlled cell entrapment and culture at microfluidic electrode surfaces. *Lab on A Chip*, **2013**, 13, 1854-8	7.2	33
28	Biological nanofactories facilitate spatially selective capture and manipulation of quorum sensing bacteria in a bioMEMS device. *Lab on A Chip*, **2010**, 10, 1128-34	7.2	31
27	Protein assembly onto patterned microfabricated devices through enzymatic activation of fusion pro-tag. *Biotechnology and Bioengineering*, **2008**, 99, 499-507	4.9	31
26	Distal modulation of bacterial cell-cell signalling in a synthetic ecosystem using partitioned microfluidics. *Lab on A Chip*, **2015**, 15, 1842-51	7.2	26
25	Air bubble-initiated biofabrication of freestanding, semi-permeable biopolymer membranes in PDMS microfluidics. *Biochemical Engineering Journal*, **2014**, 89, 2-9	4.2	19
24	Steering air bubbles with an add-on vacuum layer for biopolymer membrane biofabrication in PDMS microfluidics. *Lab on A Chip*, **2017**, 17, 248-255	7.2	18
23	Conferring biological activity to native spider silk: A biofunctionalized protein-based microfiber. *Biotechnology and Bioengineering*, **2017**, 114, 83-95	4.9	17

22	Microfluidic partition with in situ biofabricated semipermeable biopolymer membranes for static gradient generation. *Lab on A Chip*, **2016**, 16, 3815-3823	7.2	15
21	Perspectives in flow-based microfluidic gradient generators for characterizing bacterial chemotaxis. *Biomicrofluidics*, **2016**, 10, 061301	3.2	15
20	Oral mucosa-on-a-chip to assess layer-specific responses to bacteria and dental materials. *Biomicrofluidics*, **2018**, 12, 054106	3.2	15
19	Modulating the properties of flow-assembled chitosan membranes in microfluidics with glutaraldehyde crosslinking. *Journal of Materials Chemistry B*, **2020**, 8, 2519-2529	7.3	13
18	Design optimization for bioMEMS studies of enzyme-controlled metabolic pathways. *Biomedical Microdevices*, **2008**, 10, 899-908	3.7	12
17	Magnetic nanoparticle-loaded alginate beads for local micro-actuation of in vitro tissue constructs. *Colloids and Surfaces B: Biointerfaces*, **2017**, 159, 945-955	6	10
16	Integrated biofabrication for electro-addressed in-film bioprocessing. *Biotechnology Journal*, **2012**, 7, 428-39	5.6	10
15	Tuning the porosity of biofabricated chitosan membranes in microfluidics with co-assembled nanoparticles as templates. *Materials Advances*, **2020**, 1, 34-44	3.3	9
14	Constructing Synthetic Ecosystems with Biopolymer Fluitrodes. *Advanced Biology*, **2018**, 2, 1700180	3.5	9
13	Interfacial Electrofabrication of Freestanding Biopolymer Membranes with Distal Electrodes. *Langmuir*, **2020**, 36, 11034-11043	4	6
12	Microfluidic fabrication of stable collagen microgels with aligned microstructure using flow-driven co-deposition and ionic gelation. *Journal of Micromechanics and Microengineering*, **2020**, 30, 085002	2	5
11	Microstructural densification and alignment by aspiration-ejection influence cancer cell interactions with three-dimensional collagen networks. *Biotechnology and Bioengineering*, **2020**, 117, 1826-1838	4.9	5
10	A simple and reusable bilayer membrane-based microfluidic device for the study of gradient-mediated bacterial behaviors. *Biomicrofluidics*, **2017**, 11, 044114	3.2	5
9	An Oral-mucosa-on-a-chip sensitively evaluates cell responses to dental monomers. *Biomedical Microdevices*, **2021**, 23, 7	3.7	5
8	Chemotropism among populations of yeast cells with spatiotemporal resolution in a biofabricated microfluidic platform. *Biomicrofluidics*, **2020**, 14, 014108	3.2	4
7	Flow-assembled chitosan membranes in microfluidics: recent advances and applications. *Journal of Materials Chemistry B*, **2021**, 9, 3258-3283	7.3	4
6	A simple capillary viscometer based on the ideal gas law.. *RSC Advances*, **2018**, 8, 30441-30447	3.7	2
5	Bridging the bio-electronic interface with biofabrication. *Journal of Visualized Experiments*, **2012**, e4231	1.6	1

4	Dual-modality digital holographic and polarization microscope to quantify phase and birefringence signals in biospecimens with a complex microstructure.. *Biomedical Optics Express*, **2022**, 13, 805-823	3.5	1
3	Mechanism and Direct Visualization of Electrodeposition of the Polysaccharide Chitosan. *IFMBE Proceedings*, **2010**, 401-403	0.2	
2	Integration of Diverse Biological Materials in Micro/Nano Devices. *NATO Science for Peace and Security Series B: Physics and Biophysics*, **2010**, 275-285	0.2	
1	Fabrication and Characterization of Porous Flow-Assembled Chitosan Membranes in Microfluidics. *IFMBE Proceedings*, **2022**, 383-392	0.2	