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List of Publications by Year
in descending order

39 papers	1,959 citations	257450 24 h-index	315739 38 g-index
39 all docs	39 docs citations	39 times ranked	2787 citing authors

#	Article	IF	Citations
1	Longâ€term maintenance of a microfluidic 3D human liver sinusoid. Biotechnology and Bioengineering, 2016, 113, 241-246.	3.3	164
2	Supercooling enables long-term transplantation survival following 4 days of liver preservation. Nature Medicine, 2014, 20, 790-793.	30.7	153
3	InÂvitro platforms for evaluating liver toxicity. Experimental Biology and Medicine, 2014, 239, 1180-1191.	2.4	145
4	Simple Surface Modification of Poly(dimethylsiloxane) via Surface Segregating Smart Polymers for Biomicrofluidics. Scientific Reports, 2019, 9, 7377.	3.3	144
5	Recent advances in nonbiofouling PDMS surface modification strategies applicable to microfluidic technology. Technology, 2017, 05, 1-12.	1.4	120
6	Generation and manipulation of hydrogel microcapsules by droplet-based microfluidics for mammalian cell culture. Lab on A Chip, 2017, 17, 1913-1932.	6.0	110
7	Lattice-Boltzmann simulations of the dynamics of polymer solutions in periodic and confined geometries. Journal of Chemical Physics, 2005, 122, 094902.	3.0	103
8	Metabolic Patterning on a Chip: Towards in vitro Liver Zonation of Primary Rat and Human Hepatocytes. Scientific Reports, 2018, 8, 8951.	3.3	90
9	Dynamic interplay of flow and collagen stabilizes primary hepatocytes culture in a microfluidic platform. Lab on A Chip, 2014, 14, 2033-2039.	6.0	88
10	Flow-induced migration of polymers in dilute solution. Physics of Fluids, 2006, 18, 031703.	4.0	85
11	Long-term deep-supercooling of large-volume water and red cell suspensions via surface sealing with immiscible liquids. Nature Communications, 2018, 9, 3201.	12.8	64
12	Transverse Migration of a Confined Polymer Driven by an External Force. Physical Review Letters, 2007, 98, 098301.	7.8	57
13	Towards a three-dimensional microfluidic liver platform for predicting drug efficacy and toxicity in humans. Stem Cell Research and Therapy, 2013, 4, S16.	5.5	54
14	A Microfabricated Platform for Generating Physiologically-Relevant Hepatocyte Zonation. Scientific Reports, 2016, 6, 26868.	3.3	53
15	Designing Oscillating Cilia That Capture or Release Microscopic Particles. Langmuir, 2010, 26, 2963-2968.	3.5	50
16	Flow injection of polymers into nanopores. Soft Matter, 2009, 5, 4575.	2.7	42
17	Kinetic theory of a confined polymer driven by an external force and pressure-driven flow. Physics of Fluids, 2007, 19, .	4.0	36
18	Progressive hypoxiaâ€onâ€aâ€chip: An in vitro oxygen gradient model for capturing the effects of hypoxia on primary hepatocytes in health and disease. Biotechnology and Bioengineering, 2020, 117, 763-775.	3.3	36

#	Article	IF	Citations
19	Modeling Microcapsules That Communicate through Nanoparticles To Undergo Self-Propelled Motion. ACS Nano, 2008, 2, 471-476.	14.6	35
20	Propulsion and Trapping of Microparticles by Active Cilia Arrays. Langmuir, 2012, 28, 3217-3226.	3.5	35
21	A microfluidic patterned model of non-alcoholic fatty liver disease: applications to disease progression and zonation. Lab on A Chip, 2019, 19, 3022-3031.	6.0	35
22	Polyethylene glycol protects primary hepatocytes during supercooling preservation. Cryobiology, 2015, 71, 125-129.	0.7	33
23	Supercooling as a Viable Non-Freezing Cell Preservation Method of Rat Hepatocytes. PLoS ONE, 2013, 8, e69334.	2.5	32
24	Dose-, treatment- and time-dependent toxicity of superparamagnetic iron oxide nanoparticles on primary rat hepatocytes. Nanomedicine, 2018, 13, 1267-1284.	3.3	29
25	Fork in the Road:â€‰ Patterned Surfaces Direct Microcapsules to Make a Decision. Langmuir, 2007, 23, 10887-10890.	3.5	24
26	A novel ultrathin collagen nanolayer assembly for 3-D microtissue engineering: Layer-by-layer collagen deposition for long-term stable microfluidic hepatocyte culture. Technology, 2014, 02, 67-74.	1.4	22
27	New technologies in drug metabolism and toxicity screening: organ-to-organ interaction. Expert Opinion on Drug Metabolism and Toxicology, 2016, 12, 475-477.	3.3	18
28	Deep-supercooling for extended preservation of adipose-derived stem cells. Cryobiology, 2020, 92, 67-75.	0.7	17
29	Shear and extensional deformation of droplets containing polymers and nanoparticles. Journal of Chemical Physics, 2009, 130, 234905.	3.0	14
30	A comparison of hepato-cellular in vitro platforms to study CYP3A4 induction. PLoS ONE, 2020, 15, e0229106.	2.5	14
31	CYP450 drug inducibility in NAFLD via an in vitro hepatic model: Understanding drug-drug interactions in the fatty liver. Biomedicine and Pharmacotherapy, 2022, 146, 112377.	5.6	11
32	Self-Sustained Motion of a Train of Haptotactic Microcapsules. Langmuir, 2009, 25, 9644-9647.	3.5	10
33	Selective Inactivation ofPseudomonas aeruginosaandStaphylococcus epidermidiswith Pulsed Electric Fields and Antibiotics. Advances in Wound Care, 2019, 8, 136-148.	5.1	8
34	Designing patterned substrates to regulate the movement of capsules in microchannels. Journal of Chemical Physics, 2008, 128, 235102.	3.0	7
35	Rapid maturation of the hepatic cell line Huh7 via CDK inhibition for PXR dependent CYP450 metabolism and induction. Scientific Reports, 2019, 9, 15848.	3.3	7
36	Î²-Dispersion of blood during sedimentation. Scientific Reports, 2021, 11, 2642.	3.3	7

#	Article	IF	Citations
37	Layer-by-layer Collagen Deposition in Microfluidic Devices for Microtissue Stabilization. Journal of Visualized Experiments, 2015, , .	0.3	4
38	Effect of encapsulated polymers and nanoparticles on shear deformation of droplets. Soft Matter, 2009, 5, 850.	2.7	2
39	Using Actuated Cilia to Regulate Motion of Microscopic Particles. , 2010, , .		1