Zhen

List of Publications by Year
in descending order

23 papers	811 citations	623574 14 h-index	642610 23 g-index
23 all docs	23 docs citations	23 times ranked	1470 citing authors

#	Article	IF	Citations
1	In vitro cardiac tissue models: Current status and future prospects. Advanced Drug Delivery Reviews, 2016, 96, 203-213.	6.6	150
2	Generation of spatial-patterned early-developing cardiac organoids using human pluripotent stem cells. Nature Protocols, 2018, 13, 723-737.	5.5	121
3	Three-dimensional filamentous human diseased cardiac tissue model. Biomaterials, 2014, 35, 1367-1377.	5.7	102
4	Contractile deficits in engineered cardiac microtissues as a result of MYBPC3 deficiency and mechanical overload. Nature Biomedical Engineering, 2018, 2, 955-967.	11.6	82
5	Engineering spatial-organized cardiac organoids for developmental toxicity testing. Stem Cell Reports, 2021, 16, 1228-1244.	2.3	47
6	A combined hiPSC-derived endothelial cell and in vitro microfluidic platform for assessing biomaterial-based angiogenesis. Biomaterials, 2019, 194, 73-83.	5.7	41
7	Role of the Basement Membrane in Regulation of Cardiac Electrical Properties. Annals of Biomedical Engineering, 2014, 42, 1148-1157.	1.3	36
8	Mesenchymal Stem Cell-Cardiomyocyte Interactions under Defined Contact Modes on Laser-Patterned Biochips. PLoS ONE, 2013, 8, e56554.	1.1	36
9	Myosin filament assembly onto myofibrils in live neonatal cardiomyocytes observed by TPEF-SHG microscopy. Cardiovascular Research, 2013, 97, 262-270.	1.8	30
10	Biomaterial-guided stem cell organoid engineering for modeling development and diseases. Acta Biomaterialia, 2021, 132, 23-36.	4.1	27
11	Laser-assisted biofabrication in tissue engineering and regenerative medicine. Journal of Materials Research, 2017, 32, 128-142.	1.2	20
12	Progressive Myofibril Reorganization of Human Cardiomyocytes on a Dynamic Nanotopographic Substrate. ACS Applied Materials & Interfaces, 2020, 12, 21450-21462.	4.0	20
13	Stimuli-responsive biomaterials for cardiac tissue engineering and dynamic mechanobiology. APL Bioengineering, 2021, 5, 011506.	3.3	20
14	Laser-guidance based detection of cells with single-gene modification. Applied Physics Letters, 2008, 92, 213902.	1.5	17
15	Micro-engineered architected metamaterials for cell and tissue engineering. Materials Today Advances, 2022, 13, 100206.	2.5	15
16	Myofibrillogenesis in live neonatal cardiomyocytes observed with hybrid two-photon excitation fluorescence-second harmonic generation microscopy. Journal of Biomedical Optics, 2011, 16, 126012.	1.4	13
17	Maladaptive Contractility of 3D Human Cardiac Microtissues to Mechanical Nonuniformity. Advanced Healthcare Materials, 2020, 9, e1901373.	3.9	12
18	Quantitatively characterizing drugâ€induced arrhythmic contractile motions of human stem cellâ€derived cardiomyocytes. Biotechnology and Bioengineering, 2018, 115, 1958-1970.	1.7	5

#	Article	IF	Citations
19	Serum-Free Manufacturing of Mesenchymal Stem Cell Tissue Rings Using Human-Induced Pluripotent Stem Cells. Stem Cells International, 2019, 2019, 1-11.	1.2	4
20	Profiling the responsiveness of focal adhesions of human cardiomyocytes to extracellular dynamic nano-topography. Bioactive Materials, 2022, 10, 367-377.	8.6	4
21	Integrating nonlinear analysis and machine learning for human induced pluripotent stem cellâ€based drug cardiotoxicity testing. Journal of Tissue Engineering and Regenerative Medicine, 2022, 16, 732-743.	1.3	4
22	Remodeling of Architected Mesenchymal Microtissues Generated on Mechanical Metamaterials. 3D Printing and Additive Manufacturing, 2022, 9, 483-489.	1.4	3
23	Architected mechanical designs in tissue engineering. MRS Communications, 2020, 10, 379-390.	0.8	2