

Junmin Lee

List of Publications by Year in descending order

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Version: 2024-02-01

60
papers

2,802
citations

159358

30
h-index

182168

51
g-index

68
all docs

68
docs citations

68
times ranked

4257
citing authors

#	ARTICLE	IF	CITATIONS
1	Directing stem cell fate on hydrogel substrates by controlling cell geometry, matrix mechanics and adhesion ligand composition. <i>Biomaterials</i> , 2013, 34, 8140-8148.	5.7	238
2	Interfacial geometry dictates cancer cell tumorigenicity. <i>Nature Materials</i> , 2016, 15, 856-862.	13.3	156
3	Rewiring mesenchymal stem cell lineage specification by switching the biophysical microenvironment. <i>Scientific Reports</i> , 2014, 4, 5188.	1.6	120
4	Highly Mobile Palladium Thin Films on an Elastomeric Substrate: Nanogap-Based Hydrogen Gas Sensors. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 5301-5305.	7.2	116
5	Gelatin Methacryloyl-Based Tactile Sensors for Medical Wearables. <i>Advanced Functional Materials</i> , 2020, 30, 2003601.	7.8	112
6	Organ-on-a-Chip for Cancer and Immune Organs Modeling. <i>Advanced Healthcare Materials</i> , 2019, 8, e1801363.	3.9	111
7	Gelatin Methacryloyl Microneedle Patches for Minimally Invasive Extraction of Skin Interstitial Fluid. <i>Small</i> , 2020, 16, e1905910.	5.2	104
8	Nanoparticle-Based Hybrid Scaffolds for Deciphering the Role of Multimodal Cues in Cardiac Tissue Engineering. <i>ACS Nano</i> , 2019, 13, 12525-12539.	7.3	101
9	Matrix Composition and Mechanics Direct Proangiogenic Signaling from Mesenchymal Stem Cells. <i>Tissue Engineering - Part A</i> , 2014, 20, 2737-2745.	1.6	97
10	Biodegradable Cyclodextrin Conjugated Gelatin Methacryloyl Microneedle for Delivery of Water-Insoluble Drug. <i>Advanced Healthcare Materials</i> , 2020, 9, e2000527.	3.9	91
11	A Patch of Detachable Hybrid Microneedle Depot for Localized Delivery of Mesenchymal Stem Cells in Regeneration Therapy. <i>Advanced Functional Materials</i> , 2020, 30, 2000086.	7.8	91
12	Non-transdermal microneedles for advanced drug delivery. <i>Advanced Drug Delivery Reviews</i> , 2020, 165-166, 41-59.	6.6	80
13	Controlling cell geometry on substrates of variable stiffness can tune the degree of osteogenesis in human mesenchymal stem cells. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 38, 209-218.	1.5	74
14	Temporal Modulation of Stem Cell Activity Using Magnetoactive Hydrogels. <i>Advanced Healthcare Materials</i> , 2016, 5, 2536-2544.	3.9	73
15	Electrochemical cytosensors for detection of breast cancer cells. <i>Biosensors and Bioelectronics</i> , 2020, 151, 111984.	5.3	69
16	Geometric guidance of integrin mediated traction stress during stem cell differentiation. <i>Biomaterials</i> , 2015, 69, 174-183.	5.7	65
17	Design Rules for Nanogap-Based Hydrogen Gas Sensors. <i>ChemPhysChem</i> , 2012, 13, 1395-1403.	1.0	58
18	A Heart-Breast Cancer-on-a-Chip Platform for Disease Modeling and Monitoring of Cardiotoxicity Induced by Cancer Chemotherapy. <i>Small</i> , 2021, 17, e2004258.	5.2	57

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19	Selenium and dopamine-crosslinked hyaluronic acid hydrogel for chemophotothermal cancer therapy. <i>Journal of Controlled Release</i> , 2020, 324, 750-764.	4.8	56
20	Hydrogel-Enabled Transfer-Printing of Conducting Polymer Films for Soft Organic Bioelectronics. <i>Advanced Functional Materials</i> , 2020, 30, 1906016.	7.8	55
21	Cardiac Fibrotic Remodeling on a Chip with Dynamic Mechanical Stimulation. <i>Advanced Healthcare Materials</i> , 2019, 8, e1801146.	3.9	54
22	Biofabrication of endothelial cell, dermal fibroblast, and multilayered keratinocyte layers for skin tissue engineering. <i>Biofabrication</i> , 2021, 13, 035030.	3.7	54
23	Matrix directed adipogenesis and neurogenesis of mesenchymal stem cells derived from adipose tissue and bone marrow. <i>Acta Biomaterialia</i> , 2016, 42, 46-55.	4.1	52
24	A Human Liver-on-a-Chip Platform for Modeling Nonalcoholic Fatty Liver Disease. <i>Advanced Biology</i> , 2019, 3, e1900104.	3.0	50
25	Influence of Biophysical Parameters on Maintaining the Mesenchymal Stem Cell Phenotype. <i>ACS Biomaterials Science and Engineering</i> , 2015, 1, 218-226.	2.6	43
26	Combinatorial screening of biochemical and physical signals for phenotypic regulation of stem cell-based cartilage tissue engineering. <i>Science Advances</i> , 2020, 6, eaaz5913.	4.7	42
27	Gas Sensing performance of composite materials using conducting polymer/single-walled carbon nanotubes. <i>Macromolecular Research</i> , 2012, 20, 143-146.	1.0	36
28	Serially pH-Modulated Hydrogels Based on Boronate Ester and Polydopamine Linkages for Local Cancer Therapy. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 2189-2203.	4.0	36
29	Mechanochemical functionalization of disulfide linked hydrogels. <i>Materials Horizons</i> , 2016, 3, 447-451.	6.4	33
30	Ferrous sulfate-directed dual-cross-linked hyaluronic acid hydrogels with long-term delivery of donepezil. <i>International Journal of Pharmaceutics</i> , 2020, 582, 119309.	2.6	33
31	Multi-layered cellulose nanocrystal system for CD44 receptor-positive tumor-targeted anticancer drug delivery. <i>International Journal of Biological Macromolecules</i> , 2020, 162, 798-809.	3.6	31
32	In Vitro Human Liver Model of Nonalcoholic Steatohepatitis by Coculturing Hepatocytes, Endothelial Cells, and Kupffer Cells. <i>Advanced Healthcare Materials</i> , 2019, 8, e1901379.	3.9	30
33	Cancer-on-a-Chip for Modeling Immune Checkpoint Inhibitor and Tumor Interactions. <i>Small</i> , 2021, 17, e2004282.	5.2	30
34	Polypseudorotaxane and polydopamine linkage-based hyaluronic acid hydrogel network with a single syringe injection for sustained drug delivery. <i>Carbohydrate Polymers</i> , 2021, 266, 118104.	5.1	29
35	Capturing extracellular matrix properties in vitro: Microengineering materials to decipher cell and tissue level processes. <i>Experimental Biology and Medicine</i> , 2016, 241, 930-938.	1.1	25
36	Melanoma topology reveals a stem-like phenotype that promotes angiogenesis. <i>Science Advances</i> , 2017, 3, e1701350.	4.7	25

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37	Mechanical Cues Regulating Proangiogenic Potential of Human Mesenchymal Stem Cells through YAP-Mediated Mechanosensing. <i>Small</i> , 2020, 16, e2001837.	5.2	25
38	Monopotassium phosphate-reinforced in situ forming injectable hyaluronic acid hydrogels for subcutaneous injection. <i>International Journal of Biological Macromolecules</i> , 2020, 163, 2134-2144.	3.6	24
39	Co-Electrospun Silk Fibroin and Gelatin Methacryloyl Sheet Seeded with Mesenchymal Stem Cells for Tendon Regeneration. <i>Small</i> , 2022, 18, e2107714.	5.2	23
40	Cell shape and the presentation of adhesion ligands guide smooth muscle myogenesis. <i>Journal of Biomedical Materials Research - Part A</i> , 2016, 104, 1212-1220.	2.1	20
41	Bioengineered Multicellular Liver Microtissues for Modeling Advanced Hepatic Fibrosis Driven Through Non-Alcoholic Fatty Liver Disease. <i>Small</i> , 2021, 17, e2007425.	5.2	20
42	Geometric regulation of histone state directs melanoma reprogramming. <i>Communications Biology</i> , 2020, 3, 341.	2.0	19
43	A Microfabricated Sandwiching Assay for Nanoliter and High-Throughput Biomarker Screening. <i>Small</i> , 2019, 15, e1900300.	5.2	18
44	Iron sulfate-reinforced hydrogel reactors with glucose deprivation, serial reactive oxygen species generation, ferroptosis induction, and photothermal ablation for cancer therapy. <i>Chemical Engineering Journal</i> , 2022, 438, 135584.	6.6	17
45	Submolecular Ligand Size and Spacing for Cell Adhesion. <i>Advanced Materials</i> , 2022, 34, e2110340.	11.1	13
46	Rhodamine Conjugated Gelatin Methacryloyl Nanoparticles for Stable Cell Imaging. <i>ACS Applied Bio Materials</i> , 2020, 3, 6908-6918.	2.3	12
47	Combinatorial Discovery of Defined Substrates That Promote a Stem Cell State in Malignant Melanoma. <i>ACS Central Science</i> , 2017, 3, 381-393.	5.3	11
48	Gradient and Dynamic Hydrogel Materials to Probe Dynamics in Cancer Stem Cell Phenotypes. <i>ACS Applied Bio Materials</i> , 2021, 4, 711-720.	2.3	9
49	Cytoskeletal Priming of Mesenchymal Stem Cells to a Medicinal Phenotype. <i>Regenerative Engineering and Translational Medicine</i> , 2017, 3, 5-14.	1.6	7
50	Wearable Tactile Sensors: Gelatin Methacryloyl-Based Tactile Sensors for Medical Wearables (Adv. Mater. 2020, 32, 1907005).	7.8	6
51	Engineering liver microtissues to study the fusion of HepG2 with mesenchymal stem cells and invasive potential of fused cells. <i>Biofabrication</i> , 2022, 14, 014104.	3.7	5
52	Microneedle Patches: Gelatin Methacryloyl Microneedle Patches for Minimally Invasive Extraction of Skin Interstitial Fluid (<i>Small</i> 16/2020). <i>Small</i> , 2020, 16, 2070086.	5.2	4
53	Synthetic Biomaterials to Rival Nature's Complexity—a Path Forward with Combinatorics, High-Throughput Discovery, and High-Content Analysis. <i>Advanced Healthcare Materials</i> , 2017, 6, 1700535.	3.9	3
54	Hall of Fame Article: Minimally Invasive and Regenerative Therapeutics (Adv. Mater. 1/2019). <i>Advanced Materials</i> , 2019, 31, 1970005.	11.1	2

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55	Hydrogelâ€Enabled Transfer Printing: Hydrogelâ€Enabled Transferâ€Printing of Conducting Polymer Films for Soft Organic Bioelectronics (Adv. Funct. Mater. 6/2020). Advanced Functional Materials, 2020, 30, 2070038.	7.8	2
56	Highâ€Throughput Drug Screening: A Microfabricated Sandwiching Assay for Nanoliter and Highâ€Throughput Biomarker Screening (Small 15/2019). Small, 2019, 15, 1970078.	5.2	1
57	Titelbild: Highly Mobile Palladium Thin Films on an Elastomeric Substrate: Nanogap-Based Hydrogen Gas Sensors (Angew. Chem. 23/2011). Angewandte Chemie, 2011, 123, 5335-5335.	1.6	0
58	Cover Picture: Highly Mobile Palladium Thin Films on an Elastomeric Substrate: Nanogap-Based Hydrogen Gas Sensors (Angew. Chem. Int. Ed. 23/2011). Angewandte Chemie - International Edition, 2011, 50, 5227-5227.	7.2	0
59	Angiogenesis: Mechanical Cues Regulating Proangiogenic Potential of Human Mesenchymal Stem Cells through YAPâ€Mediated Mechanosensing (Small 25/2020). Small, 2020, 16, 2070142.	5.2	0
60	Organâ€onâ€aâ€Chip: A Heartâ€Breast Cancerâ€onâ€aâ€Chip Platform for Disease Modeling and Monitoring of Cardiotoxicity Induced by Cancer Chemotherapy (Small 15/2021). Small, 2021, 17, 2170070.	5.2	0