Deok-Ho Kim

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5740800/publications.pdf

Version: 2024-02-01

166 papers	12,731 citations	28272 55 h-index	25787 108 g-index
179 all docs	179 docs citations	179 times ranked	16538 citing authors

#	Article	IF	Citations
1	Printing three-dimensional tissue analogues with decellularized extracellular matrix bioink. Nature Communications, 2014, 5, 3935.	12.8	1,434
2	3D bioprinting for engineering complex tissues. Biotechnology Advances, 2016, 34, 422-434.	11.7	1,240
3	Nanoscale cues regulate the structure and function of macroscopic cardiac tissue constructs. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 565-570.	7.1	541
4	Matrix nanotopography as a regulator of cell function. Journal of Cell Biology, 2012, 197, 351-360.	5.2	522
5	Microengineered Platforms for Cell Mechanobiology. Annual Review of Biomedical Engineering, 2009, 11, 203-233.	12.3	378
6	Nanotopography-guided tissue engineering and regenerative medicine. Advanced Drug Delivery Reviews, 2013, 65, 536-558.	13.7	346
7	Mechanosensitivity of fibroblast cell shape and movement to anisotropic substratum topography gradients. Biomaterials, 2009, 30, 5433-5444.	11.4	323
8	A biomimetic undulatory tadpole robot using ionic polymerâ€“metal composite actuators. Smart Materials and Structures, 2005, 14, 1579-1585.	3.5	239
9	Control of stem cell fate and function by engineering physical microenvironments. Integrative Biology (United Kingdom), 2012, 4, 1008-1018.	1.3	226
10	Anisotropic forces from spatially constrained focal adhesions mediate contact guidance directed cell migration. Nature Communications, 2017, 8, 14923.	12.8	221
11	Directed migration of cancer cells guided by the graded texture of the underlying matrix. Nature Materials, 2016, 15, 792-801.	27.5	190
12	Guided Cell Migration on Microtextured Substrates with Variable Local Density and Anisotropy. Advanced Functional Materials, 2009, 19, 1579-1586.	14.9	173
13	Fabrication of nanostructures of polyethylene glycol for applications to protein adsorption and cell adhesion. Nanotechnology, 2005, 16, 2420-2426.	2.6	161
14	Nanotopography-Induced Structural Anisotropy and Sarcomere Development in Human Cardiomyocytes Derived from Induced Pluripotent Stem Cells. ACS Applied Materials & Interfaces, 2016, 8, 21923-21932.	8.0	155
15	Biomimetic Nanopatterns as Enabling Tools for Analysis and Control of Live Cells. Advanced Materials, 2010, 22, 4551-4566.	21.0	149
16	Dynamically tunable cell culture platforms for tissue engineering and mechanobiology. Progress in Polymer Science, 2017, 65, 53-82.	24.7	149
17	A superelastic alloy microgripper with embedded electromagnetic actuators and piezoelectric force sensors: a numerical and experimental study. Smart Materials and Structures, 2005, 14, 1265-1272.	3.5	148
18	Bioactive effects of graphene oxide cell culture substratum on structure and function of human adiposeâ€derived stem cells. Journal of Biomedical Materials Research - Part A, 2013, 101, 3520-3530.	4.0	148

#	Article	IF	Citations
19	Lab-on-a-chip devices as an emerging platform for stem cell biology. Lab on A Chip, 2010, 10, 2019.	6.0	142
20	Regulation of Brain Tumor Dispersal by NKCC1 Through a Novel Role in Focal Adhesion Regulation. PLoS Biology, 2012, 10, e1001320.	5.6	140
21	Patterning Methods for Polymers in Cell and Tissue Engineering. Annals of Biomedical Engineering, 2012, 40, 1339-1355.	2.5	140
22	Development of a piezoelectric polymer-based sensorized microgripper for microassembly and micromanipulation. Microsystem Technologies, 2004, 10, 275-280.	2.0	134
23	Designing nanotopographical density of extracellular matrix for controlled morphology and function of human mesenchymal stem cells. Scientific Reports, 2013, 3, 3552.	3.3	129
24	Biomimetic 3D Tissue Models for Advanced High-Throughput Drug Screening. Journal of the Association for Laboratory Automation, 2015, 20, 201-215.	2.8	129
25	Engineering neuronal growth cones to promote axon regeneration over inhibitory molecules. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5057-5062.	7.1	127
26	Spatial control of adult stem cell fate using nanotopographic cues. Biomaterials, 2014, 35, 2401-2410.	11.4	120
27	Human iPSC-derived cardiomyocytes and tissue engineering strategies for disease modeling and drug screening. Biotechnology Advances, 2017, 35, 77-94.	11.7	120
28	Metal oxide modified ZnO nanomaterials for biosensor applications. Nano Convergence, 2018, 5, 27.	12.1	119
29	Guided Three-Dimensional Growth of Functional Cardiomyocytes on Polyethylene Glycol Nanostructures. Langmuir, 2006, 22, 5419-5426.	3.5	117
30	Molecular networks underlying myofibroblast fate and fibrosis. Journal of Molecular and Cellular Cardiology, 2016, 97, 153-161.	1.9	115
31	Nanopatterned cardiac cell patches promote stem cell niche formation and myocardial regeneration. Integrative Biology (United Kingdom), 2012, 4, 1019.	1.3	112
32	3D bioprinting of mechanically tuned bioinks derived from cardiac decellularized extracellular matrix. Acta Biomaterialia, 2021, 119, 75-88.	8.3	110
33	Synergistically Enhanced Osteogenic Differentiation of Human Mesenchymal Stem Cells by Culture on Nanostructured Surfaces with Induction Media. Biomacromolecules, 2010, 11, 1856-1862.	5.4	109
34	Switch-like enhancement of epithelial-mesenchymal transition by YAP through feedback regulation of WT1 and Rho-family GTPases. Nature Communications, 2019, 10, 2797.	12.8	105
35	Topotaxis: A New Mechanism of Directed Cell Migration in Topographic ECM Gradients. Biophysical Journal, 2018, 114, 1257-1263.	0.5	97
36	A Nontranscriptional Role for HIF-1Î± as a Direct Inhibitor of DNA Replication. Science Signaling, 2013, 6, ra10.	3.6	95

#	Article	IF	Citations
37	Microfluidics-assisted in vitro drug screening and carrier production. Advanced Drug Delivery Reviews, 2013, 65, 1575-1588.	13.7	92
38	Nanopatterned muscle cell patches for enhanced myogenesis and dystrophin expression in a mouse model of muscular dystrophy. Biomaterials, 2014, 35, 1478-1486.	11.4	90
39	Micro- and nano-patterned conductive grapheneâ€“PEG hybrid scaffolds for cardiac tissue engineering. Chemical Communications, 2017, 53, 7412-7415.	4.1	90
40	Conductive silkâ€“polypyrrole composite scaffolds with bioinspired nanotopographic cues for cardiac tissue engineering. Journal of Materials Chemistry B, 2018, 6, 7185-7196.	5.8	85
41	Micro- and nanoengineering for stem cell biology: the promise with a caution. Trends in Biotechnology, 2011, 29, 399-408.	9.3	78
42	TFPa/HADHA is required for fatty acid beta-oxidation and cardiolipin re-modeling in human cardiomyocytes. Nature Communications, 2019, 10, 4671.	12.8	77
43	Isolation and Mechanical Measurements of Myofibrils from Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes. Stem Cell Reports, 2016, 6, 885-896.	4.8	75
44	Effect of self-assembled peptide–mesenchymal stem cell complex on the progression of osteoarthritis in a rat model. International Journal of Nanomedicine, 2014, 9 Suppl 1, 141.	6.7	74
45	Mechanical Analysis of Chorion Softening in Prehatching Stages of Zebrafish Embryos. IEEE Transactions on Nanobioscience, 2006, 5, 89-94.	3.3	73
46	Electroconductive Nanopatterned Substrates for Enhanced Myogenic Differentiation and Maturation. Advanced Healthcare Materials, 2016, 5, 137-145.	7.6	71
47	Enhanced Chondrogenic Differentiation of Dental Pulp Stem Cells Using Nanopatterned PEG-GelMA-HA Hydrogels. Tissue Engineering - Part A, 2014, 20, 2817-2829.	3.1	70
48	Periostin is a novel therapeutic target that predicts and regulates glioma malignancy. Neuro-Oncology, 2015, 17, 372-382.	1.2	69
49	Fabrication of poly(ethylene glycol): gelatin methacrylate composite nanostructures with tunable stiffness and degradation for vascular tissue engineering. Biofabrication, 2014, 6, 024112.	7.1	65
50	Applications, techniques, and microfluidic interfacing for nanoscale biosensing. Microfluidics and Nanofluidics, 2009, 7, 149-167.	2.2	64
51	Microfluidic approaches for gene delivery and gene therapy. Lab on A Chip, 2011, 11, 3941.	6.0	64
52	Migration Phenotype of Brain-Cancer Cells Predicts Patient Outcomes. Cell Reports, 2016, 15, 2616-2624.	6.4	63
53	Novel Adult-Onset Systolic Cardiomyopathy Due to MYH7 E848G Mutation in Patient-Derived Induced Pluripotent Stem Cells. JACC Basic To Translational Science, 2018, 3, 728-740.	4.1	63
54	Cell Migration: Guided Cell Migration on Microtextured Substrates with Variable Local Density and Anisotropy (Adv. Funct. Mater. 10/2009). Advanced Functional Materials, 2009, 19, NA-NA.	14.9	62

#	Article	IF	Citations
55	Recent advances in three-dimensional microelectrode array technologies for in vitro and in vivo cardiac and neuronal interfaces. Biosensors and Bioelectronics, 2021, 171, 112687.	10.1	62
56	A neurovascular-unit-on-a-chip for the evaluation of the restorative potential of stem cell therapies for ischaemic stroke. Nature Biomedical Engineering, 2021, 5, 847-863.	22.5	62
57	Thermoresponsive Nanofabricated Substratum for the Engineering of Three-Dimensional Tissues with Layer-by-Layer Architectural Control. ACS Nano, 2014, 8, 4430-4439.	14.6	61
58	Matrix Rigidity Controls Endothelial Differentiation and Morphogenesis of Cardiac Precursors. Science Signaling, 2012, 5, ra41.	3.6	60
59	Tunable electroconductive decellularized extracellular matrix hydrogels for engineering human cardiac microphysiological systems. Biomaterials, 2021, 272, 120764.	11.4	60
60	Spatiotemporal control of cardiac anisotropy using dynamic nanotopographic cues. Biomaterials, 2016, 86, 1-10.	11.4	59
61	Initiated chemical vapor deposition of thermoresponsive poly(N-vinylcaprolactam) thin films for cell sheet engineering. Acta Biomaterialia, 2013, 9, 7691-7698.	8.3	57
62	Manipulation of cells using an ultrasonic pressure field. Ultrasound in Medicine and Biology, 2005, 31, 857-864.	1.5	56
63	Additive Manufacturing of Bovine Serum Albumin-Based Hydrogels and Bioplastics. Biomacromolecules, 2020, 21, 484-492.	5.4	56
64	Nanopatterned Human iPSC-Based Model of a Dystrophin-Null Cardiomyopathic Phenotype. Cellular and Molecular Bioengineering, 2015, 8, 320-332.	2.1	55
65	Combined Effects of Substrate Topography and Stiffness on Endothelial Cytokine and Chemokine Secretion. ACS Applied Materials & Interfaces, 2015, 7, 4525-4532.	8.0	53
66	Emerging nanotechnology approaches in tissue engineering and regenerative medicine. International Journal of Nanomedicine, 2014, 9 Suppl 1, 1.	6.7	52
67	Mechanochemical feedback underlies coexistence of qualitatively distinct cell polarity patterns within diverse cell populations. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E5750-E5759.	7.1	51
68	Cronos Titin Is Expressed in Human Cardiomyocytes and Necessary for Normal Sarcomere Function. Circulation, 2019, 140, 1647-1660.	1.6	50
69	Macrophage-Mediated Delivery of Multifunctional Nanotherapeutics for Synergistic Chemoâ€“Photothermal Therapy of Solid Tumors. ACS Applied Materials & Interfaces, 2020, 12, 10130-10141.	8.0	50
70	Synergistic Effects of Matrix Nanotopography and Stiffness on Vascular Smooth Muscle Cell Function. Tissue Engineering - Part A, 2014, 20, 2115-2126.	3.1	48
71	Absence of full-length dystrophin impairs normal maturation and contraction of cardiomyocytes derived from human-induced pluripotent stem cells. Cardiovascular Research, 2020, 116, 368-382.	3.8	47
72	Mechanoregulation of titanium dioxide nanoparticles in cancer therapy. Materials Science and Engineering C, 2020, 107, 110303.	7.3	47

#	Article	IF	Citations
73	Chromatin compartment dynamics in a haploinsufficient model of cardiac laminopathy. Journal of Cell Biology, 2019, 218, 2919-2944.	5.2	46
74	Human Microphysiological Models of Intestinal Tissue and Gut Microbiome. Frontiers in Bioengineering and Biotechnology, 2020, 8, 725.	4.1	46
75	Engineering Microphysiological Immune System Responses on Chips. Trends in Biotechnology, 2020, 38, 857-872.	9.3	45
76	Engineering approaches for effective therapeutic applications based on extracellular vesicles. Journal of Controlled Release, 2021, 330, 15-30.	9.9	45
77	Muscular dystrophy in a dish: engineered human skeletal muscle mimetics for disease modeling and drug discovery. Drug Discovery Today, 2016, 21, 1387-1398.	6.4	44
78	Multiscale Biofabrication of Articular Cartilage: Bioinspired and Biomimetic Approaches. Tissue Engineering - Part B: Reviews, 2015, 21, 543-559.	4.8	41
79	Multiscale Cues Drive Collective Cell Migration. Scientific Reports, 2016, 6, 29749.	3.3	40
80	Infarct Collagen Topography Regulates Fibroblast Fate via p38-Yes-Associated Protein Transcriptional Enhanced Associate Domain Signals. Circulation Research, 2020, 127, 1306-1322.	4.5	40
81	Endothelial thrombomodulin downregulation caused by hypoxia contributes to severe infiltration and coagulopathy in COVID-19 patient lungs. EBioMedicine, 2022, 75, 103812.	6.1	39
82	Charged Nanomatrices as Efficient Platforms for Modulating Cell Adhesion and Shape. Tissue Engineering - Part C: Methods, 2012, 18, 913-923.	2.1	34
83	A nanotopography approach for studying the structure-function relationships of cells and tissues. Cell Adhesion and Migration, 2015, 9, 300-307.	2.7	34
84	Fabrication of patterned micromuscles with high activity for powering biohybrid microdevices. Sensors and Actuators B: Chemical, 2006, 117, 391-400.	7.8	33
85	Factors mediating spaceflight-induced skeletal muscle atrophy. American Journal of Physiology - Cell Physiology, 2022, 322, C567-C580.	4.6	33
86	<scp>ADSSL</scp>1 mutation relevant to autosomal recessive adolescent onset distal myopathy. Annals of Neurology, 2016, 79, 231-243.	5.3	32
87	Self-assembling peptides for stem cell and tissue engineering. Biomaterials Science, 2016, 4, 543-554.	5.4	32
88	Microphysiological Systems as Enabling Tools for Modeling Complexity in the Tumor Microenvironment and Accelerating Cancer Drug Development. Advanced Functional Materials, 2019, 29, 1807553.	14.9	32
89	NanoMEA: A Tool for High-Throughput, Electrophysiological Phenotyping of Patterned Excitable Cells. Nano Letters, 2020, 20, 1561-1570.	9.1	32
90	Unraveling the Mechanobiology of the Immune System. Advanced Healthcare Materials, 2019, 8, e1801332.	7.6	31

#	Article	IF	Citations
91	Smooth shift control of automatic transmissions using a robust adaptive scheme with intelligent supervision. International Journal of Vehicle Design, 2003, 32, 250.	0.3	29
92	Simple haptotactic gradient generation within a triangular microfluidic channel. Lab on A Chip, 2010, 10, 2130.	6.0	28
93	Quantitative Analysis of the Combined Effect of Substrate Rigidity and Topographic Guidance on Cell Morphology. IEEE Transactions on Nanobioscience, 2012, 11, 28-36.	3.3	28
94	Engineering anisotropic 3D tubular tissues with flexible thermoresponsive nanofabricated substrates. Biomaterials, 2020, 240, 119856.	11.4	28
95	A flexible microassembly system based on hybrid manipulation scheme for manufacturing photonics components. International Journal of Advanced Manufacturing Technology, 2006, 28, 379-386.	3.0	26
96	Regulation of skeletal myotube formation and alignment by nanotopographically controlled cellâ€secreted extracellular matrix. Journal of Biomedical Materials Research - Part A, 2018, 106, 1543-1551.	4.0	26
97	Advanced micro- and nanofabrication technologies for tissue engineering. Biofabrication, 2014, 6, 020301.	7.1	25
98	A biomaterial approach to cell reprogramming and differentiation. Journal of Materials Chemistry B, 2017, 5, 2375-2389.	5.8	25
99	Investigating chorion softening of zebrafish embryos with a microrobotic force sensing system. Journal of Biomechanics, 2005, 38, 1359-1363.	2.1	24
100	Identification and Control of a Sensorized Microgripper for Micromanipulation. IEEE/ASME Transactions on Mechatronics, 2005, 10, 601-606.	5.8	24
101	Capillarity-assisted fabrication of nanostructures using a less permeable mold for nanotribological applications. Journal of Applied Physics, 2006, 100, 034303.	2.5	24
102	Capillary Force Lithography for Cardiac Tissue Engineering. Journal of Visualized Experiments, 2014, , .	0.3	22
103	Harnessing Sphingosine-1-Phosphate Signaling and Nanotopographical Cues To Regulate Skeletal Muscle Maturation and Vascularization. ACS Nano, 2017, 11, 11954-11968.	14.6	22
104	CRISPR Genome Engineering for Human Pluripotent Stem Cell Research. Theranostics, 2017, 7, 4445-4469.	10.0	22
105	Biomanufacturing in low Earth orbit for regenerative medicine. Stem Cell Reports, 2022, 17, 1-13.	4.8	22
106	Recognizing and tracking of 3D-shaped micro parts using multiple visions for micromanipulation. , 0, , .		21
107	Self-adjuvanted hyaluronate â€“ antigenic peptide conjugate for transdermal treatment of muscular dystrophy. Biomaterials, 2016, 81, 93-103.	11.4	21
108	Biomechanical interplay between anisotropic re-organization of cells and the surrounding matrix underlies transition to invasive cancer spread. Scientific Reports, 2018, 8, 14210.	3.3	19

#	Article	IF	Citations
109	Evaluation of the periodontal regenerative properties of patterned human periodontal ligament stem cell sheets. Journal of Periodontal and Implant Science, 2017, 47, 402.	2.0	18
110	Astrocyte-derived extracellular vesicles enhance the survival and electrophysiological function of human cortical neurons in vitro. Biomaterials, 2021, 271, 120700.	11.4	17
111	Syndecan-1 in mechanosensing of nanotopological cues in engineered materials. Biomaterials, 2018, 155, 13-24.	11.4	16
112	Engineering a 3D collective cancer invasion model with control over collagen fiber alignment. Biomaterials, 2021, 275, 120922.	11.4	16
113	Facile fabrication of tissue-engineered constructs using nanopatterned cell sheets and magnetic levitation. Nanotechnology, 2017, 28, 075103.	2.6	15
114	Mechanoregulation of Myofibroblast Fate and Cardiac Fibrosis. Advanced Biology, 2018, 2, 1700172.	3.0	15
115	Biomaterials-based Approaches for Cardiac Regeneration. Korean Circulation Journal, 2021, 51, 943.	1.9	15
116	Nanotopographical regulation of pancreatic islet-like cluster formation from human pluripotent stem cells using a gradient-pattern chip. Acta Biomaterialia, 2019, 95, 337-347.	8.3	14
117	Nanopatterned Nafion Microelectrode Arrays for In Vitro Cardiac Electrophysiology. Advanced Functional Materials, 2020, 30, 1910660.	14.9	14
118	Tomatidine-stimulated maturation of human embryonic stem cell-derived cardiomyocytes for modeling mitochondrial dysfunction. Experimental and Molecular Medicine, 2022, 54, 493-502.	7.7	14
119	Driving Load Estimation with the Use of an Estimated Turbine Torque. JSME International Journal Series C-Mechanical Systems Machine Elements and Manufacturing, 2006, 49, 163-171.	0.3	13
120	Human Induced Pluripotent Stem Cell-Derived TDP-43 Mutant Neurons Exhibit Consistent Functional Phenotypes Across Multiple Gene Edited Lines Despite Transcriptomic and Splicing Discrepancies. Frontiers in Cell and Developmental Biology, 2021, 9, 728707.	3.7	13
121	A multi-functional ammonia gas and strain sensor with 3D-printed thermoplastic polyurethane-polypyrrole composites. Polymer, 2022, 240, 124490.	3.8	13
122	Nanotopographic cues and stiffness control of tendon-derived stem cells from diverse conditions. International Journal of Nanomedicine, 2018, Volume 13, 7217-7227.	6.7	12
123	Engineering Three-Dimensional Vascularized Cardiac Tissues. Tissue Engineering - Part B: Reviews, 2022, 28, 336-350.	4.8	12
124	Human microphysiological models of airway and alveolar epithelia. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2021, 321, L1072-L1088.	2.9	12
125	HDAC6 Inhibition Corrects Electrophysiological and Axonal Transport Deficits in a Human Stem Cellâ€Based Model of Charcotâ€Marieâ€Tooth Disease (Type 2D). Advanced Biology, 2022, 6, e2101308.	2.5	12
126	Concise Review: Mechanotransduction via p190RhoGAP Regulates a Switch Between Cardiomyogenic and Endothelial Lineages in Adult Cardiac Progenitors. Stem Cells, 2014, 32, 1999-2007.	3.2	11

#	Article	IF	Citations
127	Modeling Intercellular Transfer of Biomolecules Through Tunneling Nanotubes. Bulletin of Mathematical Biology, 2013, 75, 1400-1416.	1.9	10
128	Hybrid Microfabrication of Nanofiber-Based Sheets and Rods for Tissue Engineering Applications. Journal of the Association for Laboratory Automation, 2013, 18, 494-503.	2.8	10
129	Engineering Heart Morphogenesis. Trends in Biotechnology, 2020, 38, 835-845.	9.3	10
130	Recent Advances in Nanobiotechnology and High-Throughput Molecular Techniques for Systems Biomedicine. Molecules and Cells, 2013, 36, 477-484.	2.6	9
131	Charcotâ€Marieâ€Tooth Disease Type 4H Resulting from Compound Heterozygous Mutations in FGD4 from Nonconsanguineous Korean Families. Annals of Human Genetics, 2015, 79, 460-469.	0.8	7
132	Control of the interface between heterotypic cell populations reveals the mechanism of intercellular transfer of signaling proteins. Integrative Biology (United Kingdom), 2015, 7, 364-372.	1.3	7
133	Immunostimulatory Effects Triggered by Selfâ€Assembled Microspheres with Tandem Repeats of Polymerized RNA Strands. Advanced Healthcare Materials, 2019, 8, e1801395.	7.6	7
134	Matrix Rigidityâ€Dependent Regulation of Ca²⁺ at Plasma Membrane Microdomains by FAK Visualized by Fluorescence Resonance Energy Transfer. Advanced Science, 2019, 6, 1801290.	11.2	7
135	Fabrication of Microâ€and Nanopatterned Nafion Thin Films with Tunable Mechanical and Electrical Properties Using Thermal Evaporationâ€Induced Capillary Force Lithography. Advanced Materials Interfaces, 2021, 8, 2002005.	3.7	7
136	Implementation of a piezoresistive MEMS cantilever for nanoscale force measurement in micro/nano robotic applications. Journal of Mechanical Science and Technology, 2004, 18, 789-797.	0.4	6
137	AFM-based identification of the dynamic properties of globular proteins: simulation study. Journal of Mechanical Science and Technology, 2008, 22, 2203-2212.	1.5	6
138	Soft Shape-Memory Materials. , 2016, , 237-251.		6
139	Hybrid gold/DNA nanowire circuit with sub-10â€‰nm nanostructure arrays. Microsystems and Nanoengineering, 2020, 6, 91.	7.0	6
140	Design and performance evaluation of a 3-DOF mobile microrobot for micromanipulation. Journal of Mechanical Science and Technology, 2003, 17, 1268-1275.	0.4	4
141	A superelastic alloy microgripper with embedded electromagnetic actuators and piezoelectric sensors. , 2004, , .		4
142	High-Throughput Contractility Assay for Human Stem Cell-Derived Cardiomyocytes. Circulation Research, 2019, 124, 1146-1148.	4.5	4
143	Therapeutic Potential of CKD-504, a Novel Selective Histone Deacetylase 6 Inhibitor, in a Zebrafish Model of Neuromuscular Junction Disorders. Molecules and Cells, 2022, 45, 231-242.	2.6	4
144	Factors associated with the improvement of vocal fold movement: An analysis of LEMG and laryngeal CT parameters. Journal of Electromyography and Kinesiology, 2015, 25, 1-7.	1.7	3

#	Article	IF	Citations
145	Free-Standing Nanopatterned Poly(Ïµ-Caprolactone) Thin Films as a Multifunctional Scaffold. IEEE Nanotechnology Magazine, 2018, 17, 389-392.	2.0	3
146	A Microfabricated Pistonless Syringe Pump Driven by Electroâ€Conjugate Fluid with Leakless On/Off Microvalves. Small, 2022, 18, e2106221.	10.0	3
147	Using Lab-on-a-Chip Technologies for Stem Cell Biology. Pancreatic Islet Biology, 2011, , 483-498.	0.3	2
148	JALA Special Issue: Microengineered Cell- and Tissue-Based Assays for Drug Screening and Toxicology Applications. Journal of the Association for Laboratory Automation, 2015, 20, 79-81.	2.8	2
149	Combined Effect of Matrix Topography and Stiffness on Neutrophil Shape and Motility. Advanced Biology, 2022, 6, e2101312.	2.5	2
150	Guest Editorial Introduction to the Special Section on the 9th International Conference on Nano/Molecular Medicine and Engineering (IEEE-NANOMED 2015). IEEE Transactions on Nanobioscience, 2016, 15, 795-797.	3.3	1
151	Engineering Innovations for Fundamental Biology and Translational Medicine. SLAS Technology, 2019, 24, 455-456.	1.9	1
152	Topological heterogeneity and evaporation dynamics of irregular water droplets. Scientific Reports, 2021, 11, 18700.	3.3	1
153	Three-Dimensionally Patterned Cardiomyocytes with High Activity for Powering Bio-Hybrid Microdevices. , 0, , .		0
154	Contractile force measurements of cardiac myocytes using a micro-manipulation system. , 2005, , .		0
155	Contractile force measurements of cardiac myocytes using a micro-manipulation system. Journal of Mechanical Science and Technology, 2006, 20, 668-674.	1.5	0
156	MICROPATTERNED POLYMER STRUCTURES FOR CELL AND TISSUE ENGINEERING. , 2010, , 101-120.		0
157	Biomimetic approaches for engineered organ chips and skin electronics for in vitro diagnostics. , 2012, , .		0
158	Elastin-Sprayed Tubular Scaffolds With Microstructures and Nanotextures for Vascular Tissue Engineering. , 2013, , .		0
159	Multiscale topographical approaches for cell mechanobiology studies. , 0, , 69-89.		0
160	Stretchable micropost array cytometry: a powerful tool for cell mechanics and mechanobiology research. , 0, , 32-46.		0
161	Guest Editorial Introduction to the Special Section on the 8th International Conference on Nano/Molecular Medicine and Engineering (IEEE-NANOMED 2014). IEEE Transactions on Nanobioscience, 2015, 14, 809-810.	3.3	0
162	A Tribute to Professor Kahpâ€Yang Suh (1972 â€“ 2013). Advanced Healthcare Materials, 2016, 5, 8-9.	7.6	0

#	Article	IF	Citations
163	Bioengineered Human Heart and Skeletal Muscles on Chips: Methods and Applications. Biosystems and Biorobotics, 2016, , 199-208.	0.3	0
164	Tissue engineered cardiac stem cell grafts for repairing heart with myocardial infarction. FASEB Journal, 2010, 24, 599.11.	0.5	0
165	Biomimetic Surfaces for Tribological Applications in Micro/Nano-Devices. , 2013, , 147-162.		0
166	BIOINSPIRED NANOTOPOGRAPHICALLY-DEFINED CELL CULTURE MODELS. World Scientific Series in Nanoscience and Nanotechnology, 2014, , 1149-1176.	0.1	0