

Joong Yull Park

List of Publications by Year in descending order

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Version: 2024-02-01

61
papers

2,284
citations

257450

24
h-index

223800

46
g-index

61
all docs

61
docs citations

61
times ranked

3451
citing authors

#	ARTICLE	IF	CITATIONS
1	Next-generation integrated microfluidic circuits. <i>Lab on A Chip</i> , 2011, 11, 2813.	6.0	227
2	Biomimetic Soft Multifunctional Miniature Aquabots. <i>Small</i> , 2008, 4, 2148-2153.	10.0	158
3	Shear Stress Induced by an Interstitial Level of Slow Flow Increases the Osteogenic Differentiation of Mesenchymal Stem Cells through TAZ Activation. <i>PLoS ONE</i> , 2014, 9, e92427.	2.5	158
4	Differentiation of Neural Progenitor Cells in a Microfluidic Chip-Generated Cytokine Gradient. <i>Stem Cells</i> , 2009, 27, 2646-2654.	3.2	155
5	Study of cellular behaviors on concave and convex microstructures fabricated from elastic PDMS membranes. <i>Lab on A Chip</i> , 2009, 9, 2043.	6.0	120
6	Gradient generation by an osmotic pump and the behavior of human mesenchymal stem cells under the fetal bovine serum concentration gradient. <i>Lab on A Chip</i> , 2007, 7, 1673.	6.0	102
7	Increased poly(dimethylsiloxane) stiffness improves viability and morphology of mouse fibroblast cells. <i>Biochip Journal</i> , 2010, 4, 230-236.	4.9	93
8	Single cell trapping in larger microwells capable of supporting cell spreading and proliferation. <i>Microfluidics and Nanofluidics</i> , 2010, 8, 263-268.	2.2	90
9	Electrically-driven hydrogel actuators in microfluidic channels: fabrication, characterization, and biological application. <i>Lab on A Chip</i> , 2010, 10, 1604.	6.0	84
10	Neurotoxic amyloid beta oligomeric assemblies recreated in microfluidic platform with interstitial level of slow flow. <i>Scientific Reports</i> , 2013, 3, 1921.	3.3	75
11	Simultaneous generation of chemical concentration and mechanical shear stress gradients using microfluidic osmotic flow comparable to interstitial flow. <i>Lab on A Chip</i> , 2009, 9, 2194.	6.0	72
12	Concise Review: Stem Cell Microenvironment on a Chip: Current Technologies for Tissue Engineering and Stem Cell Biology. <i>Stem Cells Translational Medicine</i> , 2015, 4, 1352-1368.	3.3	67
13	Regulating microenvironmental stimuli for stem cells and cancer cells using microsystems. <i>Integrative Biology (United Kingdom)</i> , 2010, 2, 229.	1.3	66
14	DNA hybridization detection in a microfluidic channel using two fluorescently labelled nucleic acid probes. <i>Biosensors and Bioelectronics</i> , 2008, 23, 1878-1882.	10.1	57
15	Ice-lithographic fabrication of concave microwells and a microfluidic network. <i>Biomedical Microdevices</i> , 2009, 11, 129-133.	2.8	54
16	Engineered Microsystems for Spheroid and Organoid Studies. <i>Advanced Healthcare Materials</i> , 2021, 10, e2001284.	7.6	51
17	Microwell fabrication methods and applications for cellular studies. <i>Biomedical Engineering Letters</i> , 2013, 3, 131-137.	4.1	41
18	Microfluidic Biosensor Based on Microwave Substrate-Integrated Waveguide Cavity Resonator. <i>Journal of Sensors</i> , 2018, 2018, 1-13.	1.1	41

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19	A low-energy-consumption electroactive valveless hydrogel micropump for long-term biomedical applications. <i>Lab on A Chip</i> , 2011, 11, 2910.	6.0	38
20	Networked concave microwell arrays for constructing 3D cell spheroids. <i>Biofabrication</i> , 2018, 10, 015001.	7.1	37
21	Microfluidic Automation Using Elastomeric Valves and Droplets: Reducing Reliance on External Controllers. <i>Small</i> , 2012, 8, 2925-2934.	10.0	32
22	Cell morphological response to low shear stress in a two-dimensional culture microsystem with magnitudes comparable to interstitial shear stress. <i>Biorheology</i> , 2010, 47, 165-178.	0.4	29
23	PDMS double casting method enabled by plasma treatment and alcohol passivation. <i>Sensors and Actuators B: Chemical</i> , 2019, 293, 115-121.	7.8	27
24	Surface chemistry modification of PDMS elastomers with boiling water improves cellular adhesion. <i>Sensors and Actuators B: Chemical</i> , 2012, 173, 765-771.	7.8	26
25	Magnetic force-assisted self-locking metallic bead array for fabrication of diverse concave microwell geometries. <i>Lab on A Chip</i> , 2016, 16, 3565-3575.	6.0	24
26	Fabrication of three-dimensional microarray structures by controlling the thickness and elasticity of poly(dimethylsiloxane) membrane. <i>Biomedical Microdevices</i> , 2010, 12, 49-54.	2.8	22
27	Arrayed pH-responsive microvalves controlled by multiphase laminar flow. <i>Journal of Micromechanics and Microengineering</i> , 2007, 17, 1985-1991.	2.6	20
28	DNA-Enrichment Microfluidic Chip for Chromatin Immunoprecipitation. <i>Analytical Chemistry</i> , 2009, 81, 2832-2839.	6.5	20
29	Responses of human adipose-derived stem cells to interstitial level of extremely low shear flows regarding differentiation, morphology, and proliferation. <i>Lab on A Chip</i> , 2017, 17, 2115-2124.	6.0	19
30	Pseudo-organ boundary conditions applied to a computational fluid dynamics model of the human aorta. <i>Computers in Biology and Medicine</i> , 2007, 37, 1063-1072.	7.0	18
31	Hypergravity-induced multicellular spheroid generation with different morphological patterns precisely controlled on a centrifugal microfluidic platform. <i>Biofabrication</i> , 2017, 9, 045006.	7.1	18
32	Fabrication of omega-shaped microwell arrays for a spheroid culture platform using pins of a commercial CPU to minimize cell loss and crosstalk. <i>Biofabrication</i> , 2018, 10, 045003.	7.1	18
33	Floating-on-water Fabrication Method for Thin Polydimethylsiloxane Membranes. <i>Polymers</i> , 2019, 11, 1264.	4.5	17
34	Membrane-bottomed microwell array added to Transwell insert to facilitate non-contact co-culture of spermatogonial stem cell and STO feeder cell. <i>Biofabrication</i> , 2020, 12, 045031.	7.1	17
35	Development of a Cold Dialysate Regeneration System for Home Hemodialysis. <i>Blood Purification</i> , 2009, 28, 84-92.	1.8	15
36	Estimation of saline-mixed tissue conductivity and ablation lesion size. <i>Computers in Biology and Medicine</i> , 2013, 43, 504-512.	7.0	14

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37	The Need of Slanted Side Holes for Venous Cannulae. Computational and Mathematical Methods in Medicine, 2012, 2012, 1-7.	1.3	12
38	Deformable L-shaped microwell array for trapping pairs of heterogeneous cells. Journal of Micromechanics and Microengineering, 2015, 25, 035005.	2.6	12
39	Establishment of Three-Dimensional Bioprinted Bladder Cancer-on-a-Chip with a Microfluidic System Using Bacillus Calmette-Guérin. International Journal of Molecular Sciences, 2021, 22, 8887.	4.1	12
40	Microplatforms for Gradient Field Generation of Various Properties and Biological Applications. Journal of the Association for Laboratory Automation, 2015, 20, 82-95.	2.8	11
41	Stand-alone external power-free microfluidic fuel cell system harnessing osmotic pump for long-term operation. Journal of Micromechanics and Microengineering, 2018, 28, 125005.	2.6	11
42	Customized Multilayered Tissue-on-a-Chip (MTOC) to Simulate Bacillus Calmette-Guérin (BCG) Immunotherapy for Bladder Cancer Treatment. Biochip Journal, 2022, 16, 67-81.	4.9	11
43	Concomitant differentiation of a population of mouse embryonic stem cells into neuron-like cells and schwann cell-like cells in a slow-flow microfluidic device. Developmental Dynamics, 2017, 246, 7-27.	1.8	10
44	Quantitative Analysis of Pulsatile Flow Contribution to Ultrafiltration. Artificial Organs, 2009, 33, 69-73.	1.9	9
45	Three-dimensional cartilage tissue regeneration system harnessing goblet-shaped microwells containing biocompatible hydrogel. Biofabrication, 2020, 12, 015019.	7.1	9
46	Coarsening behavior of bulk nanobubbles in water. Scientific Reports, 2021, 11, 19173.	3.3	9
47	Novel microwell with a roof capable of buoyant spheroid culture. Lab on A Chip, 2021, 21, 1974-1986.	6.0	8
48	A Paired Bead and Magnet Array for Molding Microwells with Variable Concave Geometries. Journal of Visualized Experiments, 2018, , .	0.3	7
49	Pattern-coated titanium bone fixation plate for dual delivery of vancomycin and alendronate. Macromolecular Research, 2017, 25, 756-762.	2.4	6
50	Effect of off-plane bifurcation angles of primary bronchi on expiratory flows in the human trachea. Computers in Biology and Medicine, 2018, 95, 63-74.	7.0	6
51	A numerical study of the Coriolis effect in centrifugal microfluidics with different channel arrangements. Microfluidics and Nanofluidics, 2016, 20, 1.	2.2	5
52	Computational dose predictions for combined treatment of hemofiltration with weekly hemodialysis. Computer Methods and Programs in Biomedicine, 2008, 89, 275-281.	4.7	4
53	Features of Microsystems for Cultivation and Characterization of Stem Cells with the Aim of Regenerative Therapy. Stem Cells International, 2016, 2016, 1-13.	2.5	4
54	Numerical Investigation on the Effects of Baffles with Various Thermal and Geometrical Conditions on Thermo-Fluid Dynamics and Kinetic Power of a Solar Updraft Tower. Energies, 2018, 11, 2230.	3.1	4

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55	Thermo-Fluid Dynamic Effects of the Radial Location of the Baffle Installed in a Solar Updraft Tower. <i>Energies</i> , 2019, 12, 1340.	3.1	4
56	Lab-on-a-CD Platform for Generating Multicellular Three-dimensional Spheroids. <i>Journal of Visualized Experiments</i> , 2019, , .	0.3	2
57	Effects of the Angled Blades of Extremely Small Wind Turbines on Energy Harvesting Performance. <i>Mathematics</i> , 2020, 8, 1295.	2.2	2
58	DKK3, Downregulated in Invasive Epithelial Ovarian Cancer, Is Associated with Chemoresistance and Enhanced Paclitaxel Susceptibility via Inhibition of the β -Catenin-P-Glycoprotein Signaling Pathway. <i>Cancers</i> , 2022, 14, 924.	3.7	2
59	Additive Aerodynamic and Thermal Effects of a Central Guide Post and Baffle Installed in a Solar Updraft Tower. <i>Energies</i> , 2019, 12, 3506.	3.1	1
60	Harmonisation of Coolant Flow Pattern with Wake of Stator Vane to Improve Sealing Effectiveness Using a Wave-Shaped Rim Seal. <i>Energies</i> , 2019, 12, 1060.	3.1	1
61	Control of Plural Number of Arrayed Microvalves using pH-responsive Hydrogel. , 2007, , .		0