Bong Geun Chung

List of Publications by Year
in descending order

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90 papers	5,831 citations	101496 36 h-index	74108 75 g-index
90 all docs	90 docs citations	90 times ranked	8141 citing authors

#	Article	IF	Citations
1	Pen-drawn air cathode featuring graphite felt substrate modified with MnO2-decorated graphene flakes and PEDOT network for rechargeable zincâ€“air battery. Journal of Industrial and Engineering Chemistry, 2022, 108, 411-417.	2.9	1
2	Near-Infrared Light-Triggered Generation of Reactive Oxygen Species and Induction of Local Hyperthermia from Indocyanine Green Encapsulated Mesoporous Silica-Coated Graphene Oxide for Colorectal Cancer Therapy. Antioxidants, 2022, 11, 174.	2.2	6
3	Contributions of the microbiome to intestinal inflammation in a gut-on-a-chip. Nano Convergence, 2022, 9, 8.	6.3	32
4	Microfluidic electrode array chip for electrical stimulation-mediated axonal regeneration. Lab on A Chip, 2022, 22, 2122-2130.	3.1	8
5	Conductive Silver/Carbon Fiber Films for Rapid Detection of Human Coronavirus. Polymers, 2022, 14, 1983.	2.0	0
6	Hybrid Grapheneâ€Gold Nanoparticleâ€Based Nucleic Acid Conjugates for Cancerâ€Specific Multimodal Imaging and Combined Therapeutics. Advanced Functional Materials, 2021, 31, 2006918.	7.8	55
7	CuS/rGO-PEG Nanocomposites for Photothermal Bonding of PMMA-Based Plastic Lab-on-a-Chip. Nanomaterials, 2021, 11, 176.	1.9	5
8	Conductive GelMAâ€“Collagenâ€“AgNW Blended Hydrogel for Smart Actuator. Polymers, 2021, 13, 1217.	2.0	12
9	Sequential and Comprehensive Algorithm for Fault Detection in Semiconductor Sensors. Applied Sciences (Switzerland), 2021, 11, 10419.	1.3	3
10	Effect of biochemical and biomechanical factors on vascularization of kidney organoid-on-a-chip. Nano Convergence, 2021, 8, 35.	6.3	43
11	Near-Infrared Light-Triggered Thermo-responsive Poly(N-Isopropylacrylamide)-Pyrrole Nanocomposites for Chemo-photothermal Cancer Therapy. Nanoscale Research Letters, 2020, 15, 214.	3.1	12
12	Microneedles with Tunable Dissolution Rate. ACS Biomaterials Science and Engineering, 2020, 6, 5061-5068.	2.6	22
13	Electro-responsive hydrogel-based microfluidic actuator platform for photothermal therapy. Lab on A Chip, 2020, 20, 3354-3364.	3.1	38
14	Droplet-based Synthesis of Homogeneous Gold Nanoparticles for Enhancing HRP-based ELISA Signals. Biochip Journal, 2020, 14, 298-307.	2.5	19
15	Plasmonic heating-based portable digital PCR system. Lab on A Chip, 2020, 20, 3560-3568.	3.1	22
16	Separation, Purification, and Detection of cfDNA in a Microfluidic Device. Biochip Journal, 2020, 14, 195-203.	2.5	12
17	Generation of tumor spheroids using a droplet-based microfluidic device for photothermal therapy. Microsystems and Nanoengineering, 2020, 6, 52.	3.4	43
18	A microfluidic gradient device for drug screening with human iPSC-derived motoneurons. Analyst, The, 2020, 145, 3081-3089.	1.7	17

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19	Combinatorial biophysical cue sensor array for controlling neural stem cell fate. Biosensors and Bioelectronics, 2020, 156, 112125.	5.3	20
20	Dual-stimuli responsive mesoporous copper (II) sulfide nanocomposite for chemo-photothermal synergistic therapy. Microporous and Mesoporous Materials, 2020, 302, 110228.	2.2	15
21	Automated droplet reactor for the synthesis of iron oxide/gold core-shell nanoparticles. Scientific Reports, 2020, 10, 1737.	1.6	27
22	rGO nanomaterial-mediated cancer targeting and photothermal therapy in a microfluidic co-culture platform. Nano Convergence, 2020, 7, 10.	6.3	33
23	Micropillarâ€based microfluidic device to regulate neurite networks of uniformâ€sized neurospheres. Electrophoresis, 2019, 40, 419-424.	1.3	1
24	Continuous separation of fungal spores in a microfluidic flow focusing device. Analyst, The, 2019, 144, 4962-4971.	1.7	6
25	Dual-neodymium magnet-based microfluidic separation device. Scientific Reports, 2019, 9, 9502.	1.6	27
26	Microwell Array-based Digital PCR for Influenza Virus Detection. Biochip Journal, 2019, 13, 269-276.	2.5	17
27	Dual Stimuli-Triggered Nanogels in Response to Temperature and pH Changes for Controlled Drug Release. Nanoscale Research Letters, 2019, 14, 77.	3.1	60
28	Algorithm Analysis of Gas Bubble Generation in a Microfluidic Device. Biochip Journal, 2019, 13, 133-141.	2.5	4
29	Molecular theranostic based on esterase-mediated drug activation for hepatocellular carcinoma. Dyes and Pigments, 2019, 163, 628-633.	2.0	18
30	Functional Graphene Oxide-Based Nanosheets for Photothermal Therapy. Macromolecular Research, 2018, 26, 557-565.	1.0	53
31	Circularâ€shaped microfluidic device to study the effect of shear stress on cellular orientation. Electrophoresis, 2018, 39, 1816-1820.	1.3	4
32	Poisson statistics-mediated particle/cell counting in microwell arrays. Scientific Reports, 2018, 8, 2438.	1.6	12
33	Prediction analysis and quality assessment of microwell array images. Electrophoresis, 2018, 39, 948-956.	1.3	1
34	Conductive hydrogel/nanowire micropattern-based sensor for neural stem cell differentiation. Sensors and Actuators B: Chemical, 2018, 258, 1042-1050.	4.0	38
35	Development of a theranostic prodrug for colon cancer therapy by combining ligand-targeted delivery and enzyme-stimulated activation. Biomaterials, 2018, 155, 145-151.	5.7	85
36	Generation of uniform-sized multicellular tumor spheroids using hydrogel microwells for advanced drug screening. Scientific Reports, 2018, 8, 17145.	1.6	89

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37	Development of the Microfluidic Device to Regulate Shear Stress Gradients. Biochip Journal, 2018, 12, 294-303.	2.5	13
38	Facile Synthesis of Surfactant-Free Au Decorated Hollow Silica Nanoparticles for Photothermal Applications. Macromolecular Research, 2018, 26, 1129-1134.	1.0	7
39	Droplet-based synthesis of homogeneous magnetic iron oxide nanoparticles. Beilstein Journal of Nanotechnology, 2018, 9, 2413-2420.	1.5	20
40	Selective monitoring of vascular cell senescence via Î²-Galactosidase detection with a fluorescent chemosensor. Sensors and Actuators B: Chemical, 2018, 274, 194-200.	4.0	32
41	Dual-nozzle microfluidic droplet generator. Nano Convergence, 2018, 5, 12.	6.3	10
42	Hydrogel microfluidic coâ€culture device for photothermal therapy and cancer migration. Electrophoresis, 2017, 38, 1318-1324.	1.3	22
43	Analysis of 3D multiâ€layer microfluidic gradient generator. Electrophoresis, 2017, 38, 270-277.	1.3	11
44	Uniformâ€sized neurosphereâ€mediated motoneuron differentiation in microwell arrays. Electrophoresis, 2017, 38, 3161-3167.	1.3	3
45	Reduced Graphene Oxide Nanosheet for Chemo-photothermal Therapy. Langmuir, 2016, 32, 2731-2736.	1.6	119
46	Polymerase chain reaction in microfluidic devices. Lab on A Chip, 2016, 16, 3866-3884.	3.1	210
47	Hydrogel-encapsulated 3D microwell array for neuronal differentiation. Biomedical Materials (Bristol), 2016, 11, 015019.	1.7	16
48	Graphene and thermo-responsive polymeric nanocomposites for therapeutic applications. Biomedical Engineering Letters, 2016, 6, 10-15.	2.1	14
49	Concave microwell array-mediated three-dimensional tumor model for screening anticancer drug-loaded nanoparticles. Nanomedicine: Nanotechnology, Biology, and Medicine, 2015, 11, 1153-1161.	1.7	38
50	Photoâ€crosslinkable hydrogelâ€based 3D microfluidic culture device. Electrophoresis, 2015, 36, 994-1001.	1.3	31
51	Thermo-responsive polymeric nanoparticles for enhancing neuronal differentiation of human induced pluripotent stem cells. Nanomedicine: Nanotechnology, Biology, and Medicine, 2015, 11, 1861-1869.	1.7	40
52	Development of pH-responsive chitosan-coated mesoporous silica nanoparticles. Macromolecular Research, 2014, 22, 412-417.	1.0	34
53	Microwell arrays for uniform-sized embryoid body-mediated endothelial cell differentiation. Biomedical Microdevices, 2014, 16, 559-566.	1.4	11
54	Synthesis and characterization of thermoresponsive polymeric nanoparticles. Biochip Journal, 2014, 8, 8-14.	2.5	10

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55	Special issue on tissue engineering. Biomedical Engineering Letters, 2013, 3, 115-116.	2.1	1
56	Epithelialâ€toâ€mesenchymal transition of human lung alveolar epithelial cells in a microfluidic gradient device. Electrophoresis, 2013, 34, 441-447.	1.3	10
57	Dualâ€micropillarâ€based microfluidic platform for single embryonic stem cellâ€derived neuronal differentiation. Electrophoresis, 2013, 34, 1931-1938.	1.3	10
58	Retinoic Acid-Polyethyleneimine Complex Nanoparticles for Embryonic Stem Cell-Derived Neuronal Differentiation. Langmuir, 2013, 29, 9857-9862.	1.6	23
59	Liver Cell Line Derived Conditioned Medium Enhances Myofibril Organization of Primary Rat Cardiomyocytes. Molecules and Cells, 2012, 34, 149-158.	1.0	2
60	Anticancer Drug-Loaded Gliadin Nanoparticles Induce Apoptosis in Breast Cancer Cells. Langmuir, 2012, 28, 8216-8223.	1.6	135
61	Microfluidic fabrication of microengineered hydrogels and their application in tissue engineering. Lab on A Chip, 2012, 12, 45-59.	3.1	375
62	Highly Porous Coreâ€“Shell Polymeric Fiber Network. Langmuir, 2011, 27, 10993-10999.	1.6	42
63	A selfâ€assembled monolayerâ€based micropatterned array for controlling cell adhesion and protein adsorption. Biotechnology and Bioengineering, 2011, 108, 1194-1202.	1.7	22
64	Concave microwell based size-controllable hepatosphere as a three-dimensional liver tissue model. Biomaterials, 2011, 32, 8087-8096.	5.7	168
65	Mucin (MUC5AC) expression by lung epithelial cells cultured in a microfluidic gradient device. Electrophoresis, 2011, 32, 254-260.	1.3	7
66	An integrated microfluidic culture device to regulate endothelial cell differentiation from embryonic stem cells. Electrophoresis, 2011, 32, 3133-3137.	1.3	39
67	Twoâ€phase bioreactor system for cellâ€laden hydrogel assembly. Biotechnology Progress, 2011, 27, 466-472.	1.3	9
68	Nano/Microfluidics for diagnosis of infectious diseases in developing countries. Advanced Drug Delivery Reviews, 2010, 62, 449-457.	6.6	305
69	A computational and experimental study inside microfluidic systems: the role of shear stress and flow recirculation in cell docking. Biomedical Microdevices, 2010, 12, 619-626.	1.4	31
70	Microfluidic gradient platforms for controlling cellular behavior. Electrophoresis, 2010, 31, 3014-3027.	1.3	83
71	Microporous cellâ€laden hydrogels for engineered tissue constructs. Biotechnology and Bioengineering, 2010, 106, 138-148.	1.7	90
72	Controlled-size embryoid body formation in concave microwell arrays. Biomaterials, 2010, 31, 4296-4303.	5.7	223

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73	Microfluidic synthesis of pure chitosan microfibers for bio-artificial liver chip. Lab on A Chip, 2010, 10, 1328.	3.1	135
74	Development of a multi-layer microfluidic array chip to culture and replate uniform-sized embryoid bodies without manual cell retrieval. Lab on A Chip, 2010, 10, 2651.	3.1	53
75	Optofluidic platforms based on surface-enhanced Raman scattering. Analyst, The, 2010, 135, 837.	1.7	96
76	Microwell-mediated control of embryoid body size regulates embryonic stem cell fate via differential expression of WNT5a and WNT11. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 16978-16983.	3.3	349
77	Rapid Formation of Acrylated Microstructures by Microwaveâ€Induced Thermal Crosslinking. Macromolecular Rapid Communications, 2009, 30, 1382-1386.	2.0	19
78	Cell Docking in Double Grooves in a Microfluidic Channel. Small, 2009, 5, 1186-1194.	5.2	46
79	Rapid generation of spatially and temporally controllable long-range concentration gradients in a microfluidic device. Lab on A Chip, 2009, 9, 761-767.	3.1	81
80	A microwell array system for stem cell culture. Biomaterials, 2008, 29, 752-763.	5.7	277
81	High-throughput screening of cell responses to biomaterials. European Journal of Pharmaceutical Sciences, 2008, 35, 151-160.	1.9	66
82	Microfluidics for drug discovery and development: From target selection to product lifecycle management. Drug Discovery Today, 2008, 13, 1-13.	3.2	290
83	Microcirculation within grooved substrates regulates cell positioning and cell docking inside microfluidic channels. Lab on A Chip, 2008, 8, 747.	3.1	79
84	Stop-flow lithography to generate cell-laden microgel particles. Lab on A Chip, 2008, 8, 1056.	3.1	268
85	Micro- and nanoscale technologies for tissue engineering and drug discovery applications. Expert Opinion on Drug Discovery, 2007, 2, 1653-1668.	2.5	75
86	Generation of Stable Complex Gradients Across Two-Dimensional Surfaces and Three-Dimensional Gels. Langmuir, 2007, 23, 10910-10912.	1.6	105
87	A hybrid microfluidic-vacuum device for direct interfacing with conventional cell culture methods. BMC Biotechnology, 2007, 7, 60.	1.7	49
88	Generation of stable concentration gradients in 2D and 3D environments using a microfluidic ladder chamber. Biomedical Microdevices, 2007, 9, 627-635.	1.4	175
89	A microfluidic multi-injector for gradient generation. Lab on A Chip, 2006, 6, 764.	3.1	91
90	Human neural stem cell growth and differentiation in a gradient-generating microfluidic device. Lab on A Chip, 2005, 5, 401.	3.1	501