Gyu Man Kim

List of Publications by Year
in descending order

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70	1,112	361045	454577
papers	citations	20 h-index	30 g-index

71	71	71	1387
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Application of electrochemical impedance spectroscopy in bio-fuel cell characterization: A review. International Journal of Hydrogen Energy, 2014, 39, 20159-20170.	3.8	74
2	Microfluidic formation of pH responsive 5CB droplets decorated with PAA-b-LCP. Lab on A Chip, 2011, 11, 3493.	3.1	70
3	Facile and highly efficient microencapsulation of a phase change material using tubular microfluidics. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 422, 61-67.	2.3	55
4	Porous polymer coatings on metal microneedles for enhanced drug delivery. Royal Society Open Science, 2018, 5, 171609.	1.1	53
5	Preparation of monodisperse PEG hydrogel microparticles using a microfluidic flow-focusing device. Journal of Industrial and Engineering Chemistry, 2012, 18, 1308-1313.	2.9	50
6	Microneedle array with a pH-responsive polymer coating and its application in smart drug delivery for wound healing. Sensors and Actuators B: Chemical, 2021, 345, 130441.	4.0	46
7	All-photoplastic microstencil with self-alignment for multiple layer shadow-mask patterning. Sensors and Actuators A: Physical, 2003, 107, 132-136.	2.0	39
8	Micropatterning of neural stem cells and Purkinje neurons using a polydimethylsiloxane (PDMS) stencil. Lab on A Chip, 2012, 12, 5045.	3.1	38
9	Mean cutting force prediction in ball-end milling using force map method. Journal of Materials Processing Technology, 2004, 146, 303-310.	3.1	34
10	Determination of catecholamines based on the measurement of the metal nanoparticle-enhanced fluorescence of their terbium complexes. Mikrochimica Acta, 2012, 176, 153-161.	2.5	33
11	Smart Microneedles with Porous Polymer Layer for Glucose-Responsive Insulin Delivery. Pharmaceutics, 2020, 12, 606.	2.0	28
12	Surface modification with self-assembled monolayers for nanoscale replication of photoplastic MEMS. Journal of Microelectromechanical Systems, 2002, 11, 175-181.	1.7	27
13	Micro-patterning on non-planar surface using flexible microstencil. International Journal of Precision Engineering and Manufacturing, 2011, 12, 165-168.	1.1	27
14	Multi walled carbon nanotube and polyaniline coated pencil graphite based bio-cathode for enzymatic biofuel cell. International Journal of Hydrogen Energy, 2015, 40, 9515-9522.	3.8	27
15	Smart Microneedles with Porous Polymer Coatings for pH-Responsive Drug Delivery. Polymers, 2019, 11, 1834.	2.0	26
16	Method for determination of fluoroquinolones based on the plasmonic interaction between their fluorescent terbium complexes and silver nanoparticles. Mikrochimica Acta, 2011, 174, 353-360.	2.5	25
17	Screening various pencil leads coated with MWCNT and PANI as enzymatic biofuel cell biocathode. International Journal of Hydrogen Energy, 2017, 42, 27220-27229.	3.8	25
18	Synthesis and application of hydrogel calcium alginate microparticles as a biomaterial to remove heavy metals from aqueous media. Environmental Technology and Innovation, 2021, 22, 101400.	3.0	25

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19	Recent developments in enzymatic biofuel cell: towards implantable integrated micro-devices. International Journal of Nanoparticles, 2015, 8, 61.	0.1	23
20	Sustainable production of helical pinion gears: Environmental effects and product quality. International Journal of Precision Engineering and Manufacturing - Green Technology, 2014, 1, 37-41.	2.7	21
21	Applications of PLGA microcarriers prepared using geometrically passive breakup on microfluidic chip. International Journal of Precision Engineering and Manufacturing, 2015, 16, 2545-2551.	1.1	21
22	Deep learningâ€“based optimization of a microfluidic membraneless fuel cell for maximum power density via data-driven three-dimensional multiphysics simulation. Bioresource Technology, 2022, 348, 126794.	4.8	19
23	Micropositioning and microscopic observation of individual picoliter-sized containers within SU-8 microchannels. Microfluidics and Nanofluidics, 2007, 3, 189-194.	1.0	17
24	Micropatterning on roll surface using photo-lithography processes. International Journal of Precision Engineering and Manufacturing, 2011, 12, 763-768.	1.1	16
25	Fabrication of Vertically aligned Copper Nanotubes as a Novel Electrode for Enzymatic Biofuel Cells. Electrochimica Acta, 2015, 167, 213-218.	2.6	16
26	Effects of composite porous gas-diffusion layers on performance of proton exchange membrane fuel cell. International Journal of Precision Engineering and Manufacturing - Green Technology, 2014, 1, 305-312.	2.7	15
27	Extrusion Characteristics of Thin Walled Tubes for Catheters Using Thermoplastic Elastomer. Polymers, 2020, 12, 1628.	2.0	15
28	Hydrothermal Investigation of a Microchannel Heat Sink Using Secondary Flows in Trapezoidal and Parallel Orientations. Energies, 2020, 13, 5616.	1.6	15
29	Preparation of Monodisperse ENX-Loaded PLGA Microspheres Using a Microfluidic Flow-Focusing Device. Journal of Biobased Materials and Bioenergy, 2013, 7, 108-114.	0.1	15
30	Enzyme immobilization on microelectrode arrays of CNT/Nafion nanocomposites fabricated using hydrogel microstencils. Microelectronic Engineering, 2015, 141, 193-197.	1.1	12
31	Solvent Effects on the Porosity and Size of Porous PLGA Microspheres Using Gelatin and PBS as Porogens in a Microfluidic Flow-Focusing Device. Journal of Nanoscience and Nanotechnology, 2017, 17, 7775-7782.	0.9	11
32	Fabrication of Enzymatic Biofuel Cell with Electrodes on Both Sides of Microfluidic Channel. International Journal of Precision Engineering and Manufacturing - Green Technology, 2019, 6, 511-520.	2.7	11
33	Fabrication of suspended micro-structures using diffsuser lithography on negative photoresist. Journal of Mechanical Science and Technology, 2008, 22, 1765-1771.	0.7	10
34	Fabrication of detachable hydrogel microplates for separably patterned cell culture. International Journal of Precision Engineering and Manufacturing, 2014, 15, 945-948.	1.1	9
35	Development of an air-knife system for highly reproducible fabrication of polydimethylsiloxane microstencils. Journal of Micromechanics and Microengineering, 2015, 25, 085014.	1.5	9
36	Fabrication and Performance Evaluation of the Helmholtz Resonator Inspired Acoustic Absorber Using Various Materials. Micromachines, 2020, 11, 983.	1.4	9

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37	Micro- and Nanostructured Devices for the Investigation of Biomolecular Interactions. Chimia, 2006, 60, 754-760.	0.3	8
38	Repeated geometrical T-junction breakup microfluidic filter device by injection of premixed emulsion for microdroplet production. Journal of Industrial and Engineering Chemistry, 2020, 81, 81-87.	2.9	8
39	Integrated, Automated, Fast PCR System for Point-Of-Care Molecular Diagnosis of Bacterial Infection. Sensors, 2021, 21, 377.	2.1	8
40	Preparation of Carbon Nanotube-Wrapped Porous Microparticles Using a Microfluidic Device. Journal of Nanoscience and Nanotechnology, 2016, 16, 12003-12008.	0.9	7
41	Micropatterned Culture and Differentiation of Human Bone Marrow Mesenchymal Stem Cells Using a Polydimethylsiloxane Microstencil. Journal of Biomedical Nanotechnology, 2016, 12, 366-370.	0.5	7
42	Preparation of lidocaine-loaded porous Poly (lactic-co-glycolic acid) microparticles using microfluidic flow focusing and phosphate buffer solution porogen. International Journal of Precision Engineering and Manufacturing, 2017, 18, 599-604.	1.1	7
43	Neuropeptide Y improves cisplatin-induced bone marrow dysfunction without blocking chemotherapeutic efficacy in a cancer mouse model. BMB Reports, 2017, 50, 417-422.	1.1	7
44	Continuous Determination of Glucose Using a Membraneless, Microfluidic Enzymatic Biofuel Cell. Micromachines, 2020, 11, 1129.	1.4	7
45	512-Channel Geometric Droplet-Splitting Microfluidic Device by Injection of Premixed Emulsion for Microsphere Production. Polymers, 2020, 12, 776.	2.0	6
46	Numerical Study on the Optimization of Polymer Extrusion Process for a Single-Lumen Micro Catheter. Transactions of the Korean Society of Mechanical Engineers, A, 2018, 42, 1059-1065.	0.1	6
47	Fabrication of PDMS Stencil using Gas Blowing for Micropatterned 3T3 Cell Culture. Journal of the Korean Society for Precision Engineering, 2013, 30, 236-240.	0.1	6
48	Fabrication of Microengineered Templates and Their Applications into Micropatterned Cell Culture. Journal of Biomedical Nanotechnology, 2013, 9, 377-381.	0.5	5
49	Fabrication of poly (lactic-co-glycolic acid) microcontainers using solvent evaporation with polydimethylsiloxane stencil. Journal of Micromechanics and Microengineering, 2017, 27, 125018.	1.5	5
50	Automated Platform for Rapid and Reproducible Sample Preparations in Point-of-Care(POC) Molecular Diagnostics. Biochip Journal, 2019, 13, 288-293.	2.5	5
51	Fabrication of 512-Channel Geometrical Passive Breakup Device for High-Throughput Microdroplet Production. Micromachines, 2019, 10, 709.	1.4	5
52	Fabrication of Microfluidic Cell Culture Platform for Real-time Monitoring of Lidocaine Concentration. International Journal of Precision Engineering and Manufacturing, 2020, 21, 2399-2405.	1.1	5
53	Generalized correlation for predicting the droplet size in a microfluidic flow-focusing device under the effect of surfactant. Physics of Fluids, 2022, 34, .	1.6	5
54	EXPERIMENTAL STUDY ON BASIC PERFORMANCE OF ELECTROOSMOTIC PUMP WITH ION EXCHANGING POROUS GLASS SLIT. International Journal of Modern Physics B, 2010, 24, 2627-2632.	1.0	4

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55	Enhancement of Virus Infection Using Dynamic Cell Culture in a Microchannel. Micromachines, 2018, 9, 482.	1.4	4
56	Fabrication of HepG2 Cell Laden Collagen Microspheres using Inkjet Printing. Journal of the Korean Society for Precision Engineering, 2014, 31, 743-747.	0.1	4
57	THE FEASIBILITY OF FLUORESCENT NANO-PARTICLE FOR BIOLOGICAL FLOW ANALYSIS IN A MICROCHANNEL. International Journal of Modern Physics B, 2006, 20, 4505-4510.	1.0	3
58	Numerical investigation on composite porous layers in electroosmotic flow. International Journal of Precision Engineering and Manufacturing - Green Technology, 2014, 1, 207-213.	2.7	3
59	Sustained Drug Release from a Microcontainer Fabricated Using a Polydimethylsiloxane Stencil. International Journal of Precision Engineering and Manufacturing, 2021, 22, 1873-1881.	1.1	3
60	Effect of electrodes positions on the performance of microfluidic enzymatic biofuel cell: From two streams to a single-stream flow device. International Journal of Hydrogen Energy, 2021, 46, 33541-33550.	3.8	3
61	Fabrication of Nanostencil by Size Reduction of Microaperture by Additional Deposition. Japanese Journal of Applied Physics, 2008, 47, 5042-5047.	0.8	2
62	Preparation of 3D Electrode Microarrays of Multi-Walled Carbon Nanotubes/Nafion Nanocomposites for Microfluidic Biofuel Cells. Journal of Nanoscience and Nanotechnology, 2014, 14, 9323-9328.	0.9	2
63	1600 Parallel Microchamber Microfluidic Device for Fast Sample Array Preparation Using the Immiscibility of Two Liquids. Micromachines, 2017, 8, 63.	1.4	2
64	Development of a Subpath Extrusion Tip and Die for Peripheral Inserted Central Catheter Shaft with Multi Lumen. Polymers, 2021, 13, 1308.	2.0	2
65	Development of Multi Sample Array System Based on Pneumatic Valve. Journal of the Korean Society for Precision Engineering, 2017, 34, 59-63.	0.1	2
66	Highly efficient reprogramming and characterization of induced pluripotent stem cells by using a microwell array. Tissue Engineering and Regenerative Medicine, 2016, 13, 691-700.	1.6	1
67	Advanced Film-Type Acoustic Reflector Inspired by Helmholtz Resonator. Journal of the Korean Society for Precision Engineering, 2020, 37, 283-290.	0.1	1
68	Review on Microstencil Lithography Technologies. Journal of the Korean Society for Precision Engineering, 2018, 35, 1043-1054.	0.1	1
69	Development of Multilayered Droplet Splitting Microfluidic System for Preparation of Microdroplet. Journal of the Korean Society for Precision Engineering, 2022, 39, 425-431.	0.1	1
70	Highly reproducible quantification of apoptotic cells using micropatterned culture of neurons. Analytical Biochemistry, 2015, 469, 65-70.	1.1	0