Sung Bong Kim

List of Publications by Year
in descending order

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50 papers	3,095 citations	201674 27 h-index	189892 50 g-index
52 all docs	52 docs citations	52 times ranked	3793 citing authors

#	Article	IF	Citations
1	Wireless bioresorbable electronic system enables sustained nonpharmacological neuroregenerative therapy. Nature Medicine, 2018, 24, 1830-1836.	30.7	331
2	Soft, Skin-Integrated Multifunctional Microfluidic Systems for Accurate Colorimetric Analysis of Sweat Biomarkers and Temperature. ACS Sensors, 2019, 4, 379-388.	7.8	239
3	Mechano-acoustic sensing of physiological processes and body motions via a soft wireless device placed at the suprasternal notch. Nature Biomedical Engineering, 2020, 4, 148-158.	22.5	223
4	Thin, Soft, Skinâ€Mounted Microfluidic Networks with Capillary Bursting Valves for Chronoâ€Sampling of Sweat. Advanced Healthcare Materials, 2017, 6, 1601355.	7.6	209
5	A fluorometric skin-interfaced microfluidic device and smartphone imaging module for in situ quantitative analysis of sweat chemistry. Lab on A Chip, 2018, 18, 2178-2186.	6.0	166
6	Passive sweat collection and colorimetric analysis of biomarkers relevant to kidney disorders using a soft microfluidic system. Lab on A Chip, 2019, 19, 1545-1555.	6.0	157
7	Development of a neural interface for high-definition, long-term recording in rodents and nonhuman primates. Science Translational Medicine, 2020, 12, .	12.4	145
8	Multimodal Sensing with a Three-Dimensional Piezoresistive Structure. ACS Nano, 2019, 13, 10972-10979.	14.6	134
9	Superâ€Absorbent Polymer Valves and Colorimetric Chemistries for Timeâ€Sequenced Discrete Sampling and Chloride Analysis of Sweat via Skinâ€Mounted Soft Microfluidics. Small, 2018, 14, e1703334.	10.0	119
10	Biodiesel production by a mixture of Candida rugosa and Rhizopus oryzae lipases using a supercritical carbon dioxide process. Bioresource Technology, 2011, 102, 2105-2108.	9.6	102
11	Pretreatment of rice straw with combined process using dilute sulfuric acid and aqueous ammonia. Biotechnology for Biofuels, 2013, 6, 109.	6.2	101
12	Natural Wax for Transient Electronics. Advanced Functional Materials, 2018, 28, 1801819.	14.9	90
13	Soft, Skinâ€Interfaced Microfluidic Systems with Wireless, Batteryâ€Free Electronics for Digital, Realâ€Time Tracking of Sweat Loss and Electrolyte Composition. Small, 2018, 14, e1802876.	10.0	88
14	Wirelessly controlled, bioresorbable drug delivery device with active valves that exploit electrochemically triggered crevice corrosion. Science Advances, 2020, 6, eabb1093.	10.3	87
15	Soft, skin-interfaced microfluidic systems with integrated immunoassays, fluorometric sensors, and impedance measurement capabilities. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 27906-27915.	7.1	84
16	Battery-free, wireless soft sensors for continuous multi-site measurements of pressure and temperature from patients at risk for pressure injuries. Nature Communications, 2021, 12, 5008.	12.8	83
17	Soft, skin-interfaced microfluidic systems with integrated enzymatic assays for measuring the concentration of ammonia and ethanol in sweat. Lab on A Chip, 2020, 20, 84-92.	6.0	67
18	A Bioresorbable Magnetically Coupled System for Lowâ€Frequency Wireless Power Transfer. Advanced Functional Materials, 2019, 29, 1905451.	14.9	58

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19	Dilute acid pretreatment of barley straw and its saccharification and fermentation. Biotechnology and Bioprocess Engineering, 2011, 16, 725-732.	2.6	45
20	Development of Batch and Continuous Processes on Biodiesel Production in a Packed-Bed Reactor by a Mixture of Immobilized Candida rugosa and Rhizopus oryzae Lipases. Applied Biochemistry and Biotechnology, 2010, 161, 365-371.	2.9	43
21	Co-immobilization of Candida rugosa and Rhyzopus oryzae lipases and biodiesel production. Korean Journal of Chemical Engineering, 2013, 30, 1335-1338.	2.7	42
22	Tolerance of Saccharomyces cerevisiae K35 to lignocellulose-derived inhibitory compounds. Biotechnology and Bioprocess Engineering, 2011, 16, 755-760.	2.6	38
23	Sugar recovery from rice straw by dilute acid pretreatment. Journal of Industrial and Engineering Chemistry, 2012, 18, 183-187.	5.8	38
24	Optimization of medium composition for enhanced cellulase production by mutant Penicillium brasilianum KUEB15 using statistical method. Journal of Industrial and Engineering Chemistry, 2015, 25, 145-150.	5.8	37
25	Enhancement of immobilized enzyme activity by pretreatment of Î²-glucosidase with cellobiose and glucose. Journal of Industrial and Engineering Chemistry, 2012, 18, 702-706.	5.8	33
26	Effect of crude glycerol-derived inhibitors on ethanol production by Enterobacter aerogenes. Bioprocess and Biosystems Engineering, 2012, 35, 85-92.	3.4	30
27	Phenolic compounds: Strong inhibitors derived from lignocellulosic hydrolysate for 2,3â€butanediol production by Enterobacter aerogenes. Biotechnology Journal, 2015, 10, 1920-1928.	3.5	29
28	Lipase from Penicillium camembertii KCCM 11268: Optimization of solid state fermentation and application to biodiesel production. Korean Journal of Chemical Engineering, 2013, 30, 405-412.	2.7	25
29	Biodiesel production by enzymatic process using Jatropha oil and waste soybean oil. Biotechnology and Bioprocess Engineering, 2013, 18, 703-708.	2.6	25
30	Kinetic modeling of biodiesel production by mixed immobilized and co-immobilized lipase systems under two pressure conditions. Korean Journal of Chemical Engineering, 2013, 30, 1272-1276.	2.7	24
31	Skin-interfaced soft microfluidic systems with modular and reusable electronics for in situ capacitive sensing of sweat loss, rate and conductivity. Lab on A Chip, 2020, 20, 4391-4403.	6.0	23
32	Efficient and simultaneous cleaner production of biodiesel and glycerol carbonate in solvent-free system via statistical optimization. Journal of Cleaner Production, 2019, 218, 985-992.	9.3	20
33	Effect of a buffer mixture system on the activity of lipases during immobilization process. Bioresource Technology, 2010, 101, S66-S70.	9.6	19
34	Co-fermentation of carbon sources by Enterobacter aerogenes ATCC 29007 to enhance the production of bioethanol. Bioprocess and Biosystems Engineering, 2014, 37, 1073-1084.	3.4	19
35	Pretreatment of Rice Straw by Proton Beam Irradiation for Efficient Enzyme Digestibility. Applied Biochemistry and Biotechnology, 2011, 164, 1183-1191.	2.9	15
36	Production and characterization of cellobiose dehydrogenase from Phanerochaete chrysosporium KCCM 60256 and its application for an enzymatic fuel cell. Korean Journal of Chemical Engineering, 2016, 33, 3434-3441.	2.7	12

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37	Stimulation of 2,3-butanediol production by upregulation of alsR gene transcription level with acetate addition in Enterobacter aerogenes ATCC 29007. Process Biochemistry, 2016, 51, 1904-1910.	3.7	12
38	Eco-design and evaluation for production of 7-aminocephalosporanic acid from carbohydrate wastes discharged after microalgae-based biodiesel production. Journal of Cleaner Production, 2016, 133, 511-517.	9.3	12
39	Development of Electron Transfer Mediator Using Modified Graphite Oxide/Cobalt for Enzymatic Fuel Cell. Journal of the Electrochemical Society, 2015, 162, G113-G118.	2.9	10
40	The hydrolysate of barley straw containing inhibitors can be used to produce cephalosporin C by solvent extraction using ethyl acetate. Process Biochemistry, 2014, 49, 2203-2206.	3.7	9
41	Process design and evaluation of production of bioethanol and Î²-lactam antibiotic from lignocellulosic biomass. Bioresource Technology, 2014, 172, 194-200.	9.6	9
42	Furfural production from hydrolysate of barley straw after dilute sulfuric acid pretreatment. Korean Journal of Chemical Engineering, 2015, 32, 2280-2284.	2.7	9
43	Immobilization of acetyl xylan esterase on modified graphite oxide and utilization to peracetic acid production. Biotechnology and Bioprocess Engineering, 2014, 19, 1042-1047.	2.6	8
44	Rapid analysis of barley straw before and after dilute sulfuric acid pretreatment by photoluminescence. Bioresource Technology, 2013, 146, 789-793.	9.6	6
45	Utilization of hydrolysate from lignocellulosic biomass pretreatment to generate electricity by enzymatic fuel cell system. Enzyme and Microbial Technology, 2016, 85, 32-37.	3.2	6
46	Solution processes for ultrabroadband and omnidirectional graded-index glass lenses with near-zero reflectivity in high concentration photovoltaics. Scientific Reports, 2018, 8, 14907.	3.3	4
47	Microfluidic Networks: Thin, Soft, Skinâ€Mounted Microfluidic Networks with Capillary Bursting Valves for Chronoâ€Sampling of Sweat (Adv. Healthcare Mater. 5/2017). Advanced Healthcare Materials, 2017, 6, .	7.6	3
48	Reutilization of carbon sources through sugar recovery from waste rice straw. Renewable Energy, 2013, 53, 43-48.	8.9	2
49	Inhibitory effect of crude glycerol on ethanol production by Enterobacter aerogenes. Journal of Biotechnology, 2010, 150, 160-160.	3.8	0
50	Statistical optimization of critical parameters for alkaline treatments of canola agricultural residue by advanced regression model. New Biotechnology, 2014, 31, S96-S97.	4.4	0