Chulhwan Park

List of Publications by Year in descending order

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123 papers 4,161 citations

34 h-index 56 g-index

123 all docs 123
docs citations

times ranked

123

4782 citing authors

#	Article	IF	CITATIONS
1	Comparison of disperse and reactive dye removals by chemical coagulation and Fenton oxidation. Journal of Hazardous Materials, 2004, 112, 95-103.	12.4	317
2	Decolorization of disperse and reactive dyes by continuous electrocoagulation process. Desalination, 2002, 150, 165-175.	8.2	216
3	Biodegradation and biosorption for decolorization of synthetic dyes by Funalia trogii. Biochemical Engineering Journal, 2007, 36, 59-65.	3.6	150
4	Colorimetric Detection of Co ²⁺ Ion Using Silver Nanoparticles with Spherical, Plate, and Rod Shapes. Langmuir, 2013, 29, 8978-8982.	3.5	106
5	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
6	Decolorization of disperse and reactive dye solutions using ferric chloride. Desalination, 2004, 161, 49-58.	8.2	101
7	Pretreatment of rice straw with combined process using dilute sulfuric acid and aqueous ammonia. Biotechnology for Biofuels, 2013, 6, 109.	6.2	101
8	Recent Advances in Sustainable Plastic Upcycling and Biopolymers. Biotechnology Journal, 2020, 15, e1900489.	3.5	92
9	Fabrication of electrochemical biosensor consisted of multi-functional DNA structure/porous au nanoparticle for avian influenza virus (H5N1) in chicken serum. Materials Science and Engineering C, 2019, 99, 511-519.	7.3	87
10	Current states and prospects of organic waste utilization for biorefineries. Renewable and Sustainable Energy Reviews, 2015, 49, 335-349.	16.4	85
11	Enzymatic coproduction of biodiesel and glycerol carbonate from soybean oil and dimethyl carbonate. Enzyme and Microbial Technology, 2011, 48, 505-509.	3.2	81
12	Decolorization of dye solutions by a membrane bioreactor (MBR) using white-rot fungi. Desalination, 2004, 168, 287-293.	8.2	77
13	COD reduction and decolorization of textile effluent using a combined process. Journal of Bioscience and Bioengineering, 2003, 95, 102-105.	2.2	72
14	Label-free localized surface plasmon resonance biosensor composed of multi-functional DNA 3 way junction on hollow Au spike-like nanoparticles (HAuSN) for avian influenza virus detection. Colloids and Surfaces B: Biointerfaces, 2019, 182, 110341.	5.0	56
15	Enzymatic production of glycerol carbonate from by-product after biodiesel manufacturing process. Enzyme and Microbial Technology, 2012, 51, 143-147.	3.2	54
16	Batch and continuous synthesis of lactulose from whey lactose by immobilized \hat{l}^2 -galactosidase. Food Chemistry, 2013, 136, 689-694.	8.2	54
17	Fabrication of electrochemical biosensor composed of multi-functional DNA structure/Au nanospike on micro-gap/PCB system for detecting troponin I in human serum. Colloids and Surfaces B: Biointerfaces, 2019, 175, 343-350.	5.0	54
18	Enzymatic fuel cells based on electrodeposited graphite oxide/cobalt hydroxide/chitosan composite–enzymeelectrode. Biosensors and Bioelectronics, 2013, 42, 342-348.	10.1	53

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19	Biodiesel Production from Various Oils Under Supercritical Fluid Conditions by Candida antartica Lipase B Using a Stepwise Reaction Method. Applied Biochemistry and Biotechnology, 2009, 156, 24-34.	2.9	51
20	\hat{l}^2 -Galactosidase-immobilised microreactor fabricated using a novel technique for enzyme immobilisation and its application for continuous synthesis of lactulose. Food Chemistry, 2012, 133, 611-617.	8.2	50
21	Improved production of bacterial cellulose from waste glycerol through investigation of inhibitory effects of crude glycerol-derived compounds by Gluconacetobacter xylinus. Journal of Industrial and Engineering Chemistry, 2019, 75, 158-163.	5.8	50
22	Biorefinery of instant noodle waste to biofuels. Bioresource Technology, 2014, 159, 17-23.	9.6	49
23	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
24	Co-immobilization of Candida rugosa and Rhyzopus oryzae lipases and biodiesel production. Korean Journal of Chemical Engineering, 2013, 30, 1335-1338.	2.7	42
25	Repeated batch production of 1,3-propanediol from biodiesel derived waste glycerol by Klebsiella pneumoniae. Chemical Engineering Journal, 2017, 314, 660-669.	12.7	42
26	Optimization and morphology for decolorization of reactive black 5 by Funalia trogii. Enzyme and Microbial Technology, 2007, 40, 1758-1764.	3.2	41
27	Biodiesel production by lipases co-immobilized on the functionalized activated carbon. Bioresource Technology Reports, 2019, 7, 100248.	2.7	40
28	Production of bioethanol and biodiesel using instant noodle waste. Bioprocess and Biosystems Engineering, 2014, 37, 1627-1635.	3.4	39
29	Tolerance of Saccharomyces cerevisiae K35 to lignocellulose-derived inhibitory compounds. Biotechnology and Bioprocess Engineering, 2011, 16, 755-760.	2.6	38
30	Sugar recovery from rice straw by dilute acid pretreatment. Journal of Industrial and Engineering Chemistry, 2012, 18, 183-187.	5.8	38
31	Development of a <i>Saccharomyces cerevisiae </i> strain for increasing the accumulation of triacylglycerol as a microbial oil feedstock for biodiesel production using glycerol as a substrate. Biotechnology and Bioengineering, 2013, 110, 343-347.	3.3	38
32	Quantitative Detection of Glyphosate by Simultaneous Analysis of UV Spectroscopy and Fluorescence Using DNA-Labeled Gold Nanoparticles. Journal of Agricultural and Food Chemistry, 2010, 58, 12096-12100.	5.2	37
33	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
34	5-Aminolevulinic acid production in engineered Corynebacterium glutamicum via C5 biosynthesis pathway. Enzyme and Microbial Technology, 2015, 81, 1-7.	3.2	36
35	Improvement of electrical properties via glucose oxidase-immobilization by actively turning over glucose for an enzyme-based biofuel cell modified with DNA-wrapped single walled nanotubes. Biosensors and Bioelectronics, 2011, 26, 2685-2688.	10.1	35
36	Enzymatic coproduction of biodiesel and glycerol carbonate from soybean oil in solvent-free system. Enzyme and Microbial Technology, 2013, 53, 154-158.	3.2	34

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37	Recent advances in metabolic engineering of <i>Corynebacterium glutamicum</i> as a potential platform microorganism for biorefinery. Biofuels, Bioproducts and Biorefining, 2018, 12, 899-925.	3.7	34
38	Recent Advances in the Metabolic Engineering of Klebsiella pneumoniae: A Potential Platform Microorganism for Biorefineries. Biotechnology and Bioprocess Engineering, 2019, 24, 48-64.	2.6	34
39	Fabrication of MERS-nanovesicle biosensor composed of multi-functional DNA aptamer/graphene-MoS2 nanocomposite based on electrochemical and surface-enhanced Raman spectroscopy. Sensors and Actuators B: Chemical, 2022, 352, 131060.	7.8	34
40	Optimization of backflushing conditions for ceramic ultrafiltration membrane of disperse dye solutions. Desalination, 2007, 202, 150-155.	8.2	33
41	Use of bioelectrode containing DNA-wrapped single-walled carbon nanotubes for enzyme-based biofuel cell. Journal of Power Sources, 2010, 195, 750-755.	7.8	33
42	Enhancement of glucose yield from canola agricultural residue by alkali pretreatment based on multi-regression models. Journal of Industrial and Engineering Chemistry, 2017, 51, 303-311.	5.8	33
43	Optimization of lactulose synthesis from whey lactose by immobilized \hat{l}^2 -galactosidase and glucose isomerase. Carbohydrate Research, 2013, 369, 1-5.	2.3	31
44	Detection of glyphosate by quantitative analysis of fluorescence and single DNA using DNA-labeled fluorescent magnetic core–shell nanoparticles. Sensors and Actuators B: Chemical, 2013, 177, 879-886.	7.8	31
45	Enhancement of enzymatic digestibility of Miscanthus by electron beam irradiation and chemical combined treatments for bioethanol production. Chemical Engineering Journal, 2015, 275, 227-234.	12.7	31
46	Recent Advances in AIV Biosensors Composed of Nanobio Hybrid Material. Micromachines, 2018, 9, 651.	2.9	31
47	Improvement of enzymatic biodiesel production by controlled substrate feeding using silica gel in solvent free system. Enzyme and Microbial Technology, 2011, 49, 402-406.	3.2	30
48	Effect of crude glycerol-derived inhibitors on ethanol production by Enterobacter aerogenes. Bioprocess and Biosystems Engineering, 2012, 35, 85-92.	3.4	30
49	Single walled carbon nanotube based biosensor for detection of peanut allergy-inducing protein ara h1. Korean Journal of Chemical Engineering, 2018, 35, 172-178.	2.7	30
50	Fabrication of Troponin I Biosensor Composed of Multi-Functional DNA Structure/Au Nanocrystal Using Electrochemical and Localized Surface Plasmon Resonance Dual-Detection Method. Nanomaterials, 2019, 9, 1000.	4.1	30
51	Phenolic compounds: Strong inhibitors derived from lignocellulosic hydrolysate for 2,3â€butanediol production by ⟨i⟩Enterobacter aerogenes⟨/i⟩. Biotechnology Journal, 2015, 10, 1920-1928.	3.5	29
52	Titanium dioxide-based sonophotocatalytic mineralization of bisphenol A and its intermediates. Environmental Science and Pollution Research, 2017, 24, 15488-15499.	5.3	29
53	Fabrication of electrochemical biosensor composed of multi-functional DNA/rhodium nanoplate heterolayer for thyroxine detection in clinical sample. Colloids and Surfaces B: Biointerfaces, 2020, 195, 111240.	5.0	28
54	A pretreatment-free electrical capacitance biosensor for exosome detection in undiluted serum. Biosensors and Bioelectronics, 2022, 199, 113872.	10.1	28

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55	Enzymatic synthesis of phenethyl ester from phenethyl alcohol with acyl donors. Enzyme and Microbial Technology, 2017, 100, 37-44.	3.2	26
56	Biodiesel production by enzymatic process using Jatropha oil and waste soybean oil. Biotechnology and Bioprocess Engineering, 2013, 18, 703-708.	2.6	25
57	Improvement of lactulose synthesis through optimization of reaction conditions with immobilized \hat{l}^2 -galactosidase. Korean Journal of Chemical Engineering, 2013, 30, 160-165.	2.7	25
58	Improved Cordycepin Production by Cordyceps militaris KYLO5 Using Casein Hydrolysate in Submerged Conditions. Biomolecules, 2019, 9, 461.	4.0	25
59	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
60	Improved bioethanol production from metabolic engineering of Enterobacter aerogenes ATCC 29007. Process Biochemistry, 2015, 50, 2051-2060.	3.7	24
61	Improved fermentation of lignocellulosic hydrolysates to 2,3-butanediol through investigation of effects of inhibitory compounds by Enterobacter aerogenes. Chemical Engineering Journal, 2016, 306, 916-924.	12.7	24
62	Enzymatic Biodiesel Synthesis in Semi-Pilot Continuous Process in Near-Critical Carbon Dioxide. Applied Biochemistry and Biotechnology, 2013, 171, 1118-1127.	2.9	23
63	Statistical Optimization of Alkali Pretreatment to Improve Sugars Recovery from Spent Coffee Grounds and Utilization in Lactic Acid Fermentation. Processes, 2021, 9, 494.	2.8	23
64	Optimization of the process for biodiesel production using a mixture of immobilized Rhizopus oryzae and Candida rugosa lipases. Journal of Microbiology and Biotechnology, 2008, 18, 1927-31.	2.1	23
65	Biosynthesis of organic photosensitizer Zn-porphyrin by diphtheria toxin repressor (DtxR)-mediated global upregulation of engineered heme biosynthesis pathway in Corynebacterium glutamicum. Scientific Reports, 2018, 8, 14460.	3.3	22
66	Metabolic engineering of Enterobacter aerogenes to improve the production of 2,3-butanediol. Biochemical Engineering Journal, 2019, 143, 169-178.	3.6	21
67	Novel and Efficient Synthesis of Phenethyl Formate via Enzymatic Esterification of Formic Acid. Biomolecules, 2020, 10, 70.	4.0	21
68	Enhanced Production of Bacterial Cellulose from Miscanthus as Sustainable Feedstock through Statistical Optimization of Culture Conditions. International Journal of Environmental Research and Public Health, 2022, 19, 866.	2.6	21
69	Strain development and medium optimization for fumaric acid production. Biotechnology and Bioprocess Engineering, 2010, 15, 761-769.	2.6	20
70	Improvement of Ethanol Yield from Glycerol via Conversion of Pyruvate to Ethanol in Metabolically Engineered Saccharomyces cerevisiae. Applied Biochemistry and Biotechnology, 2012, 166, 856-865.	2.9	20
71	Efficient simultaneous production of biodiesel and glycerol carbonate via statistical optimization. Journal of Industrial and Engineering Chemistry, 2017, 51, 49-53.	5.8	20
72	Assessment of peanut allergen Ara h1 in processed foods using a SWCNTs-based nanobiosensor. Bioscience, Biotechnology and Biochemistry, 2018, 82, 1134-1142.	1.3	20

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73	Photothermal Cellulose-Patch with Gold-Spiked Silica Microrods Based on <i>Escherichia coli</i> ACS Omega, 2018, 3, 5244-5251.	3.5	20
74	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
75	Fabrication of Electrochemical Influenza Virus (H1N1) Biosensor Composed of Multifunctional DNA Four-Way Junction and Molybdenum Disulfide Hybrid Material. Materials, 2021, 14, 343.	2.9	20
76	Effect of a buffer mixture system on the activity of lipases during immobilization process. Bioresource Technology, 2010, 101, S66-S70.	9.6	19
77	Application of an enzyme-based biofuel cell containing a bioelectrode modified with deoxyribonucleic acid-wrapped single-walled carbon nanotubes to serum. Enzyme and Microbial Technology, 2011, 48, 80-84.	3.2	19
78	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
79	Re-utilization of waste glycerol for continuous production of bioethanol by immobilized Enterobacter aerogenes. Journal of Cleaner Production, 2017, 161, 757-764.	9.3	19
80	Production of L-lactic acid from metabolically engineered strain of Enterobacter aerogenes ATCC 29007. Enzyme and Microbial Technology, 2017, 102, 1-8.	3.2	18
81	A novel enzyme-immobilization method for a biofuel cell. Journal of Molecular Catalysis B: Enzymatic, 2009, 59, 274-278.	1.8	17
82	Immobilization of glucose oxidase onto cobalt based on silica core/shell nanoparticles as carrier. Process Biochemistry, 2012, 47, 1282-1286.	3.7	17
83	Increased ethanol production from glycerol by Saccharomyces cerevisiae strains with enhanced stress tolerance from the overexpression of SAGA complex components. Enzyme and Microbial Technology, 2012, 51, 237-243.	3.2	17
84	Development of the Troponin Detection System Based on the Nanostructure. Micromachines, 2019, 10, 203.	2.9	17
85	Process design and evaluation of value-added chemicals production from biomass. Biotechnology and Bioprocess Engineering, 2012, 17, 1055-1061.	2.6	16
86	Improved production of bacterial cellulose through investigation of effects of inhibitory compounds from lignocellulosic hydrolysates. GCB Bioenergy, 2021, 13, 436-444.	5.6	16
87	Pretreatment of Rice Straw by Proton Beam Irradiation for Efficient Enzyme Digestibility. Applied Biochemistry and Biotechnology, 2011, 164, 1183-1191.	2.9	15
88	Enzymatic production of glycerol acetate from glycerol. Enzyme and Microbial Technology, 2015, 69, 19-23.	3.2	15
89	Enhanced l-Lysine into 1,5-Diaminopentane Conversion via Statistical Optimization of Whole-Cell Decarboxylation System. Polymers, $2019, 11, 1372$.	4.5	15
90	Production of Novel Polygalacturonase from Bacillus paralicheniformis CBS32 and Application to Depolymerization of Ramie Fiber. Polymers, 2019, 11, 1525.	4.5	15

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91	Energy-efficient glucose recovery from chestnut shell by optimization of NaOH pretreatment at room temperature and application to bioethanol production. Environmental Research, 2022, 208, 112710.	7.5	14
92	Improved high-pressure enzymatic biodiesel batch synthesis in near-critical carbon dioxide. Bioprocess and Biosystems Engineering, 2012, 35, 105-113.	3.4	13
93	Recent Advances in CRP Biosensor Based on Electrical, Electrochemical and Optical Methods. Sensors, 2021, 21, 3024.	3 . 8	13
94	Fabrication of a surface-enhanced Raman spectroscopy-based analytical method consisting of multifunctional DNA three-way junction-conjugated porous gold nanoparticles and Au-Te nanoworm for C-reactive protein detection. Analytical and Bioanalytical Chemistry, 2022, 414, 3197-3204.	3.7	13
95	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
96	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
97	Process strategy for 2,3-butanediol production in fed-batch culture by acetate addition. Journal of Industrial and Engineering Chemistry, 2017, 56, 157-162.	5.8	12
98	Improvement of power generation of enzyme fuel cell by novel GO/Co/chitosan electrodeposition. Journal of Industrial and Engineering Chemistry, 2020, 81, 108-114.	5 . 8	12
99	Hydrogen Production from Methane by Methylomonas sp. DH-1 under Micro-aerobic Conditions. Biotechnology and Bioprocess Engineering, 2020, 25, 71-77.	2.6	12
100	Enhancement of glucose isomerase activity by pretreatment with substrates prior to immobilization. Korean Journal of Chemical Engineering, 2011, 28, 1096-1100.	2.7	11
101	Enhanced In-Vitro Hemozoin Polymerization by Optimized Process using Histidine-Rich Protein II (HRPII). Polymers, 2019, 11, 1162.	4.5	11
102	Improvement of Enzymatic Glucose Conversion from Chestnut Shells through Optimization of KOH Pretreatment. International Journal of Environmental Research and Public Health, 2021, 18, 3772.	2.6	11
103	Optimization of culture medium for lactosucrose (G-beta-D-galactosylsucrose) Production by Sterigmatomyces elviae mutant using statistical analysis. Journal of Microbiology and Biotechnology, 2007, 17, 1996-2004.	2.1	11
104	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
105	Novel and highly efficient lipase-catalyzed esterification of formic acid with hexanol for waste gas reutilization. Journal of Industrial and Engineering Chemistry, 2021, 93, 430-435.	5.8	10
106	Process design and evaluation of production of bioethanol and \hat{l}^2 -lactam antibiotic from lignocellulosic biomass. Bioresource Technology, 2014, 172, 194-200.	9.6	9
107	Continuous production of bioethanol using microalgal sugars extracted from Nannochloropsis gaditana. Korean Journal of Chemical Engineering, 2019, 36, 71-76.	2.7	9
108	Fabrication of an Electrochemical Aptasensor Composed of Multifunctional DNA Three-Way Junction on Au Microgap Electrode for Interferon Gamma Detection in Human Serum. Biomedicines, 2021, 9, 692.	3.2	9

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109	Optimization of enzymatic biodiesel synthesis using RSM in high pressure carbon dioxide and its scale up. Bioprocess and Biosystems Engineering, 2013, 36, 775-780.	3.4	7
110	The potential of waste microalgal hydrolysate for power generation in enzymatic fuel cell. Journal of Cleaner Production, 2018, 187, 903-909.	9.3	7
111	Fabrication of Bioprobe Self-Assembled on Au–Te Nanoworm Structure for SERS Biosensor. Materials, 2020, 13, 3234.	2.9	7
112	Improving Biosensors by the Use of Different Nanomaterials: Case Study with Microcystins as Target Analytes. Biosensors, 2021, 11, 525.	4.7	7
113	Rapid analysis of barley straw before and after dilute sulfuric acid pretreatment by photoluminescence. Bioresource Technology, 2013, 146, 789-793.	9.6	6
114	Bimetallic Au/Ag nanoframes as spectator for Co 2+ ion. Journal of Industrial and Engineering Chemistry, 2017, 48, 235-241.	5.8	6
115	Sonocatalytic reduction of nitrate using magnetic layered double hydroxide: Implications for removal mechanism. Chemosphere, 2019, 218, 799-809.	8.2	6
116	Development of 2,3-Butanediol Production Process from Klebsiella aerogenes ATCC 29007 Using Extracted Sugars of Chlorella pyrenoidosa and Biodiesel-Derived Crude Glycerol. Processes, 2021, 9, 517.	2.8	6
117	Development of Colorimetric Whole-Cell Biosensor for Detection of Heavy Metals in Environment for Public Health. International Journal of Environmental Research and Public Health, 2021, 18, 12721.	2.6	6
118	Efficient Production of Naringin Acetate with Different Acyl Donors via Enzymatic Transesterification by Lipases. International Journal of Environmental Research and Public Health, 2022, 19, 2972.	2.6	6
119	Fabrication of electrochemical biosensor composed of multi-functional DNA 4 way junction for TNF-α detection in human serum. Bioelectrochemistry, 2021, 142, 107939.	4.6	5
120	Increase of electrical properties using a novel mixed buffer system in an enzyme fuel cell. Biotechnology and Bioprocess Engineering, 2009, 14, 687-693.	2.6	3
121	Rapid and concise quantification of mycelial growth by microscopic image intensity model and application to mass cultivation of fungi. Scientific Reports, 2021, 11, 24157.	3.3	3
122	Development of magnetic luminescent core/shell nanocomplex particles with fluorescence using Rhodamine 6G. Materials Research Bulletin, 2012, 47, 4101-4106.	5. 2	2
123	Reutilization of carbon sources through sugar recovery from waste rice straw. Renewable Energy, 2013, 53, 43-48.	8.9	2