Yongjin Chung

List of Publications by Year
in descending order

53 papers	1,355 citations	279487 23 h-index	360668 35 g-index
53 all docs	53 docs citations	53 times ranked	867 citing authors

#	Article	IF	Citations
1	Mesoporous tungsten oxynitride as electrocatalyst for promoting redox reactions of vanadium redox couple and performance of vanadium redox flow battery. Applied Surface Science, 2018, 429, 187-195.	3.1	74
2	Co-immobilization of glucose oxidase and catalase for enhancing the performance of a membraneless glucose biofuel cell operated under physiological conditions. Nanoscale, 2017, 9, 1993-2002.	2.8	66
3	Chelating functional group attached to carbon nanotubes prepared for performance enhancement of vanadium redox flow battery. Journal of Materials Chemistry A, 2017, 5, 21334-21342.	5.2	64
4	Development of a glucose oxidase-based biocatalyst adopting both physical entrapment and crosslinking, and its use in biofuel cells. Nanoscale, 2016, 8, 9201-9210.	2.8	59
5	Fabrication of a biofuel cell improved by the Ï€-conjugated electron pathway effect induced from a new enzyme catalyst employing terephthalaldehyde. Nanoscale, 2016, 8, 1161-1168.	2.8	58
6	Role of borate functionalized carbon nanotube catalyst for the performance improvement of vanadium redox flow battery. Journal of Power Sources, 2019, 438, 227063.	4.0	51
7	All iron aqueous redox flow batteries using organometallic complexes consisting of iron and 3-[bis (2-hydroxyethyl)amino]-2-hydroxypropanesulfonic acid ligand and ferrocyanide as redox couple. Chemical Engineering Journal, 2020, 398, 125631.	6.6	51
8	Vanadium Redox Flow Battery Using Electrocatalyst Decorated with Nitrogen-Doped Carbon Nanotubes Derived from Metal-Organic Frameworks. Journal of the Electrochemical Society, 2018, 165, A1388-A1399.	1.3	49
9	Highly sensitive glucose biosensor using new glucose oxidase based biocatalyst. Korean Journal of Chemical Engineering, 2017, 34, 2916-2921.	1.2	48
10	Glucose biofuel cells using bi-enzyme catalysts including glucose oxidase, horseradish peroxidase and terephthalaldehyde crosslinker. Chemical Engineering Journal, 2018, 334, 1085-1092.	6.6	48
11	A correlation of results measured by cyclic voltammogram and impedance spectroscopy in glucose oxidase based biocatalysts. Korean Journal of Chemical Engineering, 2017, 34, 3009-3016.	1.2	47
12	Effect of the redox reactivity of vanadium ions enhanced by phosphorylethanolamine based catalyst on the performance of vanadium redox flow battery. Journal of Power Sources, 2018, 406, 26-34.	4.0	44
13	A hybrid biocatalyst consisting of silver nanoparticle and naphthalenethiol self-assembled monolayer prepared for anchoring glucose oxidase and its use for an enzymatic biofuel cell. Applied Surface Science, 2018, 429, 180-186.	3.1	38
14	Pd Bi bimetallic catalysts including polyvinylpyrrolidone surfactant inducing excellent formic acid oxidation reaction and direct formic acid fuel cell performance. International Journal of Hydrogen Energy, 2017, 42, 17211-17220.	3.8	35
15	Amide group anchored glucose oxidase based anodic catalysts for high performance enzymatic biofuel cell. Journal of Power Sources, 2017, 337, 152-158.	4.0	35
16	A new biocatalyst employing pyrenecarboxaldehyde as an anodic catalyst for enhancing the performance and stability of an enzymatic biofuel cell. NPG Asia Materials, 2017, 9, e386-e386.	3.8	33
17	Glucose oxidase and polyacrylic acid based water swellable enzymeâ€"polymer conjugates for promoting glucose detection. Nanoscale, 2017, 9, 15998-16004.	2.8	33
18	Cathodic biocatalyst consisting of laccase and gold nanoparticle for improving oxygen reduction reaction rate and enzymatic biofuel cell performance. Journal of Industrial and Engineering Chemistry, 2018, 62, 329-332.	2.9	33

#	Article	IF	Citations
19	Performance evaluation of enzymatic biofuel cells using a new cathodic catalyst containing hemin and poly acrylic acid promoting the oxygen reduction reaction. Journal of Materials Chemistry C, 2019, 7, 11597-11605.	2.7	29
20	Dual catalytic functions of biomimetic, atomically dispersed iron-nitrogen doped carbon catalysts for efficient enzymatic biofuel cells. Chemical Engineering Journal, 2020, 381, 122679.	6.6	29
21	Effects of the gold nanoparticles including different thiol functional groups on the performances of glucose-oxidase-based glucose sensing devices. Korean Journal of Chemical Engineering, 2018, 35, 2421-2429.	1.2	27
22	Vanadium redox flow battery working even at a high current density by the adoption of tris(hydroxymethyl) aminomethane functionalized acidified carbon nanotube catalyst. Applied Surface Science, 2021, 550, 148977.	3.1	27
23	Biocatalyst including porous enzyme cluster composite immobilized by two-step crosslinking and its utilization as enzymatic biofuel cell. Journal of Power Sources, 2017, 360, 172-179.	4.0	24
24	Highly stable aqueous organometallic redox flow batteries using cobalt triisopropanolamine and iron triisopropanolamine complexes. Chemical Engineering Journal, 2021, 405, 126966.	6.6	24
25	Membraneless enzymatic biofuel cells using iron and cobalt co-doped ordered mesoporous porphyrinic carbon based catalyst. Applied Surface Science, 2020, 511, 145449.	3.1	23
26	Organometallic redox flow batteries using iron triethanolamine and cobalt triethanolamine complexes. Journal of Power Sources, 2020, 466, 228333.	4.0	21
27	Aqueous redox flow battery using iron 2,2â€bis(hydroxymethyl)â€2,2â€²,2â€²â€nitrilotriethanol complex and ferrocyanide as newly developed redox couple. International Journal of Energy Research, 2022, 46, 8175-8185.	2.2	21
28	Glucose biofuel cells using the two-step reduction reaction of bienzyme structure as cathodic catalyst. Journal of Industrial and Engineering Chemistry, 2019, 71, 435-444.	2.9	20
29	Carbon supported palladium-copper bimetallic catalysts for promoting electrochemical oxidation of formic acid and its utilization in direct formic acid fuel cells. Korean Journal of Chemical Engineering, 2020, 37, 176-183.	1.2	20
30	Optimization of iron and cobalt based organometallic redox couples for long-term stable operation of aqueous organometallic redox flow batteries. Journal of Power Sources, 2021, 495, 229799.	4.0	19
31	Enhancements in catalytic activity and duration of PdFe bimetallic catalysts and their use in direct formic acid fuel cells. Journal of Industrial and Engineering Chemistry, 2020, 90, 351-357.	2.9	17
32	The effect of a vitamin B₁₂ based catalyst on hydrogen peroxide oxidation reactions and the performance evaluation of a membraneless hydrogen peroxide fuel cell under physiological pH conditions. Journal of Materials Chemistry C, 2020, 8, 2749-2755.	2.7	17
33	Effect of Bismuth Sulfate Coated on Acidified CNT on Performance of Vanadium Redox Flow Battery. Journal of the Electrochemical Society, 2019, 166, A2602-A2609.	1.3	16
34	Amine axial ligand-coordinated cobalt phthalocyanine-based catalyst for flow-type membraneless hydrogen peroxide fuel cell or enzymatic biofuel cell. Journal of Energy Chemistry, 2021, 58, 463-471.	7.1	16
35	A biocatalyst containing chitosan and embedded dye mediator adopted for promoting oxidation reactions and its utilization in biofuel cells. Applied Surface Science, 2020, 507, 145007.	3.1	15
36	The effect of lowâ€defected carboxylic acid functional groupâ€“rich carbon nanotubeâ€“doped electrode on the performance of aqueous vanadium redox flow battery. International Journal of Energy Research, 2022, 46, 11802-11817.	2.2	15

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37	The effects of cobalt phthalocyanine and polyacrylic acid on the reactivity of hydrogen peroxide oxidation reaction and the performance of hydrogen peroxide fuel cell. Journal of Power Sources, 2020, 480, 228860.	4.0	12
38	Effect of axial ligand on the performance of hemin based catalysts and their use for fuel cells. Journal of Industrial and Engineering Chemistry, 2020, 88, 366-372.	2.9	11
39	Spray pyrolysisâ€assisted synthesis of hollow cobalt nitrogenâ€doped carbon catalyst for the performance enhancement of membraneless fuel cells. International Journal of Energy Research, 2022, 46, 760-773.	2.2	11
40	High performance of the flow-type one-compartment hydrogen peroxide fuel cell using buckypaper and narrow fuel pathway under physiological conditions. Sustainable Energy and Fuels, 2022, 6, 841-850.	2.5	11
41	Polydopamine mediator for glucose oxidation reaction and its use for membraneless enzymatic biofuel cells. Journal of Industrial and Engineering Chemistry, 2022, 111, 263-271.	2.9	10
42	Sulfenic Acid Doped Mesocellular Carbon Foam as Powerful Catalyst for Activation of V(II)/V(III) Reaction in Vanadium Redox Flow Battery. Journal of the Electrochemical Society, 2018, 165, A2703-A2708.	1.3	9
43	Performance improvement of the glucose oxidation reactions using methyl red mediator. International Journal of Hydrogen Energy, 2020, 45, 4821-4828.	3.8	9
44	The effects of the interstitial pores of buckypaper in trapping cobalt phthalocyanine and their use in sugarcane-extract fuel cells. Journal of Materials Chemistry C, 2021, 9, 14675-14682.	2.7	9
45	High temperatureâ€induced myoglobinâ€mimic catalytic structure having high axial ligand content for oneâ€compartment hydrogen peroxide fuel cells. International Journal of Energy Research, 2022, 46, 4142-4155.	2.2	8
46	Sulfhydryl-maleimide crosslinking for enhancing catalytic activity and duration of biocatalyst. Materials Chemistry and Physics, 2021, 267, 124615.	2.0	6
47	A Study on Performance Improvement of Glucose Sensor Adopting a Catalyst Using New Cross Liker. Korean Chemical Engineering Research, 2015, 53, 802-807.	0.2	5
48	Performance Enhancement of Biofuel Cell by Surface Modification of Glucose Oxidase using Ferrocene Carboxylic acid. Transactions of the Korean Hydrogen and New Energy Society, 2016, 27, 526-532.	0.1	3
49	Paperâ€based flexible membraneless fuel cells using vitamins as both anodic catalyst and fuel. International Journal of Energy Research, 2022, 46, 15781-15792.	2.2	3
50	Immobilization of Glucose Oxidase using Branched Polyethyleneimines of Various Molecular Weights for Glucose Based Biofuel Cell. Korean Chemical Engineering Research, 2016, 54, 693-697.	0.2	2
51	A Study on Glucose Sensing Measured by Catalyst Containing Multiple Layers of Glucose Oxidase and Gold Nano Rod. Transactions of the Korean Hydrogen and New Energy Society, 2015, 26, 179-183.	0.1	0
52	A Technical Assessment of Possibility Sanction for Assistance to DPRK. Journal of Energy Engineering, 2015, 24, 192-199.	0.2	0
53	Performance Improvement of Glucose Sensor Adopting Enzymatic Catalyst bonded by Glutaraldehyde. Transactions of the Korean Hydrogen and New Energy Society, 2016, 27, 378-385.	0.1	0