Yongchai Kwon

List of Publications by Year
in descending order

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135 papers	4,194 citations	71061 41 h-index	161767 54 g-index
135 all docs	135 docs citations	135 times ranked	2854 citing authors

#	Article	IF	Citations
1	Vanadium Redox Flow Batteries Using meta-Polybenzimidazole-Based Membranes of Different Thicknesses. ACS Applied Materials & Interfaces, 2017, 9, 36799-36809.	4.0	114
2	Direct growth of FeCo2O4 nanowire arrays on flexible stainless steel mesh for high-performance asymmetric supercapacitor. NPG Asia Materials, 2017, 9, e419-e419.	3.8	108
3	Immobilization of glucose oxidase into polyaniline nanofiber matrix for biofuel cell applications. Biosensors and Bioelectronics, 2011, 26, 3908-3913.	5.3	101
4	Porous-Nafion/PBI composite membranes and Nafion/PBI blend membranes for vanadium redox flow batteries. Applied Surface Science, 2018, 450, 301-311.	3.1	85
5	Interfaceâ€Engineered Nickel Cobaltite Nanowires through NiO Atomic Layer Deposition and Nitrogen Plasma for Highâ€Energy, Longâ€Cycleâ€Life Foldable Allâ€Solidâ€State Supercapacitors. Small, 2019, 15, e1803716.	5.2	75
6	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
7	Effects of methylene blue and methyl red mediators on performance of yeast based microbial fuel cells adopting polyethylenimine coated carbon felt as anode. Journal of Power Sources, 2018, 396, 1-11.	4.0	71
8	Performance enhancement in vanadium redox flow battery using platinum-based electrocatalyst synthesized by polyol process. Electrochimica Acta, 2013, 114, 439-447.	2.6	69
9	Fabrication of biofuel cell containing enzyme catalyst immobilized by layer-by-layer method. Journal of Power Sources, 2015, 286, 197-203.	4.0	68
10	Performance evaluation of aqueous organic redox flow battery using anthraquinone-2,7-disulfonic acid disodium salt and potassium iodide redox couple. Chemical Engineering Journal, 2019, 358, 1438-1445.	6.6	67
11	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
12	The Effects of Different Thick Sulfonated Poly (Ether Ether Ketone) Membranes on Performance of Vanadium Redox Flow Battery. Journal of the Electrochemical Society, 2016, 163, A5090-A5096.	1.3	64
13	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
14	MoO₂nanocrystals interconnected on mesocellular carbon foam as a powerful catalyst for vanadium redox flow battery. RSC Advances, 2016, 6, 17574-17582.	1.7	62
15	Current trends for the floating liquefied natural gas (FLNG) technologies. Korean Journal of Chemical Engineering, 2014, 31, 732-743.	1.2	61
16	Fabrication of Mediatorless/Membraneless Glucose/Oxygen Based Biofuel Cell using Biocatalysts Including Glucose Oxidase and Laccase Enzymes. Scientific Reports, 2016, 6, 30128.	1.6	60
17	Neutral pH aqueous redox flow batteries using an anthraquinone-ferrocyanide redox couple. Journal of Materials Chemistry C, 2020, 8, 5727-5731.	2.7	60
18	Effect of nafion membrane thickness on performance of vanadium redox flow battery. Korean Journal of Chemical Engineering, 2014, 31, 2081-2087.	1.2	59

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19	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
20	Yeast and carbon nanotube based biocatalyst developed by synergetic effects of covalent bonding and hydrophobic interaction for performance enhancement of membraneless microbial fuel cell. Bioresource Technology, 2017, 225, 175-182.	4.8	59
21	Blending polybenzimidazole with an anion exchange polymer increases the efficiency of vanadium redox flow batteries. Journal of Membrane Science, 2019, 580, 110-116.	4.1	59
22	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
23	Carbon felt molecular modification and biofilm augmentation via quorum sensing approach in yeast-based microbial fuel cells. Applied Energy, 2019, 238, 239-248.	5.1	58
24	Alkaline aqueous organic redox flow batteries of high energy and power densities using mixed naphthoquinone derivatives. Chemical Engineering Journal, 2020, 386, 123985.	6.6	58
25	Direct electrochemistry of glucose oxidase immobilized on carbon nanotube for improving glucose sensing. International Journal of Hydrogen Energy, 2015, 40, 2199-2206.	3.8	56
26	Layered composite membranes based on porous PVDF coated with a thin, dense PBI layer for vanadium redox flow batteries. Journal of Membrane Science, 2019, 591, 117333.	4.1	56
27	Highly stable enzyme precipitate coatings and their electrochemical applications. Biosensors and Bioelectronics, 2011, 26, 1980-1986.	5.3	54
28	Early-stage performance evaluation of flowing microbial fuel cells using chemically treated carbon felt and yeast biocatalyst. Applied Energy, 2018, 222, 369-382.	5.1	52
29	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
30	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
31	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
32	Highly sensitive glucose biosensor using new glucose oxidase based biocatalyst. Korean Journal of Chemical Engineering, 2017, 34, 2916-2921.	1.2	48
33	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
34	Optimization of glucose concentration and glucose/yeast ratio in yeast microbial fuel cell using response surface methodology approach. Journal of Power Sources, 2018, 402, 402-412.	4.0	48
35	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
36	High ionic selectivity of low permeable organic composite membrane with amphiphilic polymer for vanadium redox flow batteries. Solid State Ionics, 2018, 324, 69-76.	1.3	46

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37	Nanoscale enzyme reactors in mesoporous carbon for improved performance and lifetime of biosensors and biofuel cells. Biosensors and Bioelectronics, 2010, 26, 655-660.	5.3	45
38	Effect of deactivation and reactivation of palladium anode catalyst on performance of direct formic acid fuel cell (DFAFC). International Journal of Hydrogen Energy, 2011, 36, 14719-14724.	3.8	44
39	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
40	Effect of Carboxylic Acid-Doped Carbon Nanotube Catalyst on the Performance of Aqueous Organic Redox Flow Battery Using the Modified Alloxazine and Ferrocyanide Redox Couple. ACS Applied Materials & Interfaces, 2018, 10, 36882-36891.	4.0	42
41	Effects of multiple polyaniline layers immobilized on carbon nanotube and glutaraldehyde on performance and stability of biofuel cell. Journal of Power Sources, 2015, 299, 604-610.	4.0	41
42	Effect of mesocelluar carbon foam electrode material on performance of vanadium redox flow battery. Journal of Power Sources, 2015, 278, 245-254.	4.0	41
43	Iron-vanadium redox flow batteries with polybenzimidazole membranes: High coulomb efficiency and low capacity loss. Journal of Power Sources, 2019, 439, 227079.	4.0	41
44	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
45	Effect of temperature on the performance of aqueous redox flow battery using carboxylic acid functionalized alloxazine and ferrocyanide redox couple. Korean Journal of Chemical Engineering, 2019, 36, 1732-1739.	1.2	38
46	Performance improvement by novel activation process effect of aqueous organic redox flow battery using Tiron and anthraquinone-2,7-disulfonic acid redox couple. Chemical Engineering Journal, 2020, 383, 123085.	6.6	38
47	Optimizing the performance of meta-polybenzimidazole membranes in vanadium redox flow batteries by adding an alkaline pre-swelling step. Chemical Engineering Journal, 2021, 407, 126574.	6.6	38
48	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
49	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
50	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
51	Glucose oxidase and polyacrylic acid based water swellable enzymeâ€“polymer conjugates for promoting glucose detection. Nanoscale, 2017, 9, 15998-16004.	2.8	33
52	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
53	High performance yeast-based microbial fuel cells by surfactant-mediated gold nanoparticles grown atop a carbon felt anode. Applied Energy, 2019, 256, 113912.	5.1	32
54	Nine watt â€“ Level aqueous organic redox flow battery stack using anthraquinone and vanadium as redox couple. Chemical Engineering Journal, 2020, 398, 125610.	6.6	32

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55	Performance evaluation of glucose oxidation reaction using biocatalysts adopting different quinone derivatives and their utilization in enzymatic biofuel cells. Korean Journal of Chemical Engineering, 2019, 36, 500-504.	1.2	31
56	Suppression of carbon formation in steam reforming of methane by addition of Co into Ni/ZrO2 catalysts. Korean Journal of Chemical Engineering, 2010, 27, 480-486.	1.2	29
57	Enzyme precipitate coating of pyranose oxidase on carbon nanotubes and their electrochemical applications. Biosensors and Bioelectronics, 2017, 87, 365-372.	5.3	29
58	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
59	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
60	Soft Materials for Wearable/Flexible Electrochemical Energy Conversion, Storage, and Biosensor Devices. Materials, 2020, 13, 2733.	1.3	29
61	Imidazole based ionenes, their blends with PBI-OO and applicability as membrane in a vanadium Redox flow battery. European Polymer Journal, 2017, 96, 383-392.	2.6	28
62	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
63	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
64	Critical Adhesion Energy of Benzocyclobutene-Bonded Wafers. Journal of the Electrochemical Society, 2006, 153, G347.	1.3	26
65	Enhanced electrochemical sensitivity of enzyme precipitate coating (EPC)-based glucose oxidase biosensors with increased free CNT loadings. Bioelectrochemistry, 2015, 101, 114-119.	2.4	25
66	Perovskite ceramic membrane separator with improved biofouling resistance for yeast-based microbial fuel cells. Journal of Membrane Science, 2020, 599, 117843.	4.1	25
67	Improvement in oxygen reduction activity of polypyrrole-coated PtNi alloy catalyst prepared for proton exchange membrane fuel cells. Synthetic Metals, 2014, 190, 48-55.	2.1	24
68	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
69	Highly stable aqueous organometallic redox flow batteries using cobalt triisopropanolamine and iron triisopropanolamine complexes. Chemical Engineering Journal, 2021, 405, 126966.	6.6	24
70	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
71	Development of biofuel cell adopting multiple poly(diallyldimethylammonium chloride) layers immobilized on carbon nanotube as powerful catalyst. International Journal of Hydrogen Energy, 2016, 41, 17548-17556.	3.8	22
72	The effects of temperature and membrane thickness on the performance of aqueous alkaline redox flow batteries using napthoquinone and ferrocyanide as redox couple. Korean Journal of Chemical Engineering, 2020, 37, 2326-2333.	1.2	22

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73	Evaluation of BCB Bonded and Thinned Wafer Stacks for Three-Dimensional Integration. Journal of the Electrochemical Society, 2008, 155, H280.	1.3	21
74	Performance improvement in direct formic acid fuel cells (DFAFCs) using metal catalyst prepared by dual mode spraying. International Journal of Hydrogen Energy, 2011, 36, 12583-12590.	3.8	21
75	Organometallic redox flow batteries using iron triethanolamine and cobalt triethanolamine complexes. Journal of Power Sources, 2020, 466, 228333.	4.0	21
76	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
77	Thermal Cycling Effects on Critical Adhesion Energy and Residual Stress in Benzocyclobutene-Bonded Wafers. Journal of the Electrochemical Society, 2005, 152, G286.	1.3	20
78	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
79	In situ carbon felt anode modification via codeveloping Saccharomyces cerevisiae living-template titanium dioxide nanoclusters in a yeast-based microbial fuel cell. Journal of Power Sources, 2020, 474, 228651.	4.0	20
80	New Biocatalyst Including a 4-Nitrobenzoic Acid Mediator Embedded by the Cross-Linking of Chitosan and Genipin and Its Use in an Energy Device. ACS Applied Materials & Interfaces, 2020, 12, 23635-23643.	4.0	20
81	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
82	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
83	Three-Dimensional Hierarchical Core/shell Electrodes Using Highly Conformal TiO₂ and Co₃O₄ Thin Films for High-Performance Supercapattery Devices. ACS Applied Materials & Interfaces, 2021, 13, 29058-29069.	4.0	19
84	Enzyme precipitate coatings of glucose oxidase onto carbon paper for biofuel cell applications. Biotechnology and Bioengineering, 2012, 109, 318-324.	1.7	17
85	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
86	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
87	The effect of graphite felt treatment using ironâ€triethanolamine as etching precursor on the performance of vanadium redox flow battery. International Journal of Energy Research, 2022, 46, 8803-8816.	2.2	17
88	Performance evaluation of aqueous all iron redox flow batteries using heat treated graphite felt electrode. Korean Journal of Chemical Engineering, 2022, 39, 3146-3154.	1.2	17
89	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
90	Membraneless biofuel cells using new cathodic catalyst including hemin bonded with amine functionalized carbon nanotube and glucose oxidase sandwiched by poly(dimethyl-diallylammonium) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.9	16

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91	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
92	The effect of plasma treated carbon felt on the performance of aqueous quinoneâ€based redox flow batteries. International Journal of Energy Research, 2021, 45, 17878-17887.	2.2	16
93	Effect of the protection layer formed by cross-linked gelatin on the stability and performance of glucose and oxygen fuel cells. Journal of Energy Chemistry, 2021, 61, 155-162.	7.1	16
94	Stability enhancement for allâ€iron aqueous redox flow battery using ironâ€3â€[bis(2â€hydroxyethyl)amino]â€2â€hydroxypropanesulfonic acid complex and ferrocyanide as redox couple. International Journal of Energy Research, 2022, 46, 6866-6875.	2.2	16
95	Comparative study of three different catalyst coating methods for direct methanol fuel cells. Journal of Power Sources, 2010, 195, 160-164.	4.0	15
96	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
97	A study on the stability and sensitivity of mediator-based enzymatic glucose sensor measured by catalyst consisting of multilayer stacked via layer-by-layer. Journal of Industrial and Engineering Chemistry, 2021, 93, 383-387.	2.9	15
98	Maximizing the enzyme immobilization of enzymatic glucose biofuel cells through hierarchically structured reduced graphene oxide. International Journal of Energy Research, 2021, 45, 20959-20969.	2.2	15
99	A strategy for lowering cross-contamination of aqueous redox flow batteries using metal-ligand complexes as redox couple. Journal of Power Sources, 2022, 520, 230810.	4.0	15
100	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
101	Enhanced extracellular electron transfer of yeast-based microbial fuel cells via one pot substrate-bound growth iron-manganese oxide nanoflowers. Journal of Power Sources, 2020, 474, 228496.	4.0	14
102	Sustainable Syntheses and Sources of Nanomaterials for Microbial Fuel/Electrolysis Cell Applications: An Overview of Recent Progress. Processes, 2021, 9, 1221.	1.3	14
103	Improved biofilm adhesion and electrochemical properties of a graphite-cement composite with silica nanoflowers versus two benchmark carbon felts. Applied Energy, 2020, 261, 114391.	5.1	13
104	High power density nearâ€neutral <scp>pH</scp> aqueous redox flow batteries using zinc chloride and 4,5â€dihydroxyâ€1,3â€benzenedisulfonate as redox couple with polyethylene glycol additive. International Journal of Energy Research, 2021, 45, 10024-10042.	2.2	13
105	Hydrogen peroxide sensor using the biomimetic structure of peroxidase including a metal organic framework. Applied Surface Science, 2021, 554, 148786.	3.1	13
106	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
107	Effect of pore adjustable hydrophilic nickel coated polyethylene membrane on the performance of aqueous naphthoquinone based redox flow batteries. Chemical Engineering Journal, 2021, 408, 127320.	6.6	12
108	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

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109	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
110	Electrochemical Activity Studies of Glucose Oxidase (GOx)-Based and Pyranose Oxidase (POx)-Based Electrodes in Mesoporous Carbon: Toward Biosensor and Biofuel Cell Applications. Electroanalysis, 2014, 26, 2075-2079.	1.5	10
111	Performance enhancement of alkaline organic redox flow battery using catalyst including titanium oxide and Ketjenblack. Korean Journal of Chemical Engineering, 2022, 39, 1624-1631.	1.2	10
112	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
113	Evaluation of direct formic acid fuel cells with catalyst layers coated by electrospray. Korean Journal of Chemical Engineering, 2010, 27, 836-842.	1.2	9
114	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
115	Performance improvement of the glucose oxidation reactions using methyl red mediator. International Journal of Hydrogen Energy, 2020, 45, 4821-4828.	3.8	9
116	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
117	Aqueous organic redox flow batteries using naphthoquinone and iodide maintaining pH of electrolytes desirably by adoption of carboxylic acid functionalized carbon nanotube catalyst. International Journal of Energy Research, 2022, 46, 3362-3375.	2.2	9
118	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
119	An Evaluation Process of Polymeric Adhesive Wafer Bonding for Vertical System Integration. Japanese Journal of Applied Physics, 2005, 44, 3893-3902.	0.8	7
120	Detection of Trace Copper Metal at Carbon Nanotube Based Electrodes Using Squarewave Anodic Stripping Voltammetry. Bulletin of the Korean Chemical Society, 2013, 34, 801-809.	1.0	7
121	Sulfhydryl-maleimide crosslinking for enhancing catalytic activity and duration of biocatalyst. Materials Chemistry and Physics, 2021, 267, 124615.	2.0	6
122	Alkaline naphthoquinoneâ€based redox flow batteries with a crosslinked sulfonated polyphenylsulfone membrane. International Journal of Energy Research, 2022, 46, 12988-13002.	2.2	6
123	Critical Adhesion Energy at the Interface Between Benzocyclobutene and Silicon Nitride Layers. Journal of the Electrochemical Society, 2007, 154, H460.	1.3	5
124	Performance evaluations of yeast based microbial fuel cells improved by the optimization of dead zone inside carbon felt electrode. Korean Journal of Chemical Engineering, 2021, 38, 2347-2352.	1.2	5
125	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
126	Direct electrochemistry of lactate dehydrogenase in aqueous solution system containing l(+)-lactic acid, Î²-nicotinamide adenine dinucleotide, and its reduced form. Journal of Industrial and Engineering Chemistry, 2019, 80, 508-515.	2.9	4

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127	A Study on The Effects of Three Different Carbon Catalysts on Performance of Vanadium Redox Flow Battery. Transactions of the Korean Hydrogen and New Energy Society, 2015, 26, 170-178.	0.1	3
128	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
129	Symmetric aqueous redox flow battery using hydroiodic acid and anthraquinoneâ€2, <scp>7â€disulfonic</scp> acid as redox couple. International Journal of Energy Research, 2022, 46, 7935-7945.	2.2	3
130	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
131	A Study on Oxygen Reduction Reaction of PtM Electrocatalysts Synthesized on Graphene for Proton Exchange Membrane Fuel Cell. Transactions of the Korean Hydrogen and New Energy Society, 2014, 25, 378-385.	0.1	2
132	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
133	A Research on Direct Formic Acid Fuel Cell (DFAFC) using Palladium Catalyst Synthesized by Polyol Method. Transactions of the Korean Hydrogen and New Energy Society, 2015, 26, 227-233.	0.1	1
134	Assessment of Greenhouse Gas Emissions from Landfills Based on Energy Recovery and Surface Emissions of Landfill Gas. New & Renewable Energy, 2020, 16, 27-34.	0.1	1
135	Acidic aqueous redox flow battery using 12â€phosphotungstic acid and 2,4,5,6â€tetrahydroxybenzeneâ€1,3â€disulfonic acid as redox couple. International Journal of Energy Research, 0, , .	2.2	1