# Sung Jong Yoo

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 264 papers | 9,712 citations | 44444 50 h-index | 64407 83 g-index |
| 271 all docs | 271 docs citations | 271 times ranked | 12980 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | 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 |
| 2 | Effect of Support for Nonâ€Noble NiMo Electrocatalyst in Alkaline Hydrogen Oxidation. Advanced Sustainable Systems, 2022, 6, . | 2.7 | 8 |
| 3 | Upcycling waste tires to affordable catalysts for the oxygen reduction reaction. International Journal of Energy Research, 2022, 46, 4645-4654. | 2.2 | 5 |
| 4 | Pyrrolic N wrapping strategy to maximize the number of single-atomic Fe-Nx sites for oxygen reduction reaction. Journal of Power Sources, 2022, 520, 230904. | 4.0 | 14 |
| 5 | Safeguarding the RuO<sub>2</sub> phase against lattice oxygen oxidation during acidic water electrooxidation. Energy and Environmental Science, 2022, 15, 1119-1130. | 15.6 | 66 |
| 6 | Impact of the dopant-induced ensemble structure of hetero-double atom catalysts in electrochemical NH<sub>3</sub> production. Journal of Materials Chemistry A, 2022, 10, 6216-6230. | 5.2 | 11 |
| 7 | Surfactant assisted geometric barriers on PtNi@C electrocatalyst for phosphoric acid fuel cells. Journal of Industrial and Engineering Chemistry, 2022, 110, 198-205. | 2.9 | 6 |
| 8 | Metastable hexagonal close-packed palladium hydride in liquid cell TEM. Nature, 2022, 603, 631-636. | 13.7 | 31 |
| 9 | Atomically dispersed Ru(III) on N-doped mesoporous carbon hollow spheres as catalysts for CO2 hydrogenation to formate. Chemical Engineering Journal, 2022, 442, 136185. | 6.6 | 17 |
| 10 | Hierarchical porous single-wall carbon nanohorns with atomic-level designed single-atom Co sites toward oxygen reduction reaction. Nano Energy, 2022, 97, 107206. | 8.2 | 17 |
| 11 | Design of Co-NC as efficient electrocatalyst: The unique structure and active site for remarkable durability of proton exchange membrane fuel cells. Applied Catalysis B: Environmental, 2022, 308, 121220. | 10.8 | 26 |
| 12 | <scp>Sandwichâ€like</scp> Nafion composite membrane with ultrathin ceria barriers for durable fuel cells. International Journal of Energy Research, 2022, 46, 6457-6470. | 2.2 | 7 |
| 13 | Sacrificial Dopant to Enhance the Activity and Durability of Electrochemical N<sub>2</sub> Reduction Catalysis. ACS Catalysis, 2022, 12, 5684-5697. | 5.5 | 12 |
| 14 | Synthesis of hollow structured PtNi/Pt core/shell and Pt-only nanoparticles via galvanic displacement and selective etching for efficient oxygen reduction reaction. Journal of Industrial and Engineering Chemistry, 2022, 111, 300-307. | 2.9 | 14 |
| 15 | Formation Mechanism of Carbon-Supported Hollow PtNi Nanoparticles via One-Step Preparations for Use in the Oxygen Reduction Reaction. Catalysts, 2022, 12, 513. | 1.6 | 4 |
| 16 | Tofu-derived heteroatom-doped carbon for oxygen reduction reaction in an anion exchange membraneâ€“fuel cell. Energy Conversion and Management, 2022, 265, 115754. | 4.4 | 9 |
| 17 | Electrochemical determination of the degree of atomic surface roughness in Ptâ€“Ni alloy nanocatalysts for oxygen reduction reaction. , 2021, 3, 375-383. | | 57 |
| 18 | Regenerative Electrocatalytic Redox Cycle of Copper Sulfide for Sustainable NH<sub>3</sub> Production under Ambient Conditions. ACS Catalysis, 2021, 11, 435-445. | 5.5 | 43 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Electrochemically fabricated MoO<sub>3</sub>â€“MoO<sub>2</sub>@NiMo heterostructure catalyst with Pt-like activity for the pH-universal hydrogen evolution reaction. Journal of Materials Chemistry A, 2021, 9, 3677-3684. | 5.2 | 27 |
| 20 | Reinforced Polymer Blend Membranes with Liposomeâ€Like Morphology for Polymer Electrolyte Membrane Fuel Cells Operating under Lowâ€Humidity Conditions. Advanced Engineering Materials, 2021, 23, 2001174. | 1.6 | 4 |
| 21 | Anion Constructor for Atomicâ€Scale Engineering of Antiperovskite Crystals for Electrochemical Reactions. Advanced Functional Materials, 2021, 31, 2009241. | 7.8 | 4 |
| 22 | Single-atom oxygen reduction reaction electrocatalysts of Fe, Si, and N co-doped carbon with 3D interconnected mesoporosity. Journal of Materials Chemistry A, 2021, 9, 4297-4309. | 5.2 | 43 |
| 23 | Polystyrene-Based Hydroxide-Ion-Conducting Ionomer: Binder Characteristics and Performance in Anion-Exchange Membrane Fuel Cells. Polymers, 2021, 13, 690. | 2.0 | 14 |
| 24 | Insight on the treatment of pig blood as biomass derived electrocatalyst precursor for high performance in the oxygen reduction reaction. Applied Surface Science, 2021, 545, 148940. | 3.1 | 6 |
| 25 | Poly(fluorenyl aryl piperidinium) membranes and ionomers for anion exchange membrane fuel cells. Nature Communications, 2021, 12, 2367. | 5.8 | 193 |
| 26 | Atomicâ€Scale Engineering: Anion Constructor for Atomicâ€Scale Engineering of Antiperovskite Crystals for Electrochemical Reactions (Adv. Funct. Mater. 16/2021). Advanced Functional Materials, 2021, 31, 2170112. | 7.8 | 0 |
| 27 | Highâ€dispersion <scp>Coâ€Feâ€NC</scp> electrocatalyst based on leafâ€shaped zeolite imidazole framework for oxygenâ€“reduction reaction in acidic medium. International Journal of Energy Research, 2021, 45, 15534-15543. | 2.2 | 8 |
| 28 | High-Performance Fuel Cells with a Plasma-Etched Polymer Electrolyte Membrane with Microhole Arrays. ACS Sustainable Chemistry and Engineering, 2021, 9, 5884-5894. | 3.2 | 13 |
| 29 | Hydrogen-Mediated Thin Pt Layer Formation on Ni<sub>3</sub>N Nanoparticles for the Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2021, 13, 24624-24633. | 4.0 | 3 |
| 30 | Structural Evolution of Atomically Dispersed Fe Species in Feâ€“N/C Catalysts Probed by X-ray Absorption and <sup>57</sup>Fe MÃ¶ssbauer Spectroscopies. Journal of Physical Chemistry C, 2021, 125, 11928-11938. | 1.5 | 9 |
| 31 | Enhanced thermoelectric performance of Mo nanoparticle decorated n-type Bi2Te2.7Se0.3 powder composites. Applied Surface Science, 2021, 548, 149200. | 3.1 | 8 |
| 32 | Atomic-Scale Engineered Fe Single-Atom Electrocatalyst Based on Waste Pig Blood for High-Performance AEMFCs. ACS Sustainable Chemistry and Engineering, 2021, 9, 7863-7872. | 3.2 | 17 |
| 33 | Strategic design for promoting water behavior via ensemble of thermo-responsive polymer functionalized catalysts and reservoir carbon in anion exchange membrane fuel cells. Journal of Power Sources, 2021, 494, 229738. | 4.0 | 9 |
| 34 | Bimetallic ZIFs derived nitrogen-doped hollow carbon with carbon nanotube bridges as a superior oxygen reduction reaction electrocatalyst. Journal of Industrial and Engineering Chemistry, 2021, 97, 466-475. | 2.9 | 19 |
| 35 | Capping agentâ€free synthesis of surface engineered Pt nanocube for direct ammonia fuel cell. International Journal of Energy Research, 2021, 45, 18281-18291. | 2.2 | 7 |
| 36 | Flash Bottomâ€Up Arc Synthesis of Nanocarbons as a Universal Route for Fabricating Singleâ€Atom Electrocatalysts. Small Methods, 2021, 5, 2100239. | 4.6 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Monitoring electrochemical methanol oxidation and CO coverage using Pt deposited SPR sensor platform. International Journal of Energy Research, 2021, 45, 19535. | 2.2 | 2 |
| 38 | Tailoring of Pt Island RuO<sub>2</sub>/C Catalysts by Galvanic Replacement to Achieve Superior Hydrogen Oxidation Reaction and CO Poisoning Resistance. ACS Applied Energy Materials, 2021, 4, 8098-8107. | 2.5 | 6 |
| 39 | Elevated surface plasmon resonance sensing sensitivity of Au-covered silica sphere monolayer prepared by Langmuirâ€“Blodgett coating. Journal of Industrial and Engineering Chemistry, 2021, 99, 179-186. | 2.9 | 5 |
| 40 | Flash Bottomâ€Up Arc Synthesis of Nanocarbons as a Universal Route for Fabricating Singleâ€Atom Electrocatalysts (Small Methods 8/2021). Small Methods, 2021, 5, 2170037. | 4.6 | 0 |
| 41 | Feasibility of a Spherical Hollow Carbon Framework as a Stable Host Material for Reversible Metallic Li Storage. ACS Applied Materials & Interfaces, 2021, 13, 42732-42740. | 4.0 | 5 |
| 42 | Waste pig blood-derived 2D Fe single-atom porous carbon as an efficient electrocatalyst for zincâ€“air batteries and AEMFCs. Applied Surface Science, 2021, 563, 150208. | 3.1 | 25 |
| 43 | Polymer electrolyte membrane unitized regenerative fuel cells: Operational considerations for achieving high round trip efficiency at low catalyst loading. Applied Catalysis B: Environmental, 2021, 297, 120458. | 10.8 | 14 |
| 44 | Emerging carbon shell-encapsulated metal nanocatalysts for fuel cells and water electrolysis. Nanoscale, 2021, 13, 15116-15141. | 2.8 | 46 |
| 45 | A target-customized carbon shell structure of carbon-encapsulated metal nanoparticles for fuel cell applications. Journal of Materials Chemistry A, 2021, 9, 24480-24487. | 5.2 | 18 |
| 46 | Plasma-induced alloying as a green technology for synthesizing ternary nanoparticles with an early transition metal. Nano Today, 2021, 41, 101316. | 6.2 | 11 |
| 47 | Atomic Rearrangement in Coreâ€“Shell Catalysts Induced by Electrochemical Activation for Favorable Oxygen Reduction in Acid Electrolytes. ACS Catalysis, 2021, 11, 15098-15109. | 5.5 | 9 |
| 48 | Hollow-sphere Co-NC synthesis by incorporation of ultrasonic spray pyrolysis and pseudomorphic replication and its enhanced activity toward oxygen reduction reaction. Applied Catalysis B: Environmental, 2020, 260, 118192. | 10.8 | 52 |
| 49 | Dual exchange membrane fuel cell with sequentially aligned cation and anion exchange membranes for non-humidified operation. Journal of Membrane Science, 2020, 596, 117745. | 4.1 | 8 |
| 50 | Defect-controlled Fe-N-doped carbon nanofiber by ball-milling for oxygen reduction reaction. Korean Journal of Chemical Engineering, 2020, 37, 938-945. | 1.2 | 8 |
| 51 | Activityâ€“Stability Relationship in Au@Pt Nanoparticles for Electrocatalysis. ACS Energy Letters, 2020, 5, 2827-2834. | 8.8 | 49 |
| 52 | Electron-deficient titanium single-atom electrocatalyst for stable and efficient hydrogen production. Nano Energy, 2020, 78, 105151. | 8.2 | 16 |
| 53 | Prism patterned TiO2 layers/NafionÂ® composite membrane for elevated temperature/low relative humidity fuel cell operation. Journal of Industrial and Engineering Chemistry, 2020, 90, 327-332. | 2.9 | 11 |
| 54 | Direct Synthesis of Intermetallic Platinumâ€“Alloy Nanoparticles Highly Loaded on Carbon Supports for Efficient Electrocatalysis. Journal of the American Chemical Society, 2020, 142, 14190-14200. | 6.6 | 160 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Fe-based non-noble metal catalysts with dual active sites of nanosized metal carbide and single-atomic species for oxygen reduction reaction. Journal of Materials Chemistry A, 2020, 8, 22379-22388. | 5.2 | 30 |
| 56 | Tunable Synthesis of N,C-Codoped Ti<sup>3+</sup>-Enriched Titanium Oxide Support for Highly Durable PEMFC Cathode. ACS Catalysis, 2020, 10, 12080-12090. | 5.5 | 39 |
| 57 | Monolayer Quantum-Dot Based Light-Sensor by a Photo-Electrochemical Mechanism. Micromachines, 2020, 11, 817. | 1.4 | 0 |
| 58 | Surface engineering of Pd-based nanoparticles by gas treatment for oxygen reduction reaction. Korean Journal of Chemical Engineering, 2020, 37, 1360-1364. | 1.2 | 2 |
| 59 | Effect of N-cyclic cationic groups in poly(phenylene oxide)-based catalyst ionomer membranes for anion exchange membrane fuel cells. Journal of Membrane Science, 2020, 608, 118183. | 4.1 | 32 |
| 60 | Bimodal-porous hollow MgO sphere embedded mixed matrix membranes for CO2 capture. Separation and Purification Technology, 2020, 250, 117065. | 3.9 | 22 |
| 61 | Highly Active and Durable Ordered Intermetallic PdFe Electrocatalyst for Formic Acid Electrooxidation Reaction. ACS Applied Energy Materials, 2020, 3, 4226-4237. | 2.5 | 31 |
| 62 | Formation Mechanism and Gram-Scale Production of PtNi Hollow Nanoparticles for Oxygen Electrocatalysis through In Situ Galvanic Displacement Reaction. ACS Applied Materials & Interfaces, 2020, 12, 16286-16297. | 4.0 | 15 |
| 63 | Effect of the fabrication condition of membrane electrode assemblies with carbon-supported ordered PtCo electrocatalyst on the durability of polymer electrolyte membrane fuel cells. International Journal of Hydrogen Energy, 2020, 45, 32834-32843. | 3.8 | 2 |
| 64 | Spirobiindane-Based Poly(arylene ether sulfone) Ionomers for Alkaline Anion Exchange Membrane Fuel Cells. Macromolecular Research, 2020, 28, 275-281. | 1.0 | 8 |
| 65 | Low-loading IrO2 supported on Pt for catalysis of PEM water electrolysis and regenerative fuel cells. Applied Catalysis B: Environmental, 2020, 272, 118955. | 10.8 | 43 |
| 66 | New PtMg Alloy with Durable Electrocatalytic Performance for Oxygen Reduction Reaction in Proton Exchange Membrane Fuel Cell. ACS Energy Letters, 2020, 5, 1601-1609. | 8.8 | 37 |
| 67 | Hydrocarbon-based electrode ionomer for proton exchange membrane fuel cells. International Journal of Hydrogen Energy, 2020, 45, 32856-32864. | 3.8 | 18 |
| 68 | Additional Carbon/Nafion Covering Layer on Electrode in Polymer Electrolyte Membrane Fuel Cell for Effective Operation at Low Relative Humidity Condition. ECS Meeting Abstracts, 2020, MA2020-01, 1665-1665. | 0.0 | 0 |
| 69 | Boosting Fuel Cell Durability under Shut-Down/Start-Up Conditions Using a Hydrogen Oxidation-Selective Metalâ€“Carbon Hybrid Coreâ€“Shell Catalyst. ACS Applied Materials & Interfaces, 2019, 11, 27735-27742. | 4.0 | 35 |
| 70 | Tuning the surface structure of PtCo nanocatalysts with high activity and stability toward oxygen reduction. Journal of Industrial and Engineering Chemistry, 2019, 78, 448-454. | 2.9 | 19 |
| 71 | Investigation of the effect of carbon-covering layer on catalyst layer in polymer electrolyte membrane fuel cell in low relative humidity condition. Journal of Power Sources, 2019, 436, 226823. | 4.0 | 14 |
| 72 | Bioâ€Derived Co<sub>2</sub>P Nanoparticles Supported on Nitrogenâ€Doped Carbon as Promising Oxygen Reduction Reaction Electrocatalyst for Anion Exchange Membrane Fuel Cells. Small, 2019, 15, e1902090. | 5.2 | 31 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Preparation of porous PtAuCu@Pt core-shell catalyst for application to oxygen reduction. Journal of Industrial and Engineering Chemistry, 2019, 79, 210-216. | 2.9 | 15 |
| 74 | Rational Generation of Feâ˜'N x Active Sites in Feâ˜'Nâ˜'C Electrocatalysts Facilitated by Feâ˜'N Coordinated Precursors for the Oxygen Reduction Reaction. ChemCatChem, 2019, 11, 5982-5988. | 1.8 | 19 |
| 75 | Membrane/Electrode Interface Design for Effective Water Management in Alkaline Membrane Fuel Cells. ACS Applied Materials & Interfaces, 2019, 11, 34805-34811. | 4.0 | 29 |
| 76 | Enhanced Water Management of Three-Dimensional Graphene-Ni Foam with Patterned Wettability in a Polymer Electrolyte Membrane Fuel Cell. ACS Sustainable Chemistry and Engineering, 2019, 7, 15487-15494. | 3.2 | 26 |
| 77 | Development of robust Pt shell through organic hydride donor in PtCo@Pt core-shell electrocatalysts for highly stable proton exchange membrane fuel cells. Journal of Catalysis, 2019, 379, 112-120. | 3.1 | 41 |
| 78 | A new etching process for zinc oxide with etching rate and crystal plane control: experiment, calculation, and membrane application. Nanoscale, 2019, 11, 12337-12346. | 2.8 | 3 |
| 79 | Polyethylenimineâ€assisted Synthesis of Au Nanoparticles for Efficient Syngas Production. Electroanalysis, 2019, 31, 1401-1408. | 1.5 | 12 |
| 80 | Bending-durable membrane-electrode assembly using metal nanowires for bendable polymer electrolyte membrane fuel cell. Energy, 2019, 172, 874-880. | 4.5 | 14 |
| 81 | Pt-Sputtered Ti Mesh Electrode for Polymer Electrolyte Membrane Fuel Cells. International Journal of Precision Engineering and Manufacturing - Green Technology, 2019, 6, 271-279. | 2.7 | 11 |
| 82 | Work function-tailored graphene via transition metal encapsulation as a highly active and durable catalyst for the oxygen reduction reaction. Energy and Environmental Science, 2019, 12, 2200-2211. | 15.6 | 141 |
| 83 | A study on electrode fabrication and operation variables affecting the performance of anion exchange membrane water electrolysis. Journal of Industrial and Engineering Chemistry, 2019, 76, 410-418. | 2.9 | 85 |
| 84 | Synthesis and growth mechanism of carbon-supported nanoparticle catalysts by physical vapor deposition onto a liquid medium substrate. Applied Surface Science, 2019, 471, 1083-1087. | 3.1 | 5 |
| 85 | Zeolitic imidazolate framework ZIF-8 films by ZnO to ZIF-8 conversion and their usage as seed layers for propylene-selective ZIF-8 membranes. Journal of Industrial and Engineering Chemistry, 2019, 72, 374-379. | 2.9 | 36 |
| 86 | Highly active bimetallic CuFeâ€“Nâ€“C electrocatalysts for oxygen reduction reaction in alkaline media. Journal of Industrial and Engineering Chemistry, 2019, 71, 234-241. | 2.9 | 12 |
| 87 | Effect of Catalyst Pore Size on the Performance of Nonâ€Precious Fe/N/Câ€Based Electrocatalysts for Highâ€Temperature Polymer Electrolyte Membrane Fuel Cells. ChemElectroChem, 2018, 5, 1805-1810. | 1.7 | 19 |
| 88 | Computational and experimental design of active and durable Ir-based nanoalloy for electrochemical oxygen reduction reaction. Applied Catalysis B: Environmental, 2018, 235, 177-185. | 10.8 | 18 |
| 89 | Alkaline anion exchange membrane water electrolysis: Effects of electrolyte feed method and electrode binder content. Journal of Power Sources, 2018, 382, 22-29. | 4.0 | 96 |
| 90 | Hollow PdCu2@Pt core@shell nanoparticles with ordered intermetallic cores as efficient and durable oxygen reduction reaction electrocatalysts. Applied Catalysis B: Environmental, 2018, 225, 84-90. | 10.8 | 48 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Toward High-Performance Pt-Based Nanocatalysts for Oxygen Reduction Reaction through Organicâ€“Inorganic Hybrid Concepts. Chemistry of Materials, 2018, 30, 2-24. | 3.2 | 65 |
| 92 | Gram-scale synthesis of highly active and durable octahedral PtNi nanoparticle catalysts for proton exchange membrane fuel cell. Applied Catalysis B: Environmental, 2018, 225, 530-537. | 10.8 | 63 |
| 93 | Electrodeposited IrO2/Ti electrodes as durable and cost-effective anodes in high-temperature polymer-membrane-electrolyte water electrolyzers. Applied Catalysis B: Environmental, 2018, 226, 289-294. | 10.8 | 76 |
| 94 | Tailoring the porosity of MOF-derived N-doped carbon electrocatalysts for highly efficient solar energy conversion. Journal of Materials Chemistry A, 2018, 6, 20170-20183. | 5.2 | 25 |
| 95 | Application of spirobiindane-based microporous poly(ether sulfone)s as polymeric binder on solid alkaline exchange membrane fuel cells. Journal of Membrane Science, 2018, 568, 67-75. | 4.1 | 34 |
| 96 | Fuel Cells: Highly Efficient Oxygen Reduction Reaction Activity of Graphitic Tube Encapsulating Nitrided Co<sub>x</sub>Fe<sub>y</sub> Alloy (Adv. Energy Mater. 25/2018). Advanced Energy Materials, 2018, 8, 1870115. | 10.2 | 5 |
| 97 | Highly Efficient Oxygen Reduction Reaction Activity of Graphitic Tube Encapsulating Nitrided Co<sub>x</sub>Fe<sub>y</sub> Alloy. Advanced Energy Materials, 2018, 8, 1801002. | 10.2 | 117 |
| 98 | Electrochemical impedance analysis with transmission line model for accelerated carbon corrosion in polymer electrolyte membrane fuel cells. International Journal of Hydrogen Energy, 2018, 43, 15457-15465. | 3.8 | 23 |
| 99 | Enhanced CO2 reduction activity of polyethylene glycol-modified Au nanoparticles prepared via liquid medium sputtering. Applied Catalysis B: Environmental, 2018, 237, 673-680. | 10.8 | 35 |
| 100 | Facile Spray Pyrolysis Synthesis of Various Metal-Doped MoO2 Microspheres for Catalytic Partial Oxidation of n-Dodecane. Catalysis Letters, 2018, 148, 2510-2515. | 1.4 | 1 |
| 101 | Effect of the spirobiindane group in sulfonated poly(arylene ether sulfone) copolymer as electrode binder for polymer electrolyte membrane fuel cells. Journal of Industrial and Engineering Chemistry, 2017, 47, 315-322. | 2.9 | 14 |
| 102 | Repetitive bending test of membrane electrode assembly for bendable polymer electrolyte membrane fuel cell. Journal of Industrial and Engineering Chemistry, 2017, 47, 323-328. | 2.9 | 14 |
| 103 | Urchin-Shaped Hollow Iron-Nitrogen-Doped Carbon Microspheres as High-Performance Electrocatalysts for Oxygen Reduction. Journal of the Electrochemical Society, 2017, 164, F224-F228. | 1.3 | 11 |
| 104 | Factors in electrode fabrication for performance enhancement of anion exchange membrane water electrolysis. Journal of Power Sources, 2017, 347, 283-290. | 4.0 | 54 |
| 105 | The role of pre-defined microporosity in catalytic site formation for the oxygen reduction reaction in iron- and nitrogen-doped carbon materials. Journal of Materials Chemistry A, 2017, 5, 4199-4206. | 5.2 | 30 |
| 106 | Self-healing Pd3Au@Pt/C core-shell electrocatalysts with substantially enhanced activity and durability towards oxygen reduction. Applied Catalysis B: Environmental, 2017, 206, 666-674. | 10.8 | 14 |
| 107 | Preparation and characterization of Cuâ€“Nâ€“C electrocatalysts for oxygen reduction reaction in alkaline anion exchange membrane fuel cells. Journal of Industrial and Engineering Chemistry, 2017, 52, 35-41. | 2.9 | 18 |
| 108 | Effect of assembly pressure on the performance of a bendable polymer electrolyte fuel cell based on a silver nanowire current collector. Energy, 2017, 134, 412-419. | 4.5 | 32 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | A rollable ultra-light polymer electrolyte membrane fuel cell. NPG Asia Materials, 2017, 9, e384-e384. | 3.8 | 34 |
| 110 | Effect of Catalyst Layer Ionomer Content on Performance of Intermediate Temperature Proton Exchange Membrane Fuel Cells (IT-PEMFCs) under Reduced Humidity Conditions. Electrochimica Acta, 2017, 224, 228-234. | 2.6 | 30 |
| 111 | Anomalous in situ Activation of Carbon-Supported Ni2P Nanoparticles for Oxygen Evolving Electrocatalysis in Alkaline Media. Scientific Reports, 2017, 7, 8236. | 1.6 | 21 |
| 112 | Rhodiumâ€“Tin Binary Nanoparticleâ€”A Strategy to Develop an Alternative Electrocatalyst for Oxygen Reduction. ACS Catalysis, 2017, 7, 5796-5801. | 5.5 | 25 |
| 113 | Transition metal alloying effect on the phosphoric acid adsorption strength of Pt nanoparticles: an experimental and density functional theory study. Scientific Reports, 2017, 7, 7186. | 1.6 | 17 |
| 114 | Investigation of electrolyte leaching in the performance degradation of phosphoric acid-doped polybenzimidazole membrane-based high temperature fuel cells. Journal of Power Sources, 2017, 363, 365-374. | 4.0 | 49 |
| 115 | Synthesis of high molecular weight polybenzimidazole using a highly pure monomer under mild conditions. Polymer International, 2017, 66, 1812-1818. | 1.6 | 12 |
| 116 | Vanadium nitride nanofiber membrane as a highly stable support for Pt-catalyzed oxygen reduction reaction. Journal of Industrial and Engineering Chemistry, 2017, 46, 298-303. | 2.9 | 25 |
| 117 | Facile Synthesis of M-MOF-74 (M=Co, Ni, Zn) and its Application as an ElectroCatalyst for Electrochemical CO2 Conversion and H2 Production. Journal of Electrochemical Science and Technology, 2017, 8, 61-68. | 0.9 | 43 |
| 118 | A Review on Membranes and Catalysts for Anion Exchange Membrane Water Electrolysis Single Cells. Journal of Electrochemical Science and Technology, 2017, 8, 183-196. | 0.9 | 45 |
| 119 | A Review of Industrially Developed Components and Operation Conditions for Anion Exchange Membrane Water Electrolysis. Journal of Electrochemical Science and Technology, 2017, 8, 265-273. | 0.9 | 19 |
| 120 | Facile Synthesis of M-MOF-74 (M=Co, Ni, Zn) and its Application as an ElectroCatalyst for Electrochemical CO<sub>2</sub> Conversion and H<sub>2</sub> Production. Journal of Electrochemical Science and Technology, 2017, 8, 61-68. | 0.9 | 25 |
| 121 | Spectrophotometric Analysis of Phosphoric Acid Leakage in High-Temperature Phosphoric Acid-Doped Polybenzimidazole Membrane Fuel Cell Application. Journal of Sensors, 2016, 2016, 1-8. | 0.6 | 6 |
| 122 | PEMFC Performance with Metal Bipolar Plates Depending on the Channel Dimension. MATEC Web of Conferences, 2016, 51, 03002. | 0.1 | 0 |
| 123 | Characterizing Coverage of Phosphoric Acid on Carbon-Supported Platinum Nanoparticles Using In Situ Extended X-Ray Absorption Fine Structure Spectroscopy and Cyclic Voltammetry. Journal of the Electrochemical Society, 2016, 163, F210-F215. | 1.3 | 12 |
| 124 | Development of La0.8Sr0.2MnO3+Î´ electrocatalysts by Pechini's methods as cathode electrocatalysts in alkaline anion exchange membrane fuel cells. Solid State Ionics, 2016, 290, 124-129. | 1.3 | 2 |
| 125 | Polarization characteristics of a low catalyst loading PEM water electrolyzer operating at elevated temperature. Journal of Power Sources, 2016, 309, 127-134. | 4.0 | 68 |
| 126 | Prism-patterned Nafion membrane for enhanced water transport in polymer electrolyte membrane fuel cell. Journal of Power Sources, 2016, 317, 19-24. | 4.0 | 37 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | Base tolerant polybenzimidazolium hydroxide membranes for solid alkaline-exchange membrane fuel cells. Journal of Membrane Science, 2016, 514, 398-406. | 4.1 | 11 |
| 128 | Facile preparation of a long-term durable nano- and micro-structured polymer blend membrane for a proton exchange membrane fuel cell. RSC Advances, 2016, 6, 46516-46522. | 1.7 | 13 |
| 129 | Experimental Investigation of Operating Parameters in Power Generation by Labâ€Scale Reverse Electroâ€Dialysis (<scp>RED</scp>). Bulletin of the Korean Chemical Society, 2016, 37, 1010-1019. | 1.0 | 11 |
| 130 | Electrochemical Conversion of Carbon Dioxide to Formic Acid on Snâ€“Zn Alloy Catalysts Prepared by Electrodeposition. Journal of Nanoscience and Nanotechnology, 2016, 16, 10470-10474. | 0.9 | 10 |
| 131 | Facile synthesis of platinum alloy electrocatalyst via aluminum reducing agent and the effect of post heat treatment for oxygen reduction reaction. International Journal of Hydrogen Energy, 2016, 41, 22952-22962. | 3.8 | 6 |
| 132 | Binaphthyl-based molecular barrier materials for phosphoric acid poisoning in high-temperature proton exchange membrane fuel cells. RSC Advances, 2016, 6, 60749-60755. | 1.7 | 12 |
| 133 | High-performance PtCux@Pt core-shell nanoparticles decorated with nanoporous Pt surfaces for oxygen reduction reaction. Applied Catalysis B: Environmental, 2016, 196, 199-206. | 10.8 | 49 |
| 134 | NH3 adsorption on PtM (Fe, Co, Ni) surfaces: Cooperating effects of charge transfer, magnetic ordering and lattice strain. Chemical Physics Letters, 2016, 648, 166-169. | 1.2 | 17 |
| 135 | Rationalization of electrocatalysis of nickel phosphide nanowires for efficient hydrogen production. Nano Energy, 2016, 26, 496-503. | 8.2 | 61 |
| 136 | Organic-inorganic hybrid PtCo nanoparticle with high electrocatalytic activity and durability for oxygen reduction. NPG Asia Materials, 2016, 8, e237-e237. | 3.8 | 57 |
| 137 | Development of porous Pt/IrO2/carbon paper electrocatalysts with enhanced mass transport as oxygen electrodes in unitized regenerative fuel cells. Electrochemistry Communications, 2016, 64, 14-17. | 2.3 | 34 |
| 138 | A simple synthesis of urchin-like Ptâ€“Ni bimetallic nanostructures as enhanced electrocatalysts for the oxygen reduction reaction. Chemical Communications, 2016, 52, 597-600. | 2.2 | 47 |
| 139 | Anion exchange membrane water electrolyzer with an ultra-low loading of Pt-decorated Ni electrocatalyst. Applied Catalysis B: Environmental, 2016, 180, 674-679. | 10.8 | 47 |
| 140 | Synthesis and Properties of Nitrogen and Iodine Co-Functionalized Graphene Oxide and Its Electrochemical Applications. Science of Advanced Materials, 2016, 8, 28-33. | 0.1 | 3 |
| 141 | Recent Progress in Nanoparticle Synthesis via Liquid Medium Sputtering and its Applications. Journal of Electrochemical Science and Technology, 2016, 7, 13-26. | 0.9 | 2 |
| 142 | Carbon-Supported Ordered Pt-Ti Alloy Nanoparticles as Durable Oxygen Reduction Reaction Electrocatalyst for Polymer Electrolyte Membrane Fuel Cells. Journal of Electrochemical Science and Technology, 2016, 7, 269-276. | 0.9 | 1 |
| 143 | Recent Progress in Nanoparticle Synthesis via Liquid Medium Sputtering and its Applications. Journal of Electrochemical Science and Technology, 2016, 7, 13-26. | 0.9 | 2 |
| 144 | Carbon-Supported Ordered Pt-Ti Alloy Nanoparticles as Durable Oxygen Reduction Reaction Electrocatalyst for Polymer Electrolyte Membrane Fuel Cells. Journal of Electrochemical Science and Technology, 2016, 7, 269-276. | 0.9 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Green synthesis of carbon-supported nanoparticle catalysts by physical vapor deposition on soluble powder substrates. Scientific Reports, 2015, 5, 14245. | 1.6 | 11 |
| 146 | In Situ Transformation of Hydrogen-Evolving CoP Nanoparticles: Toward Efficient Oxygen Evolution Catalysts Bearing Dispersed Morphologies with Co-oxo/hydroxo Molecular Units. ACS Catalysis, 2015, 5, 4066-4074. | 5.5 | 420 |
| 147 | Development of electrodeposited IrO2 electrodes as anodes in polymer electrolyte membrane water electrolysis. Applied Catalysis B: Environmental, 2015, 179, 285-291. | 10.8 | 118 |
| 148 | Epitaxial Growth of a Single-Crystal Hybridized Boron Nitride and Graphene Layer on a Wide-Band Gap Semiconductor. Journal of the American Chemical Society, 2015, 137, 6897-6905. | 6.6 | 55 |
| 149 | Enhanced Methanol Tolerance of Highly Pd rich Pd-Pt Cathode Electrocatalysts in Direct Methanol Fuel Cells. Electrochimica Acta, 2015, 164, 235-242. | 2.6 | 49 |
| 150 | Design of an Advanced Membrane Electrode Assembly Employing a Double-Layered Cathode for a PEM Fuel Cell. ACS Applied Materials & Interfaces, 2015, 7, 27581-27585. | 4.0 | 30 |
| 151 | Highly Durable and Active PtFe Nanocatalyst for Electrochemical Oxygen Reduction Reaction. Journal of the American Chemical Society, 2015, 137, 15478-15485. | 6.6 | 517 |
| 152 | Structure dependent active sites of Ni<sub>x</sub>S<sub>y</sub> as electrocatalysts for hydrogen evolution reaction. Nanoscale, 2015, 7, 5157-5163. | 2.8 | 121 |
| 153 | Third-body effects of native surfactants on Pt nanoparticle electrocatalysts in proton exchange fuel cells. Chemical Communications, 2015, 51, 2968-2971. | 2.2 | 34 |
| 154 | Cobalt-carbon nanofibers as an efficient support-free catalyst for oxygen reduction reaction with a systematic study of active site formation. Journal of Materials Chemistry A, 2015, 3, 14284-14290. | 5.2 | 77 |
| 155 | Heterogeneous rhodiumâ€“tin nanoparticles: highly active and durable electrocatalysts for the oxidation of ethanol. Journal of Materials Chemistry A, 2015, 3, 17130-17134. | 5.2 | 15 |
| 156 | Synthesis of high molecular weight sulfonated poly(arylene ether sulfone) copolymer without azeotropic reaction. Solid State Ionics, 2015, 275, 92-96. | 1.3 | 6 |
| 157 | Understanding Interface between Electrode and Electrolyte: Organic/Inorganic Hybrid Design for Fast Ion Conductivity. Journal of Physical Chemistry C, 2015, 119, 9169-9176. | 1.5 | 10 |
| 158 | The nature of active sites of Ni2P electrocatalyst for hydrogen evolution reaction. Journal of Catalysis, 2015, 326, 92-99. | 3.1 | 107 |
| 159 | Effect of oleylamine concentration on the structure and oxygen reduction activity of carbon-supported surface-Pt-enriched Pt 3 Au electrocatalysts. Journal of Power Sources, 2015, 290, 130-135. | 4.0 | 6 |
| 160 | A highly active and durable Coâ€“Nâ€“C electrocatalyst synthesized using exfoliated graphitic carbon nitride nanosheets. Nanoscale, 2015, 7, 10334-10339. | 2.8 | 61 |
| 161 | Morphology-controlled synthesis of ternary Ptâ€“Pdâ€“Cu alloy nanoparticles for efficient electrocatalytic oxygen reduction reactions. Applied Catalysis B: Environmental, 2015, 174-175, 526-532. | 10.8 | 42 |
| 162 | Colorimetric determination of phosphoric acid leakage for phosphoric acid-doped polybenzimidazole membrane fuel cell applications. Journal of Power Sources, 2015, 299, 480-484. | 4.0 | 7 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | Site preference of NH<sub>3</sub>-adsorption on Co, Pt and CoPt surfaces: the role of charge transfer, magnetism and strain. Physical Chemistry Chemical Physics, 2015, 17, 9335-9340. | 1.3 | 9 |
| 164 | Highly efficient and durable TiN nanofiber electrocatalyst supports. Nanoscale, 2015, 7, 18429-18434. | 2.8 | 28 |
| 165 | Janus Pt surfaces derivatized with zwitterionic molecules for oxygen reduction reactions in alkaline and acid electrolytes. Nano Energy, 2015, 17, 152-159. | 8.2 | 19 |
| 166 | Nanosized Ptâ€“La alloy electrocatalysts with high activity and stability for the oxygen reduction reaction. Surface Science, 2015, 631, 272-277. | 0.8 | 10 |
| 167 | Novel sulfonated poly(arylene ether sulfone) containing hydroxyl groups for enhanced proton exchange membrane properties. Polymer Chemistry, 2015, 6, 233-239. | 1.9 | 25 |
| 168 | Effect of membrane electrode assembly fabrication method on the single cell performances of polybenzimidazole-based high temperature polymer electrolyte membrane fuel cells. Macromolecular Research, 2014, 22, 1214-1220. | 1.0 | 11 |
| 169 | Poly(arylene ether sulfone) with tetra(quaternary ammonium) moiety in the polymer repeating unit for application in solid alkaline exchange membrane fuel cells. International Journal of Hydrogen Energy, 2014, 39, 21223-21230. | 3.8 | 27 |
| 170 | Effects of anode flooding on the performance degradation of polymer electrolyte membrane fuel cells. Journal of Power Sources, 2014, 266, 332-340. | 4.0 | 84 |
| 171 | Analysis of the spatially distributed performance degradation of a polymer electrolyte membrane fuel cell stack. International Journal of Hydrogen Energy, 2014, 39, 16548-16555. | 3.8 | 2 |
| 172 | One-step synthesis of carbon-supported Pd@Pt/C coreâ€“shell nanoparticles as oxygen reduction electrocatalysts and their enhanced activity and stability. Nanoscale, 2014, 6, 4038. | 2.8 | 35 |
| 173 | Edge-exposed MoS<sub>2</sub>nano-assembled structures as efficient electrocatalysts for hydrogen evolution reaction. Nanoscale, 2014, 6, 2131-2136. | 2.8 | 260 |
| 174 | Development of a membrane electrode assembly for alkaline water electrolysis by direct electrodeposition of nickel on carbon papers. Applied Catalysis B: Environmental, 2014, 154-155, 197-205. | 10.8 | 77 |
| 175 | Synthesis and characterization of fluoreneâ€based polybenzimidazole copolymer for gas separation. Journal of Applied Polymer Science, 2014, 131, . | 1.3 | 11 |
| 176 | P-modified and carbon shell coated Co nanoparticles for efficient alkaline oxygen reduction catalysis. Chemical Communications, 2014, 50, 15940-15943. | 2.2 | 23 |
| 177 | Facile synthesis of carbon supported metal nanoparticles via sputtering onto a liquid substrate and their electrochemical application. RSC Advances, 2014, 4, 38575. | 1.7 | 22 |
| 178 | Effect of the type of Pt precursor on Ptâ€“Ni nanostructures for electro-oxidation of ammonia. Materials Chemistry and Physics, 2014, 147, 722-727. | 2.0 | 6 |
| 179 | Nitrogen-doped and simultaneously reduced graphene oxide with superior dispersion as electrocatalysts for oxygen reduction reaction. Materials Research Bulletin, 2014, 59, 145-149. | 2.7 | 8 |
| 180 | Origin of the Enhanced Electrocatalysis for Thermally Controlled Nanostructure of Bimetallic Nanoparticles. Journal of Physical Chemistry C, 2014, 118, 9939-9945. | 1.5 | 25 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | Effect of surface composition of Ptâ€“Fe nanoparticles for oxygen reduction reactions. International Journal of Hydrogen Energy, 2014, 39, 14751-14759. | 3.8 | 30 |
| 182 | Pt-based nanoarchitecture and catalyst design for fuel cell applications. Nano Today, 2014, 9, 433-456. | 6.2 | 267 |
| 183 | Analysis on the effect of operating conditions on electrochemical conversion of carbon dioxide to formic acid. International Journal of Hydrogen Energy, 2014, 39, 16506-16512. | 3.8 | 78 |
| 184 | Graphene-oxide-intercalated layered manganese oxides as an efficient oxygen reduction reaction catalyst in alkaline media. Electrochemistry Communications, 2014, 41, 35-38. | 2.3 | 21 |
| 185 | Surface-Rearranged Pd<sub>3</sub>Au/C Nanocatalysts by Using CO-Induced Segregation for Formic Acid Oxidation Reactions. ACS Catalysis, 2014, 4, 2402-2408. | 5.5 | 55 |
| 186 | Highly active and CO2 tolerant Ir nanocatalysts for H2/CO2 separation in electrochemical hydrogen pumps. Applied Catalysis B: Environmental, 2014, 158-159, 348-354. | 10.8 | 15 |
| 187 | Inhibition of CO poisoning on Pt catalyst coupled with the reduction of toxic hexavalent chromium in a dual-functional fuel cell. Scientific Reports, 2014, 4, 7450. | 1.6 | 77 |
| 188 | Systematic Analysis for the Effects of Atmospheric Pollutants in Cathode Feed on the Performance of Proton Exchange Membrane Fuel Cells. Bulletin of the Korean Chemical Society, 2014, 35, 3475-3481. | 1.0 | 7 |
| 189 | Effects of platinum loading on the performance of proton exchange membrane fuel cells with high ionomer content in catalyst layers. International Journal of Hydrogen Energy, 2013, 38, 9826-9834. | 3.8 | 27 |
| 190 | Pd nanocrystals on WC as a synergistic electrocatalyst for hydrogen oxidation reactions. Physical Chemistry Chemical Physics, 2013, 15, 2125. | 1.3 | 13 |
| 191 | Chemical tuning of electrochemical properties of Pt-skin surfaces for highly active oxygen reduction reactions. Physical Chemistry Chemical Physics, 2013, 15, 17079. | 1.3 | 26 |
| 192 | Electrochemically fabricated NiCu alloy catalysts for hydrogen production in alkaline water electrolysis. International Journal of Hydrogen Energy, 2013, 38, 13493-13501. | 3.8 | 78 |
| 193 | Effect of morphology of electrodeposited Ni catalysts on the behavior of bubbles generated during the oxygen evolution reaction in alkaline water electrolysis. Chemical Communications, 2013, 49, 9323. | 2.2 | 146 |
| 194 | Effect of Se modification on RuSey/C electrocatalyst for oxygen reduction with phosphoric acid. Electrochemistry Communications, 2013, 27, 46-49. | 2.3 | 8 |
| 195 | Electrochemical determination of the surface composition of Pdâ€“Pt coreâ€“shell nanoparticles. Electrochemistry Communications, 2013, 28, 114-117. | 2.3 | 6 |
| 196 | Characterizations of polybenzimidazole based electrochemical hydrogen pumps with various Pt loadings for H2/CO2 gas separation. International Journal of Hydrogen Energy, 2013, 38, 14816-14823. | 3.8 | 28 |
| 197 | Supported Core@Shell Electrocatalysts for Fuel Cells: Close Encounter with Reality. Scientific Reports, 2013, 3, 1309. | 1.6 | 59 |
| 198 | Reversible Surface Segregation of Pt in a Pt<sub>3</sub>Au/C Catalyst and Its Effect on the Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2013, 117, 9164-9170. | 1.5 | 37 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | Synthesis and characterization of poly(benzimidazolium) membranes for anion exchange membrane fuel cells. Polymer Bulletin, 2013, 70, 2619-2631. | 1.7 | 25 |
| 200 | Enhancement of oxygen reduction reaction on PtAu nanoparticles via CO induced surface Pt enrichment. Applied Catalysis B: Environmental, 2013, 129, 375-381. | 10.8 | 43 |
| 201 | The activation process through a bimodal transmittance state for improving electrochromic performance of nickel oxide thin film. Solar Energy Materials and Solar Cells, 2013, 108, 22-26. | 3.0 | 29 |
| 202 | Effect of Particle Size of PtRu Nanoparticles Embedded in WO3 on Electrocatalysis. Journal of Nanoscience and Nanotechnology, 2013, 13, 3591-3596. | 0.9 | 0 |
| 203 | Hydrogen Oxidation Reaction Activity of Sub-Monolayer Pt-Shell/Pd-Core Nanoparticles. Journal of the Electrochemical Society, 2013, 160, H62-H66. | 1.3 | 2 |
| 204 | Oxygen Reduction Reaction of Pt Supported on Y-Doped SrTiO3. Electrochemical and Solid-State Letters, 2012, 15, B61. | 2.2 | 3 |
| 205 | Facile preparation of carbon-supported PtNi hollow nanoparticles with high electrochemical performance. Journal of Materials Chemistry, 2012, 22, 8820. | 6.7 | 63 |
| 206 | Selective deposition of Pt onto supported metal clusters for fuel cell electrocatalysts. Nanoscale, 2012, 4, 6461. | 2.8 | 16 |
| 207 | Surface Structures and Electrochemical Activities of PtRu Overlayers on Ir Nanoparticles. ACS Catalysis, 2012, 2, 739-745. | 5.5 | 9 |
| 208 | The application of camphorsulfonic acid doped polyaniline films prepared on TCO-free glass for counter electrode of bifacial dye-sensitized solar cells. Journal of Photochemistry and Photobiology A: Chemistry, 2012, 245, 1-8. | 2.0 | 29 |
| 209 | Effects of Pt loading in the anode on the durability of a membraneâ€“electrode assembly for polymer electrolyte membrane fuel cells during startup/shutdown cycling. International Journal of Hydrogen Energy, 2012, 37, 18455-18462. | 3.8 | 35 |
| 210 | Role of Electronic Perturbation in Stability and Activity of Pt-Based Alloy Nanocatalysts for Oxygen Reduction. Journal of the American Chemical Society, 2012, 134, 19508-19511. | 6.6 | 219 |
| 211 | Electrocatalytic Effects of Carbon Dissolution in Pd Nanoparticles. Langmuir, 2012, 28, 3664-3670. | 1.6 | 17 |
| 212 | Promoting effects of La for improved oxygen reduction activity and high stability of Pt on Ptâ€“La alloy electrodes. Energy and Environmental Science, 2012, 5, 7521. | 15.6 | 78 |
| 213 | Electrodeposited Ni dendrites with high activity and durability for hydrogen evolution reaction in alkaline water electrolysis. Journal of Materials Chemistry, 2012, 22, 15153. | 6.7 | 159 |
| 214 | Development of a galvanostatic analysis technique as an in-situ diagnostic tool for PEMFC single cells and stacks. International Journal of Hydrogen Energy, 2012, 37, 5891-5900. | 3.8 | 40 |
| 215 | Pt3Y electrocatalyst for oxygen reduction reaction in proton exchange membrane fuel cells. International Journal of Hydrogen Energy, 2012, 37, 9758-9765. | 3.8 | 47 |
| 216 | Stability characteristics of Pt1Ni1/C as cathode catalysts in membrane electrode assembly of polymer electrolyte membrane fuel cell. Electrochimica Acta, 2012, 59, 264-269. | 2.6 | 21 |

| # | Article | IF | Citations |
|---|---|---|---|
| 217 | The improving electrochromic performance of nickel oxide film using aqueous N,N-dimethylaminoethanol solution. Solar Energy Materials and Solar Cells, 2012, 99, 31-37. | 3.0 | 30 |
| 218 | Stabilizer-mediated Synthesis of High Activity PtFe/C Nanocatalysts for Fuel Cell Application. Bulletin of the Korean Chemical Society, 2012, 33, 699-702. | 1.0 | 3 |
| 219 | Electrochemical Reduction of Carbon Dioxide Using a Proton Exchange Membrane. Journal of the Korean Electrochemical Society, 2012, 15, 216-221. | 0.1 | 0 |
| 220 | A compact BrFAFC (Bio-reformed Formic Acid Fuel Cell) converting formate to power. Chemical Communications, 2011, 47, 3972. | 2.2 | 2 |
| 221 | Enhanced stability and activity of Ptâ€“Y alloy catalysts for electrocatalytic oxygen reduction. Chemical Communications, 2011, 47, 11414. | 2.2 | 94 |
| 222 | Surface Structures and Electrochemical Activities of Pt Overlayers on Ir Nanoparticles. Langmuir, 2011, 27, 3128-3137. | 1.6 | 21 |
| 223 | Ternary Ptâˆ'Feâˆ'Co Alloy Electrocatalysts Prepared by Electrodeposition: Elucidating the Roles of Fe and Co in the Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2011, 115, 2483-2488. | 1.5 | 83 |
| 224 | Enhanced activity of Pt-based electrocatalysts for oxygen reduction via a selective Pt deposition process. Journal of Electroanalytical Chemistry, 2011, 662, 70-79. | 1.9 | 21 |
| 225 | Effect of the amount of reducing agent on surface structures, electrochemical activity and stability of PtRu catalysts. Electrochimica Acta, 2011, 56, 8688-8694. | 2.6 | 5 |
| 226 | Phosphate adsorption and its effect on oxygen reduction reaction for PtxCoy alloy and Aucoreâ€“Ptshell electrocatalysts. Electrochimica Acta, 2011, 56, 8802-8810. | 2.6 | 30 |
| 227 | Effects of stabilizers on the synthesis of Pt3Cox/C electrocatalysts for oxygen reduction. International Journal of Hydrogen Energy, 2011, 36, 12088-12095. | 3.8 | 23 |
| 228 | Electrocatalytic Properties of TiO2-Embedded Pt Nanoparticles in Oxidation of Methanol: Particle Size Effect and Proton Spillover Effect. Electrocatalysis, 2011, 2, 297-306. | 1.5 | 27 |
| 229 | Size-controlled synthesis of Pt nanoparticles and their electrochemical activities toward oxygen reduction. International Journal of Hydrogen Energy, 2011, 36, 706-712. | 3.8 | 36 |
| 230 | Performance and stability characteristics of MEAs with carbon-supported Pt and Pt1Ni1 nanoparticles as cathode catalysts in PEM fuel cell. International Journal of Hydrogen Energy, 2011, 36, 4394-4399. | 3.8 | 22 |
| 231 | Effect of PtRu alloying degree on electrocatalytic activities and stabilities. Applied Catalysis B: Environmental, 2011, 102, 334-342. | 10.8 | 40 |
| 232 | Particle size effects of PtRu nanoparticles embedded in TiO2 on methanol electrooxidation. Electrochimica Acta, 2010, 55, 7939-7944. | 2.6 | 23 |
| 233 | Tungsten oxide bilayer electrodes for photoelectrochemical cells. Journal of Power Sources, 2010, 195, 5422-5425. | 4.0 | 11 |
| 234 | Modified polyol synthesis of PtRu/C for high metal loading and effect of post-treatment. Journal of Power Sources, 2010, 195, 1031-1037. | 4.0 | 24 |

| # | Article | IF | Citations |
|---|---|---|---|
| 235 | Enhancement of polymer electrolyte membrane fuel cell performance by boiling a membrane electrode assembly in sulfuric acid solution. Journal of Power Sources, 2010, 195, 5952-5956. | 4.0 | 6 |
| 236 | High contrast ratio and fast switching polymeric electrochromic films based on water-dispersible polyaniline-poly(4-styrenesulfonate) nanoparticles. Electrochemistry Communications, 2010, 12, 164-167. | 2.3 | 69 |
| 237 | Effect of de-alloying of Ptâ€“Ni bimetallic nanoparticles on the oxygen reduction reaction. Electrochemistry Communications, 2010, 12, 1796-1799. | 2.3 | 21 |
| 238 | Electrocatalytic properties of Pd clusters on Au nanoparticles in formic acid electro-oxidation. Electrochimica Acta, 2010, 55, 4339-4345. | 2.6 | 39 |
| 239 | Enhanced Electrochromic Properties of Irâ€“Ta Oxide Grown Using a Cosputtering System. Journal of the Electrochemical Society, 2010, 157, J256. | 1.3 | 7 |
| 240 | Multilayered Pt/Ru nanorods with controllable bimetallic sites as methanol oxidation catalysts. Physical Chemistry Chemical Physics, 2010, 12, 15240. | 1.3 | 33 |
| 241 | Effect of Surface Segregation on the Methanol Oxidation Reaction in Carbon-Supported Ptâ^'Ru Alloy Nanoparticles. Langmuir, 2010, 26, 9123-9129. | 1.6 | 44 |
| 242 | Effects of particle size on surface electronic and electrocatalytic properties of Pt/TiO<sub>2</sub>nanocatalysts. Chemical Communications, 2010, 46, 794-796. | 2.2 | 77 |
| 243 | Characteristics and performance of membrane electrode assemblies with operating conditions in polymer electrolyte membrane fuel cell. Electrochimica Acta, 2010, 56, 717-721. | 2.6 | 7 |
| 244 | Facile synthesis of highly active and stable Ptâ€“Ir/C electrocatalysts for oxygen reduction and liquid fuel oxidation reaction. Chemical Communications, 2010, 46, 8401. | 2.2 | 53 |
| 245 | Fabrication and Characterization of High-activity Pt/C Electrocatalysts for Oxygen Reduction. Bulletin of the Korean Chemical Society, 2010, 31, 1577-1582. | 1.0 | 11 |
| 246 | High electrochromic performance of co-sputtered vanadiumâ€“titanium oxide as a counter electrode. Solar Energy Materials and Solar Cells, 2009, 93, 2069-2074. | 3.0 | 17 |
| 247 | Influence of Oxide on the Oxygen Reduction Reaction of Carbon-Supported Ptâ^'Ni Alloy Nanoparticles. Journal of Physical Chemistry C, 2009, 113, 19732-19739. | 1.5 | 72 |
| 248 | High utilization of Pt nanocatalysts fabricated using a high-pressure sputtering technique. Journal of Power Sources, 2008, 178, 547-553. | 4.0 | 23 |
| 249 | Promotional Effect of Palladium on the Hydrogen Oxidation Reaction at a PtPd Alloy Electrode. Angewandte Chemie - International Edition, 2008, 47, 9307-9310. | 7.2 | 51 |
| 250 | Electrochromic properties of one-dimensional tungsten oxide nanobundles. Solar Energy Materials and Solar Cells, 2008, 92, 179-183. | 3.0 | 35 |
| 251 | Enhanced performance and improved interfacial properties of polymer electrolyte membrane fuel cells fabricated using sputter-deposited Pt thin layers. Electrochimica Acta, 2008, 53, 6111-6116. | 2.6 | 22 |
| 252 | Enhanced Reliability of Electrochromic Devices with a LiPON Protective Layer. Journal of the Electrochemical Society, 2007, 154, P6. | 1.3 | 12 |

| # | Article | IF | Citations |
|---|---|---|---|
| 253 | Fast switchable electrochromic properties of tungsten oxide nanowire bundles. Applied Physics Letters, 2007, 90, 173126. | 1.5 | 95 |
| 254 | Tandem dye-sensitized solar cell-powered electrochromic devices for the photovoltaic-powered smart window. Journal of Power Sources, 2007, 168, 533-536. | 4.0 | 92 |
| 255 | High Contrast Ratio and Rapid Switching Organic Polymeric Electrochromic Thin Films Based on Triarylamine Derivatives from Layer-by-Layer Assembly. Chemistry of Materials, 2006, 18, 5823-5825. | 3.2 | 64 |
| 256 | Improved electrochromic devices with an inorganic solid electrolyte protective layer. Solar Energy Materials and Solar Cells, 2006, 90, 477-484. | 3.0 | 75 |
| 257 | A Supramolecular Chiroptical Switch Using an Amorphous Azobenzene Polymer. Advanced Functional Materials, 2006, 16, 2089-2094. | 7.8 | 57 |
| 258 | A Snowman-like Array of Colloidal Dimers for Antireflecting Surfaces. Advanced Materials, 2004, 16, 274-277. | 11.1 | 209 |
| 259 | Interferometric inscription of surface relief gratings on optical fiber using azo polymer film. Applied Physics Letters, 2003, 83, 1080-1082. | 1.5 | 33 |
| 260 | Polymeric wavelength filters fabricated using holographic surface relief gratings on azobenzene-containing polymer films. Applied Physics Letters, 2003, 82, 3823-3825. | 1.5 | 59 |
| 261 | Spin-on-Based Fabrication of Titania Nanowires Using a Solâ^'Gel Process. Nano Letters, 2002, 2, 1101-1104. | 4.5 | 54 |
| 262 | Combined Effect of Catholyte Gap and Cell Voltage on Syngas Ratio in Continuous CO<sub>2</sub>/H<sub>2</sub>O Co-electrolysis. Journal of Electrochemical Science and Technology, 0, , . | 0.9 | 4 |
| 263 | Ion Generation and Water Formation Imaging Regarding Fuel Cell Performance Degradation Through Hydrangea-Like Membrane Electrode Assembly Development. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 264 | Improved platinumâ€nickel nanoparticles with dopamineâ€derived carbon shells for proton exchange membrane fuel cells. International Journal of Energy Research, 0, , . | 2.2 | 1 |