

# Makoto Uchida

## List of Publications by Year in descending order

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127  
papers

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docs citations

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4169  
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| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 1  | An aromatic ionomer in the anode catalyst layer improves the start-up durability of polymer electrolyte fuel cells. <i>Energy Advances</i> , 2022, 1, 38-44.   | 1.4 | 2         |
| 2  | Effect of water management in membrane and cathode catalyst layers on suppressing the performance hysteresis phenomenon in anion-exchange membrane fuel cells. <i>Journal of Power Sources</i> , 2022, 522, 230997.                                    | 4.0 | 13        |
| 3  | Pt nanorods oriented on Gd-doped ceria polyhedra enable superior oxygen reduction catalysis for fuel cells. <i>Journal of Catalysis</i> , 2022, 407, 300-311.  | 3.1 | 17        |
| 4  | The Possibility of Intermediate-Temperature (120 °C)-Operated Polymer Electrolyte Fuel Cells using Perfluorosulfonic Acid Polymer Membranes. <i>Journal of the Electrochemical Society</i> , 2022, 169, 044522.  | 1.3 | 9         |
| 5  | Effect of Pt Loading Percentage on Carbon Blacks with Large Interior Nanopore Volume on the Performance and Durability of Polymer Electrolyte Fuel Cells. <i>ACS Applied Energy Materials</i> , 2022, 5, 316-329.                                      | 2.5 | 14        |
| 6  | Visualization of the oxygen partial pressure in a proton exchange membrane fuel cell during cell operation with low oxygen concentrations. <i>Journal of Power Sources</i> , 2021, 483, 229193.  | 4.0 | 8         |
| 7  | Effect of Pt and Ionomer Distribution on Polymer Electrolyte Fuel Cell Performance and Durability. <i>ACS Applied Energy Materials</i> , 2021, 4, 2307-2317.   | 2.5 | 45        |
| 8  | Performance hysteresis phenomena of anion exchange membrane fuel cells using an Fe-N-C cathode catalyst and an in-house-developed polymer electrolyte. <i>Journal of Power Sources</i> , 2021, 487, 229407.  | 4.0 | 13        |
| 9  | Temperature Dependence of Oxygen Reduction Activity at Pt/Nb-Doped SnO <sub>2</sub> Catalysts with Varied Pt Loading. <i>ACS Catalysis</i> , 2021, 11, 5222-5230.  | 5.5 | 28        |
| 10 | Oscillation mechanism in polymer electrolyte membrane fuel cell studied by <i>in operando</i> monitoring of oxygen partial pressure using optical probes. <i>Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan</i> , 2021, 72, 230-237. | 0.1 | 6         |
| 11 | Reinforced Polyphenylene Ionomer Membranes Exhibiting High Fuel Cell Performance and Mechanical Durability. <i>ACS Materials Au</i> , 2021, 1, 81-88.  | 2.6 | 29        |
| 12 | Evaluation of Ionomer Distribution on Electrocatalysts for Polymer Electrolyte Fuel Cells by Use of a Low Acceleration Voltage Scanning Electron Microscope. <i>Journal of the Electrochemical Society</i> , 2021, 168, 054510.                        | 1.3 | 7         |
| 13 | Wet/dry cycle durability of polyphenylene ionomer membranes in PEFC. <i>Journal of Power Sources Advances</i> , 2021, 10, 100063.  | 2.6 | 5         |
| 14 | Enhanced oxygen reduction electrocatalysis on PtCoSn alloy nanocatalyst mediated by Ta-doped SnO <sub>2</sub> support for polymer electrolyte fuel cells. <i>Electrochimica Acta</i> , 2021, 390, 138894.  | 2.6 | 8         |
| 15 | Soft X-Ray Imaging of Polymer Electrolyte Fuel Cells Using Different Support Materials for Catalyst Layers. <i>ECS Transactions</i> , 2021, 104, 185-190.  | 0.3 | 0         |
| 16 | Effect of Water Management for Membranes and Catalyst Layers Using an In-House Developed Polymer Electrolyte on Cell Performance Hysteresis in Anion Exchange Membrane Fuel Cells. <i>ECS Meeting Abstracts</i> , 2021, MA2021-02, 1206-1206.          | 0.0 | 0         |
| 17 | Fabrication of Cathode Catalyst Layer By Use of Multi-Nozzle Electrospray Method on Polymer Electrolyte Fuel Cells. <i>ECS Meeting Abstracts</i> , 2021, MA2021-02, 1087-1087.   | 0.0 | 0         |
| 18 | Highly Durable and Active Pt Nanorod Electrocatalysts Using SnO <sub>2</sub> Supports for Polymer Electrolyte Fuel Cells. <i>ECS Meeting Abstracts</i> , 2021, MA2021-02, 1181-1181.   | 0.0 | 0         |

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|----|---|-----|-----------|
| 19 | Effect of Pt and Ionomer Distribution on Cell Performance and Durability. ECS Meeting Abstracts, 2021, MA2021-02, 1177-1177.  | 0.0 | 1         |
| 20 | Soft X-Ray Imaging of Polymer Electrolyte Fuel Cells Using Different Support Materials for Catalyst Layers. ECS Meeting Abstracts, 2021, MA2021-02, 1059-1059.  | 0.0 | 0         |
| 21 | Unparalleled mitigation of membrane degradation in fuel cells <i>via</i> a counter-intuitive approach: suppression of H <sub>2</sub> O <sub>2</sub> production at the hydrogen anode using a Pt <sub>skin</sub> –PtCo catalyst. Journal of Materials Chemistry A, 2020, 8, 1091-1094. | 5.2 | 19        |
| 22 | Effect of an Electrospray-Generated Ionomer Morphology on Polymer Electrolyte Fuel Cell Performance. Energy & Fuels, 2020, 34, 14853-14863.   | 2.5 | 11        |
| 23 | Enhancement of the Catalytic Activity and Load Cycle Durability of a PtCo Alloy Cathode Catalyst Supported on Ta-Doped SnO <sub>2</sub> with a Unique Fused Aggregated Network Microstructure for Polymer Electrolyte Fuel Cells. ACS Applied Energy Materials, 2020, 3, 6922-6928.   | 2.5 | 15        |
| 24 | PEFC catalyst layers: Effect of support microstructure on both distributions of Pt and ionomer and cell performance and durability. Current Opinion in Electrochemistry, 2020, 21, 209-218.   | 2.5 | 33        |
| 25 | (Invited) Highly Durable and Active Electrocatalysts Using SnO <sub>2</sub> Supports for Polymer Electrolyte Fuel Cells. ECS Meeting Abstracts, 2020, MA2020-02, 2331-2331.   | 0.0 | 0         |
| 26 | (Invited) Partially Fluorinated Anion Exchange Membranes for Electrochemical Applications. ECS Meeting Abstracts, 2020, MA2020-02, 2364-2364.   | 0.0 | 0         |
| 27 | Effect of Electrospray-Generated Ionomer Morphology on Polymer Electrolyte Fuel Cell Performance. ECS Meeting Abstracts, 2020, MA2020-02, 2117-2117.  | 0.0 | 0         |
| 28 | A Simple Analytical Approach for Fitting Steady-State Polarization Behavior of Polymer Electrolyte Fuel Cells Using Tafel Slope Component Analysis (TSCA). ECS Meeting Abstracts, 2020, MA2020-02, 2177-2177.   | 0.0 | 0         |
| 29 | Study of Cathode Catalyst Layers for Anion Exchange Membrane Fuel Cells Using Fe-N-C Catalyst and a Novel Polymer Electrolyte. ECS Meeting Abstracts, 2020, MA2020-02, 2349-2349.   | 0.0 | 0         |
| 30 | (Invited) Effect of Water Management for Cathode Catalyst Layers Using a Non-Noble Metal Catalyst and a Novel Polymer Electrolyte on Cell Performance Hysteresis in Anion Exchange Membrane Fuel Cells. ECS Meeting Abstracts, 2020, MA2020-02, 2371-2371.                            | 0.0 | 0         |
| 31 | Electronic States and Transport Phenomena of Pt Nanoparticle Catalysts Supported on Nb-Doped SnO <sub>2</sub> for Polymer Electrolyte Fuel Cells. ACS Applied Materials & Interfaces, 2019, 11, 34957-34963.  | 4.0 | 32        |
| 32 | Effect of Electronic Conductivities of Iridium Oxide/Doped SnO <sub>2</sub> Oxygen-Evolving Catalysts on the Polarization Properties in Proton Exchange Membrane Water Electrolysis. Catalysts, 2019, 9, 74.  | 1.6 | 41        |
| 33 | Durability of Newly Developed Polyphenylene-Based Ionomer Membranes in Polymer Electrolyte Fuel Cells: Accelerated Stress Evaluation. Journal of the Electrochemical Society, 2019, 166, F3105-F3110.   | 1.3 | 12        |
| 34 | Effects of Various Operating Conditions on Load Cycle Durability of Pt/Nb-SnO <sub>2</sub> Cathode Catalyst Layers. ECS Meeting Abstracts, 2019, , .  | 0.0 | 0         |
| 35 | Durability of Newly Developed Polyphenylene-Based Ionomer Membranes in Polymer Electrolyte Fuel Cells: Accelerated Stress Evaluation. ECS Meeting Abstracts, 2019, , .  | 0.0 | 0         |
| 36 | A Study on the Influence of Ionization Method on Single Cell Initial Performance: Electrospray Method. ECS Meeting Abstracts, 2019, , .   | 0.0 | 0         |

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|----|--|-----|-----------|
| 37 | Improvement of the Performance of Pt Catalysts Supported on Nb-Doped SnO <sub>2</sub> Via Well-Controlled Interfaces. ECS Meeting Abstracts, 2019, , .   | 0.0 | 0         |
| 38 | Evaluation of Cell Performance and Durability for Cathode Catalysts (Platinum Supported on Carbon) Tj ETQq0 0 0 rgBT /Overlock 10 Tf Start-Up/Shutdown Cycles and Load Cycles. , 2018, , 53-113.   |     | 1         |
| 39 | Unsupported Pt <sub>3</sub> Ni Aerogels as Corrosion Resistant PEFC Anode Catalysts under Gross Fuel Starvation Conditions. Journal of the Electrochemical Society, 2018, 165, F3001-F3006.  | 1.3 | 19        |
| 40 | Tomographic Analysis and Modeling of Polymer Electrolyte Fuel Cell Unsupported Catalyst Layers. Journal of the Electrochemical Society, 2018, 165, F7-F16.   | 1.3 | 15        |
| 41 | Effects of Both Oxygen Permeability and Ion Exchange Capacity for Cathode Ionomers on the Performance and Durability of Polymer Electrolyte Fuel Cells. Journal of the Electrochemical Society, 2018, 165, F3063-F3071.                  | 1.3 | 51        |
| 42 | Platinum Anti-Dissolution Mechanism of Pt/Nb-SnO <sub>2</sub> Cathode Catalyst Layer during Load Cycling in the Presence of Oxygen for Polymer Electrolyte Fuel Cells. Journal of the Electrochemical Society, 2018, 165, F1300-F1311.   | 1.3 | 9         |
| 43 | Structurally Well-Defined Anion-Exchange Membranes Containing Perfluoroalkyl and Ammonium-Functionalized Fluorenyl Groups. ACS Omega, 2018, 3, 16143-16149.  | 1.6 | 16        |
| 44 | Influence of Ionomer Content on Both Cell Performance and Load Cycle Durability for Polymer Electrolyte Fuel Cells Using Pt/Nb-SnO <sub>2</sub> Cathode Catalyst Layers. Journal of the Electrochemical Society, 2018, 165, J3083-J3089. | 1.3 | 18        |
| 45 | Oxygen Evolution Reaction on Perovskites: A Multieffect Descriptor Study Combining Experimental and Theoretical Methods. ACS Catalysis, 2018, 8, 9567-9578.  | 5.5 | 98        |
| 46 | (Invited) Effects of Ionomers and Fabrication Methods on Both Performance and Durability of Low-Pt-Loading PEFC Cathode Catalyst Layer with Carbon or Conductive Ceramic Supported Pt Catalyst. ECS Meeting Abstracts, 2018, , .         | 0.0 | 0         |
| 47 | Effects of Ionomer Content on Both Performance and Load Cycle Durability for PEFCs Using Pt/Nb-SnO <sub>2</sub> Cathode Catalyst Layers. ECS Meeting Abstracts, 2018, , .  | 0.0 | 0         |
| 48 | (Invited) Pt-Based Aerogels As Enhanced-Durability Electrocatalysts for Polymer Electrolyte Fuel Cells. ECS Meeting Abstracts, 2018, , .   | 0.0 | 0         |
| 49 | Unsupported Pt <sub>3</sub> Ni Aerogels As High Stability Catalysts for PEFC Anodes Under Fuel Starvation Conditions. ECS Meeting Abstracts, 2018, , .   | 0.0 | 0         |
| 50 | Modeling and Experimental Studies of Mesoscopic Morphologies and Proton Conductivities of Cathode Catalyst Layers with Different Carbon Supports. ECS Meeting Abstracts, 2018, , .   | 0.0 | 0         |
| 51 | Transmission Electron Microscopic Observation of Both Ionomer and Pt Distribution and Their Effects on Cathode Performance for Polymer Electrolyte Fuel Cells. ECS Meeting Abstracts, 2018, , .  | 0.0 | 0         |
| 52 | Load Cycle Durability of Pt/Nb-SnO <sub>2</sub> in Polymer Electrolyte Fuel Cells Under Potentiostatic/Galvanostatic Operation. ECS Meeting Abstracts, 2018, , .   | 0.0 | 0         |
| 53 | Simultaneous visualization of oxygen partial pressure, current density, and water droplets in serpentine fuel cell during power generation for understanding reaction distributions. Journal of Power Sources, 2017, 343, 135-141.       | 4.0 | 21        |
| 54 | Degradation Mechanisms of Carbon Supports under Hydrogen Passivation Startup and Shutdown Process for PEFCs. Journal of the Electrochemical Society, 2017, 164, F181-F187.   | 1.3 | 29        |

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|----|---|-----|-----------|
| 55 | Improvement of Cell Performance in Low-Pt-Loading PEFC Cathode Catalyst Layers with Pt/Ta-SnO <sub>2</sub> Prepared by the Electrospray Method. Journal of the Electrochemical Society, 2017, 164, F235-F242.   | 1.3 | 22        |
| 56 | Design of flexible polyphenylene proton-conducting membrane for next-generation fuel cells. Science Advances, 2017, 3, eaao0476.  | 4.7 | 175       |
| 57 | Durability and degradation analysis of hydrocarbon ionomer membranes in polymer electrolyte fuel cells accelerated stress evaluation. Journal of Power Sources, 2017, 367, 63-71.   | 4.0 | 24        |
| 58 | Durability of Sulfonated Phenylene Poly(Arylene Ether Ketone) Semiblock Copolymer Membrane in Wet-Dry Cycling for PEFCs. Journal of the Electrochemical Society, 2017, 164, F1204-F1210.  | 1.3 | 12        |
| 59 | Electrochemical Oxidation of Hydrolyzed Poly-Oxymethylene-Dimethylether by Pt and PtRu Catalysts on Ta-Doped SnO <sub>2</sub> Supports for Direct Oxidation Fuel Cells. Journal of the Electrochemical Society, 2017, 164, F1226-F1233.   | 1.3 | 5         |
| 60 | Remarkable Mass Activities for the Oxygen Evolution Reaction at Iridium Oxide Nanocatalysts Dispersed on Tin Oxides for Polymer Electrolyte Membrane Water Electrolysis. Journal of the Electrochemical Society, 2017, 164, F944-F947.  | 1.3 | 28        |
| 61 | Boosting Pt oxygen reduction reaction activity by tuning the tin oxide support. Electrochemistry Communications, 2017, 83, 90-95.   | 2.3 | 19        |
| 62 | Visualization of the Oxygen Partial Pressure on the Gas-Diffusion-Layer Surface under the Single-Serpentine Flow Channel and the Ribs in a Polymer Electrolyte Membrane Fuel Cell during the Power Generation. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2017, 68, 338-343. | 0.1 | 2         |
| 63 | Use of a sub-gasket and soft gas diffusion layer to mitigate mechanical degradation of a hydrocarbon membrane for polymer electrolyte fuel cells in wet-dry cycling. Journal of Power Sources, 2016, 325, 35-41.  | 4.0 | 27        |
| 64 | Anion conductive aromatic polymers containing fluorenyl groups: Effect of the position and number of ammonium groups. Journal of Polymer Science Part A, 2016, 54, 935-944.   | 2.5 | 23        |
| 65 | Durability of Pt Catalysts Supported on Graphitized Carbon-Black during Gas-Exchange Start-Up Operation Similar to That Used for Fuel Cell Vehicles. Journal of the Electrochemical Society, 2016, 163, F644-F650.  | 1.3 | 28        |
| 66 | Effect of Surface Ion Conductivity of Anion Exchange Membranes on Fuel Cell Performance. Langmuir, 2016, 32, 9557-9565.   | 1.6 | 15        |
| 67 | Simple, Effective Molecular Strategy for the Design of Fuel Cell Membranes: Combination of Perfluoroalkyl and Sulfonated Phenylene Groups. ACS Energy Letters, 2016, 1, 348-352.  | 8.8 | 32        |
| 68 | Improvement of Cell Performance in Low-Pt-Loading PEFC Cathode Catalyst Layers Prepared by the Electrospray Method. Journal of the Electrochemical Society, 2016, 163, F1182-F1188.   | 1.3 | 25        |
| 69 | Load cycle durability of a graphitized carbon black-supported platinum catalyst in polymer electrolyte fuel cell cathodes. Journal of Power Sources, 2016, 324, 729-737.  | 4.0 | 77        |
| 70 | Effects of carbon supports on Pt distribution, ionomer coverage and cathode performance for polymer electrolyte fuel cells. Journal of Power Sources, 2016, 315, 179-191.   | 4.0 | 264       |
| 71 | Influence of Pt Loading and Cell Potential on the HF Ohmic Resistance of an Nb-Doped SnO <sub>2</sub> -Supported Pt Cathode for PEFCs. Journal of the Electrochemical Society, 2016, 163, F97-F105.   | 1.3 | 17        |
| 72 | Effects of SiO <sub>2</sub> Nanoparticles Incorporated into Poly(Arylene Ether Sulfone) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Electrochemistry, 2015, 83, 150-154.   | 0.6 | 6         |

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|----|---|-----|-----------|
| 73 | Visualization of Oxygen Partial Pressure and Numerical Simulation of a Running Polymer Electrolyte Fuel Cell with Straight Flow Channels to Elucidate Reaction Distributions. <i>ChemElectroChem</i> , 2015, 2, 1495-1501.  | 1.7 | 13        |
| 74 | Oxygen Reduction Reaction Activity and Durability of Pt Catalysts Supported on Titanium Carbide. <i>Catalysts</i> , 2015, 5, 966-980.   | 1.6 | 46        |
| 75 | Effect of Added Graphitized CB on Both Performance and Durability of Pt/Nb-SnO <sub>2</sub> Cathodes for PEFCs. <i>Journal of the Electrochemical Society</i> , 2015, 162, F736-F743.   | 1.3 | 29        |
| 76 | Performance of practical-sized membrane-electrode assemblies using titanium nitride-supported platinum catalysts mixed with acetylene black as the cathode catalyst layer. <i>Journal of Power Sources</i> , 2015, 280, 593-599.  | 4.0 | 19        |
| 77 | Novel strategy to mitigate cathode catalyst degradation during air/air startup cycling via the atmospheric resistive switching mechanism of a hydrogen anode with a platinum catalyst supported on tantalum-doped titanium dioxide. <i>Journal of Power Sources</i> , 2015, 294, 292-298. | 4.0 | 28        |
| 78 | Anion exchange membranes composed of perfluoroalkylene chains and ammonium-functionalized oligophenylenes. <i>Journal of Materials Chemistry A</i> , 2015, 3, 21779-21788.  | 5.2 | 67        |
| 79 | Cathodic performance and high potential durability of Ta-SnO <sub>2</sub> -supported Pt catalysts for PEFC cathodes. <i>Electrochemistry Communications</i> , 2015, 51, 37-40.  | 2.3 | 52        |
| 80 | Effects of short-side-chain perfluorosulfonic acid ionomers as binders on the performance of low Pt loading fuel cell cathodes. <i>Journal of Power Sources</i> , 2015, 275, 384-391.   | 4.0 | 84        |
| 81 | Real-time visualization of oxygen partial pressures in straight channels of running polymer electrolyte fuel cell with water plugging. <i>Journal of Power Sources</i> , 2015, 273, 873-877.  | 4.0 | 12        |
| 82 | Electrochemical Oxidation of Hydrolyzed Poly Oxymethylene-dimethyl Ether by PtRu Catalysts on Nb-Doped SnO <sub>2</sub> Supports for Direct Oxidation Fuel Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 22138-22145.   | 4.0 | 11        |
| 83 | Investigation of the effect of a hydrophilic layer in the gas diffusion layer of a polymer electrolyte membrane fuel cell on the cell performance and cold start behaviour. <i>Electrochimica Acta</i> , 2014, 120, 240-247.  | 2.6 | 52        |
| 84 | Deleterious effects of interim cyclic voltammetry on Pt/carbon black catalyst degradation during start-up/shutdown cycling evaluation. <i>Electrochimica Acta</i> , 2014, 123, 84-92.   | 2.6 | 76        |
| 85 | Temperature- and Humidity- Controlled SAXS Analysis of Proton-Conductive Ionomer Membranes for Fuel Cells. <i>ChemSusChem</i> , 2014, 7, 729-733.   | 3.6 | 49        |
| 86 | Double-Layer Ionomer Membrane for Improving Fuel Cell Performance. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 13894-13899.  | 4.0 | 19        |
| 87 | Oxygen partial pressures on gas-diffusion layer surface and gas-flow channel wall in polymer electrolyte fuel cell during power generation studied by visualization technique combined with numerical simulation. <i>Journal of Power Sources</i> , 2014, 269, 556-564.                   | 4.0 | 21        |
| 88 | Improvements in electrical and electrochemical properties of Nb-doped SnO <sub>2</sub> supports for fuel cell cathodes due to aggregation and Pt loading. <i>RSC Advances</i> , 2014, 4, 32180-32188.   | 1.7 | 56        |
| 89 | Effects of Incorporation of SiO <sub>2</sub> Nanoparticles into Sulfonated Polyimide Electrolyte Membranes on Fuel Cell Performance under Low Humidity Conditions. <i>Electrochimica Acta</i> , 2014, 137, 213-218.   | 2.6 | 25        |
| 90 | Polymer Electrolyte Fuel Cells, Membrane-Electrode Assemblies. , 2014, , 1669-1675.   |     | 0         |

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| 91  | Investigation of the effect of pore diameter of gas diffusion layers on cold start behavior and cell performance of polymer electrolyte membrane fuel cells. <i>Electrochimica Acta</i> , 2013, 108, 304-312.                   | 2.6 | 63        |
| 92  | Effect of the state of distribution of supported Pt nanoparticles on effective Pt utilization in polymer electrolyte fuel cells. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 11236.                                  | 1.3 | 99        |
| 93  | Characterization of Pt catalysts on Nb-doped and Sb-doped SnO <sub>2</sub> support materials with aggregated structure by rotating disk electrode and fuel cell measurements. <i>Electrochimica Acta</i> , 2013, 110, 316-324.  | 2.6 | 88        |
| 94  | Investigation of the corrosion of carbon supports in polymer electrolyte fuel cells using simulated start-up/shutdown cycling. <i>Electrochimica Acta</i> , 2013, 91, 195-207.  | 2.6 | 105       |
| 95  | Experimental analyses of low humidity operation properties of SiO <sub>2</sub> -containing catalyst layers for polymer electrolyte fuel cells. <i>Electrochimica Acta</i> , 2013, 88, 807-813.                                  | 2.6 | 11        |
| 96  | Durability of an aromatic block copolymer membrane in practical PEFC operation. <i>Electrochemistry Communications</i> , 2012, 24, 47-49.   | 2.3 | 11        |
| 97  | Effect of platinum loading on fuel cell cathode performance using hydrocarbon ionomers as binders. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 16713.  | 1.3 | 10        |
| 98  | Preparation and Fuel Cell Performance of Catalyst Layers Using Sulfonated Polyimide Ionomers. <i>ACS Applied Materials &amp; Interfaces</i> , 2012, 4, 730-737.   | 4.0 | 36        |
| 99  | Micro-Raman study on water distribution inside a Nafion membrane during operation of polymer electrolyte fuel cell. <i>Electrochimica Acta</i> , 2012, 82, 277-283.   | 2.6 | 32        |
| 100 | Real-Time Visualization of CO <sub>2</sub> Generated by Corrosion of the Carbon Support in a PEFC Cathode. <i>Electrochemical and Solid-State Letters</i> , 2012, 15, B51.  | 2.2 | 13        |
| 101 | SiO <sub>2</sub> -containing catalyst layers for PEFCs operating under low humidity. <i>Electrochemistry Communications</i> , 2012, 16, 100-102.  | 2.3 | 27        |
| 102 | Electrochemical and Raman spectroscopic evaluation of Pt/graphitized carbon black catalyst durability for the start/stop operating condition of polymer electrolyte fuel cells. <i>Electrochimica Acta</i> , 2012, 70, 171-181. | 2.6 | 107       |
| 103 | Preparation of titanium nitride-supported platinum catalysts with well controlled morphology and their properties relevant to polymer electrolyte fuel cells. <i>Electrochimica Acta</i> , 2012, 77, 279-284.                   | 2.6 | 46        |
| 104 | Tafel Slope Component Analysis of Polymer Electrolyte Fuel Cell Cathode Current-Potential Behavior. <i>ECS Transactions</i> , 2011, 35, 13-23.  | 0.3 | 3         |
| 105 | Sulfonated Poly(arylene ether sulfone ketone) Multiblock Copolymers with Highly Sulfonated Blocks. Long-Term Fuel Cell Operation and Post-Test Analyses. <i>ACS Applied Materials &amp; Interfaces</i> , 2011, 3, 2786-2793.    | 4.0 | 55        |
| 106 | Durability of Pt/Graphitized Carbon Catalyst Prepared by the Nanocapsule Method for the Start/Stop Operating Condition of Polymer Electrolyte Fuel Cells. <i>Electrochemistry</i> , 2011, 79, 381-387.                          | 0.6 | 21        |
| 107 | Imaging of Water Droplets Formed during PEFC Operation on GDLs With Different Pore Sizes. <i>Electrochemistry</i> , 2011, 79, 388-391.  | 0.6 | 20        |
| 108 | Electrochemical Activity and Durability of Platinum Catalysts Supported on Nanometer-Size Titanium Nitride Particles for Polymer Electrolyte Fuel Cells. <i>Electrochemistry</i> , 2011, 79, 399-403.                           | 0.6 | 30        |

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|-----|--|-----|-----------|
| 109 | Effect of PEFC operating conditions on the durability of sulfonated poly(arylene ether sulfone) Tj ETQq1 1 0.784314 rgBT /Overlock 101   | 2.6 | 15        |
| 110 | Effect of PEFC operating conditions on the durability of sulfonated polyimide membranes. Electrochimica Acta, 2011, 58, 589-598.   | 2.6 | 6         |
| 111 | Synthesis and electrochemical characterization of Pt catalyst supported on Sn <sub>0.96</sub> Sb <sub>0.04</sub> O <sub>2</sub> with a network structure. Electrochimica Acta, 2011, 56, 2881-2887.  | 2.6 | 82        |
| 112 | The effectiveness of platinum/carbon electrocatalysts: Dependence on catalyst layer thickness and Pt alloy catalytic effects. Electrochimica Acta, 2011, 56, 4783-4790.  | 2.6 | 48        |
| 113 | Corrosion of carbon supports at cathode during hydrogen/air replacement at anode studied by visualization of oxygen partial pressures in a PEFC Start-up/shut-down simulation. Journal of Power Sources, 2011, 196, 3003-3008.                         | 4.0 | 98        |
| 114 | New evaluation method for the effectiveness of platinum/carbon electrocatalysts under operating conditions. Electrochimica Acta, 2010, 55, 8504-8512.  | 2.6 | 117       |
| 115 | Gas diffusion electrodes containing sulfonated poly (arylene ether) ionomer for polymer electrolyte fuel cells. Electrochimica Acta, 2010, 55, 3464-3470.  | 2.6 | 21        |
| 116 | Sulfonated Poly(arylene ether sulfone ketone) Multiblock Copolymers with Highly Sulfonated Block. Fuel Cell Performance. Journal of Physical Chemistry B, 2010, 114, 10481-10487.  | 1.2 | 52        |
| 117 | Gas diffusion electrodes containing sulfonated poly (arylene ether) ionomer for PEFCs. Electrochimica Acta, 2009, 54, 4328-4333.   | 2.6 | 40        |
| 118 | PEFC. Electrochemistry, 2002, 70, 639-644.   | 0.6 | 1         |
| 119 | Effects of microstructure in catalyst layer on the performance of PEFC. Studies in Surface Science and Catalysis, 2001, , 959-962.   | 1.5 | 0         |
| 120 | Improved Preparation Process of Very Low Platinum Loading Electrodes for Polymer Electrolyte Fuel Cells. Journal of the Electrochemical Society, 1998, 145, 3708-3713.   | 1.3 | 188       |
| 121 | Effects of Microstructure of Carbon Support in the Catalyst Layer on the Performance of Polymer Electrolyte Fuel Cells. Journal of the Electrochemical Society, 1996, 143, 2245-2252.  | 1.3 | 300       |
| 122 | Investigation of the Microstructure in the Catalyst Layer and Effects of Both Perfluorosulfonate Ionomer and PTFE Loaded Carbon on the Catalyst Layer of Polymer Electrolyte Fuel Cells. Journal of the Electrochemical Society, 1995, 142, 4143-4149. | 1.3 | 380       |
| 123 | New Preparation Method for Polymer Electrolyte Fuel Cells. Journal of the Electrochemical Society, 1995, 142, 463-468.   | 1.3 | 248       |
| 124 | Influences of Both Carbon Supports and Heat Treatment of Supported Catalyst on Electrochemical Oxidation of Methanol. Journal of the Electrochemical Society, 1995, 142, 2572-2576.  | 1.3 | 160       |
| 125 | Preparation of highly dispersed Pt + Ru alloy clusters and the activity for the electrooxidation of methanol. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1987, 229, 395-406.   | 0.3 | 562       |
| 126 | Applications of the gas diffusion electrode to a backward feed and exhaust (BFE) type methanol anode. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1986, 199, 311-322.   | 0.3 | 58        |



| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 127 | Application of a backward feed and exhaust (BFE) type methanol anode to zinc electrowinning. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1986, 205, 125-133. | 0.3 | 7         |