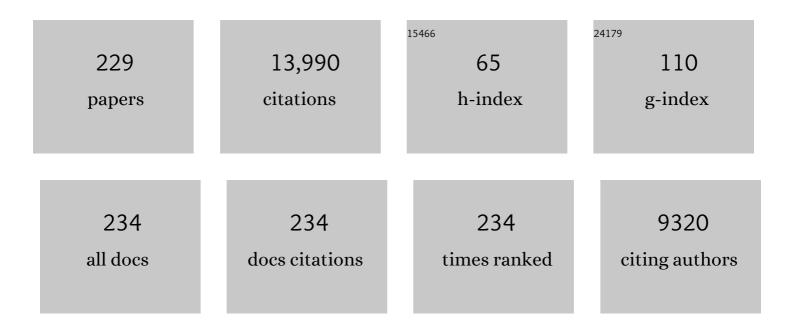
Hiroyuki Uchida

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/822224/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Enhancement of the Electroreduction of Oxygen on Pt Alloys with Fe, Ni, and Co. Journal of the Electrochemical Society, 1999, 146, 3750-3756.	1.3	1,282
2	Aliphatic/Aromatic Polyimide Ionomers as a Proton Conductive Membrane for Fuel Cell Applications. Journal of the American Chemical Society, 2006, 128, 1762-1769.	6.6	624
3	Electronic Structures of Ptâ^'Co and Ptâ^'Ru Alloys for CO-Tolerant Anode Catalysts in Polymer Electrolyte Fuel Cells Studied by ECâ^'XPS. Journal of Physical Chemistry B, 2006, 110, 23489-23496.	1.2	458
4	Selfâ€Humidifying Polymer Electrolyte Membranes for Fuel Cells. Journal of the Electrochemical Society, 1996, 143, 3847-3852.	1.3	438
5	CO Tolerance of Pt alloy electrocatalysts for polymer electrolyte fuel cells and the detoxification mechanism. Physical Chemistry Chemical Physics, 2001, 3, 306-314.	1.3	334
6	In-Situ ATR-FTIR Spectroscopic Study of Electro-oxidation of Methanol and Adsorbed CO at Ptâ^'Ru Alloy. Journal of Physical Chemistry B, 2004, 108, 2654-2659.	1.2	318
7	Oxygen Reduction Activity of Carbon-Supported Ptâ^'M (M = V, Ni, Cr, Co, and Fe) Alloys Prepared by Nanocapsule Method. Langmuir, 2007, 23, 6438-6445.	1.6	256
8	Removal of carbon monoxide from hydrogen-rich fuels by selective oxidation over platinum catalyst supported on zeolite. Applied Catalysis A: General, 1997, 159, 159-169.	2.2	249
9	Protonâ€Conductive Aromatic Ionomers Containing Highly Sulfonated Blocks for Highâ€Temperatureâ€Operable Fuel Cells. Angewandte Chemie - International Edition, 2010, 49, 317-320.	7.2	236
10	Polymer Electrolyte Membranes Incorporated with Nanometer-Size Particles of Pt and/or Metal-Oxides:Â Experimental Analysis of the Self-Humidification and Suppression of Gas-Crossover in Fuel Cells. Journal of Physical Chemistry B, 1998, 102, 3129-3137.	1.2	233
11	Effect of loading level in platinum-dispersed carbon black electrocatalysts on oxygen reduction activity evaluated by rotating disk electrode. Journal of Electroanalytical Chemistry, 2005, 583, 69-76.	1.9	193
12	Temperature Dependence of Oxygen Reduction Activity at Ptâ^'Fe, Ptâ^'Co, and Ptâ^'Ni Alloy Electrodes. Journal of Physical Chemistry B, 2005, 109, 5836-5841.	1.2	188
13	Particle-size effect of nanoscale platinum catalysts in oxygen reduction reaction: an electrochemical and 195Pt EC-NMR study. Physical Chemistry Chemical Physics, 2006, 8, 4932.	1.3	179
14	Temperature-dependence of oxygen reduction activity at a platinum electrode in an acidic electrolyte solution investigated with a channel flow double electrode. Journal of Electroanalytical Chemistry, 2005, 574, 339-346.	1.9	177
15	Proton Conductive Polyimide Electrolytes Containing Trifluoromethyl Groups:Â Synthesis, Properties, and DMFC Performance. Macromolecules, 2004, 37, 4961-4966.	2.2	167
16	Analyses of Selfâ€Humidification and Suppression of Gas Crossover in Ptâ€Dispersed Polymer Electrolyte Membranes for Fuel Cells. Journal of the Electrochemical Society, 1998, 145, 1137-1141.	1.3	165
17	Increased Oxygen Coverage at Ptâ^'Fe Alloy Cathode for the Enhanced Oxygen Reduction Reaction Studied by ECâ^'XPS. Journal of Physical Chemistry C, 2008, 112, 2750-2755.	1.5	164
18	Identification and Quantification of Oxygen Species Adsorbed on Pt(111) Single-Crystal and Polycrystalline Pt Electrodes by Photoelectron Spectroscopy. Langmuir, 2009, 25, 1897-1900.	1.6	163

#	Article	IF	CITATIONS
19	Oxidation of CO on a Ptâ^'Fe Alloy Electrode Studied by Surface Enhanced Infrared Reflectionâ^'Absorption Spectroscopy. Journal of Physical Chemistry B, 2000, 104, 1762-1768.	1.2	157
20	Highly proton conductive polyimide electrolytes containing fluorenyl groupsEleupplementary information (ESI) available: experimental section. See http://www.rsc.org/suppdata/cc/b2/b210296j/. Chemical Communications, 2003, , 368-369.	2.2	144
21	Hydrogen purification for fuel cells: selective oxidation of carbon monoxide on Pt–Fe/zeolite catalysts. Applied Catalysis B: Environmental, 2003, 46, 595-600.	10.8	143
22	Reaction mechanism of preferential oxidation of carbon monoxide on Pt, Fe, and Pt–Fe/mordenite catalysts. Journal of Catalysis, 2005, 236, 262-269.	3.1	121
23	Self-Humidifying Electrolyte Membranes for Fuel Cells. Journal of the Electrochemical Society, 2003, 150, A57.	1.3	117
24	New evaluation method for the effectiveness of platinum/carbon electrocatalysts under operating conditions. Electrochimica Acta, 2010, 55, 8504-8512.	2.6	117
25	Overview of recent developments in oxygen reduction electrocatalysis. Electrochimica Acta, 2012, 84, 187-201.	2.6	117
26	Decomposition mechanism of perfluorosulfonic acid electrolyte in polymer electrolyte fuel cells. Electrochemistry Communications, 2006, 8, 1509-1513.	2.3	110
27	Electrochemical and Raman spectroscopic evaluation of Pt/graphitized carbon black catalyst durability for the start/stop operating condition of polymer electrolyte fuel cells. Electrochimica Acta, 2012, 70, 171-181.	2.6	107
28	In situ STM observation of morphological changes of the Pt(111) electrode surface during potential cycling in 10 mM HF solution. Physical Chemistry Chemical Physics, 2010, 12, 4184.	1.3	105
29	Investigation of the corrosion of carbon supports in polymer electrolyte fuel cells using simulated start-up/shutdown cycling. Electrochimica Acta, 2013, 91, 195-207.	2.6	105
30	Oxidation of Carbon Monoxide at a Platinum Film Electrode Studied by Fourier Transform Infrared Spectroscopy with Attenuated Total Reflection Technique. Langmuir, 1999, 15, 8757-8764.	1.6	103
31	High Performance Electrode for Medium-Temperature Solid Oxide Fuel Cells La(Sr)CoO[sub 3] Cathode with Ceria Interlayer on Zirconia Electrolyte. Electrochemical and Solid-State Letters, 1999, 2, 428.	2.2	102
32	Attenuated Total Reflectionâ^'Fourier Transform Infrared Study of Methanol Oxidation on Sputtered Pt Film Electrode. Langmuir, 2001, 17, 146-154.	1.6	102
33	Preparation of highly dispersed SiO2 and Pt particles in Nafion®112 for self-humidifying electrolyte membranes in fuel cells. Electrochimica Acta, 2006, 51, 3979-3985.	2.6	99
34	Effect of the state of distribution of supported Pt nanoparticles on effective Pt utilization in polymer electrolyte fuel cells. Physical Chemistry Chemical Physics, 2013, 15, 11236.	1.3	99
35	Particle-size effect of Pt cathode catalysts on durability in fuel cells. Nano Energy, 2016, 29, 323-333.	8.2	99
36	Effects of operating potential and temperature on degradation of electrocatalyst layer for PEFCs. Electrochimica Acta, 2007, 52, 5997-6005.	2.6	98

Hiroyuki Uchida

#	Article	IF	CITATIONS
37	Electrochemical quartz crystal microbalance study of copper adatoms on gold electrodes Part II. Further discussion on the specific adsorption of anions from solutions of perchloric and sulfuric acid. Journal of Electroanalytical Chemistry, 1997, 424, 5-12.	1.9	97
38	ATR-FTIR Study of Water in Nafion Membrane Combined with Proton Conductivity Measurements during Hydration/Dehydration Cycle. Journal of Physical Chemistry B, 2011, 115, 4315-4321.	1.2	94
39	Temperature Dependence of Oxygen Reduction Activity at Nafion-Coated Bulk Pt and Pt/Carbon Black Catalysts. Journal of Physical Chemistry B, 2006, 110, 16544-16549.	1.2	93
40	In situ STM imaging of surface dissolution and rearrangement of a Pt–Fe alloy electrocatalyst in electrolyte solution. Chemical Communications, 2002, , 58-59.	2.2	92
41	Adsorbed water for the electro-oxidation of methanol at Pt–Ru alloyElectronic supplementary information (ESI) available: additional explanation for Figs. 2 and 3. See http://www.rsc.org/suppdata/cc/b2/b212197b/. Chemical Communications, 2003, , 828-829.	2.2	91
42	Photocatalytic Decomposition of Propyzamide Using TiO2Supported on Activated Carbon. Chemistry Letters, 1993, 22, 1995-1998.	0.7	90
43	Polarization properties of La0.6Sr0.4Co0.2Fe0.8O3-based double layer-type oxygen electrodes for reversible SOFCs. Electrochimica Acta, 2009, 54, 3309-3315.	2.6	90
44	Characterization of Pt catalysts on Nb-doped and Sb-doped SnO2– support materials with aggregated structure by rotating disk electrode and fuel cell measurements. Electrochimica Acta, 2013, 110, 316-324.	2.6	88
45	Effect of Ionic Conductivity of Zirconia Electrolytes on the Polarization Behavior of Various Cathodes in Solid Fuel Cells. Journal of the Electrochemical Society, 1999, 146, 1-7.	1.3	86
46	Electrochemical quartz crystal microbalance analysis of CO-tolerance at Ptî—,Fe alloy electrodes. Electrochimica Acta, 2002, 47, 3629-3636.	2.6	86
47	Durability of Pt/graphitized carbon catalysts for the oxygen reduction reaction prepared by the nanocapsule method. Physical Chemistry Chemical Physics, 2010, 12, 3806.	1.3	86
48	Temperature Dependence of Oxygen Reduction Activity at Carbon-Supported Pt _{<i>X</i>} Co (<i>X</i> = 1, 2, and 3) Alloy Catalysts Prepared by the Nanocapsule Method. Journal of Physical Chemistry C, 2008, 112, 8372-8380.	1.5	85
49	Effects of short-side-chain perfluorosulfonic acid ionomers as binders on the performance of low Pt loading fuel cell cathodes. Journal of Power Sources, 2015, 275, 384-391.	4.0	84
50	Suppression of Methanol Crossover and Distribution of Ohmic Resistance in Pt-Dispersed PEMs under DMFC Operation. Journal of the Electrochemical Society, 2002, 149, A682.	1.3	83
51	Synthesis and electrochemical characterization of Pt catalyst supported on Sn0.96Sb0.04O2â^δ with a network structure. Electrochimica Acta, 2011, 56, 2881-2887.	2.6	82
52	High-Performance Electrode for Steam Electrolysis. Electrochemical and Solid-State Letters, 2004, 7, A500.	2.2	81
53	Novel evaluation method for degradation rate of polymer electrolytes in fuel cells. Electrochemistry Communications, 2005, 7, 1434-1438.	2.3	80
54	Highâ€Performance Electrode for Mediumâ€Temperature Solid Oxide Fuel Cells: Effects of Composition and Microstructures on Performance of Ceriaâ€Based Anodes. Journal of the Electrochemical Society, 1998, 145, 615-620.	1.3	78

#	Article	IF	CITATIONS
55	Gallium arsenide nanocrystals prepared in quinoline. The Journal of Physical Chemistry, 1991, 95, 5382-5384.	2.9	77
56	Durability of Sulfonated Polyimide Membrane Evaluated by Long-Term Polymer Electrolyte Fuel Cell Operation. Journal of the Electrochemical Society, 2006, 153, A1154.	1.3	77
57	Deleterious effects of interim cyclic voltammetry on Pt/carbon black catalyst degradation during start-up/shutdown cycling evaluation. Electrochimica Acta, 2014, 123, 84-92.	2.6	76
58	Mechanism of CO Tolerance at Pt-Alloy Anode Catalysts for Polymer Electrolyte Fuel Cells. Electrochemistry, 2000, 68, 244-251.	0.6	75
59	Electrochemical quartz crystal microbalance study of copper adatoms on Au(111) electrodes in solutions of perchloric and sulfuric acid. Journal of Electroanalytical Chemistry, 1998, 452, 97-106.	1.9	71
60	Structural effects on the surface oxidation processes at Pt single-crystal electrodes studied by X-ray photoelectron spectroscopy. Energy and Environmental Science, 2011, 4, 1662.	15.6	71
61	Pt Catalyst Supported on Zeolite for Selective Oxidation of CO in Reformed Gases. Chemistry Letters, 1995, 24, 21-22.	0.7	68
62	Temperature Dependence of CO-Tolerant Hydrogen Oxidation Reaction Activity at Pt, Ptâ^'Co, and Ptâ^'Ru Electrodes. Journal of Physical Chemistry B, 2006, 110, 21924-21930.	1.2	68
63	Highly Active, CO-Tolerant, and Robust Hydrogen Anode Catalysts: Pt–M (M = Fe, Co, Ni) Alloys with Stabilized Pt-Skin Layers. ACS Catalysis, 2017, 7, 267-274.	5.5	67
64	Enhanced Proton Conduction in Polymer Electrolyte Membranes with Acidâ€Functionalized Polysilsesquioxane. Angewandte Chemie - International Edition, 2007, 46, 6646-6649.	7.2	66
65	Direct STM Elucidation of the Effects of Atomic-Level Structure on Pt(111) Electrodes for Dissolved CO Oxidation. Journal of the American Chemical Society, 2013, 135, 1476-1490.	6.6	66
66	Temperature-dependence of hydrogen oxidation reaction rates and CO-tolerance at carbon-supported Pt, Pt–Co, and Pt–Ru catalysts. Physical Chemistry Chemical Physics, 2009, 11, 1771.	1.3	64
67	Effect of Ionic Conductivity of Zirconia Electrolytes on the Polarization Behavior of Ceriaâ€Based Anodes in Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 1997, 144, 1739-1743.	1.3	63
68	Durability of a novel sulfonated polyimide membrane in polymer electrolyte fuel cell operation. Electrochimica Acta, 2009, 54, 1076-1082.	2.6	63
69	Investigation of the effect of pore diameter of gas diffusion layers on cold start behavior and cell performance of polymer electrolyte membrane fuel cells. Electrochimica Acta, 2013, 108, 304-312.	2.6	63
70	Preparation of High Catalyst Utilization Electrodes for Polymer Electrolyte Fuel Cells. Langmuir, 2006, 22, 6422-6428.	1.6	62
71	Polarization Behavior of SDC Cathode with Highly Dispersed Ni Catalysts for Solid Oxide Electrolysis Cells. Journal of the Electrochemical Society, 2006, 153, A816.	1.3	61
72	Improvements in electrical and electrochemical properties of Nb-doped SnO _{2â~î´} supports for fuel cell cathodes due to aggregation and Pt loading. RSC Advances, 2014, 4, 32180-32188.	1.7	56

#	Article	IF	CITATIONS
73	Electrochemical quartz crystal microbalance study of copper ad-atoms on highly ordered Au(111) electrodes in sulfuric acid. Journal of Electroanalytical Chemistry, 1995, 384, 191-195.	1.9	55
74	Temperature-Dependence of Methanol Oxidation Rates at PtRu and Pt Electrodes. Electrochemical and Solid-State Letters, 2002, 5, E62.	2.2	55
75	Electron Tomography of Nafion Ionomer Coated on Pt/Carbon Black in High Utilization Electrode for PEFCs. Journal of Physical Chemistry B, 2006, 110, 13319-13321.	1.2	55
76	Sulfonated Poly(arylene ether sulfone ketone) Multiblock Copolymers with Highly Sulfonated Blocks. Long-Term Fuel Cell Operation and Post-Test Analyses. ACS Applied Materials & Interfaces, 2011, 3, 2786-2793.	4.0	55
77	In Situ ATR-FTIR Analysis of the Structure of Nafion–Pt/C and Nafion–Pt ₃ Co/C Interfaces in Fuel Cell. Journal of Physical Chemistry C, 2012, 116, 21401-21406.	1.5	55
78	Adsorption/Oxidation of CO on Highly Dispersed Pt Catalyst Studied by Combined Electrochemical and ATR-FTIRAS Methods:  Oxidation of CO Adsorbed on Carbon-Supported Pt Catalyst and Unsupported Pt Black. Langmuir, 2008, 24, 3590-3601.	1.6	54
79	Electrochemical Quartz Crystal Microbalance Analysis of the Oxygen Reduction Reaction on Pt-Based Electrodes. Part 1: Effect of Adsorbed Anions on the Oxygen Reduction Activities of Pt in HF, HClO4, and H2SO4Solutions. Langmuir, 2011, 27, 6464-6470.	1.6	54
80	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
81	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. Electrochimica Acta, 2014, 120, 240-247.	2.6	52
82	Cathodic performance and high potential durability of Ta-SnO2â^î^-supported Pt catalysts for PEFC cathodes. Electrochemistry Communications, 2015, 51, 37-40.	2.3	52
83	Electrochemical quartz crystal microbalance study of copper ad-atoms on gold and platinum electrodes Part I. Adsorption of anions in sulfuric acid. Journal of Electroanalytical Chemistry, 1995, 380, 255-260.	1.9	51
84	High Performance Electrode for Medium-Temperature Solid Oxide Fuel Cells: Control of Microstructure of La(Sr)CoO[sub 3] Cathodes with Highly Dispersed Pt Electrocatalysts. Journal of the Electrochemical Society, 2002, 149, A13.	1.3	51
85	Highâ€Performance Electrode for Mediumâ€Temperature Solid Oxide Fuel Cell Control of Microstructure of Ceriaâ€Based Anodes with Highly Dispersed Ruthenium Electrocatalysts. Journal of the Electrochemical Society, 1999, 146, 1677-1682.	1.3	50
86	Control of Particle Size of Pt and Pt Alloy Electrocatalysts Supported on Carbon Black by the Nanocapsule Method. ACS Applied Materials & Interfaces, 2010, 2, 888-895.	4.0	50
87	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
88	Oxygen reduction reaction at binary and ternary nanocatalysts based on Pt, Pd and Au. Electrochimica Acta, 2015, 182, 131-142.	2.6	48
89	Design of Electrocatalyst for  CO 2 Reduction: V . Effect of the Microcrystalline Structures of Cuâ€Sn and Cuâ€Zn Alloys on the Electrocatalysis of Reduction. Journal of the Electrochemical Society, 1994, 141, 2054-2058.	1.3	46
90	Preparation of titanium nitride-supported platinum catalysts with well controlled morphology and their properties relevant to polymer electrolyte fuel cells. Electrochimica Acta, 2012, 77, 279-284.	2.6	46

#	Article	IF	CITATIONS
91	Oxygen Reduction Reaction Activity and Durability of Pt Catalysts Supported on Titanium Carbide. Catalysts, 2015, 5, 966-980.	1.6	46
92	Effects of Ionic Conductivities of Zirconia Electrolytes on Polarization Properties of Platinum Anodes in Solid Oxide Fuel Cells. The Journal of Physical Chemistry, 1995, 99, 3282-3287.	2.9	45
93	Temperature dependence of the water distribution inside a Nafion membrane in an operating polymer electrolyte fuel cell. A micro-Raman study. Electrochimica Acta, 2011, 58, 449-455.	2.6	45
94	Electrochemical quartz crystal microbalance study of silver ad-atoms on highly ordered Au(111) electrodes in sulfuric acid. Journal of Electroanalytical Chemistry, 1995, 386, 261-265.	1.9	43
95	Effect of Electronic Conductivities of Iridium Oxide/Doped SnO2 Oxygen-Evolving Catalysts on the Polarization Properties in Proton Exchange Membrane Water Electrolysis. Catalysts, 2019, 9, 74.	1.6	41
96	Gas diffusion electrodes containing sulfonated poly (arylene ether) ionomer for PEFCs. Electrochimica Acta, 2009, 54, 4328-4333.	2.6	40
97	Effect of Particle Size and Composition on CO-Tolerance at Pt–Ru/C Catalysts Analyzed by In Situ Attenuated Total Reflection FTIR Spectroscopy. ACS Catalysis, 2012, 2, 450-455.	5.5	40
98	Noble metal catalysts highly-dispersed on Sm-doped ceria for the application to internal reforming solid oxide fuel cells operated at medium temperature. Catalysis Letters, 1994, 26, 149-157.	1.4	39
99	Experimental analysis of water behavior in NafionÂ $^{\odot}$ electrolyte under fuel cell operation. Journal of Electroanalytical Chemistry, 1995, 399, 239-241.	1.9	39
100	Distribution profile of hydrogen and oxygen permeating in polymer electrolyte membrane measured by mixed potential. Electrochemistry Communications, 2007, 9, 1975-1979.	2.3	39
101	Performance of Pt-Fe/mordenite monolithic catalysts for preferential oxidation of carbon monoxide in a reformate gas for PEFCs. Applied Catalysis A: General, 2008, 341, 93-97.	2.2	39
102	Highly Durable and Active PtCo Alloy/Graphitized Carbon Black Cathode Catalysts by Controlled Deposition of Stabilized Pt Skin Layers. Journal of the Electrochemical Society, 2016, 163, F455-F463.	1.3	38
103	Electrochemical Quartz Crystal Microbalance Study of Halide Adsorption and Concomitant Change of Surface Excess of Water on Highly Ordered Au(111). Langmuir, 1997, 13, 3523-3528.	1.6	37
104	Investigation of direct methanol fuel cell performance of sulfonated polyimide membrane. Electrochimica Acta, 2006, 51, 4497-4504.	2.6	37
105	Preparation and Fuel Cell Performance of Catalyst Layers Using Sulfonated Polyimide Ionomers. ACS Applied Materials & Interfaces, 2012, 4, 730-737.	4.0	36
106	Electrochemical quartz crystal microbalance study of adsorption of iodide on highly ordered Au(111). Journal of Electroanalytical Chemistry, 1996, 413, 131-136.	1.9	35
107	Photocatalytic degradation of trichlorobenzene using immobilized TiO2 films containing poly(tetrafluoroethylene) and platinum metal catalyst. Electrochimica Acta, 1998, 43, 2111-2116.	2.6	35
108	Durability of novel sulfonated poly(arylene ether) membrane in PEFC operation. Electrochemistry Communications, 2006, 8, 1412-1416.	2.3	35

#	Article	IF	CITATIONS
109	Facile preparation and electrochemical behavior of Pt100â^'xCox(111) single-crystal electrodes in 0.1 M HClO4. Electrochemistry Communications, 2011, 13, 317-320.	2.3	35
110	Mordenite-Supported Noble Metal Catalysts for Selective Oxidation of Carbon Monoxide in a Reformed Gas. Chemistry Letters, 2000, 29, 1262-1263.	0.7	34
111	Structures of a CO adlayer on a Pt(100) electrode in HClO4 solution studied by in situ STM. Chemical Communications, 2005, , 2710.	2.2	34
112	Oxygen Reduction Reaction Activity of Carbon-Supported Pt-Fe, Pt-Co, and Pt-Ni Alloys with Stabilized Pt-Skin Layers. Electrochemistry, 2016, 84, 133-137.	0.6	34
113	Influence of Decomposition Products from Perfluorosulfonic Acid Membrane on Fuel Cell Performance. Electrochemical and Solid-State Letters, 2008, 11, B190.	2.2	33
114	Preparation and optical nonlinearity of quantized indium arsenide nanocrystals. Chemistry of Materials, 1993, 5, 716-719.	3.2	32
115	Micro-Raman study on water distribution inside a Nafion membrane during operation of polymer electrolyte fuel cell. Electrochimica Acta, 2012, 82, 277-283.	2.6	32
116	Temperature Dependence of Oxygen Reduction Reaction Activity at Stabilized Pt Skin-PtCo Alloy/Graphitized Carbon Black Catalysts Prepared by a Modified Nanocapsule Method. ACS Applied Materials & Interfaces, 2012, 4, 6982-6991.	4.0	32
117	Gas diffusion electrodes containing sulfonated polyether ionomers for PEFCs. Electrochimica Acta, 2007, 53, 1972-1978.	2.6	31
118	Further improvement in performances of La0.6Sr0.4Co0.2Fe0.8O3â^´Î´ - doped ceria composite oxygen electrodes with infiltrated doped ceria nanoparticles for reversible solid oxide cells. Journal of Power Sources, 2019, 427, 293-298.	4.0	31
119	Preparation of the electrode for high temperature PEFCs using novel polymer electrolytes based on organic/inorganic nanohybrids. Electrochimica Acta, 2004, 50, 667-672.	2.6	30
120	Electrochemical Activity and Durability of Platinum Catalysts Supported on Nanometer-Size Titanium Nitride Particles for Polymer Electrolyte Fuel Cells. Electrochemistry, 2011, 79, 399-403.	0.6	30
121	Atomically Flat Pt Skin and Striking Enrichment of Co in Underlying Alloy at Pt ₃ Co(111) Single Crystal with Unprecedented Activity for the Oxygen Reduction Reaction. ACS Omega, 2018, 3, 154-158.	1.6	30
122	Effect of Wet-Proofing Treatment of Carbon Backing Layer in Gas Diffusion Electrodes on the PEFC Performance. Electrochemistry, 2005, 73, 189-193.	0.6	29
123	Interaction of samaria-doped ceria anode with highly dispersed Ni catalysts in a medium-temperature solid oxide fuel cell during long-term operation. Solid State Ionics, 2006, 177, 359-365.	1.3	29
124	High durability of Pt/graphitized carbon catalysts for polymer electrolyte fuel cells prepared by the nanocapsule method. Journal of Electroanalytical Chemistry, 2013, 688, 137-142.	1.9	29
125	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
126	XAFS Characterization of Pt–Fe/zeolite Catalysts for Preferential Oxidation of CO in Hydrogen Fuel Gases. Catalysis Letters, 2005, 103, 263-269.	1.4	28

#	Article	IF	CITATIONS
127	High-performance electrodes for reversible solid oxide fuel cell/solid oxide electrolysis cell: Ni–Co dispersed ceria hydrogen electrodes. RSC Advances, 2014, 4, 16260.	1.7	28
128	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
129	High Performance Electrode for Medium-Temperature Solid Oxide Fuel Cells. Electrochemical and Solid-State Letters, 2003, 6, A174.	2.2	27
130	Response of Specific Resistance Distribution in Electrolyte Membrane to Load Change at PEFC Operation. Journal of the Electrochemical Society, 2007, 154, B1373.	1.3	27
131	Effects of the decomposition products of sulfonated polyimide and Nafion membranes on the degradation and recovery of electrode performance in PEFCs. Electrochimica Acta, 2009, 54, 2754-2760.	2.6	27
132	SiO2-containing catalyst layers for PEFCs operating under low humidity. Electrochemistry Communications, 2012, 16, 100-102.	2.3	27
133	Effect of samaria-doped ceria (SDC) interlayer on the performance of La0.6Sr0.4Co0.2Fe0.8O3-Î′/SDC composite oxygen electrode for reversible solid oxide fuel cells. Electrochimica Acta, 2017, 225, 114-120.	2.6	27
134	Oxygen Reduction Activity and Durability of Ordered and Disordered Pt ₃ Co Alloy Nanoparticle Catalysts at Practical Temperatures of Polymer Electrolyte Fuel Cells. Journal of the Electrochemical Society, 2017, 164, F966-F972.	1.3	27
135	Development of Pt/ZSM-5 Catalyst with High CO Selectivity for Preferential Oxidation of Carbon Monoxide in a Reformed Gas. Chemistry Letters, 2005, 34, 866-867.	0.7	26
136	Oxygen Reduction at the Pt/Carbon Black-Polyimide Ionomer Interface. Journal of Physical Chemistry C, 2009, 113, 7772-7778.	1.5	26
137	Suppression of Methanol Crossover in Pt-Dispersed Polymer Electrolyte Membrane for Direct Methanol Fuel Cells. Chemistry Letters, 2000, 29, 1268-1269.	0.7	25
138	Effects of Incorporation of SiO2 Nanoparticles into Sulfonated Polyimide Electrolyte Membranes on Fuel Cell Performance under Low Humidity Conditions. Electrochimica Acta, 2014, 137, 213-218.	2.6	25
139	Metal separators coated with carbon/resin composite layers for PEFCs. Electrochimica Acta, 2007, 53, 2025-2033.	2.6	23
140	Electrochemical behavior of Pt–Co(111), (100) and (110) alloy single-crystal electrodes in 0.1 M HClO4 and 0.05 M H2SO4 solution as a function of Co content. Electrochemistry Communications, 2012, 18, 55-57.	2.3	23
141	Gas diffusion electrodes for polymer electrolyte fuel cells using novel organic/inorganic hybrid electrolytes: effect of carbon black addition in the catalyst layer. Electrochimica Acta, 2005, 50, 2719-2723.	2.6	22
142	Temperature dependence of oxygen reduction activity at Nafion-coated Pt/graphitized carbon black catalysts prepared by the nanocapsule method. Energy and Environmental Science, 2010, 3, 1511.	15.6	22
143	Hydrolyzed polyoxymethylenedimethylethers as liquid fuels for direct oxidation fuel cells. Electrochimica Acta, 2013, 108, 350-355.	2.6	22
144	Gas diffusion electrodes containing sulfonated poly (arylene ether) ionomer for polymer electrolyte fuel cells. Electrochimica Acta, 2010, 55, 3464-3470.	2.6	21

#	Article	lF	CITATIONS
145	In Situ STM Observation of the CO Adlayer on a Pt(110) Electrode in 0.1 M HClO ₄ Solution. Langmuir, 2010, 26, 9191-9194.	1.6	21
146	Durability of Pt/Graphitized Carbon Catalyst Prepared by the Nanocapsule Method for the Start/Stop Operating Condition of Polymer Electrolyte Fuel Cells. Electrochemistry, 2011, 79, 381-387.	0.6	21
147	Electro-oxidation of hydrolysed poly-oxymethylene-dimethylether on PtRu supported catalysts. Electrochimica Acta, 2011, 56, 1460-1465.	2.6	21
148	In situATR-FTIR analysis of the CO-tolerance mechanism on Pt ₂ Ru ₃ /C catalysts prepared by the nanocapsule method. Energy and Environmental Science, 2011, 4, 433-438.	15.6	19
149	Double-Layer Ionomer Membrane for Improving Fuel Cell Performance. ACS Applied Materials & Interfaces, 2014, 6, 13894-13899.	4.0	19
150	Performance of practical-sized membrane-electrode assemblies using titanium nitride-supported platinum catalysts mixed with acetylene black as the cathode catalyst layer. Journal of Power Sources, 2015, 280, 593-599.	4.0	19
151	Unparalleled mitigation of membrane degradation in fuel cells <i>via</i> a counter-intuitive approach: suppression of H ₂ O ₂ production at the hydrogen anode using a Pt _{skin} –PtCo catalyst. Journal of Materials Chemistry A, 2020, 8, 1091-1094.	5.2	19
152	Characterization of Methoxy Fuels for Direct Oxidation-Type Fuel Cell. Journal of the Electrochemical Society, 2004, 151, A1636.	1.3	18
153	Gas diffusion electrodes for polymer electrolyte fuel cell using sulfonated polyimide. Research on Chemical Intermediates, 2006, 32, 533-542.	1.3	18
154	Effect of adsorption of sulfate anions on the activities for oxygen reduction reaction on Nafion®-coated Pt/carbon black catalysts at practical temperatures. Journal of Electroanalytical Chemistry, 2015, 747, 91-96.	1.9	18
155	High durability of La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8ceria (SDC) composite oxygen electrode with SDC interlayer for reversible solid oxide fuel cell/solid oxide electrolysis cell. Journal of the Ceramic Society of Japan, 2017, 125, 218-222.}	o>Q< 0.5	sub>3&an
156	Selective photoreduction of carbon dioxide to methanol on titanium dioxide photocatalysts in propylene carbonate solution. Journal of the Chemical Society Chemical Communications, 1995, , 829.	2.0	17
157	Electrocatalysis of the Oxygen Reduction Reaction at Pt and Pt-Alloys. Electrochemistry, 2011, 79, 303-311.	0.6	17
158	ATR-FTIR Analysis of the State of Water in a Sulfonated Block Poly(arylene ether sulfone ketone) Membrane and Proton Conductivity Measurement during the Hydration/Dehydration Cycle. Journal of Physical Chemistry C, 2013, 117, 3762-3771.	1.5	16
159	Weakened CO adsorption and enhanced structural integrity of a stabilized Pt skin/PtCo hydrogen oxidation catalyst analysed by <i>in situ</i> X-ray absorption spectroscopy. Catalysis Science and Technology, 2017, 7, 6124-6131.	2.1	16
160	Effects of Sulfate on the Oxygen Reduction Reaction Activity on Stabilized Pt Skin/PtCo Alloy Catalysts from 30 to 80 °C. Langmuir, 2018, 34, 13558-13564.	1.6	16
161	Application of Sulfonated Polyimide Membranes to Direct Methanol Fuel Cells. Chemistry Letters, 2005, 34, 996-997.	0.7	15
162	In situ analysis of oxygen partial pressure at the cathode catalyst layer/membrane interface during PEFC operation. Electrochimica Acta, 2008, 53, 4699-4705.	2.6	15

#	Article	IF	CITATIONS
163	Synthesis of nickel nanoparticles supported on hollow samaria-doped ceria particles via the solution-spray plasma technique: Anode catalysts for SOFCs. Solid State Ionics, 2009, 180, 968-972.	1.3	15
164	H2O-tolerant monolithic catalysts for preferential oxidation of carbon monoxide in the presence of hydrogen. Applied Catalysis A: General, 2009, 370, 50-53.	2.2	15
165	Effects of polymer electrolyte membrane's property on fuel cell performances. Macromolecular Symposia, 2000, 156, 223-230.	0.4	14
166	New Evaluation Method for Degradation Rate of Polymer Electrolytes. ECS Transactions, 2006, 3, 485-492.	0.3	14
167	Distribution profile of water and suppression of methanol crossover in sulfonated polyimide electrolyte membrane for direct methanol fuel cells. Electrochimica Acta, 2007, 52, 5272-5280.	2.6	14
168	Analyses of the preferential oxidation of carbon monoxide in hydrogen-rich gas over noble metal catalysts supported on mordenite. Studies in Surface Science and Catalysis, 2001, , 953-958.	1.5	13
169	Electrochemical quartz crystal microbalance analysis of the CO oxidation reaction at Pt alloy electrodes. Journal of Electroanalytical Chemistry, 2011, 662, 123-129.	1.9	13
170	Effect of Microstructure on Performance of Double-Layer Hydrogen Electrodes for Reversible SOEC/SOFC. Journal of the Electrochemical Society, 2017, 164, F889-F894.	1.3	12
171	Effect of core-alloy composition and particle size of stabilized Pt Skin/PtCo alloy nanocatalysts on the CO-Tolerant hydrogen oxidation electrocatalysis. Electrochimica Acta, 2019, 328, 135056.	2.6	12
172	Experimental analyses of low humidity operation properties of SiO2-containing catalyst layers for polymer electrolyte fuel cells. Electrochimica Acta, 2013, 88, 807-813.	2.6	11
173	High hydrogen evolution activity and suppressed H ₂ O ₂ production on Pt-skin/PtFe alloy nanocatalysts for proton exchange membrane water electrolysis. Physical Chemistry Chemical Physics, 2019, 21, 2861-2865.	1.3	11
174	Adsorption and Oxidation of Carbon Monoxide on Pt/C, Pt ₃ Co/C, and PtRu/C Catalysts Studied by <i>In-Situ</i> Attenuated Total Reflection Fourier-Transform Infrared. Journal of Nanoscience and Nanotechnology, 2011, 11, 5123-5130.	0.9	10
175	Effect of platinum loading on fuel cell cathode performance using hydrocarbon ionomers as binders. Physical Chemistry Chemical Physics, 2012, 14, 16713.	1.3	10
176	Structural variations of CO adlayers on a Pt(100) electrode in 0.1 M HClO4 solution: an in situ STM study. Physical Chemistry Chemical Physics, 2013, 15, 11038.	1.3	10
177	In Situ FTIR Analysis of CO-Tolerance of a Pt-Fe Alloy with Stabilized Pt Skin Layers as a Hydrogen Anode Catalyst for Polymer Electrolyte Fuel Cells. Catalysts, 2017, 7, 8.	1.6	10
178	Addressing planar solid oxide cell degradation mechanisms: A critical review of selected components. Electrochemical Science Advances, 2022, 2, e2100024.	1.2	10
179	In situ STM observation with atomic resolution on platinum film electrodes formed by a sputtering method. Chemical Communications, 2000, , 2279-2280.	2.2	9
180	Photoelectrochemical properties of Fe2O3 microcrystallites prepared in nafion. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1990, 295, 71-78.	0.3	8

#	Article	IF	CITATIONS
181	Gas diffusion electrodes for polymer electrolyte fuel cells using borosiloxane electrolytes. Solid State Ionics, 2004, 171, 45-49.	1.3	8
182	Double Layer-Type Electrodes for Reversible Solid Oxide Fuel Cells. ECS Transactions, 2007, 7, 365-371.	0.3	8
183	Remarkably Improved Durability of Ni–Co Dispersed Samaria-Doped Ceria Hydrogen Electrodes by Reversible Cycling Operation of Solid Oxide Cells. Journal of the Electrochemical Society, 2020, 167, 134516.	1.3	8
184	(Invited) <i></i> Recent Progress in the Understanding of the Electrocatalysis of the CO-Tolerant Hydrogen Oxidation Reaction in Polymer Electrolyte Fuel Cells. ECS Transactions, 2018, 85, 41-46.	0.3	7
185	Potential Cycle-Induced Change in the Crystal Structure of a Pt-Skin/PtCo Alloy Nanostructured Electrocatalyst for Fuel Cells. ACS Applied Nano Materials, 2019, 2, 7473-7477.	2.4	7
186	Gas Diffusion Electrodes for Polymer Electrolyte Fuel Cells Using Novel Organic/Inorganic Hybrid Electrolytes. Electrochemistry, 2004, 72, 232-237.	0.6	7
187	é›»æ±é–¢é€£å^†é‡Žã§ã®å¿œç"ï¼^3)燃料電æ±ï¼^PEFC). Electrochemistry, 2007, 75, 489-493.	0.6	6
188	Effects of SiO ₂ Nanoparticles Incorporated into Poly(Arylene Ether Sulfone) Tj ETQq0 0 0 Electrochemistry, 2015, 83, 150-154.	rgBT /Ove 0.6	rlock 10 Tf 5 6
189	Effect of an Sb-Doped SnO2 Support on the CO-Tolerance of Pt2Ru3 Nanocatalysts for Residential Fuel Cells. Catalysts, 2016, 6, 139.	1.6	6
190	Electro-Oxidation of CO Saturated in 0.1 M HClO4 on Basal and Stepped Pt Single-Crystal Electrodes at Room Temperature Accompanied by Surface Reconstruction. Surfaces, 2019, 2, 315-325.	1.0	6
191	Microstructural Analyses of Ceria-Based Anode with Highly Dispersed Ni Electrocatalysts for Medium-Temperature Solid Oxide Fuel Cells. Electrochemistry, 2005, 73, 128-134.	0.6	6
192	Electrocatalysis at Platinum and Bimetallic Alloys. , 0, , 317-341.		5
193	Analysis of the Gold/Polymer Electrolyte Membrane Interface by Polarization-Modulated ATR-FTIR Spectroscopy. Journal of Physical Chemistry C, 2015, 119, 16754-16761.	1.5	5
194	Analysis of the Surface Oxidation Process on Pt Nanoparticles on a Glassy Carbon Electrode by Angle-Resolved, Grazing-Incidence X-ray Photoelectron Spectroscopy. Langmuir, 2017, 33, 8877-8882.	1.6	5
195	Important Roles of Ceria-Based Materials on Durability of Hydrogen and Oxygen Electrodes for Reversible SOEC/SOFC. ECS Transactions, 2017, 78, 3189-3195.	0.3	5
196	High Performance Electrode for Medium Temperature Operating Solid Oxide Fuel Cells. Activation of La(Sr)MnO ₃ Cathode with Highly Dispersed Pt Microcrystals. Electrochemistry, 1996, 64, 686-687.	0.3	5
197	Synthesis and Evaluation of Ni Catalysts Supported on BaCe0.5Zr0.3â^'xY0.2NixO3â^'δ with Fused-Aggregate Network Structure for the Hydrogen Electrode of Solid Oxide Electrolysis Cell. Catalysts, 2017, 7, 223.	1.6	4
198	Depth-direction analysis of nickel depletion in a Ni–gadolinia-doped ceria hydrogen electrode after steam electrolysis operation. Journal of the Ceramic Society of Japan, 2021, 129, 111-117.	0.5	4

#	Article	IF	CITATIONS
199	Properties of ab-PBI Membranes for Fuel Cells. Electrochemistry, 2002, 70, 943-945.	0.6	4
200	Particle-Size Effect of Pt Anode Catalysts on H ₂ O ₂ Production Rate and H ₂ Oxidation Activity at 20 to 80 °C. Journal of the Electrochemical Society, 2022, 169, 014516.	1.3	4
201	Tafel Slope Component Analysis of Polymer Electrolyte Fuel Cell Cathode Current-Potential Behavior. ECS Transactions, 2011, 35, 13-23.	0.3	3
202	Electrocatalysis: Holding the Keys to Advanced Energy Materials and Systems. ChemElectroChem, 2016, 3, 1518-1518.	1.7	3
203	Further Improvement of Performances and Durability of Oxygen and Hydrogen Electrodes for Reversible Solid Oxide Cells. ECS Transactions, 2019, 91, 2379-2386.	0.3	3
204	High-Performance Electrodes for Medium-Temperature Solid Oxide Fuel Cells. , 2008, , 53-87.		3
205	ã•ã•ã,ã┥ã®é›»æ°—åŒーå┤è∽æ,¬â€•ã¾ãšæ,¬å®šã⊷ã┥ãĮã,^ã†ã€€å›žè»¢é›»æ¥µæ³•. Electrochemistry, 2000, 68, 8	1608220.	3
206	1.Ptç³»å•̃çµæ™¶é›»æ¥µã,'用ã,ãŸç‡ƒæ−™é›»æ±å応解枕 Electrochemistry, 2015, 83, 96-100.	0.6	3
207	New Metal Separators Coated with Carbon/Resin Composite Layers for PEFCs. Electrochemistry, 2007, 75, 213-216.	0.6	2
208	Research and Development of Highly Active and Durable Electrocatalysts Based on Multilateral Analyses of Fuel Cell Reactions. Electrochemistry, 2017, 85, 526-533.	0.6	2
209	Optical Nonlinearity of Quantized GaAs Nanocrystals Prepared by Wet Process. Electrochemistry, 1993, 61, 918-919.	0.3	2
210	Temperature-Dependence of Hydrogen Oxidation Rates in the Presence of CO at Pt, PtRu, and Pt3Co Catalysts Dispersed on Carbon Black. ECS Transactions, 2007, 11, 913-919.	0.3	1
211	STEM Image Analysis Using LAT Image Processing. Imaging & Microscopy, 2009, 11, 34-38.	0.1	1
212	Performances of Metal Particle-Dispersed Ceria Hydrogen Electrodes in Reversible SOFCs. ECS Transactions, 2011, 35, 1811-1816.	0.3	1
213	Highly Active Pt‒M (M=Co, Fe) Alloy Catalysts for the Hydrogen Evolution Reaction in Polymer Electrolyte Water Electrolysis. ECS Meeting Abstracts, 2018, , .	0.0	1
214	Modeling the Effect of Underlying Cobalt on the Electrochemical Behavior of Pt-Skin / Pt100-x Cox(111) Single Crystal Electrodes. ECS Meeting Abstracts, 2019, , .	0.0	1
215	Distribution of Nafion Ionomer in PEFC Electrodes with High Catalyst Utilization. ECS Transactions, 2006, 3, 379-384.	0.3	0
216	Distribution Profile of Specific Resistance in Polymer Electrolyte Membrane During Load Change for PEFC. ECS Transactions, 2007, 11, 1505-1513.	0.3	0

Ηιγογικι Uchida

#	Article	IF	CITATIONS
217	Synthesis and Photophysical Properties of Ill–V Semiconductor Nanocrystals. Springer Series in Cluster Physics, 1999, , 211-222.	0.3	0
218	(Invited) Analyses of CO Tolerance at Stabilized Pt-Skin/Ptfe and PtCo Hydrogen Anode Catalysts with High Activity and Robustness for Residential PEFCs. ECS Meeting Abstracts, 2017, , .	0.0	0
219	Density Functional Theory Studies of CO-Tolerant Stabilized Platinum Skin/Platinum Alloy Catalysts for the Hydrogen Oxidation Reaction. ECS Meeting Abstracts, 2017, , .	0.0	0
220	Important Roles of Ceria-Based Materials on Durability of Hydrogen and Oxygen Electrodes for Reversible SOEC/SOFC. ECS Meeting Abstracts, 2017, , .	0.0	0
221	Structures of Atomically Designed PtCo Alloy Catalysts and Durability/Activity Towards Oxygen Reduction Reaction. ECS Meeting Abstracts, 2017, , .	0.0	0
222	(Invited) Development of Highly Active and Stable Pt and Pt Alloy Catalysts Evading the Draw-Back of the Nano-Sizing for PEFC Cathodes. ECS Meeting Abstracts, 2017, , .	0.0	0
223	(Invited) Recent Progress in the Understanding of the Electrocatalysis of the CO-Tolerant Hydrogen Oxidation Reaction in Polymer Electrolyte Fuel Cells. ECS Meeting Abstracts, 2018, , .	0.0	0
224	(Invited) Highly Active and Durable Pt-Based Catalysts for the Oxygen Reduction Reaction in PEFCs. ECS Meeting Abstracts, 2018, , .	0.0	0
225	(Invited) In Situ Structural Analysis of PtCo Alloy Catalysts with Stabilized Platinum-Skin Layers and Durability/Activity Towards Oxygen Reduction Reaction. ECS Meeting Abstracts, 2018, , .	0.0	0
226	Effect of Underlying Cobalt Content on Oxygen Reduction Reaction Activity at Pt-Skin/Pt100-XCox (111) Single Crystal Electrodes. ECS Meeting Abstracts, 2019, , .	0.0	0
227	(Invited) Highly Active and Robust Pt-Skin/Pt Alloy Two-Way Catalysts for Oxygen Reduction and Hydrogen Oxidation in PEFCs. ECS Meeting Abstracts, 2019, , .	0.0	0
228	The Role of Theory in the Development of Electrocatalysts: Case Study on Pt-Skin/Pt Alloy Nanoparticles for Hydrogen Oxidation and Evolution. ECS Meeting Abstracts, 2019, , .	0.0	0
229	Suppression of H2O2 Formation at Pt-Skin/Pt Alloy Hydrogen Anode Catalysts for Mitigation of Membrane Degradation. ECS Meeting Abstracts, 2019, , .	0.0	0