Koichi Matsuzawa

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Catalytic activity of zirconia on zirconium for the oxygen evolution reaction in potassium hydroxide. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2021, 267, 115112.	3.5	2
2	Control of surface area and conductivity of niobium-added titanium oxides as durable supports for cathode of polymer electrolyte fuel cells. Materials and Design, 2021, 203, 109623.	7.0	7
3	Study of Titanium Oxide-based Materials for Next-generation Polymer Electrolyte Fuel Cells. Denki Kagaku, 2021, 89, 268-272.	0.0	0
4	Niobium-added titanium oxides powders as non-noble metal cathodes for polymer electrolyte fuel cells â€“ Electrochemical evaluation and effect of added amount of niobium. International Journal of Hydrogen Energy, 2020, 45, 5438-5448.	7.1	7
5	Emergence of Oxygen Reduction Activity in Zirconium Oxide-Based Compounds in Acidic Media: Creation of Active Sites for the Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2019, 123, 18150-18159.	3.1	23
6	Templated Synthesis of Carbon-Free Mesoporous MagnÃ©li-Phase Titanium Suboxide. Electrocatalysis, 2019, 10, 459-465.	3.0	6
7	Factors affecting oxygen reduction activity of Nb2O5-doped TiO2 using carbon nanotubes as support in acidic solution. Electrochimica Acta, 2018, 283, 1779-1788.	5.2	14
8	Zirconium Oxynitride-Catalyzed Oxygen Reduction Reaction at Polymer Electrolyte Fuel Cell Cathodes. ACS Omega, 2017, 2, 678-684.	3.5	49
9	Temperature dependence of oxygen reduction mechanism on a titanium oxideâ€“based catalyst made from oxyâ€“titanium tetraâ€“pyrazinoâ€“porphyrazine using carbon nano-tubes as support in acidic solution. Electrochimica Acta, 2016, 209, 1-6.	5.2	10
10	Titanium-Niobium Oxides as Non-Noble Metal Cathodes for Polymer Electrolyte Fuel Cells. Catalysts, 2015, 5, 1289-1303.	3.5	20
11	A Simulation Study of Pt Particle Degradation During Potential Cycling Using a Dissolution/Deposition Model. Electrocatalysis, 2015, 6, 102-108.	3.0	10
12	Degradation of Pt/C Under Various Potential Cycling Patterns. Electrocatalysis, 2013, 4, 10-16.	3.0	23
13	Immersed effects of Ta and Zr compounds on activity of oxygen reduction reaction in sulfuric acid. Journal of Power Sources, 2013, 226, 16-19.	7.8	4
14	Ionic Conductivity of [dema][TfO]/Solid Acid-Base Composite Membrane. ECS Transactions, 2013, 50, 1089-1095.	0.5	3
15	Emergence of Oxygen Reduction Activity in Partially Oxidized Tantalum Carbonitrides: Roles of Deposited Carbon for Oxygen-Reduction-Reaction-Site Creation and Surface Electron Conduction. Journal of Physical Chemistry C, 2013, 117, 18837-18844.	3.1	59
16	ORR Activity of Nb Oxide Based Catalyst Prepared from Nb Compound Including C and N. ECS Transactions, 2013, 50, 1769-1775.	0.5	3
17	Catalytic Activity and Stability of Ta Compounds for Oxygen Reduction Reaction. ECS Transactions, 2013, 50, 1823-1829.	0.5	1
18	Enhancement of Oxygen Reduction Activity of Zirconium Oxide-Based Cathode for PEFC. ECS Transactions, 2013, 58, 1489-1494.	0.5	7

#	Article	IF	Citations
19	Preparation of Highly Active Zr Oxide-Based Oxygen Reduction Electrocatalysts as PEFC Cathode. ECS Transactions, 2013, 50, 1785-1790.	0.5	7
20	Highly Active Titanium Oxide-based Catalyst for Oxygen Reduction Reaction for PEFC. ECS Transactions, 2013, 50, 1777-1783.	0.5	5
21	Activity of Tantalum Oxide-Based Electrocatalysts toward Oxygen Reduction Reaction for PEFC. ECS Transactions, 2013, 58, 1217-1223.	0.5	1
22	Stabilization and Activation of Zirconium Oxide Based Electrocatalysts as PEFC Cathode by Re-Heat Treatment. ECS Transactions, 2013, 58, 1225-1231.	0.5	1
23	Improving ORR Activity of Group 4 and 5 Metal Oxide-Based Cathodes for PEFCs. ECS Transactions, 2013, 58, 1495-1500.	0.5	3
24	Factors for Improvements of Catalytic Activity of Zirconium Oxide-Based Oxygen-Reduction Electrocatalysts. Journal of the Electrochemical Society, 2013, 160, F162-F167.	2.9	36
25	Improvement of Zr Oxide Based Cathode for Polymer Electrolyte Fuel Cells. ECS Meeting Abstracts, 2013, , .	0.0	0
26	Ta Compound Film as New Anode Material for Polymer Electrolyte Water Electrolysis. ECS Transactions, 2012, 41, 21-25.	0.5	0
27	Solubilities of La and Ni on LaNiO3 in Li/K Carbonate Eutectic with La2O3. Chemistry Letters, 2012, 41, 817-819.	1.3	0
28	Transition Metal Oxide Based Materials for Cathode of Polymer Electrolyte Fuel Cells. ECS Meeting Abstracts, 2012, , .	0.0	0
29	Oxygen Evolution Reaction of Zr Compounds as New Anode Materials for Water Electrolysis. Transactions of the Materials Research Society of Japan, 2012, 37, 373-376.	0.2	1
30	Oxygen reduction reaction on tantalum oxide-based catalysts prepared from TaC and TaN. Electrochimica Acta, 2012, 68, 192-197.	5.2	52
31	Pt-Ir-SnO2/C Electrocatalysts for Ethanol Oxidation in Acidic Media. Chinese Journal of Catalysis, 2011, 32, 1856-1863.	14.0	14
32	Factors for Improvements of Catalytic Activity for Zirconium Oxide-Based Oxygen-Reduction Electrocatalysts. ECS Transactions, 2011, 41, 1225-1247.	0.5	2
33	Zirconium Oxide-Based Compounds as Non-Pt Cathode for Polymer Electrolyte Fuel Cell. Electrochemistry, 2011, 79, 340-342.	1.4	8
34	A Mesothermal Fuel Cell using Diethylmethylammonium Trifluoromethanesulfonate Absorbed Membrane with H3PO4 Addition and Various Amount of Electrolyte Loading in Catalyst Layer. Electrochemistry, 2011, 79, 377-380.	1.4	5
35	Catalytic Activity for Oxygen Reduction Reaction on Tantalum Oxide-Based Compounds (2) Active Sites of TaON Thin Film Catalysts and Role of Carbon. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2011, 75, 552-556.	0.4	1
36	Catalytic Activity for Oxygen Reduction Reaction on Tantalum Oxide-Based Compounds (1) Effect of Preparation Conditions of Thin Film Model Catalysts Using Reactive Sputtering Method on Oxygen Reduction Activity. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2011, 75, 545-551.	0.4	2

#	Article	IF	Citations
37	Quantitative Analysis of Electrooxidation Products on Platinum for Direct Ethanol Fuel Cell. Electrochemistry, 2011, 79, 419-423.	1.4	0
38	Development of group 4 and 5 metal oxide-based cathodes for polymer electrolyte fuel cell. Journal of Power Sources, 2011, 196, 5256-5263.	7.8	54
39	Solubilities of NiO and LaNiO3 in Li/Na eutectic carbonate with rare-earth oxide. Journal of Power Sources, 2011, 196, 5007-5011.	7.8	6
40	Partially Oxidized Tantalum Carbonitride as New Cathodes Without Platinum Group Metals for Polymer Electrolyte Fuel Cell. Journal of Fuel Cell Science and Technology, 2011, 8, .	0.8	12
41	Non-Precious Metal Electrocatalyst for Oxygen Evolution in Polymer Electrolyte Water Electrolysis. ECS Transactions, 2010, 25, 119-124.	0.5	1
42	Hydrogen Energy System and Environmental Impact Factor. Electrochemistry, 2010, 78, 970-975.	1.4	9
43	Tantalum oxide-based compounds as new non-noble cathodes for polymer electrolyte fuel cell. Electrochimica Acta, 2010, 55, 7581-7589.	5.2	74
44	Progress in non-precious metal oxide-based cathode for polymer electrolyte fuel cells. Electrochimica Acta, 2010, 55, 8005-8012.	5.2	148
45	Partially oxidized niobium carbonitride as a non-platinum catalyst for the reduction of oxygen in acidic medium. Electrochimica Acta, 2010, 55, 7290-7297.	5.2	30
46	Evaluation of Solubility of Ru in Acidic Solution. Electrocatalysis, 2010, 1, 83-86.	3.0	3
47	Shape-Controlled Platinum Nanoparticles of Different Sizes and Their Electrochemical Properties. Electrocatalysis, 2010, 1, 169-177.	3.0	11
48	Mass transportation in diethylmethylammonium trifluoromethanesulfonate for fuel cell applications. Electrochimica Acta, 2010, 55, 6639-6644.	5.2	17
49	Oxygen Reduction Reaction on LaNiO3 in Li/Na Eutectic Carbonate Melt with La2O3. ECS Transactions, 2010, 33, 449-454.	0.5	1
50	Evaluation of Ta and Zr Compounds for Oxygen Evolution Reaction in Sulfuric Acid. ECS Transactions, 2010, 33, 247-252.	0.5	0
51	Catalytic Activity of Zirconium Based Cathode without Platinum for Oxygen Reduction Reaction. ECS Transactions, 2010, 33, 609-624.	0.5	4
52	Electrocatalytic Activity of Ta Compound Thin Film for Oxygen Reduction Reaction. ECS Transactions, 2010, 28, 3-10.	0.5	3
53	Efficiency of CO2 Generation during the Electrooxidation of Ethanol on Platinum with Various Roughness Factors. ECS Transactions, 2009, 16, 1253-1261.	0.5	2
54	Partially Oxidized Niobium Carbonitride as Non-Platinum Cathode for PEFC. Electrochemical and Solid-State Letters, 2009, 12, B158.	2.2	21

#	Article	IF	Citations
55	Catalytic Activity of Partially Oxidized Tantalum Carbonitride for Oxygen Reduction Reaction. ECS Transactions, 2009, 16, 125-132.	0.5	4
56	Oxygen Reduction Reaction of Partially Oxidized Tantalum Carbonitride as Non-Platinum Cathode for PEFC: Dependence of Degree of Oxidation of Tantalum Carbonitride on Catalytic Activity. ECS Transactions, 2009, 19, 51-57.	0.5	0
57	Zirconium Oxide-based Cathode without Platinum Group Metals for PEFC. ECS Transactions, 2009, 25, 129-139.	0.5	5
58	Tantalum Oxide-based Cathodes without Precious Metals for PEFC. ECS Transactions, 2009, 25, 175-180.	0.5	1
59	Tantalum-based Compounds Prepared by Reactive Sputtering as a New Non-platinum Cathode for PEFC. Chemistry Letters, 2009, 38, 1184-1185.	1.3	15
60	Impacts of air bleeding on membrane degradation in polymer electrolyte fuel cells. Journal of Power Sources, 2008, 178, 699-705.	7.8	50
61	Group 4 and 5 Oxide-based Compounds as New Cathodes without Platinum Group Metals for PEFC. ECS Transactions, 2008, 16, 449-457.	0.5	2
62	Stability of Pt-Ru/C Catalysts: Effects of Ru Content. ECS Transactions, 2007, 11, 325-334.	0.5	12
63	Preparation of Cubic Platinum Nanoparticles of Different Sizes and Their Electrochemical Propeties. ECS Transactions, 2007, 11, 181-189.	0.5	2
64	Controlled growth and shape formation of platinum nanoparticles and their electrochemical properties. Electrochimica Acta, 2006, 52, 1632-1638.	5.2	103
65	Effect of rare earth oxides for improvement of MCFC. Journal of Power Sources, 2006, 160, 811-815.	7.8	23
66	Hydrogen Peroxide Formation as a Degradation Factor of Polymer Electrolyte Fuel Cells. ECS Transactions, 2006, 1, 315-322.	0.5	10
67	The effect of La oxide additive on the solubility of NiO in molten carbonates. Journal of Power Sources, 2005, 140, 258-263.	7.8	39
68	Effects of Rare-Earth Additives in Liâˆ•Na Eutectic Carbonate for Decreasing the Solubility of NiO. Journal of the Electrochemical Society, 2005, 152, A1116.	2.9	18
69	Improvement of MCFC cathode stability by additives. Electrochimica Acta, 2002, 47, 3823-3830.	5.2	55