

# Shigenori Mitsushima

## List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Microscopic high-speed video observation of oxygen bubble generation behavior and effects of anode electrode shape on OER performance in alkaline water electrolysis. International Journal of Hydrogen Energy, 2022, 47, 11116-11127.	3.8	28
2	A New Accelerated Durability Test Protocol for Water Oxidation Electrocatalysts of Renewable Energy Powered Alkaline Water Electrolyzers. Electrochemistry, 2021, 89, 186-191.	0.6	25
3	The Effect of Li <sub>x</sub> Ni <sub>2-x</sub> O <sub>2</sub> /Ni with Modification Method on Activity and Durability of Alkaline Water Electrolysis Anode. Electrocatalysis, 2018, 9, 162-171.	1.5	23
4	Challenge of advanced low temperature fuel cells based on high degree of freedom of group 4 and 5 metal oxides. Current Opinion in Electrochemistry, 2020, 21, 234-241.	2.5	14
5	OER Activity of Ir-Ta-Zr Composite Anode as a Counter Electrode for Electrohydrogenation of Toluene. Electrocatalysis, 2016, 7, 441-444.	1.5	13
6	Electrocatalytic Activity and Durability of Li <sub>x</sub> Ni <sub>2-x</sub> O <sub>2</sub> /Ni Electrode Prepared by Oxidation with LiOH Melt for Alkaline Water Electrolysis. Electrocatalysis, 2017, 8, 422-429.	1.5	13
7	Existence of Dissolved Oxygen near Anode Catalyst in Proton Exchange Membrane Water Electrolyzers. Journal of the Electrochemical Society, 2022, 169, 044515.	1.3	10
8	Effect of Semiconducting Properties of Oxide-Based Compounds on Oxygen Reduction Activity in Acidic Media. ECS Transactions, 2020, 98, 457-464.	0.3	6
9	Quadruple perovskite oxides CaMn <sub>7</sub> O <sub>12</sub> proceed by two active site reaction mechanism for oxygen evolution reaction. ChemElectroChem, 0, , .	1.7	5
10	Current Measurement and Electrochemical Characterization of Gas Evolution Reactions on a Rotating Ring-Disk Electrode. Electrocatalysis, 2020, 11, 301-308.	1.5	2
11	Control of Transport Water in Direct Toluene Electro-Hydrogenation Electrolyzer. ECS Meeting Abstracts, 2021, MA2021-02, 1737-1737.	0.0	2
12	Visualization of Bubble Behavior on Hydrophobic Coated CL in PEM Water Electrolysis Cell. ECS Meeting Abstracts, 2020, MA2020-02, 2459-2459.	0.0	2
13	Degradation Analysis of Pt/Nb <sub>4</sub> Ti <sub>4</sub> O <sub>7</sub> as PEFC Cathode Catalysts with Controlled Arc Plasma-deposited Platinum Content. Electrochemistry, 2022, 90, 057004-057004.	0.6	2
14	Factors Which Affect Oxygen Reduction Activity of Niobium Added Titanium Oxides as Non-Platinum Cathodes for Polymer Electrolyte Fuel Cells. ECS Transactions, 2017, 80, 717-724.	0.3	1
15	Oxygen Reduction Activity of TiO <sub>2</sub> Single Crystals in Acidic Media. ECS Transactions, 2018, 86, 549-558.	0.3	1
16	Practical and Reliable Methanol Concentration Sensor for Direct Methanol Fuel Cells. Electrochemistry, 2021, 89, 250-255.	0.6	1
17	Green Hydrogen and Polymer Electrolyte Fuel Cells for Our Future Sustainable Growth. ECS Meeting Abstracts, 2019, , .	0.0	1
18	Separation of Polarization for Proton Exchange Membrane Water Electrolyzers. ECS Meeting Abstracts, 2019, , .	0.0	1

#	ARTICLE	IF	CITATIONS
19	Relationship between Evaluation of Oer Performance and Oxygen Bubble Generation Behavior in Alkaline Water Electrolysis. ECS Meeting Abstracts, 2021, MA2021-02, 1730-1730.	0.0	1
20	Separation of Polarizations Using Shifted Electrode Arrangement in Proton Exchange Membrane Water Electrolysis. ECS Meeting Abstracts, 2020, MA2020-02, 2484-2484.	0.0	1
21	Zirconium Oxide-Based Compounds as Non-Platinum Cathodes for Polymer Electrolyte Fuel Cells. ECS Transactions, 2017, 77, 1465-1472.	0.3	0
22	Effect of Added Elements into TiO <sub>2</sub> on Oxygen Reduction Activity in Acid Media. ECS Transactions, 2020, 97, 583-592.	0.3	0
23	Membrane Electrolysis for Organic Chemical Hydride Synthesis with Water Oxidation. ECS Meeting Abstracts, 2017, , .	0.0	0
24	Factors Which Affect Oxygen Reduction Activity of Niobium Added Titanium Oxides as Non-Platinum Cathodes for Polymer Electrolyte Fuel Cells. ECS Meeting Abstracts, 2017, , .	0.0	0
25	Catalytic Activity and Durability for Oxygen Evolution on La-Ni-O / Ni for Alkaline Water Electrolysis Under Potential Cycling. ECS Meeting Abstracts, 2017, , .	0.0	0
26	(Invited) Development of Non Platinum Group Metal Oxide Cathode without Carbon Support for PEFCs. ECS Meeting Abstracts, 2017, , .	0.0	0
27	Oxygen Reduction Activity of TiO <sub>2</sub> Single Crystals in Acidic Media. ECS Meeting Abstracts, 2018, , .	0.0	0
28	Self-Assembled Anode Catalysts with Excellent Durability for Alkaline Water Electrolysis Using Novel Hybrid Cobalt Hydroxide Nanosheets. ECS Meeting Abstracts, 2018, , .	0.0	0
29	Precious Metal Oxide Loading Reduction of Dimensionally Stable Electrodes for Oxygen Evolution Reaction. ECS Meeting Abstracts, 2018, , .	0.0	0
30	(Invited) Reverse Current Behavior and ADT Protocol for Start & Stop Operation of Bipolar Alkaline Water Electrolyzer. ECS Meeting Abstracts, 2020, MA2020-01, 1835-1835.	0.0	0
31	Electrocatalytic Semihydrogenation of Alkynes to Z-Alkenes Using a Proton Exchange Membrane Reactor: Influence of Catalyst Materials on Product Selectivity and Reaction Rate. ECS Meeting Abstracts, 2020, MA2020-01, 2499-2499.	0.0	0
32	Difference of Active Sites between Titanium and Zirconium Oxide-Based Cathodes for Polymer Electrolyte Fuel Cells. ECS Meeting Abstracts, 2020, MA2020-01, 1591-1591.	0.0	0
33	Degradation of Ni-Co Coated Ni Oxygen Evolution Electrodes in Alkaline Water Electrolysis Using Accelerated Durability Test Based on Reverse Current Phenomenon. ECS Meeting Abstracts, 2021, MA2021-02, 1728-1728.	0.0	0
34	Structure and Activity of Electrolytically Deposited Hybrid Cobalt Hydroxide Nanosheet for Self-Repairing Oxygen Evolution Reaction Catalysts. ECS Meeting Abstracts, 2021, MA2021-02, 1725-1725.	0.0	0
35	Evaluation of Factors for Promoting Bubble Detachment from Anodes for Alkaline Water Electrolysis. ECS Meeting Abstracts, 2021, MA2021-02, 1735-1735.	0.0	0
36	Evaluation of Anode Porous Transport Layer Using Polarization Separation Method on PEM Water Electrolysis. ECS Meeting Abstracts, 2021, MA2021-02, 1731-1731.	0.0	0

#	ARTICLE	IF	CITATIONS
37	(Invited) Operando X-Ray Absorption Fine Structure Studies of Polymer Electrolyte Membrane Electrolysis and Alkaline Water Electrolysis. ECS Meeting Abstracts, 2021, MA2021-02, 1276-1276.	0.0	0
38	Effect of Semiconducting Properties of Oxide-Based Compounds on Oxygen Reduction Activity in Acidic Media. ECS Meeting Abstracts, 2020, MA2020-02, 2285-2285.	0.0	0
39	Electrocatalyst Layer Design of Polymer Electrolyte Membrane Electrolyzer for Simultaneous Hydrogenation of Organic Chemical Hydride Energy Carrier and Water Decomposition. ECS Meeting Abstracts, 2020, MA2020-02, 2494-2494.	0.0	0
40	Highly Selective and Efficient Electrocatalytic Semihydrogenation of Diphenylacetylene to Z-Stilbene Using Pt-Pd Alloy Cathode Catalyst. ECS Meeting Abstracts, 2020, MA2020-02, 2776-2776.	0.0	0
41	Pt/TiO <sub>x</sub> Cathode Catalysts for Polymer Electrolyte Fuel Cells. ECS Meeting Abstracts, 2020, MA2020-02, 2296-2296.	0.0	0
42	Observation of Oxygen Bubble Growth near Anode Catalyst Electrode in PEM Water Electrolyzer. ECS Meeting Abstracts, 2021, MA2021-02, 1230-1230.	0.0	0
43	In Situ X-Ray Diffraction Study of Iridium Crystalline Structure Under Working Conditions of Proton Exchange Membrane Water Electrolysis. ECS Meeting Abstracts, 2021, MA2021-02, 1275-1275.	0.0	0
44	Heat and Mass Balance Analysis of 130-W Active-type Direct-methanol Fuel Cell. Electrochemistry, 2022, 90, 017007-017007.	0.6	0
45	(Invited) Leak Current Analysis of Stop Operation and Its Modeling for the Development of Bipolar Alkaline Water Electrolyzer Electrodes. ECS Meeting Abstracts, 2022, MA2022-01, 1344-1344.	0.0	0