

Takaaki Sakai

List of Publications by Year in descending order

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861
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#	ARTICLE	IF	CITATIONS
1	Incorporation and conduction of proton in Sr-doped LaMO ₃ (M=Al, Sc, In, Yb, Y). <i>Electrochimica Acta</i> , 2014, 125, 443-449.	5.2	63
2	A Cocatalyst that Stabilizes a Hydride Intermediate during Photocatalytic Hydrogen Evolution over a Rhodium-doped TiO ₂ Nanosheet. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 9073-9077.	13.8	62
3	Intermediate temperature steam electrolysis using strontium zirconate-based protonic conductors. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 56-63.	7.1	60
4	Proton transport properties of La _{0.9} M _{0.1} YbO ₃ (M= Ba, Sr, Ca, Mg). <i>Electrochimica Acta</i> , 2013, 95, 54-59.	5.2	46
5	Incorporation and conduction of proton in SrCe _{0.9} xZrxY _{0.1} O ₃ . <i>Solid State Ionics</i> , 2015, 275, 35-38.	2.7	40
6	Proton-conducting oxide and applications to hydrogen energy devices. <i>Pure and Applied Chemistry</i> , 2012, 85, 427-435.	1.9	36
7	Oxide ion conductivity in doped NdBaInO ₄ . <i>Solid State Ionics</i> , 2016, 288, 262-265.	2.7	35
8	Electrochemical hydrogen pumps using Ba doped LaYbO ₃ type proton conducting electrolyte. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 6842-6847.	7.1	33
9	Improved cycle stability of Fe-air solid state oxide rechargeable battery using LaGaO ₃ -based oxide ion conductor. <i>Journal of Power Sources</i> , 2014, 262, 310-315.	7.8	26
10	A rechargeable Si-air solid state oxygen shuttle battery incorporating an oxide ion conductor. <i>Journal of Materials Chemistry A</i> , 2013, 1, 15212.	10.3	25
11	High performance of electroless-plated platinum electrode for electrochemical hydrogen pumps using strontium-zirconate-based proton conductors. <i>Electrochimica Acta</i> , 2008, 53, 8172-8177.	5.2	24
12	Proton conduction properties of hydrous sulfated nano-titania synthesized by hydrolysis of titanyl sulfate. <i>Solid State Ionics</i> , 2010, 181, 1746-1749.	2.7	21
13	Incorporation of a proton into La _{0.9} Sr _{0.1} (Yb _{1-x} M _x)O ₃ (M= Y, In). <i>Solid State Ionics</i> , 2014, 262, 865-869.	2.7	20
14	Proton transport properties of La _{0.9} Sr _{0.1} Yb _{0.8} In _{0.2} O ₃ and its application to proton ceramic fuel cell. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 20829-20836.	7.1	20
15	Experimental and theoretical studies of hydrogen permeation for doped strontium cerates. <i>Solid State Ionics</i> , 2010, 181, 1328-1335.	2.7	17
16	Nanoprotonics in perovskite-type oxides: Reversible changes in color and ion conductivity due to nanoionics phenomenon in platinum-containing perovskite oxide. <i>Solid State Ionics</i> , 2011, 182, 13-18.	2.7	16
17	Ce _{0.6} Mn _{0.3} Fe _{0.1} O ₂ as an Alternative Cathode Material for High Temperature Steam Electrolysis Using LaGaO ₃ -based Oxide Electrolyte. <i>Electrochimica Acta</i> , 2016, 194, 473-479.	5.2	16
18	Photoelectrochemical H ₂ evolution using TiO ₂ -coated CaFe ₂ O ₄ without an external applied bias under visible light irradiation at 470 nm based on device modeling. <i>Sustainable Energy and Fuels</i> , 2017, 1, 280-287.	4.9	15

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19	A Cocatalyst that Stabilizes a Hydride Intermediate during Photocatalytic Hydrogen Evolution over a Rhodium-Doped TiO ₂ Nanosheet. <i>Angewandte Chemie</i> , 2018, 130, 9211-9215.	2.0	14
20	Characteristics of YCoO ₃ -type perovskite oxide and application as an SOFC cathode. <i>Journal of Materials Chemistry A</i> , 2021, 9, 3584-3588.	10.3	12
21	Low temperature operation of a solid-oxide Fe-air rechargeable battery using a La _{0.9} Sr _{0.1} Ga _{0.8} Mg _{0.2} O ₃ oxide ion conductor. <i>Journal of Materials Chemistry A</i> , 2015, 3, 8260-8264.	10.3	11
22	Intermediate temperature solid oxide electrolysis cell using LaGaO ₃ -base oxide. <i>Solid State Ionics</i> , 2012, 225, 77-80.	2.7	10
23	Effects of Ce _{0.6} Mn _{0.3} Fe _{0.1} O _{2-δ} Interlayer on Electrochemical Properties of Microtubular SOFC Using Doped LaGaO ₃ Electrolyte. <i>Journal of the Electrochemical Society</i> , 2015, 162, F1379-F1383.	2.9	10
24	High Sinterability of Planetary-Bead-Milled Barium Zirconate. <i>Electrochemistry</i> , 2009, 77, 876-878.	1.4	9
25	Discharge Performance of Solid-State Oxygen Shuttle Metal-Air Battery Using Ca-Stabilized ZrO ₂ Electrolyte. <i>ChemSusChem</i> , 2015, 8, 1264-1269.	6.8	9
26	Determination of Oxide Ion Conductivity in Ba-Doped LaYbO ₃ Proton-Conducting Perovskites via an Oxygen Isotope Exchange Method. <i>Journal of Physical Chemistry C</i> , 2021, 125, 1703-1713.	3.1	9
27	Performance of palladium electrode for electrochemical hydrogen pump using strontium-zirconate-based proton conductors. <i>Ionics</i> , 2009, 15, 665-670.	2.4	8
28	Preparation of nano-structured cathode for protonic ceramic fuel cell by bead-milling method. <i>Solid State Ionics</i> , 2014, 262, 388-391.	2.7	8
29	Characteristics of Fe-air battery using Y ₂ O ₃ -stabilized-ZrO ₂ electrolyte with Ni-Fe electrode and Ba _{0.6} La _{0.4} CoO _{3-δ} electrode operated at intermediate temperature. <i>Journal of Energy Storage</i> , 2016, 7, 115-120.	8.1	8
30	Effect of Electrochemical Polarization on the Emission of O [•] Ions from the Surface of YSZ. <i>Journal of the Electrochemical Society</i> , 2003, 150, E543.	2.9	7
31	Emission characteristics of F [•] ions into vacuum from CaF ₂ . <i>Solid State Ionics</i> , 2006, 177, 1601-1605.	2.7	7
32	Atmosphere dependence of anode reaction of intermediate temperature steam electrolysis using perovskite type proton conductor. <i>Journal of Solid State Electrochemistry</i> , 2015, 19, 1793-1798.	2.5	7
33	Evaluation of isotope diffusion coefficient and surface exchange coefficient of ScSZ series oxide by oxygen isotope exchange method. <i>Solid State Ionics</i> , 2017, 301, 156-162.	2.7	7
34	Emission characteristics of negative oxygen ions into vacuum from cerium oxide. <i>Journal of Alloys and Compounds</i> , 2006, 408-412, 1127-1131.	5.5	6
35	Water Electrolysis Using Water-Absorbing Porous Electrolyte Consisting of a Sulfonated Nanotitania Proton Conductor. <i>Electrochemistry</i> , 2012, 80, 246-248.	1.4	6
36	Effect of doped ceria interlayer on cathode performance of the electrochemical cell using proton conducting oxide. <i>Electrochimica Acta</i> , 2012, 75, 179-184.	5.2	6

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37	Effect of Ni/Fe ratio on the performance and stability of the Fe-air rechargeable battery using a La _{0.9} Sr _{0.1} Ga _{0.8} Mg _{0.2} O ₃ electrolyte. International Journal of Hydrogen Energy, 2014, 39, 21352-21357.	7.1	6
38	Preparation of Y-doped BaZrO ₃ thin film electrolyte by laser chemical vapor deposition. Materials Today Communications, 2020, 24, 101184.	1.9	6
39	Long-term stability of sulfated hydrous titania-based electrolyte for water electrolysis. Journal of Solid State Electrochemistry, 2012, 16, 3587-3592.	2.5	4
40	Proton conduction properties of nano-titania modified by sulfuric acid impregnation. Journal of Solid State Electrochemistry, 2012, 16, 2055-2059.	2.5	4
41	Microtubular SOFC using doped LaGaO ₃ electrolyte film prepared with dip coating method. Journal of the Ceramic Society of Japan, 2015, 123, 182-186.	1.1	4
42	Lithium-Air Oxygen Shuttle Battery with a ZrO ₂ -Based Ion-Conducting Oxide Electrolyte. ChemPlusChem, 2015, 80, 359-362.	2.8	4
43	Continuous emission of O ²⁺ ions into a vacuum from a bare surface of yttria-stabilized zirconia at elevated temperatures. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2006, 24, 1818-1822.	2.1	3
44	Power-generating property of direct CH ₄ fueled SOFC using LaGaO ₃ electrolyte. Journal of Solid State Electrochemistry, 2010, 14, 1777-1780.	2.5	3
45	Single-nanosize pulverization of solid oxide by means of a wet planetary-bead-milling. Journal of the Ceramic Society of Japan, 2012, 120, 39-42.	1.1	3
46	Improvement in stability of La _{0.4} Ba _{0.6} CoO ₃ cathode by combination with La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8} O ₃ for intermediate temperature-solid oxide fuel cells. Journal of Solid State Electrochemistry, 2013, 17, 2251-2258.	2.5	3
47	Preparation of Nano-Structured La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8} O ₃ Cathode for Protonic Ceramic Fuel Cell by Bead-Milling Method. Materials Transactions, 2014, 55, 722-727.	1.2	2
48	Oxygen Nonstoichiometry and Cathodic Property of Ce _{0.6} Mn _{0.3} Fe _{0.1} O _{2-δ} for High Temperature Steam Electrolysis Cell Using LaGaO ₃ -Based Oxide Electrolyte. ECS Transactions, 2015, 68, 3315-3322.	0.5	2
49	An All-Solid-State Bromide-Ion Battery. ChemElectroChem, 2021, 8, 246-249.	3.4	2
50	Effects of hydrogen on phase stability of ytterbium doped strontium cerates. Materials Letters, 2010, 64, 833-835.	2.6	1
51	Fabrication of SOFC Using BaZr _{0.8} Y _{0.2} O _{3-δ} Nano-Slurry Electrolyte. ECS Transactions, 2019, 91, 1053-1058.	0.5	0
52	Preparation of Y Doped BaZrO ₃ Thin Film Electrolyte By Using Laser Chemical Vapor Deposition. ECS Meeting Abstracts, 2020, MA2020-02, 2607-2607.	0.0	0