

Takaaki Sakai

List of Publications by Year in descending order

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papers

776
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all docs

52
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52
times ranked

861
citing authors

#	ARTICLE	IF	CITATIONS
1	An All-Solid-State Bromide-Ion Battery. <i>ChemElectroChem</i> , 2021, 8, 246-249.	3.4	2
2	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
3	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
4	Preparation of Y-doped BaZrO ₃ thin film electrolyte by laser chemical vapor deposition. <i>Materials Today Communications</i> , 2020, 24, 101184.	1.9	6
5	Preparation of Y Doped BaZrO ₃ Thin Film Electrolyte By Using Laser Chemical Vapor Deposition. <i>ECS Meeting Abstracts</i> , 2020, MA2020-02, 2607-2607.	0.0	0
6	Fabrication of SOFC Using BaZr _{0.8} Y _{0.2} O _{3-δ} Nano-Slurry Electrolyte. <i>ECS Transactions</i> , 2019, 91, 1053-1058.	0.5	0
7	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
8	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
9	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
10	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
11	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
12	Ce _{0.6} Mn _{0.3} Fe _{0.1} O _{2-δ} 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
13	Oxide ion conductivity in doped NdBaInO ₄ . <i>Solid State Ionics</i> , 2016, 288, 262-265.	2.7	35
14	Microtubular SOFC using doped LaGaO ₃ electrolyte film prepared with dip coating method. <i>Journal of the Ceramic Society of Japan</i> , 2015, 123, 182-186.	1.1	4
15	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
16	Incorporation and conduction of proton in SrCe _{0.9-x} Zr _x O _{3-δ} . <i>Solid State Ionics</i> , 2015, 275, 35-38.	2.7	40
17	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
18	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

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19	Low temperature operation of a solid-oxide Fe-air rechargeable battery using a $\text{La}_{0.9}\text{Sr}_{0.1}\text{Ga}_{0.8}\text{Mg}_{0.2}\text{O}_{3-x}$ oxide ion conductor. <i>Journal of Materials Chemistry A</i> , 2015, 3, 8260-8264.	10.3	11
20	Oxygen Nonstoichiometry and Cathodic Property of $\text{Ce}_{0.6}\text{Mn}_{0.3}\text{Fe}_{0.1}\text{O}_{2-\delta}$ for High Temperature Steam Electrolysis Cell Using LaGaO_3 -Based Oxide Electrolyte. <i>ECS Transactions</i> , 2015, 68, 3315-3322.	0.5	2
21	Lithium-Air Oxygen Shuttle Battery with a ZrO_2 -Based Ion-Conducting Oxide Electrolyte. <i>ChemPlusChem</i> , 2015, 80, 359-362.	2.8	4
22	Effect of Ni/Fe ratio on the performance and stability of the Fe-air rechargeable battery using a $\text{La}_{0.9}\text{Sr}_{0.1}\text{Ga}_{0.8}\text{Mg}_{0.2}\text{O}_3$ electrolyte. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 21352-21357.	7.1	6
23	Incorporation of a proton into $\text{La}_{0.9}\text{Sr}_{0.1}(\text{Yb}_{1-x}\text{M}_x)\text{O}_{3-\delta}$ (M= Y, In). <i>Solid State Ionics</i> , 2014, 262, 865-869.	2.7	20
24	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
25	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
26	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
27	Proton transport properties of $\text{La}_{0.9}\text{Sr}_{0.1}\text{Yb}_{0.8}\text{In}_{0.2}\text{O}_{3-\delta}$ and its application to proton ceramic fuel cell. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 20829-20836.	7.1	20
28	Preparation of Nano-Structured $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3-\delta}$ Cathode for Protonic Ceramic Fuel Cell by Bead-Milling Method. <i>Materials Transactions</i> , 2014, 55, 722-727.	1.2	2
29	Improvement in stability of $\text{La}_{0.4}\text{Ba}_{0.6}\text{CoO}_3$ cathode by combination with $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_3$ for intermediate temperature-solid oxide fuel cells. <i>Journal of Solid State Electrochemistry</i> , 2013, 17, 2251-2258.	2.5	3
30	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
31	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
32	Proton transport properties of $\text{La}_{0.9}\text{M}_{0.1}\text{YbO}_{3-\delta}$ (M= Ba, Sr, Ca, Mg). <i>Electrochimica Acta</i> , 2013, 95, 54-59.	5.2	46
33	Water Electrolysis Using Water-Absorbing Porous Electrolyte Consisting of a Sulfonated Nanotitania Proton Conductor. <i>Electrochemistry</i> , 2012, 80, 246-248.	1.4	6
34	Single-nanosize pulverization of solid oxide by means of a wet planetary-bead-milling. <i>Journal of the Ceramic Society of Japan</i> , 2012, 120, 39-42.	1.1	3
35	Long-term stability of sulfated hydrous titania-based electrolyte for water electrolysis. <i>Journal of Solid State Electrochemistry</i> , 2012, 16, 3587-3592.	2.5	4
36	Proton-conducting oxide and applications to hydrogen energy devices. <i>Pure and Applied Chemistry</i> , 2012, 85, 427-435.	1.9	36

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37	Intermediate temperature solid oxide electrolysis cell using LaGaO ₃ -base oxide. Solid State Ionics, 2012, 225, 77-80.	2.7	10
38	Proton conduction properties of nano-titania modified by sulfuric acid impregnation. Journal of Solid State Electrochemistry, 2012, 16, 2055-2059.	2.5	4
39	Effect of doped ceria interlayer on cathode performance of the electrochemical cell using proton conducting oxide. Electrochimica Acta, 2012, 75, 179-184.	5.2	6
40	Nanoprotonics in perovskite-type oxides: Reversible changes in color and ion conductivity due to nanoionics phenomenon in platinum-containing perovskite oxide. Solid State Ionics, 2011, 182, 13-18.	2.7	16
41	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
42	Effects of hydrogen on phase stability of ytterbium doped strontium cerates. Materials Letters, 2010, 64, 833-835.	2.6	1
43	Experimental and theoretical studies of hydrogen permeation for doped strontium cerates. Solid State Ionics, 2010, 181, 1328-1335.	2.7	17
44	Proton conduction properties of hydrous sulfated nano-titania synthesized by hydrolysis of titanyl sulfate. Solid State Ionics, 2010, 181, 1746-1749.	2.7	21
45	Performance of palladium electrode for electrochemical hydrogen pump using strontium-zirconate-based proton conductors. Ionics, 2009, 15, 665-670.	2.4	8
46	Intermediate temperature steam electrolysis using strontium zirconate-based protonic conductors. International Journal of Hydrogen Energy, 2009, 34, 56-63.	7.1	60
47	High Sinterability of Planetary-Bead-Milled Barium Zirconate. Electrochemistry, 2009, 77, 876-878.	1.4	9
48	High performance of electroless-plated platinum electrode for electrochemical hydrogen pumps using strontium-zirconate-based proton conductors. Electrochimica Acta, 2008, 53, 8172-8177.	5.2	24
49	Emission characteristics of negative oxygen ions into vacuum from cerium oxide. Journal of Alloys and Compounds, 2006, 408-412, 1127-1131.	5.5	6
50	Emission characteristics of F ⁻ ions into vacuum from CaF ₂ . Solid State Ionics, 2006, 177, 1601-1605.	2.7	7
51	Continuous emission of O ⁻ 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
52	Effect of Electrochemical Polarization on the Emission of O ⁻ Ions from the Surface of YSZ. Journal of the Electrochemical Society, 2003, 150, E543.	2.9	7