Junji Hyodo

List of Publications by Year
in descending order

44 papers	1,153 citations	430874 18 h-index	377865 34 g-index
48 all docs	48 docs citations	48 times ranked	1586 citing authors

#	Article	IF	Citations
1	Synthesis and Photocatalytic Activity of Rhodium-Doped Calcium Niobate Nanosheets for Hydrogen Production from a Water/Methanol System without Cocatalyst Loading. Journal of the American Chemical Society, 2011, 133, 18034-18037.	13.7	205
2	Development of Doubleâ€Perovskite Compounds as Cathode Materials for Lowâ€Temperature Solid Oxide Fuel Cells. Angewandte Chemie - International Edition, 2014, 53, 13064-13067.	13.8	176
3	A robust symmetrical electrode with layered perovskite structure for direct hydrocarbon solid oxide fuel cells: PrBa_{0.8}Ca_{0.2}Mn₂O_{5+Î´}. Journal of Materials Chemistry A, 2016, 4, 1747-1753.	10.3	93
4	Fast and Stable Proton Conduction in Heavily Scandiumâ€Doped Polycrystalline Barium Zirconate at Intermediate Temperatures. Advanced Energy Materials, 2020, 10, 2000213.	19.5	53
5	Correlation between fast oxygen kinetics and enhanced performance in Fe doped layered perovskite cathodes for solid oxide fuel cells. Journal of Materials Chemistry A, 2015, 3, 15082-15090.	10.3	48
6	Surface segregation and poisoning in materials for low-temperature SOFCs. MRS Bulletin, 2014, 39, 810-815.	3.5	47
7	Chromium deposition and poisoning of La_{0.8}Sr_{0.2}MnO₃ oxygen electrodes of solid oxide electrolysis cells. Faraday Discussions, 2015, 182, 457-476.	3.2	41
8	Effect of Boron Deposition and Poisoning on the Surface Exchange Properties of LSCF Electrode Materials of Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2013, 160, F682-F686.	2.9	35
9	Homogeneous Electron Doping into Nonstoichiometric Strontium Titanate Improves Its Photocatalytic Activity for Hydrogen and Oxygen Evolution. ACS Catalysis, 2018, 8, 7190-7200.	11.2	34
10	Electrical conductivity and oxygen diffusivity in Cu- and Ga-doped Pr2NiO4. Solid State Ionics, 2014, 256, 5-10.	2.7	32
11	Boron deposition and poisoning of La0.8Sr0.2MnO3 oxygen electrodes of solid oxide electrolysis cells under accelerated operation conditions. International Journal of Hydrogen Energy, 2016, 41, 1419-1431.	7.1	32
12	Ruddlesden Popper oxides of LnSr₃Fe₃O_{10â^'Î´} (Ln = La, Pr, Nd, Sm,) Tj ETQq0 0 0 rgBT /Overlock Chemistry A, 2015, 3, 12357-12366.	10.3	31
13	Oxygen Affinity: The Missing Link Enabling Prediction of Proton Conductivities in Doped Barium Zirconates. Chemistry of Materials, 2020, 32, 7292-7300.	6.7	25
14	Accelerated Discovery of Proton-Conducting Perovskite Oxide by Capturing Physicochemical Fundamentals of Hydration. ACS Energy Letters, 2021, 6, 2985-2992.	17.4	24
15	Structural, Electrical, and Electrochemical Characteristics of LnBa_{0.5}Sr_{0.5}Co_{1.5}Fe_{0.5}O_{5+Î´} (Ln=Pr,) Tj ETQq1 1 0.784314 rg 2017, 5, 1337-1343.	3.8	23
16	Crucial impact of reduction on the photocarrier dynamics of SrTiO₃ powders studied by transient absorption spectroscopy. Journal of Materials Chemistry A, 2019, 7, 26139-26146.	10.3	21
17	Effect of Volatile Boron Species on the Microstructure and Composition of (La,Sr)MnO3and (La,Sr)(Co,Fe)O3Cathode Materials of Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2013, 160, F1033-F1039.	2.9	19
18	Effect of Volatile Boron Species on the Electrocatalytic Activity of Cathodes of Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2014, 161, F1163-F1170.	2.9	17

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19	Effects of Three-Dimensional Strain on Electric Conductivity in Au-Dispersed Pr_{1.90}Ni_{0.71}Cu_{0.24}Ga_{0.05}O_{4+Î´}. Journal of Physical Chemistry C, 2015, 119, 5-13.	3.1	14
20	Electronic and oxide ion conductivity in Pr2Ni0.71Cu0.24Ga0.05O4/Ce0.8Sm0.2O2 laminated film. Solid State Ionics, 2013, 230, 16-20.	2.7	12
21	XRD and Raman Spectroscopy Study of Fe solubility in Cerium Oxide. ECS Transactions, 2013, 50, 53-58.	0.5	12
22	Double Columnar Structure with a Nanogradient Composite for Increased Oxygen Diffusivity and Reduction Activity. Advanced Energy Materials, 2014, 4, 1400783.	19.5	11
23	Low temperature operation of a solid-oxide Feâ€“air rechargeable battery using a La_{0.9}Sr_{0.1}Ga_{0.8}Mg_{0.2}O₃ oxide ion conductor. Journal of Materials Chemistry A, 2015, 3, 8260-8264.	10.3	11
24	High Sinterability of Planetary-Bead-Milled Barium Zirconate. Electrochemistry, 2009, 77, 876-878.	1.4	9
25	Defect Density-Dependent Electron Injection from Excited-State Ru(II) Tris-Diimine Complexes into Defect-Controlled Oxide Semiconductors. Journal of Physical Chemistry C, 2019, 123, 28310-28318.	3.1	9
26	Determination of Oxide Ion Conductivity in Ba-Doped LaYbO₃ Proton-Conducting Perovskites via an Oxygen Isotope Exchange Method. Journal of Physical Chemistry C, 2021, 125, 1703-1713.	3.1	9
27	XRD and Raman Spectroscopy Study of Mn Solubility in Cerium Oxide. ECS Transactions, 2013, 57, 1607-1612.	0.5	8
28	Non-linear Behavior for Chemical Expansion in Yttrium-doped Barium Zirconate upon Hydration. Chemistry Letters, 2021, 50, 899-902.	1.3	8
29	A dense La(Sr)Fe(Mn)O_{3â^Î´} nano-film anode for intermediate-temperature solid oxide fuel cells. Journal of Materials Chemistry A, 2015, 3, 3586-3593.	10.3	7
30	Evaluation of isotope diffusion coefficient and surface exchange coefficient of ScSZ series oxide by oxygen isotope exchange method. Solid State Ionics, 2017, 301, 156-162.	2.7	7
31	New buffer layer material La(Pr)CrO3for intermediate temperature solid oxide fuel cell using LaGaO3-based electrolyte film. Journal of Materials Research, 2012, 27, 1906-1914.	2.6	6
32	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
33	Bolometric ferromagnetic resonance techniques for characterising spin-Hall effect at high temperatures. Journal of Magnetism and Magnetic Materials, 2019, 485, 304-307.	2.3	6
34	Improved electrical conductivity in Pr2Ni(Cu,Ga)O4 film with nano thickness. International Journal of Hydrogen Energy, 2012, 37, 8066-8072.	7.1	5
35	Effects of three-dimensional mechano-chemical tensile strain on fast oxygen diffusion in Au-dispersed Pr_{1.90}Ni_{0.71}Cu_{0.24}Ga_{0.05}O_{4+Î´}. Journal of Materials Chemistry A, 2016, 4, 3844-3849.	10.3	5
36	Chromium Deposition and Poisoning of LSCF and LSM Oxygen Electrodes of Solid Oxide Electrolysis Cells. ECS Transactions, 2015, 68, 793-799.	0.5	4

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37	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
38	Oxide ionic conductivity in Pr2(Ni, Cu, Ga)O4+Î´â€“(Ce, Sm)O2â€“Î´ laminated film estimated with the Hebbâ€“Wagner method. Solid State Ionics, 2014, 262, 889-892.	2.7	2
39	(Invited) Increased Oxide Ion Diffusivity and Surface Exchange on Pr2NiO4 Base Oxide by Au Dispersion. ECS Transactions, 2014, 61, 123-129.	0.5	2
40	Effects of Pt dispersion on electronic and oxide ionic conductivity in Pr_{1.90}Ni_{0.71}Cu_{0.24}Ga_{0.05}O₄. Physical Chemistry Chemical Physics, 2016, 18, 11125-11131.	2.8	2
41	Boron Poisoning of (La, Sr)(Co, Fe)O3 Cathodes of Solid Oxide Fuel Cells. ECS Transactions, 2013, 57, 1821-1830.	0.5	1
42	Water Vapor Reduces the Effect of Cl-Poisoning on CO Oxidation over Pt/CeO₂ Heterogeneous Catalysts. Chemistry Letters, 2021, 50, 888-891.	1.3	1
43	Titelbild: Development of Double-Perovskite Compounds as Cathode Materials for Low-Temperature Solid Oxide Fuel Cells (Angew. Chem. 48/2014). Angewandte Chemie, 2014, 126, 13187-13187.	2.0	0
44	Ce(Mn,Fe)O2 dense film deposited on LaGaO3 electrolyte for dense anode of solid oxide fuel cells. International Journal of Hydrogen Energy, 2014, 39, 20777-20782.	7.1	0