Eiki Niwa

List of Publications by Year
in descending order

43 papers	619 citations	567281 15 h-index	642732 23 g-index
45 all docs	45 docs citations	45 times ranked	682 citing authors

#	Article	IF	Citations
1	Oxide-ion conduction in the Dionâ€“Jacobson phase CsBi2Ti2NbO10âˆ’Î´. Nature Communications, 2020, 11, 1224.	12.8	50
2	Direct evidence for two-dimensional oxide-ion diffusion in the hexagonal perovskite-related oxide Ba₃MoNbO_{8.5âˆ’Î´}. Journal of Materials Chemistry A, 2019, 7, 13910-13916.	10.3	44
3	Sintering temperature dependence of conductivity, porosity and specific surface area of LaNi0.6Fe0.4O3 ceramics as cathode material for solid oxide fuel cellsâ€"Superiority of Pechini method among various solution mixing processes. Materials Research Bulletin, 2013, 48, 1-6.	5.2	35
4	Discovery of a Rare-Earth-Free Oxide-Ion Conductor Ca₃Ga₄O₉ by Screening through Bond Valence-Based Energy Calculations, Synthesis, and Characterization of Structural and Transport Properties. Inorganic Chemistry, 2019, 58, 9460-9468.	4.0	34
5	Conductivity and sintering property of LaNi1âˆ’xFexO3 ceramics prepared by Pechini method. Solid State Ionics, 2011, 201, 87-93.	2.7	30
6	Thermodynamic analyses of structural phase transition of Pr2NiO4+Î´ involving variation of oxygen content. Thermochimica Acta, 2014, 575, 129-134.	2.7	25
7	Experimental visualization of oxide-ion diffusion paths in pyrochlore-type Yb₂Ti₂O₇. Journal of the Ceramic Society of Japan, 2018, 126, 341-345.	1.1	25
8	Thermal Expansion and Phase Transition Behavior of Al2-xMx(WO4)3 (M=Y, Ga and Sc) Ceramics. Journal of the Ceramic Society of Japan, 2007, 115, 176-181.	1.3	24
9	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
10	Evaluation of reaction kinetics of CO 2 and Li 4 SiO 4 by thermogravimetry under various CO 2 partial pressures. Materials Research Bulletin, 2018, 97, 56-60.	5.2	22
11	Analysis of chemical reaction between Li 4 SiO 4 and CO 2 by thermogravimetry under various CO 2 partial pressuresâ€"Clarification of CO 2 partial pressure and temperature region of CO 2 absorption or desorption. Materials Research Bulletin, 2017, 94, 134-139.	5.2	19
12	Dependence of thermal expansion of LaNi0.6Fe0.4O3âˆ’ and La0.6Sr0.4Co0.2Fe0.8O3âˆ’ on oxygen partial pressure. Solid State Ionics, 2016, 285, 187-194.	2.7	18
13	Discovery of Oxide-Ion Conductors with a New Crystal Structure, BaSc_{2â€“<i>x</i>}<i>A</i>_{<i>x</i>}Si₃O_{10â€“<i>x</i>/2} (<i>A</i> = Mg, Ca) by Screening Sc-Containing Oxides through the Bond-Valence Method and Experiments. ACS Applied Energy Materials, 2018, 1, 4009-4015.	5.1	17
14	Crystal structure of blue-colored ceria during redox reactions in a hydrogen atmosphere. CrystEngComm, 2018, 20, 155-158.	2.6	16
15	Analysis of structural phase transition of Nd2NiO4+Î´ by scanning thermal measurement under controlled oxygen partial pressure. Thermochimica Acta, 2011, 523, 46-50.	2.7	15
16	Preparation of Ba1âˆ’La FeO3âˆ’ (xâ€‰=â€‰0.1â€“0.6) with cubic perovskite phase and random distribution of oxide ion vacancy and their electrical conduction property and thermal expansion behavior. Solid State Ionics, 2018, 320, 76-83.	2.7	15
17	A new structure family of oxide-ion conductors Ca_{0.8}Y_{2.4}Sn_{0.8}O₆ discovered by a combined technique of the bond-valence method and experiments. Dalton Transactions, 2018, 47, 7515-7521.	3.3	15
18	Evaluation of Specific Surface Area and Pore Size Distribution of <scp><scp>La</scp><scp>Ni</scp></scp>_{0.6}<scp><scp>Fe</scp></scp>_{0.4}<scp><scp>O</scp></scp><sub Ceramics Prepared using Pechini Method by <scp><scp>N</scp></scp>₂ Adsorption Methodâ€"Optimization of Sintering Temperature as Cathode Material of Solid Oxide Fuel Cells. Journal of the American Ceramic Society, 2012, 95, 3802-3806.	3.8	14

#	Article	IF	Citations
19	Pr/Ba cation-disordered perovskite Pr_{2/3}Ba_{1/3}CoO_{3âˆ'Î´} as a new bifunctional electrocatalyst for oxygen reduction and oxygen evolution reactions. Journal of the Ceramic Society of Japan, 2018, 126, 814-819.	1.1	14
20	Dependence of crystal symmetry, electrical conduction property and electronic structure of LnFeO₃ (Ln: La, Pr, Nd, Sm) on kinds of Ln³⁺. Journal of the Ceramic Society of Japan, 2015, 123, 501-506.	1.1	13
21	Crystal structure and electrical conductivity of Ba<i>R</i>₂ZnO₅ (<i>R</i> = Sm, Gd,) Tj ETQq1 1 0.784314 rgBT /(Japan, 2018, 126, 292-299.	1.1	13
22	Thermal analysis of structural phase transition behavior of Ln2Ni1âˆ'xCuxO4+Î´ (Lnâ€‰=â€‰Nd, Pr) under various oxygen partial pressures. Journal of Thermal Analysis and Calorimetry, 2019, 135, 2765-2774.	3.6	13
23	Li vaporization property of two-phase material of Li2TiO3 and Li2SiO3 for tritium breeder. Fusion Engineering and Design, 2015, 98-99, 1859-1863.	1.9	12
24	Oxygen nonstoichiometry and electrical conductivity of LaNi0.6Fe0.4O3âˆ' at high temperatures under various oxygen partial pressures. Solid State Ionics, 2015, 274, 119-122.	2.7	10
25	Electrical conduction mechanism of LaNixMe1âˆ'xO3âˆ'Î´ (Me=Fe, Mn). Materials Research Bulletin, 2015, 70, 241-247.	5.2	10
26	Dependence of crystal structure, phase transition temperature, chemical state of Fe, oxygen content and electrical conductivity of Ba2-La Fe2O5+ (x= 0.00â€“0.15) on La content. Solid State Ionics, 2016, 290, 71-76.	2.7	10
27	Construction of structural phase diagram of Nd2Ni1-Cu O4+ and effect of crystal structure and phase transition on electrical conduction behavior. Materials Research Bulletin, 2019, 111, 61-69.	5.2	10
28	Chemical state of Fe in LaNi1â€‰âˆ'â€‰x Fe x O3 and its effect on electrical conduction property. Hyperfine Interactions, 2012, 206, 47-50.	0.5	8
29	Analysis of structural phase transition behavior of Ln2NiO4+ (Ln: Nd, Pr) with variation of oxygen content. Solid State Ionics, 2014, 262, 724-727.	2.7	8
30	SillÃ©nâ€“Aurivillius phase bismuth niobium oxychloride, Bi₄NbO₈Cl, as a new oxide-ion conductor. Journal of Materials Chemistry A, 2022, 10, 2550-2558.	10.3	8
31	K2NiF4 type oxides, Ln2-Sr NiO4+ (LnÂ=ÂLa and Pr; xÂ=Â0â€“1.4) as an oxygen electrocatalyst for aqueous lithiumâ€“oxygen rechargeable batteries. Solid State Ionics, 2021, 369, 115708.	2.7	7
32	Prevention of Sulfur Poisoning and Performance Recovery of Sulfur-Poisoned-Anode Electrode by Shifting Anode Electrode Potential. Journal of the Electrochemical Society, 2015, 162, F1107-F1113.	2.9	6
33	High-Temperature Gravimetric Study on the Kinetics of the Formation of SrTiO₃ by Solid State Reaction of SrCO₃ and TiO₂. ECS Transactions, 2009, 16, 205-210.	0.5	5
34	Conductivities and Seebeck Coefficients of donor-doped-SrTiO₃ Oxide Ceramics. ECS Transactions, 2009, 25, 2631-2638.	0.5	5
35	Thermodynamics and kinetics analyses of high CO₂ absorption properties of Li₃NaSiO₄ under various CO₂ partial pressures. Dalton Transactions, 2021, 50, 5301-5310.	3.3	5
36	Analysis of thermal stability of LaNi1âˆ'xFexO3âˆ'Î´ (xÂ=Â0.0, 0.2, 0.4) by thermogravimetry and high-temperature X-ray diffraction under controlled oxygen partial pressures. Journal of Thermal Analysis and Calorimetry, 2016, 123, 1769-1775.	3.6	4

#	Article	IF	Citations
37	Low Temperature Preparation of LaNi1-xFexO3 as New Cathode Material for SOFC - Advantage of Liquid Phase Mixing Method -. ECS Transactions, 2011, 35, 1935-1943.	0.5	3
38	Preparation of Structural Phase Diagram of Ln₂Ni_{1-<i>X</i>}Cu<i>_x</i>O_{4+<i>Î´</i>}(Ln=La, Pr, Nd,) Tj ETQq0 0 0 rgBT /Overlock Transactions, 2017, 78, 613-622.	0.5	3
39	Crystal structure, thermal expansion and electrical conduction behavior of PrNi_{1−}<i>_x</i>Fe<i>_x</i>O_{3−δ} at high temperature. Journal of the Ceramic Society of Japan, 2017, 125, 227-235.	1.1	3
40	Effect of chemical state and occupation site of RE (RE = Yb, Y, Eu, Sm, Nd) on crystal structure and optical property of BaCe 1-x RE x O 3-Î´ â€"Analyses of origin of peculiar crystal structure and property of BaCe 1-x Nd x O 3-Î´. Materials Research Bulletin, 2017, 87, 6-13.	5.2	2
41	Preparation of Structural Phase Diagram of Nd2Ni1-XCuxO4+Î´As New Cathode Materials â€" Clarification of Existence of Miscibility Gap. ECS Transactions, 2017, 78, 603-612.	0.5	1
42	Thermodynamic analyses of the orthorhombic-to-tetragonal phase transition in Pr2â^'xNdxNiO4+Î´ under controlled oxygen partial pressures. Dalton Transactions, 2020, 49, 11931-11941.	3.3	1
43	Dense-film preparation of zirconium oxide by self-oxidation in air. Fusion Engineering and Design, 2021, 171, 112793.	1.9	0