Sandrine Ricote

List of Publications by Year
in descending order

79 papers	3,778 citations	172457 29 h-index	128289 60 g-index
80 all docs	80 docs citations	80 times ranked	2514 citing authors

#	Article	IF	Citations
1	Estimating Ni valence with magnetometry in solidâ€state reactive sintered yttriumâ€doped barium zirconate. Journal of the American Ceramic Society, 2022, 105, 159-168.	3.8	4
2	Faradaic efficiency in protonic-ceramic electrolysis cells. JPhys Energy, 2022, 4, 014002.	5.3	12
3	Nano-LaCoO3 infiltrated BaZr0.8Y0.2O3â^' electrodes for steam splitting in protonic ceramic electrolysis cells. , 2022, 1, 100003.		10
4	Ba_{0.5}Gd_{0.8}La_{0.7}Co₂O_{6â^'Î´} Infiltrated BaZr_{0.8}Y_{0.2}O_{3â^'Î´} Composite Oxygen Electrodes for Protonic Ceramic Cells. Journal of the Electrochemical Society, 2022, 169, 014513.	2.9	2
5	Planar proton-conducting ceramic cells for hydrogen extraction: Mechanical properties, electrochemical performance and up-scaling. International Journal of Hydrogen Energy, 2022, 47, 6745-6754.	7.1	6
6	Slip Casting and Solid-State Reactive Sintering of BCZY(BaCexZr0.9â^'xY0.1O3â^'d)-NiO/BCZY Half-Cells. Membranes, 2022, 12, 242.	3.0	7
7	Advanced Materials for Thinâ€Film Solid Oxide Fuel Cells: Recent Progress and Challenges in Boosting the Device Performance at Low Temperatures. Advanced Functional Materials, 2022, 32, .	14.9	51
8	Effects of exsolution on the stability and morphology of Ni nanoparticles on BZY thin films. Acta Materialia, 2022, 228, 117752.	7.9	7
9	Perspectives on Technical Challenges and Scaling Considerations for Tubular Protonic-Ceramic Electrolysis Cells and Stacks. Journal of the Electrochemical Society, 2022, 169, 054525.	2.9	2
10	Large-area protonic ceramic cells for hydrogen purification. Separation and Purification Technology, 2022, 295, 121301.	7.9	9
11	Modeling Electro-Chemo-Mechanical Behaviors within the Dense BaZr0.8Y0.2O3â^'Î´ Protonic-Ceramic Membrane in a Long Tubular Electrochemical Cell. Membranes, 2021, 11, 378.	3.0	4
12	Ba_{0.5}Gd_{0.8}La_{0.7}Co₂O_{6â^'Î´}Infiltrated BaZr_{0.8}Y_{0.2}O_{3-Î´} Composite Oxygen Electrodes for Protonic Ceramic Electrolysis Cells. ECS Transactions, 2021, 102, 3-16.	0.5	1
13	The influence of the sintering temperature on BaZr0Â·7Ce0Â·2Y0Â·1O3-Î´ proton conductors prepared by Spark Plasma Sintering. Ceramics International, 2021, 47, 15349-15356.	4.8	8
14	The effect of Ni and Fe on the decomposition of yttrium doped barium zirconate thin films. Scripta Materialia, 2021, 201, 113948.	5.2	4
15	Highly Conductive Ceramics with Multiple Types of Mobile Charge Carriers. Crystals, 2021, 11, 1148.	2.2	0
16	Structural and electrical properties of BaZr0.7Ce0.2Y0.1O3â^'Î´ proton conducting ceramic fabricated by spark plasma sintering. Solid State Ionics, 2020, 345, 115118.	2.7	8
17	The effect of grain size on the hydration of BaZr_{0.9}Y_{0.1}O_{3â^'Î´} proton conductor studied by ambient pressure X-ray photoelectron spectroscopy. Physical Chemistry Chemical Physics, 2020, 22, 136-143.	2.8	7
18	Ceramic/Metal-Supported, Tubular, Molten Carbonate Membranes for High-Temperature CO2 Separations. Industrial & Engineering Chemistry Research, 2020, 59, 13706-13715.	3.7	7

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19	Self-contained Electrochemical Process to Produce Pure Compressed Hydrogen from Hydrocarbons and Steam Without an External Energy Supply. Journal of the Electrochemical Society, 2020, 167, 104512.	2.9	0
20	Electrochemistry of proton-conducting ceramic materials and cells. Journal of Solid State Electrochemistry, 2020, 24, 1445-1446.	2.5	4
21	Quantification of grain boundary defect chemistry in a mixed protonâ€electron conducting oxide composite. Journal of the American Ceramic Society, 2020, 103, 3217-3230.	3.8	13
22	Nondestructive 3D Nanoscale X-ray Imaging of Solid Oxide Fuel Cells in the Laboratory. Microscopy and Microanalysis, 2019, 25, 382-383.	0.4	0
23	Thermodynamic Insights for Electrochemical Hydrogen Compression with Proton-Conducting Membranes. Membranes, 2019, 9, 77.	3.0	18
24	Chemo-Thermo-Mechanical Coupling in Protonic Ceramic Fuel Cells from Fabrication to Operation. Journal of the Electrochemical Society, 2019, 166, F1007-F1015.	2.9	18
25	Channelized Substrates Made from BaZr0.75Ce0.05Y0.2O3â^'d Proton-Conducting Ceramic Polymer Clay. Membranes, 2019, 9, 130.	3.0	2
26	Particle atomic layer deposition of alumina for sintering yttriaâ€stabilized cubic zirconia. Journal of the American Ceramic Society, 2019, 102, 2283-2293.	3.8	8
27	Non stoichiometry and lattice expansion of BaZr0.9Dy0.1O3-Î´ in oxidizing atmospheres. Solid State Ionics, 2019, 330, 33-39.	2.7	7
28	Galvanic hydrogen pumping performance of copper electrodes fabricated by electroless plating on a BaZr0.9-Ce Y0.1O3- proton-conducting ceramic membrane. Solid State Ionics, 2018, 317, 256-262.	2.7	9
29	Chemical expansion in BaZr_{0.9â^'<i>x</i>}Ce_{<i>x</i>}Y_{0.1}O_{3â^'Î´} (<i>x</i> = 0 and) Tj ETQq1 1 0.784314 rg Society, 2018, 101, 1298-1309.	3.8	22
30	Conductivity behavior of BaZr0.9Dy0.1O3â^'Î´. Solid State Ionics, 2018, 314, 25-29.	2.7	10
31	Assessing Substitution Effects on Surface Chemistry by in Situ Ambient Pressure X-ray Photoelectron Spectroscopy on Perovskite Thin Films, BaCe_{<i>x</i>}Zr_{0.9â€"<i>x</i>}Y_{0.1}O_{2.95} (<i>x</i> = 0;) Tj ETQq1 1 0.784314 rg	8.0	19
32	Evolution of Copper Electrodes Fabricated by Electroless Plating on BaZr0.7Ce0.2Y0.1O3-Î´ Proton-Conducting Ceramic Membrane: From Deposition to Testing in Methane. Ceramics, 2018, 1, 261-273.	2.6	2
33	High-Performance La0.5Ba0.5Co1/3Mn1/3Fe1/3O3â^'Î´-BaZr1â^'zYzO3â^'Î´ Cathode Composites via an Exsolution Mechanism for Protonic Ceramic Fuel Cells. Inorganics, 2018, 6, 83.	2.7	13
34	Thermal and Chemical Expansion in Proton Ceramic Electrolytes and Compatible Electrodes. Crystals, 2018, 8, 365.	2.2	102
35	Defect Incorporation and Transport within Dense BaZr_{0.8}Y_{0.2}O_{3 â^' Î´}(BZY20) Proton-Conducting Membranes. Journal of the Electrochemical Society, 2018, 165, F581-F588.	2.9	69
36	Defect Chemistry and Transport within Dense BaCe_{0.7}Zr_{0.1}Y_{0.1}Yb_{0.1}O_{3 â^' Î´}(BCZYYb) Proton-Conducting Membranes. Journal of the Electrochemical Society, 2018, 165, F845-F853.	2.9	64

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37	Effect of Cation Ordering on the Performance and Chemical Stability of Layered Double Perovskite Cathodes. Materials, 2018, 11, 196.	2.9	43
38	Highly durable, coking and sulfur tolerant, fuel-flexible protonic ceramic fuel cells. Nature, 2018, 557, 217-222.	27.8	500
39	Double perovskite Ba2FeMoO6â^'Î´ as fuel electrode for protonic-ceramic membranes. Solid State Ionics, 2017, 306, 97-103.	2.7	22
40	Dense Inorganic Membranes for Hydrogen Separation. , 2017, , 271-363.		4
41	Benchmarking the expected stack manufacturing cost of next generation, intermediate-temperature protonic ceramic fuel cells with solid oxide fuel cell technology. Journal of Power Sources, 2017, 369, 65-77.	7.8	77
42	High performance fuel electrodes fabricated by electroless plating of copper on BaZr 0.8 Ce 0.1 Y 0.1 O 3-Î´ proton-conducting ceramic. Journal of Power Sources, 2017, 365, 399-407.	7.8	4
43	Comparing the Expected Stack Cost of Next Generation Intermediate Temperature Protonic Ceramic Fuel Cells with Solid Oxide Fuel Cell Technology. ECS Transactions, 2017, 78, 1963-1972.	0.5	7
44	Synthesis and characterization of BaGa2O4 and Ba3Co2O6(CO3)0.6 compounds in the search of alternative materials for Proton Ceramic Fuel Cell (PCFC). Solid State Sciences, 2017, 71, 61-68.	3.2	10
45	Fabrication of reducing atmosphere electrodes (fuel electrodes) by electroless plating of copper on BaZr0.9â^'xCexY0.1O3â^'Î´ â€" A proton-conducting ceramic. International Journal of Hydrogen Energy, 2017, 42, 16911-16919.	7.1	7
46	Probing Grain-Boundary Chemistry and Electronic Structure in Proton-Conducting Oxides by Atom Probe Tomography. Nano Letters, 2016, 16, 6924-6930.	9.1	36
47	Exploring electronic conduction through BaCe Zr0.9â^'Y0.1O3â^'d proton-conducting ceramics. Solid State Ionics, 2016, 286, 117-121.	2.7	39
48	Hydrogen permeation through dense BaCe 0.8 Y 0.2 O 3â^'Î´ â€" Ce 0.8 Y 0.2 O 2â^'Î´ composite-ceramic hydrogen separation membranes. International Journal of Hydrogen Energy, 2016, 41, 2598-2606.	7.1	49
49	Electrical properties and flux performance of composite ceramic hydrogen separation membranes. Journal of Materials Chemistry A, 2015, 3, 5392-5401.	10.3	37
50	Readily processed protonic ceramic fuel cells with high performance at low temperatures. Science, 2015, 349, 1321-1326.	12.6	982
51	Low Temperature Waterâ€"Gas Shift Reaction: Interactions of Steam and CO with Ceria Treated with Different Oxidizing and Reducing Environments. Catalysis Letters, 2015, 145, 533-540.	2.6	4
52	Interpreting equilibrium-conductivity and conductivity-relaxation measurements to establish thermodynamic and transport properties for multiple charged defect conducting ceramics. Faraday Discussions, 2015, 182, 49-74.	3.2	49
53	Thermogravimetric analysis of InCl3 sublimation at atmospheric pressure. Thermochimica Acta, 2015, 622, 55-63.	2.7	11
54	Characterization of ionic transport through BaCe 0.2 Zr 0.7 Y 0.1 O 3â^'Î´ membranes in galvanic and electrolytic operation. International Journal of Hydrogen Energy, 2015, 40, 9278-9286.	7.1	52

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55	Enhanced reducibility and electronic conductivity of Nb or W doped Ce0.9Gd0.1O1.95âˆ'Î´. Solid State Ionics, 2015, 269, 51-56.	2.7	8
56	Equilibrium and transient conductivity for gadolium-doped ceria under large perturbations: II. Modeling. Solid State Ionics, 2014, 268, 198-207.	2.7	22
57	Preparation of dense mixed electron- and proton-conducting ceramic composite materials using solid-state reactive sintering: BaCe0.8Y0.1M0.1O3âˆ'Î´â€"Ce0.8Y0.1M0.1O2âˆ'Î´ (M=Y, Yb, Er, Eu). Journal of Materials Science, 2014, 49, 4332-4340.	3.7	35
58	Behavior of BaCe0.9âˆ'x Zr x Y0.1O3âˆ'Î´ in water and ethanol suspensions. Journal of Materials Science, 2014, 49, 2588-2595.	3.7	3
59	Infiltrated Lanthanum Nickelate Cathodes for Use with BaCe_{0.2}Zr_{0.7}Y_{0.1}O_{3 âˆ' Î´}Proton Conducting Electrolytes. Journal of the Electrochemical Society, 2014, 161, F717-F723.	2.9	15
60	Effects of the fabrication process on the grain-boundary resistance in BaZr_{0.9}Y_{0.1}O_{3âˆ'Î´}. Journal of Materials Chemistry A, 2014, 2, 16107-16115.	10.3	73
61	Equilibrium and transient conductivity for gadolinium-doped ceria under large perturbations: I. Experiments. Solid State Ionics, 2014, 265, 22-28.	2.7	12
62	Synthesis by spark plasma sintering of a novel protonic/electronic conductor composite: BaCe0.2Zr0.7Y0.1O3âˆ'Î´ /Sr0.95Ti0.9Nb0.1O3âˆ'Î´ (BCZY27/STN95). Journal of Materials Science, 2013, 48, 6177-6185.	3.7	25
63	LaCoO3: Promising cathode material for protonic ceramic fuel cells based on a BaCe0.2Zr0.7Y0.1O3âˆ'Î´ electrolyte. Journal of Power Sources, 2012, 218, 313-319.	7.8	65
64	Conductivity and hydration trends in disordered fluorite and pyrochlore oxides: A study on lanthanum cerateâ€"zirconate based compounds. Solid State Ionics, 2012, 229, 26-32.	2.7	32
65	Conductivity study of dense BaCexZr(0.9âˆ'x)Y0.1O(3âˆ'Î´) prepared by solid state reactive sintering at 1500ÂÂ°C. International Journal of Hydrogen Energy, 2012, 37, 7954-7961.	7.1	113
66	Microstructure and performance of La0.58Sr0.4Co0.2Fe0.8O3âˆ'Î´ cathodes deposited on BaCe0.2Zr0.7Y0.1O3âˆ'Î´ by infiltration and spray pyrolysis. Journal of Power Sources, 2012, 209, 172-179.	7.8	44
67	Conductivity study of dense BaZr0.9Y0.1O(3âˆ'Î´) obtained by spark plasma sintering. Solid State Ionics, 2012, 213, 36-41.	2.7	42
68	Effects of A- and B-site (co-)acceptor doping on the structure and proton conductivity of LaNbO4. Solid State Ionics, 2012, 213, 45-52.	2.7	30
69	Conductivity, transport number measurements and hydration thermodynamics of BaCe0.2Zr0.7Y(0.1âˆ'Î¾)NiÎ¾O(3âˆ'Î´). Solid State Ionics, 2011, 185, 11-17.	2.7	51
70	Enhanced sintering and conductivity study of cobalt or nickel doped solid solution of barium cerate and zirconate. Solid State Ionics, 2010, 181, 694-700.	2.7	96
71	Synthesis and proton incorporation in BaCe0.9âˆ'x Zr x Y0.1O3âˆ'Î´. Journal of Applied Electrochemistry, 2009, 39, 553-557.	2.9	19
72	Water vapour solubility and conductivity study of the proton conductor BaCe(0.9âˆ'x)ZrxY0.1O(3âˆ'Î´). Solid State Ionics, 2009, 180, 990-997.	2.7	160

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73	Structural and conductivity study of the proton conductor BaCe(0.9â^'x)ZrxY0.1O(3â^'Î´) at intermediate temperatures. Journal of Power Sources, 2009, 193, 189-193.	7.8	82
74	Synthesis, Sintering, and Electrical Properties of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mtext>BaCe</mml:mtext></mml:n Journal of Nanomaterials, 2008, 2008, 1-5.	2.7	16
75	Low temperature water-gas shift: Type and loading of metal impacts decomposition and hydrogen exchange rates of pseudo-stabilized formate over metal/ceria catalysts. Applied Catalysis A: General, 2006, 302, 14-21.	4.3	62
76	Low temperature waterâ€"gas shift: Characterization and testing of binary mixed oxides of ceria and zirconia promoted with Pt. Applied Catalysis A: General, 2006, 303, 35-47.	4.3	159
77	Low temperature water gas shift: Type and loading of metal impacts forward decomposition of pseudo-stabilized formate over metal/ceria catalysts. Catalysis Today, 2005, 106, 259-264.	4.4	60
78	Low temperature water-gas shift: Examining the efficiency of Au as a promoter for ceria-based catalysts prepared by CVD of a Au precursor. Applied Catalysis A: General, 2005, 292, 229-243.	4.3	87
79	Fabrication of Yttrium-Doped Barium Zirconate for High Performance Protonic Ceramic Membranes. , 0, , .		5