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	Readily processed protonic ceramic fuel cells with high performance at low temperatures. Science, 2015, 349, 1321-1326.	12.6	982
2	Highly durable, coking and sulfur tolerant, fuel-flexible protonic ceramic fuel cells. Nature, 2018, 557, 217-222.	27.8	500
3	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
4	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
5	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
6	Thermal and Chemical Expansion in Proton Ceramic Electrolytes and Compatible Electrodes. Crystals, 2018, 8, 365.	2.2	102
7	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
8	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
9	Structural and conductivity study of the proton conductor BaCe(0.9âˆ’x)ZrxY0.1O(3âˆ’Î´) at intermediate temperatures. Journal of Power Sources, 2009, 193, 189-193.	7.8	82
10	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
11	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
12	Defect Incorporation and Transport within Dense BaZr_{0.8}Y_{0.2}O_{3 âˆ’ Î´}(BZY20) Proton-Conducting Membranes. Journal of the Electrochemical Society, 2018, 165, F581-F588.	2.9	69
13	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
14	Defect Chemistry and Transport within Dense BaCe_{0.7}Zr_{0.1}Y_{0.1}Yb_{0.1}O_{3 âˆ’ Î´}(BCZYYb) Proton-Conducting Membranes. Journal of the Electrochemical Society, 2018, 165, F845-F853.	2.9	64
15	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
16	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
17	Characterization of ionic transport through BaCe 0.2 Zr 0.7 Y 0.1 O 3âˆ’Î´ membranes in galvanic and electrolytic operation. International Journal of Hydrogen Energy, 2015, 40, 9278-9286.	7.1	52
18	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

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19	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
20	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
21	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
22	Microstructure and performance of La0.58Sr0.4Co0.2Fe0.8O3â^'Î´ cathodes deposited on BaCe0.2Zr0.7Y0.1O3â^'Î´ by infiltration and spray pyrolysis. Journal of Power Sources, 2012, 209, 172-179.	7.8	44
23	Effect of Cation Ordering on the Performance and Chemical Stability of Layered Double Perovskite Cathodes. Materials, 2018, 11, 196.	2.9	43
24	Conductivity study of dense BaZr0.9Y0.1O(3â^'Î) obtained by spark plasma sintering. Solid State Ionics, 2012, 213, 36-41.	2.7	42
25	Exploring electronic conduction through BaCe Zr0.9â^'Y0.1O3â^'d proton-conducting ceramics. Solid State Ionics, 2016, 286, 117-121.	2.7	39
26	Electrical properties and flux performance of composite ceramic hydrogen separation membranes. Journal of Materials Chemistry A, 2015, 3, 5392-5401.	10.3	37
27	Probing Grain-Boundary Chemistry and Electronic Structure in Proton-Conducting Oxides by Atom Probe Tomography. Nano Letters, 2016, 16, 6924-6930.	9.1	36
28	Preparation of dense mixed electron- and proton-conducting ceramic composite materials using solid-state reactive sintering: BaCe0.8Y0.1M0.1O3â^'Î´â€"Ce0.8Y0.1M0.1O2â^'Î´ (M=Y, Yb, Er, Eu). Journal of Materials Science, 2014, 49, 4332-4340.	3.7	35
29	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
30	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
31	Synthesis by spark plasma sintering of a novel protonic/electronic conductor composite: BaCe0.2Zr0.7Y0.1O3â^'Î´ /Sr0.95Ti0.9Nb0.1O3â^'Î´ (BCZY27/STN95). Journal of Materials Science, 2013, 48, 6177-6185.	3.7	25
32	Equilibrium and transient conductivity for gadolium-doped ceria under large perturbations: II. Modeling. Solid State Ionics, 2014, 268, 198-207.	2.7	22
33	Double perovskite Ba2FeMoO6â^'Î´ as fuel electrode for protonic-ceramic membranes. Solid State Ionics, 2017, 306, 97-103.	2.7	22
34	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 ETQq0 0 0 rgBT /Over Society, 2018, 101, 1298-1309.	3.8	22
35	Synthesis and proton incorporation in BaCe0.9â^'x Zr x Y0.1O3â^'Î´. Journal of Applied Electrochemistry, 2009, 39, 553-557.	2.9	19
36	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 ETQq0 0 0 rgBT /Overloc	8.0	19

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37	Thermodynamic Insights for Electrochemical Hydrogen Compression with Proton-Conducting Membranes. Membranes, 2019, 9, 77.	3.0	18
38	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
39	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:m Journal of Nanomaterials, 2008, 2008, 1-5.	2.7	16
40	Infiltrated Lanthanum Nickelate Cathodes for Use with BaCe_{0.2}Zr_{0.7}Y_{0.1}O_{3 â˜' Î´}Proton Conducting Electrolytes. Journal of the Electrochemical Society, 2014, 161, F717-F723.	2.9	15
41	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
42	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
43	Equilibrium and transient conductivity for gadolinium-doped ceria under large perturbations: I. Experiments. Solid State Ionics, 2014, 265, 22-28.	2.7	12
44	Faradaic efficiency in protonic-ceramic electrolysis cells. JPhys Energy, 2022, 4, 014002.	5.3	12
45	Thermogravimetric analysis of InCl3 sublimation at atmospheric pressure. Thermochimica Acta, 2015, 622, 55-63.	2.7	11
46	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
47	Conductivity behavior of BaZr0.9Dy0.1O3â˜'Î´. Solid State Ionics, 2018, 314, 25-29.	2.7	10
48	Nano-LaCoO3 infiltrated BaZr0.8Y0.2O3â˜' electrodes for steam splitting in protonic ceramic electrolysis cells. , 2022, 1, 100003.		10
49	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
50	Large-area protonic ceramic cells for hydrogen purification. Separation and Purification Technology, 2022, 295, 121301.	7.9	9
51	Enhanced reducibility and electronic conductivity of Nb or W doped Ce0.9Gd0.1O1.95â˜'Î´. Solid State Ionics, 2015, 269, 51-56.	2.7	8
52	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
53	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
54	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

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55	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
56	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
57	Non stoichiometry and lattice expansion of BaZr0.9Dy0.1O3-Î´ in oxidizing atmospheres. Solid State Ionics, 2019, 330, 33-39.	2.7	7
58	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
59	Ceramic/Metal-Supported, Tubular, Molten Carbonate Membranes for High-Temperature CO2 Separations. Industrial & Engineering Chemistry Research, 2020, 59, 13706-13715.	3.7	7
60	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
61	Effects of exsolution on the stability and morphology of Ni nanoparticles on BZY thin films. Acta Materialia, 2022, 228, 117752.	7.9	7
62	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
63	Fabrication of Yttrium-Doped Barium Zirconate for High Performance Protonic Ceramic Membranes. , 0, , .		5
64	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
65	Dense Inorganic Membranes for Hydrogen Separation. , 2017, , 271-363.		4
66	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
67	Electrochemistry of proton-conducting ceramic materials and cells. Journal of Solid State Electrochemistry, 2020, 24, 1445-1446.	2.5	4
68	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
69	The effect of Ni and Fe on the decomposition of yttrium doped barium zirconate thin films. Scripta Materialia, 2021, 201, 113948.	5.2	4
70	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
71	Behavior of BaCe0.9â^'x Zr x Y0.1O3â^'Î´ in water and ethanol suspensions. Journal of Materials Science, 2014, 49, 2588-2595.	3.7	3
72	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

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73	Channelized Substrates Made from BaZr0.75Ce0.05Y0.2O3âˆ’d Proton-Conducting Ceramic Polymer Clay. Membranes, 2019, 9, 130.	3.0	2
74	Ba_{0.5}Gd_{0.8}La_{0.7}Co₂O_{6âˆ’Î´} Infiltrated BaZr_{0.8}Y_{0.2}O_{3âˆ’Î´} Composite Oxygen Electrodes for Protonic Ceramic Cells. Journal of the Electrochemical Society, 2022, 169, 014513.	2.9	2
75	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
76	Ba_{0.5}Gd_{0.8}La_{0.7}Co₂O_{6âˆ’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
77	Nondestructive 3D Nanoscale X-ray Imaging of Solid Oxide Fuel Cells in the Laboratory. Microscopy and Microanalysis, 2019, 25, 382-383.	0.4	0
78	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
79	Highly Conductive Ceramics with Multiple Types of Mobile Charge Carriers. Crystals, 2021, 11, 1148.	2.2	0