Guopeng Wang

List of Publications by Year
in descending order

63 papers	2,827 citations	172457 29 h-index	175258 52 g-index
63 all docs	63 docs citations	63 times ranked	1771 citing authors

#	Article	IF	Citations
1	Cathode reaction models and performance analysis of Sm0.5Sr0.5CoO3âˆ’Î´â€“BaCe0.8Sm0.2O3âˆ’Î´ composite cathode for solid oxide fuel cells with proton conducting electrolyte. Journal of Power Sources, 2009, 194, 263-268.	7.8	168
2	Cathode processes and materials for solid oxide fuel cells with proton conductors as electrolytes. Journal of Materials Chemistry, 2010, 20, 6218.	6.7	163
3	A novel cobalt-free cathode with triple-conduction for proton-conducting solid oxide fuel cells with unprecedented performance. Journal of Materials Chemistry A, 2019, 7, 16136-16148.	10.3	145
4	Performance and DRT analysis of P-SOFCs fabricated using new phase inversion combined tape casting technology. Journal of Materials Chemistry A, 2017, 5, 19664-19671.	10.3	137
5	New, Efficient, and Reliable Air Electrode Material for Proton-Conducting Reversible Solid Oxide Cells. ACS Applied Materials & Interfaces, 2018, 10, 1761-1770.	8.0	131
6	Direct liquid methanol-fueled solid oxide fuel cell. Journal of Power Sources, 2008, 185, 188-192.	7.8	115
7	A high performance cathode for proton conducting solid oxide fuel cells. Journal of Materials Chemistry A, 2015, 3, 8405-8412.	10.3	113
8	A novel anode supported BaCe0.7Ta0.1Y0.2O3âˆ’Î´ electrolyte membrane for proton-conducting solid oxide fuel cell. Electrochemistry Communications, 2008, 10, 1598-1601.	4.7	112
9	An excellent OER electrocatalyst of cubic SrCoO_{3âˆ’Î´} prepared by a simple F-doping strategy. Journal of Materials Chemistry A, 2019, 7, 12538-12546.	10.3	112
10	High performance of proton-conducting solid oxide fuel cell with a layered PrBaCo2O5+Î´ cathode. Journal of Power Sources, 2009, 194, 835-837.	7.8	109
11	A novel single phase cathode material for a proton-conducting SOFC. Electrochemistry Communications, 2009, 11, 688-690.	4.7	105
12	Cobalt-doped BaZrO3: A single phase air electrode material for reversible solid oxide cells. International Journal of Hydrogen Energy, 2012, 37, 12522-12527.	7.1	82
13	Low magnetic field response single-phase multiferroics under high temperature. Materials Horizons, 2015, 2, 232-236.	12.2	79
14	A Stable and Efficient Cathode for Fluorineâ€Containing Protonâ€Conducting Solid Oxide Fuel Cells. ChemSusChem, 2018, 11, 3423-3430.	6.8	67
15	Cobalt-free oxide Ba0.5Sr0.5Fe0.8Cu0.2O3âˆ’Î´ for proton-conducting solid oxide fuel cell cathode. International Journal of Hydrogen Energy, 2010, 35, 3769-3774.	7.1	66
16	High-Performanced Cathode with a Two-Layered Râ€“P Structure for Intermediate Temperature Solid Oxide Fuel Cells. ACS Applied Materials & Interfaces, 2016, 8, 4592-4599.	8.0	62
17	Oxygen reduction and transport on the La1âˆ’xSrxCo1âˆ’yFeyO3âˆ’Î´ cathode in solid oxide fuel cells: a first-principles study. Journal of Materials Chemistry A, 2013, 1, 12932.	10.3	55
18	The effect of oxygen transfer mechanism on the cathode performance based on proton-conducting solid oxide fuel cells. Journal of Materials Chemistry A, 2015, 3, 2207-2215.	10.3	54

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19	Nanoscale structural modulation and enhanced room-temperature multiferroic properties. Nanoscale, 2014, 6, 13494-13500.	5.6	53
20	Investigation of real polarization resistance for electrode performance in proton-conducting electrolysis cells. Journal of Materials Chemistry A, 2018, 6, 18508-18517.	10.3	51
21	Characterization and evaluation of NdBaCo2O5+Î´ cathode for proton-conducting solid oxide fuel cells. International Journal of Hydrogen Energy, 2010, 35, 753-756.	7.1	48
22	Ruddlesdenâ€“Popper oxide SrEu₂Fe₂O₇ as a promising symmetrical electrode for pure CO₂ electrolysis. Journal of Materials Chemistry A, 2021, 9, 2706-2713.	10.3	38
23	Controllable CO₂conversion in high performance proton conducting solid oxide electrolysis cells and the possible mechanisms. Journal of Materials Chemistry A, 2019, 7, 4855-4864.	10.3	37
24	Co-generation of electricity and olefin via proton conducting fuel cells using (Pr0.3Sr0.7)0.9Ni0.1Ti0.9O3 catalyst layers. Applied Catalysis B: Environmental, 2020, 272, 118973.	20.2	37
25	Novel carbon and sulfur-tolerant anode material FeNi₃@PrBa(Fe,Ni)_{1.9}Mo_{0.1}O_{5+Î´} for intermediate temperature solid oxide fuel cells. Journal of Materials Chemistry A, 2019, 7, 21783-21793.	10.3	34
26	A Durable Ruddlesdenâ€Popper Cathode for Protonic Ceramic Fuel Cells. ChemSusChem, 2020, 13, 4994-5003.	6.8	33
27	Review of anodic reactions in hydrocarbon fueled solid oxide fuel cells and strategies to improve anode performance and stability. Materials for Renewable and Sustainable Energy, 2020, 9, 1.	3.6	32
28	Influence of anode pore forming additives on the densification of supported BaCe0.7Ta0.1Y0.2O3âˆ’Î´ electrolyte membranes based on a solid state reaction. Journal of the European Ceramic Society, 2009, 29, 2567-2573.	5.7	29
29	First-principles study of O₂ reduction on BaZr_{1âˆ’x}Co_xO₃ cathodes in protonic-solid oxide fuel cells. Journal of Materials Chemistry A, 2014, 2, 16707-16714.	10.3	29
30	A first-principles study on divergent reactions of using a Sr3Fe2O7 cathode in both oxygen ion conducting and proton conducting solid oxide fuel cells. RSC Advances, 2018, 8, 26448-26460.	3.6	28
31	Observation of Exchange Anisotropy in Single-Phase Layer-Structured Oxides with Long Periods. Scientific Reports, 2015, 5, 15261.	3.3	27
32	Structural Evolution and Multiferroics in Srâ€Doped Bi₇Fe_{1.5}Co_{1.5}Ti₃O₂₁ Ceramics. Journal of the American Ceramic Society, 2015, 98, 1528-1535.	3.8	27
33	Structural and Physical Properties of Mixedâ€Layer Aurivilliusâ€Type Multiferroics. Journal of the American Ceramic Society, 2016, 99, 3033-3038.	3.8	26
34	Oxygen vacancy-engineered cobalt-free Ruddlesden-Popper cathode with excellent CO2 tolerance for solid oxide fuel cells. Journal of Power Sources, 2021, 497, 229872.	7.8	26
35	Novel Niâ€“Ba1+xZr0.3Ce0.5Y0.2O3âˆ’Î´ hydrogen electrodes as effective reduction barriers for reversible solid oxide cells based on doped ceria electrolyte thin film. Journal of Power Sources, 2012, 199, 142-145.	7.8	25
36	A novel BaFe0.8Zn0.1Bi0.1O3âˆ’Î´ cathode for proton conducting solid oxide fuel cells. Ceramics International, 2020, 46, 25453-25459.	4.8	25

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37	Theoretical and Experimental Investigations on Kâ€doped SrCo_{0.9}Nb_{0.1}O_{3â€«<i>Î´</i>} as a Promising Cathode for Protonâ€Conducting Solid Oxide Fuel Cells. ChemSusChem, 2021, 14, 3876-3886.	6.8	23
38	Antimony doping to greatly enhance the electrocatalytic performance of Sr₂Fe_{1.5}Mo_{0.5}O_{6âˆ’<i>Î´</i>} perovskite as a ceramic anode for solid oxide fuel cells. Journal of Materials Chemistry A, 2021, 9, 24336-24347.	10.3	23
39	Defects evolution of Ca doped La2NiO4+Î´ and its impact on cathode performance in proton-conducting solid oxide fuel cells. International Journal of Hydrogen Energy, 2020, 45, 17736-17744.	7.1	22
40	K doping as a rational method to enhance the sluggish air-electrode reaction kinetics for proton-conducting solid oxide cells. Electrochimica Acta, 2021, 389, 138453.	5.2	20
41	Yttrium-modified Bi₇Fe_{1.5}Co_{1.5}Ti₃O₂₁ceramics with improved room temperature multiferroic properties. RSC Advances, 2014, 4, 29264.	3.6	19
42	Facile route to prepare grain-oriented multiferroic Bi7Fe3âˆ’Co Ti3O21 ceramics. Journal of the European Ceramic Society, 2015, 35, 3437-3443.	5.7	19
43	Interface engineering in epitaxial growth of layered oxides via a conducting layer insertion. Applied Physics Letters, 2015, 107, .	3.3	18
44	Nanoscale Structural Modulation and Low-temperature Magnetic Response in Mixed-layer Aurivillius-type Oxides. Scientific Reports, 2018, 8, 871.	3.3	18
45	Novel in-situ MgO nano-layer decorated carbon-tolerant anode for solid oxide fuel cells. International Journal of Hydrogen Energy, 2020, 45, 11791-11801.	7.1	18
46	Room Temperature Exchange Bias in Structure-Modulated Single-Phase Multiferroic Materials. Chemistry of Materials, 2018, 30, 6156-6163.	6.7	17
47	BaCoxFe0.7-xZr0.3O3-Î´(0.2â‰¤xâ‰¤0.5) as cathode materials for proton-based SOFCs. Ceramics International, 2019, 45, 23948-23953.	4.8	17
48	Highly stable and efficient Pt single-atom catalyst for reversible proton-conducting solid oxide cells. Applied Catalysis B: Environmental, 2022, 316, 121627.	20.2	16
49	Engineering the exchange bias and bias temperature by modulating the spin glassy state in single phase Bi9Fe5Ti3O27. Nanoscale, 2017, 9, 8305-8313.	5.6	14
50	Anisotropic electrical and magnetic properties in grain-oriented Bi₄Ti₃O₁₂â€“La_{0.5}Sr_{0.5}MnO₃. Journal of Materials Chemistry C, 2018, 6, 11272-11279.	5.5	14
51	Protonic Ceramic Electrochemical Cell for Efficient Separation of Hydrogen. ACS Applied Materials & Interfaces, 2020, 12, 25809-25817.	8.0	14
52	Infiltrated Ni_{0.08}Co_{0.02}CeO_{2â€“<i>x</i>}@Ni_{0.8}Co_{0.2} Catalysts for a Finger-Like Anode in Direct Methane-Fueled Solid Oxide Fuel Cells. ACS Applied Materials & Interfaces, 2021, 13, 4943-4954.	8.0	13
53	Platinum-induced structural collapse in layered oxide polycrystalline films. Applied Physics Letters, 2015, 106, .	3.3	10
54	<i>In situ</i> coating of a lithiophilic interphase on a biporous Cu scaffold with vertical microchannels for dendrite-free Li metal batteries. Journal of Materials Chemistry A, 2021, 9, 13642-13652.	10.3	9

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55	Realizing semiconductivity by a large bandgap tuning in Bi4Ti3O12 via inserting La1-<i>x</i>Sr<i>x</i>MnO3 perovskite layers. Applied Physics Letters, 2017, 110, .	3.3	7
56	Superlattice-like structure and enhanced ferroelectric properties of intergrowth Aurivillius oxides. RSC Advances, 2018, 8, 16937-16946.	3.6	7
57	Anisotropic magnetic property and exchange bias effect in a homogeneous Sillen-Aurivillius layered oxide. Journal of the European Ceramic Society, 2019, 39, 2685-2691.	5.7	6
58	Dopant-induced surface activation of ceria nanorods for electro-oxidation of hydrogen and propane in solid oxide fuel cells. International Journal of Hydrogen Energy, 2021, 46, 17922-17931.	7.1	6
59	The nanoscale control of disorder-to-order layer-stacking boosts multiferroic responses in an Aurivillius-type layered oxide. Journal of Materials Chemistry C, 2021, 9, 4825-4837.	5.5	6
60	Structure and the enhanced ferromagnetism in single phase Sr4Fe5CoO13-Î´ ceramic. Ceramics International, 2022, 48, 19963-19970.	4.8	4
61	The structure and properties of Co substituted Bi7Ti4NbO21 with intergrowth phases. RSC Advances, 2017, 7, 50477-50484.	3.6	3
62	Cathode materials for proton-conducting solid oxide fuel cells. , 2020, , 263-314.		3
63	Computational investigation of Zn-doped and undoped SrEu₂Fe₂O₇ as potential mixed electron and proton conductors. RSC Advances, 2020, 10, 39988-39994.	3.6	1