Yu Chen

List of Publications by Year
in descending order

118 papers	6,391 citations	61984 43 h-index	69250 77 g-index
120 all docs	120 docs citations	120 times ranked	6146 citing authors

#	Article	IF	Citations
1	Triple-Phase Boundaries (TPBs) in Fuel Cells and Electrolyzers. , 2022, , 299-328.		2
2	A high-performance and durable direct NH3 tubular protonic ceramic fuel cell integrated with an internal catalyst layer. Applied Catalysis B: Environmental, 2022, 306, 121071.	20.2	33
3	Activating the oxygen electrocatalytic activity of layer-structured Ca_{0.5}CoO₂ nanofibers by iron doping. Dalton Transactions, 2022, 51, 3636-3641.	3.3	0
4	An efficient and durable anode for ammonia protonic ceramic fuel cells. Energy and Environmental Science, 2022, 15, 287-295.	30.8	64
5	A Y-doped BaCo0.4Fe0.4Zn0.2O3-Î´ perovskite air electrode with enhanced CO2 tolerance and ORR activity for protonic ceramic electrochemical cells. Separation and Purification Technology, 2022, 288, 120657.	7.9	12
6	Highly Active and Durable Air Electrodes for Reversible Protonic Ceramic Electrochemical Cells Enabled by an Efficient Bifunctional Catalyst. Advanced Energy Materials, 2022, 12, .	19.5	57
7	Highly selective reduction of CO2 through a protonic ceramic electrochemical cell. Journal of Power Sources, 2022, 524, 231101.	7.8	6
8	An Efficient Steamâ€Induced Heterostructured Air Electrode for Protonic Ceramic Electrochemical Cells. Advanced Functional Materials, 2022, 32, .	14.9	47
9	Mangrove Root-Inspired Carbon Nanotube Film for Micro-Direct Methanol Fuel Cells. ACS Applied Materials & Interfaces, 2022, 14, 19897-19906.	8.0	6
10	Surface restructuring of a perovskite-type air electrode for reversible protonic ceramic electrochemical cells. Nature Communications, 2022, 13, 2207.	12.8	65
11	Surface Regulating of a Doubleâ€Perovskite Electrode for Protonic Ceramic Fuel Cells to Enhance Oxygen Reduction Activity and Contaminants Poisoning Tolerance. Advanced Energy Materials, 2022, 12, .	19.5	24
12	Enhanced electrochemical activity and durability of a direct ammonia protonic ceramic fuel cell enabled by an internal catalyst layer. Separation and Purification Technology, 2022, 297, 121483.	7.9	5
13	Enhancing the oxygen reduction reaction activity and durability of a double-perovskite via an A-site tuning. Science China Materials, 2022, 65, 3043-3052.	6.3	6
14	General Synthesis of Tube-like Nanostructured Perovskite Oxides with Tunable Transition Metalâ€“Oxygen Covalency for Efficient Water Electrooxidation in Neutral Media. Journal of the American Chemical Society, 2022, 144, 13163-13173.	13.7	39
15	A straight, open and macro-porous fuel electrode-supported protonic ceramic electrochemical cell. Journal of Materials Chemistry A, 2021, 9, 10789-10795.	10.3	23
16	Enhancing Oxygen Reduction Activity and Cr Tolerance of Solid Oxide Fuel Cell Cathodes by a Multiphase Catalyst Coating. Advanced Functional Materials, 2021, 31, 2100034.	14.9	56
17	An Efficient Bifunctional Air Electrode for Reversible Protonic Ceramic Electrochemical Cells. Advanced Functional Materials, 2021, 31, 2105386.	14.9	66
18	A critical review on surface-pattern engineering of nafion membrane for fuel cell applications. Renewable and Sustainable Energy Reviews, 2021, 145, 110860.	16.4	46

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19	Enhanced Electrochemical Performance of a Ba_{0.5}Sr_{0.5}Co_{0.7}Fe_{0.2}Ni_{0.1}O_{3â^'Î´}â€“BaZr_{0.1}/su Composite Oxygen Electrode for Protonic Ceramic Electrochemical Cells. Energy & Fuels, 2021, 35, 14101-14109.	5.1	12
20	An oxygen reduction reaction active and durable SOFC cathode/electrolyte interface achieved via a cost-effective spray-coating. International Journal of Hydrogen Energy, 2021, 46, 32242-32249.	7.1	19
21	A Sr and Ni doped Ruddlesdenâ^'Popper perovskite oxide La1.6Sr0.4Cu0.6Ni0.4O4+Î´ as a promising cathode for protonic ceramic fuel cells. Journal of Power Sources, 2021, 509, 230369.	7.8	31
22	An improved oxygen reduction reaction activity and CO2-tolerance of La0.6Sr0.4Co0.2Fe0.8O3-Î´ achieved by a surface modification with barium cobaltite coatings. Journal of Power Sources, 2021, 514, 230573.	7.8	24
23	High-Performance, Thermal Cycling Stable, Coking-Tolerant Solid Oxide Fuel Cells with Nanostructured Electrodes. ACS Applied Materials & Interfaces, 2021, 13, 4993-4999.	8.0	20
24	Promotion of oxygen reduction reaction on a double perovskite electrode by a water-induced surface modification. Energy and Environmental Science, 2021, 14, 1506-1516.	30.8	62
25	Understanding the Impact of Sulfur Poisoning on the Methane-Reforming Activity of a Solid Oxide Fuel Cell Anode. ACS Catalysis, 2021, 11, 13556-13566.	11.2	15
26	Power generation from a symmetric flat-tube solid oxide fuel cell using direct internal dry-reforming of methane. Journal of Power Sources, 2021, 516, 230662.	7.8	7
27	Immobilizing Polysulfide by In Situ Topochemical Oxidation Derivative TiC@Carbonâ€Included TiO₂ Coreâ€“Shell Sulfur Hosts for Advanced Lithiumâ€“Sulfur Batteries. Small, 2020, 16, e2005998.	10.0	24
28	Efficient Water Splitting Actualized through an Electrochemistryâ€Induced Heteroâ€Structured Antiperovskite/(Oxy)Hydroxide Hybrid. Small, 2020, 16, e2006800.	10.0	36
29	A highly active and durable electrode with in situ exsolved Co nanoparticles for solid oxide electrolysis cells. Journal of Power Sources, 2020, 478, 229082.	7.8	25
30	Enhanced Cr-tolerance of an SOFC cathode by an efficient electro-catalyst coating. Nano Energy, 2020, 72, 104704.	16.0	58
31	A New Family of Protonâ€Conducting Electrolytes for Reversible Solid Oxide Cells: BaHf_xCe_{0.8â^'}_xY_{0.1}Yb_{0.1}O_{3â^'Î´} Advanced Functional Materials, 2020, 30, 2002265.	14.9	46
32	Quantitative nanoscale tracking of oxygen vacancy diffusion inside single ceria grains by in situ transmission electron microscopy. Materials Today, 2020, 38, 24-34.	14.2	23
33	One Step Synthesis of Sr2Fe1.3Co0.2Mo0.5O6â^'Î´ -Gd0.1Ce0.9O2â^'Î´ for Symmetrical Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2020, 167, 084503.	2.9	8
34	Domain Structures and PrCo Antisite Point Defects in Double-perovskite PrBaCo2O5+Î´. Microscopy and Microanalysis, 2019, 25, 2016-2017.	0.4	0
35	Lattice Boltzmann modelling of the coupling between charge transport and electrochemical reactions in a solid oxide fuel cell with a patterned anode. International Journal of Hydrogen Energy, 2019, 44, 30293-30305.	7.1	11
36	High-throughput 3D reconstruction of stochastic heterogeneous microstructures in energy storage materials. Npj Computational Materials, 2019, 5, .	8.7	18

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37	A Promising Composite Anode for Solid Oxide Fuel Cells: Sr₂FeMo_{0.65}Ni_{0.35}O_{6-Î´}-Gd_{0.1}Ce_{0.9}<sub>2-Î´</sub: Journal of the Electrochemical Society, 2019, 166, F109-F113.	3.9	24
38	Effect of CO2 on La0.4Sr0.6Co0.2Fe0.7Nb0.1O3â€“Î´ cathode for solid oxide fuel cells. Journal of Electroanalytical Chemistry, 2019, 847, 113256.	3.8	6
39	Effective Promotion of Oxygen Reduction Reaction by in Situ Formation of Nanostructured Catalyst. ACS Catalysis, 2019, 9, 7137-7142.	11.2	42
40	Effect of humidity on La0.4Sr0.6Co0.2Fe0.7Nb0.1O3â^Î´ cathode of solid oxide fuel cells. International Journal of Hydrogen Energy, 2019, 44, 3055-3062.	7.1	14
41	Three-dimensional porous composite framework assembled with CuO microspheres as anode current collector for lithium-ion batteries. Science China Technological Sciences, 2019, 62, 70-79.	4.0	9
42	Three-dimensional (3D) flower-like MoSe2/N-doped carbon composite as a long-life and high-rate anode material for sodium-ion batteries. Chemical Engineering Journal, 2019, 357, 226-236.	12.7	92
43	(Invited) Recent Developments in Intermediate-Temperature Reversible Fuel Cells. ECS Meeting Abstracts, 2019, , .	0.0	0
44	High-Performance and Durable Reversible Fuel Cells Based on Proton Conductors. ECS Meeting Abstracts, 2019, , .	0.0	0
45	Catalyst-Coated PrBa_{0.8}Ca_{0.2}Co₂O_{5+Î”} Cathode with High Cr-Poisoning Tolerance for Intermediate-Temperature Solid Oxide Fuel Cells. ECS Meeting Abstracts, 2019, MA2019-02, 1798-1798.	0.0	1
46	From Checkerboardâ€Like Sand Barriers to 3D Cu@CNF Composite Current Collectors for Highâ€Performance Batteries. Advanced Science, 2018, 5, 1800031.	11.2	18
47	A binder-free composite anode composed of CuO nanosheets and multi-wall carbon nanotubes for high-performance lithium-ion batteries. Electrochimica Acta, 2018, 267, 150-160.	5.2	62
48	Enhanced Water Management and Fuel Efficiency of a Fully Passive Direct Methanol Fuel Cell With Super-Hydrophilic/ -Hydrophobic Cathode Porous Flow-Field. Journal of Electrochemical Energy Conversion and Storage, 2018, 15, .	2.1	7
49	A Microâ€Cracked Conductive Layer Made of Multiwalled Carbon Nanotubes for Lithiumâ€Ion Batteries. Energy Technology, 2018, 6, 658-669.	3.8	1
50	Rational Design of Nickel Hydroxideâ€Based Nanocrystals on Graphene for Ultrafast Energy Storage. Advanced Energy Materials, 2018, 8, 1702247.	19.5	211
51	â€œOneâ€forâ€Allâ€•Strategy in Fast Energy Storage: Production of Pillared MOF Nanorodâ€Templated Positive/Negative Electrodes for the Application of Highâ€Performance Hybrid Supercapacitor. Small, 2018, 14, e1800285.	10.0	75
52	A Highly Efficient Multi-phase Catalyst Dramatically Enhances the Rate of Oxygen Reduction. Joule, 2018, 2, 938-949.	24.0	221
53	An effective strategy to enhancing tolerance to contaminants poisoning of solid oxide fuel cell cathodes. Nano Energy, 2018, 47, 474-480.	16.0	76
54	An In Situ Formed, Dualâ€Phase Cathode with a Highly Active Catalyst Coating for Protonic Ceramic Fuel Cells. Advanced Functional Materials, 2018, 28, 1704907.	14.9	82

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55	Chromium deposition and poisoning on Ba0.9Co0.7Fe0.2Nb0.1O3â^'Î´ cathode of solid oxide fuel cells. Electrochimica Acta, 2018, 289, 503-515.	5.2	21
56	Fluorine-Doped Carbon Surface Modification of Li-Rich Layered Oxide Composite Cathodes for High Performance Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2018, 6, 16399-16411.	6.7	54
57	A robust fuel cell operated on nearly dry methane at 500 Â°C enabled by synergistic thermal catalysis and electrocatalysis. Nature Energy, 2018, 3, 1042-1050.	39.5	230
58	Improving the Electrocatalytic Activity and Durability of the La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_{3â^'Î´} Cathode by Surface Modification. ACS Applied Materials & Interfaces, 2018, 10, 39785-39793.	8.0	71
59	Effects of CO2 and H2O on Ba0.9Co0.7Fe0.2Nb0.1O3â^'Î´ cathode and modification by a Ce0.9Gd0.1O2â^'Î´ coating. Journal of Electroanalytical Chemistry, 2018, 827, 79-84.	3.8	10
60	A highly active, CO₂-tolerant electrode for the oxygen reduction reaction. Energy and Environmental Science, 2018, 11, 2458-2466.	30.8	202
61	Domain structures and Prco antisite point defects in double-perovskite PrBaCo2O5+Î´ and PrBa0.8Ca0.2Co2O5+Î´. Ultramicroscopy, 2018, 193, 64-70.	1.9	10
62	A tailored double perovskite nanofiber catalyst enables ultrafast oxygen evolution. Nature Communications, 2017, 8, 14586.	12.8	327
63	A high-performance oxygen electrode for Liâ€“O₂ batteries: Mo₂C nanoparticles grown on carbon fibers. Journal of Materials Chemistry A, 2017, 5, 5690-5695.	10.3	46
64	Promising Proton Conductor for Intermediate-Temperature Fuel Cells: Li_{13.9}Sr_{0.1}Zn(GeO₄)₄. Chemistry of Materials, 2017, 29, 1490-1495.	6.7	25
65	Snâ€MoS₂â€C@C Microspheres as a Sodiumâ€Ion Battery Anode Material with High Capacity and Long Cycle Life. Chemistry - A European Journal, 2017, 23, 5051-5058.	3.3	39
66	An open circuit voltage equation enabling separation of cathode and anode polarization resistances of ceria electrolyte based solid oxide fuel cells. Journal of Power Sources, 2017, 357, 173-178.	7.8	10
67	Interfacial effects on electrical conductivity in ultrafine-grained Sm0.2Ce0.8O2â^'Î´ electrolytes fabricated by a two-step sintering process. International Journal of Hydrogen Energy, 2017, 42, 11823-11829.	7.1	10
68	Functionalized Bimetallic Hydroxides Derived from Metalâ€“Organic Frameworks for High-Performance Hybrid Supercapacitor with Exceptional Cycling Stability. ACS Energy Letters, 2017, 2, 1263-1269.	17.4	167
69	Effects of humidity on Ba0.9Co0.7Fe0.2Nb0.1O3â^'Î´ cathode performance and durability of Solid Oxide Fuel Cells. International Journal of Hydrogen Energy, 2017, 42, 6997-7002.	7.1	18
70	V₅S₈â€“graphite hybrid nanosheets as a high rate-capacity and stable anode material for sodium-ion batteries. Energy and Environmental Science, 2017, 10, 107-113.	30.8	274
71	A high-energy, long cycle-life hybrid supercapacitor based on graphene composite electrodes. Energy Storage Materials, 2017, 7, 32-39.	18.0	157
72	A durable polyvinyl butyral-CsH2PO4 composite electrolyte for solid acid fuel cells. Journal of Power Sources, 2017, 359, 1-6.	7.8	9

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73	A robust and active hybrid catalyst for facile oxygen reduction in solid oxide fuel cells. Energy and Environmental Science, 2017, 10, 964-971.	30.8	204
74	(Invited) Robust and Active Mixed-Conducting Electrodes for Intermediate-Temperature Fuel Cells. ECS Transactions, 2017, 80, 3-12.	0.5	2
75	Structural effects of expanded metal mesh used as a flow field for a passive direct methanol fuel cell. Applied Energy, 2017, 208, 184-194.	10.1	24
76	In-situ Transmission Electron Microscopy Study of Oxygen Vacancy Ordering and Dislocation Annihilation in Undoped and Sm-doped CeO2 Ceramics During Redox Processes. Microscopy and Microanalysis, 2017, 23, 1626-1627.	0.4	0
77	High Performance Solid Oxide Electrolysis Cells with Hierarchically Porous Ni-YSZ Electrode. ECS Transactions, 2017, 78, 3217-3228.	0.5	0
78	Toward a New Generation of Intermediate-Temperature Fuel Cells. ECS Transactions, 2017, 78, 1821-1829.	0.5	0
79	A Highly Efficient and Robust Nanofiber Cathode for Solid Oxide Fuel Cells. Advanced Energy Materials, 2017, 7, 1601890.	19.5	109
80	Toward a New Generation of Intermediate-Temperature Fuel Cells. ECS Meeting Abstracts, 2017, , .	0.0	0
81	High Performance Solid Oxide Electrolysis Cells with Hierarchically Porous Ni-YSZ Electrode. ECS Meeting Abstracts, 2017, , .	0.0	0
82	(Invited) Robust and Active Mixed-Conducting Electrodes for Intermediate-Temperature Fuel Cells. ECS Meeting Abstracts, 2017, , .	0.0	0
83	Plasma Glow Discharge as a Tool for Surface Modification of Catalytic Solid Oxides: A Case Study of La0.6Sr0.4Co0.2Fe0.8O3â˜Î´ Perovskite. Energies, 2016, 9, 786.	3.1	3
84	In-situ transmission electron microscopy study of oxygen vacancy ordering and dislocation annihilation in undoped and Sm-doped CeO2 ceramics during redox processes. Journal of Applied Physics, 2016, 120, .	2.5	15
85	Inhibiting Sn coarsening to enhance the reversibility of conversion reaction in lithiated SnO2 anodes by application of super-elastic NiTi films. Acta Materialia, 2016, 109, 248-258.	7.9	54
86	Anode-supported solid oxide fuel cells based on Sm0.2Ce0.8O1.9 electrolyte fabricated by a phase-inversion and drop-coating process. International Journal of Hydrogen Energy, 2016, 41, 10907-10913.	7.1	15
87	Electrochemical fields within 3D reconstructed microstructures of mixed ionic and electronic conducting devices. Journal of Power Sources, 2016, 331, 167-179.	7.8	13
88	Nanocrystals-based Macroporous Materials Synthesized by Freeze-drying Combustion. Electrochimica Acta, 2016, 217, 187-194.	5.2	4
89	A dual-phase bilayer oxygen permeable membrane with hierarchically porous structure fabricated by freeze-drying tape-casting method. Journal of Membrane Science, 2016, 520, 354-363.	8.2	27
90	Composites of Single/Double Perovskites as Cathodes for Solid Oxide Fuel Cells. Energy Technology, 2016, 4, 804-808.	3.8	11

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91	Mechanism analysis of CO2 corrosion on Ba0.9Co0.7Fe0.2Nb0.1O3â^Î´ cathode. International Journal of Hydrogen Energy, 2016, 41, 1997-2001.	7.1	23
92	In situ X-ray diffraction characterization of NbS2 nanosheets as the anode material for sodium ion batteries. Journal of Power Sources, 2016, 325, 410-416.	7.8	99
93	A durable, high-performance hollow-nanofiber cathode for intermediate-temperature fuel cells. Nano Energy, 2016, 26, 90-99.	16.0	93
94	A high-performance, cobalt-free cathode for intermediate-temperature solid oxide fuel cells with excellent CO2 tolerance. Journal of Power Sources, 2016, 319, 178-184.	7.8	30
95	A high-precision approach to reconstruct distribution of relaxation times from electrochemical impedance spectroscopy. Journal of Power Sources, 2016, 308, 1-6.	7.8	81
96	Dramatically enhanced reversibility of Li₂O in SnO₂-based electrodes: the effect of nanostructure on high initial reversible capacity. Energy and Environmental Science, 2016, 9, 595-603.	30.8	300
97	High-performance solid oxide fuel cells based on a thin La0.8Sr0.2Ga0.8Mg0.2O3â^Î´ electrolyte membrane supported by a nickel-based anode of unique architecture. Journal of Power Sources, 2016, 301, 199-203.	7.8	28
98	Nanoscale Surface Modification of Lithiumâ€Rich Layeredâ€Oxide Composite Cathodes for Suppressing Voltage Fade. Angewandte Chemie - International Edition, 2015, 54, 13058-13062.	13.8	331
99	Sulfurâ€Tolerant Hierarchically Porous Ceramic Anodeâ€Supported Solidâ€Oxide Fuel Cells with Selfâ€Precipitated Nanocatalyst. ChemElectroChem, 2015, 2, 672-678.	3.4	23
100	Reconstruction of relaxation time distribution from linear electrochemical impedance spectroscopy. Journal of Power Sources, 2015, 283, 464-477.	7.8	164
101	Co-electrolysis of H₂O and CO₂in a solid oxide electrolysis cell with hierarchically structured porous electrodes. Journal of Materials Chemistry A, 2015, 3, 15913-15919.	10.3	41
102	Surfactants assisted synthesis and electrochemical properties of nano-LiFePO 4 /C cathode materials for low temperature applications. Journal of Power Sources, 2015, 288, 337-344.	7.8	49
103	Stability Investigation for Symmetric Solid Oxide Fuel Cell with La_{0.4}Sr_{0.6}Co_{0.2}Fe_{0.7}Nb_{0.1}O_{3-Î´}Electrode. Journal of the Electrochemical Society, 2015, 162, F718-F721.	2.9	44
104	Low temperature co-sintering of Sr2Fe1.5Mo0.5O6â^Îâ€“Gd0.1Ce0.9O2â^Î´ anode-supported solid oxide fuel cells with Li2Oâ€“Gd0.1Ce0.9O2â^Î´ electrolyte. Journal of Power Sources, 2015, 297, 271-275.	7.8	12
105	New formulas for the tortuosity factor of electrochemically conducting channels. Electrochemistry Communications, 2015, 60, 52-55.	4.7	5
106	Cu6Sn5@SnO2â€“C nanocomposite with stable core/shell structure as a high reversible anode for Li-ion batteries. Nano Energy, 2015, 18, 232-244.	16.0	56
107	La_{0.7}Sr_{0.3}Fe_{0.7}Ga_{0.3}O_{3â^Î´} as electrode material for a symmetrical solid oxide fuel cell. RSC Advances, 2015, 5, 2702-2705.	3.6	44
108	In-situ quantification of solid oxide fuel cell electrode microstructure by electrochemical impedance spectroscopy. Journal of Power Sources, 2015, 277, 277-285.	7.8	61

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109	Direct-methane solid oxide fuel cells with hierarchically porous Ni-based anode deposited with nanocatalyst layer. Nano Energy, 2014, 10, 1-9.	16.0	100
110	Hierarchically Oriented Macroporous Anode-Supported Solid Oxide Fuel Cell with Thin Ceria Electrolyte Film. ACS Applied Materials & Interfaces, 2014, 6, 5130-5136.	8.0	87
111	Synthesis of SnO‹sub›2‹/sub›/MoS‹sub›2‹/sub›composites with different component ratios and their applications as lithium ion battery anodes. Journal of Materials Chemistry A, 2014, 2, 17857-17866.	10.3	90
112	Low temperature solid oxide fuel cells with hierarchically porous cathode nano-network. Nano Energy, 2014, 8, 25-33.	16.0	144
113	High performance low temperature solid oxide fuel cells with novel electrode architecture. RSC Advances, 2012, 2, 12118.	3.6	37
114	Performance enhancement of Ni-YSZ electrode by impregnation of Mo0.1Ce0.9O2+Î´. Journal of Power Sources, 2012, 204, 40-45.	7.8	60
115	Novel functionally graded acicular electrode for solid oxide cells fabricated by the freeze-tape-casting process. Journal of Power Sources, 2012, 213, 93-99.	7.8	85
116	Development and Fabrication of a New Concept Planarâ€tubular Solid Oxide Fuel Cell (PTâ€SOFC). Fuel Cells, 2011, 11, 451-458.	2.4	3
117	Sm0.2(Ce1â^'xTix)0.8O1.9 modified Niâ€“yttria-stabilized zirconia anode for direct methane fuel cell. Journal of Power Sources, 2011, 196, 4987-4991.	7.8	37
118	An Active and Robust Air Electrode for Reversible Protonic Ceramic Electrochemical Cells. ACS Energy Letters, 0, , 1511-1520.	17.4	109