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	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
2	A tailored double perovskite nanofiber catalyst enables ultrafast oxygen evolution. Nature Communications, 2017, 8, 14586.	12.8	327
3	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
4	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
5	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
6	A Highly Efficient Multi-phase Catalyst Dramatically Enhances the Rate of Oxygen Reduction. Joule, 2018, 2, 938-949.	24.0	221
7	Rational Design of Nickel Hydroxideâ€Based Nanocrystals on Graphene for Ultrafast Energy Storage. Advanced Energy Materials, 2018, 8, 1702247.	19.5	211
8	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
9	A highly active, CO₂-tolerant electrode for the oxygen reduction reaction. Energy and Environmental Science, 2018, 11, 2458-2466.	30.8	202
10	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
11	Reconstruction of relaxation time distribution from linear electrochemical impedance spectroscopy. Journal of Power Sources, 2015, 283, 464-477.	7.8	164
12	A high-energy, long cycle-life hybrid supercapacitor based on graphene composite electrodes. Energy Storage Materials, 2017, 7, 32-39.	18.0	157
13	Low temperature solid oxide fuel cells with hierarchically porous cathode nano-network. Nano Energy, 2014, 8, 25-33.	16.0	144
14	A Highly Efficient and Robust Nanofiber Cathode for Solid Oxide Fuel Cells. Advanced Energy Materials, 2017, 7, 1601890.	19.5	109
15	An Active and Robust Air Electrode for Reversible Protonic Ceramic Electrochemical Cells. ACS Energy Letters, 0, , 1511-1520.	17.4	109
16	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
17	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
18	A durable, high-performance hollow-nanofiber cathode for intermediate-temperature fuel cells. Nano Energy, 2016, 26, 90-99.	16.0	93

#	Article	IF	Citations
19	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
20	Synthesis of SnO₂/MoS₂composites with different component ratios and their applications as lithium ion battery anodes. Journal of Materials Chemistry A, 2014, 2, 17857-17866.	10.3	90
21	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
22	A New Family of Protonâ€Conducting Electrolytes for Reversible Solid Oxide Cells: BaHf<i>_x</i>Ce_{0.8â^'}<i>_x</i>Y_{0.1}Yb_{0.1}O_{3â^'} <sub>Î´< Advanced Functional Materials, 2020, 30, 2002265.	14.9	86
23	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
24	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
25	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
26	An effective strategy to enhancing tolerance to contaminants poisoning of solid oxide fuel cell cathodes. Nano Energy, 2018, 47, 474-480.	16.0	76
27	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
28	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
29	An Efficient Bifunctional Air Electrode for Reversible Protonic Ceramic Electrochemical Cells. Advanced Functional Materials, 2021, 31, 2105386.	14.9	66
30	Surface restructuring of a perovskite-type air electrode for reversible protonic ceramic electrochemical cells. Nature Communications, 2022, 13, 2207.	12.8	65
31	An efficient and durable anode for ammonia protonic ceramic fuel cells. Energy and Environmental Science, 2022, 15, 287-295.	30.8	64
32	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
33	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
34	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
35	Performance enhancement of Ni-YSZ electrode by impregnation of Mo0.1Ce0.9O2+Î´. Journal of Power Sources, 2012, 204, 40-45.	7.8	60
36	Enhanced Cr-tolerance of an SOFC cathode by an efficient electro-catalyst coating. Nano Energy, 2020, 72, 104704.	16.0	58

#	Article	IF	Citations
37	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
38	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
39	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
40	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
41	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
42	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
43	An Efficient Steamâ€Induced Heterostructured Air Electrode for Protonic Ceramic Electrochemical Cells. Advanced Functional Materials, 2022, 32, .	14.9	47
44	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
45	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
46	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
47	La_{0.7}Sr_{0.3}Fe_{0.7}Ga_{0.3}O_{3âˆ’Î´} as electrode material for a symmetrical solid oxide fuel cell. RSC Advances, 2015, 5, 2702-2705.	3.6	44
48	Effective Promotion of Oxygen Reduction Reaction by in Situ Formation of Nanostructured Catalyst. ACS Catalysis, 2019, 9, 7137-7142.	11.2	42
49	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
50	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
51	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
52	Sm0.2(Ce1âˆ’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
53	High performance low temperature solid oxide fuel cells with novel electrode architecture. RSC Advances, 2012, 2, 12118.	3.6	37
54	Efficient Water Splitting Actualized through an Electrochemistryâ€Induced Heteroâ€Structured Antiperovskite/(Oxy)Hydroxide Hybrid. Small, 2020, 16, e2006800.	10.0	36

#	Article	IF	Citations
55	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
56	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
57	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
58	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
59	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
60	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
61	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
62	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
63	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
64	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
65	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
66	Sulfurâ€Tolerant Hierarchically Porous Ceramic Anodeâ€Supported Solidâ€Oxide Fuel Cells with Selfâ€Precipitated Nanocatalyst. ChemElectroChem, 2015, 2, 672-678.	3.4	23
67	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
68	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
69	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
70	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
71	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
72	A Promising Composite Anode for Solid Oxide Fuel Cells: Sr₂FeMo_{0.65}Ni_{0.35}O_{6-Î´}-Gd_{0.1}Ce_{0.9}O_{2-Î´}. Journal of the Electrochemical Society, 2019, 166, F109-F113.	2.9	19

#	Article	IF	Citations
73	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
74	Effects of humidity on Ba0.9Co0.7Fe0.2Nb0.1O3âˆ’Î´ cathode performance and durability of Solid Oxide Fuel Cells. International Journal of Hydrogen Energy, 2017, 42, 6997-7002.	7.1	18
75	From Checkerboardâ€Like Sand Barriers to 3D Cu@CNF Composite Current Collectors for Highâ€Performance Batteries. Advanced Science, 2018, 5, 1800031.	11.2	18
76	High-throughput 3D reconstruction of stochastic heterogeneous microstructures in energy storage materials. Npj Computational Materials, 2019, 5, .	8.7	18
77	<i>In-situ</i> 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
78	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
79	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
80	Effect of humidity on La0.4Sr0.6Co0.2Fe0.7Nb0.1O3âˆ’Î´ cathode of solid oxide fuel cells. International Journal of Hydrogen Energy, 2019, 44, 3055-3062.	7.1	14
81	Electrochemical fields within 3D reconstructed microstructures of mixed ionic and electronic conducting devices. Journal of Power Sources, 2016, 331, 167-179.	7.8	13
82	Low temperature co-sintering of Sr2Fe1.5Mo0.5O6âˆ’Î´â€“Gd0.1Ce0.9O2âˆ’Î´ anode-supported solid oxide fuel cells with Li2Oâ€“Gd0.1Ce0.9O2âˆ’Î´ electrolyte. Journal of Power Sources, 2015, 297, 271-275.	7.8	12
83	Enhanced Electrochemical Performance of a Ba_{0.5}Sr_{0.5}Co_{0.7}Fe_{0.2}Ni_{0.1}O_{3âˆ’Î´}â€“BaZr<sub>0.1</su Composite Oxygen Electrode for Protonic Ceramic Electrochemical Cells. Energy & Fuels, 2021, 35, 14101-14109.	5.1	12
84	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
85	Composites of Single/Double Perovskites as Cathodes for Solid Oxide Fuel Cells. Energy Technology, 2016, 4, 804-808.	3.8	11
86	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
87	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
88	Interfacial effects on electrical conductivity in ultrafine-grained Sm0.2Ce0.8O2âˆ’Î´ electrolytes fabricated by a two-step sintering process. International Journal of Hydrogen Energy, 2017, 42, 11823-11829.	7.1	10
89	Effects of CO2 and H2O on Ba0.9Co0.7Fe0.2Nb0.1O3âˆ’Î´ cathode and modification by a Ce0.9Gd0.1O2âˆ’Î´ coating. Journal of Electroanalytical Chemistry, 2018, 827, 79-84.	3.8	10
90	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

#	Article	IF	Citations
91	A durable polyvinyl butyral-CsH2PO4 composite electrolyte for solid acid fuel cells. Journal of Power Sources, 2017, 359, 1-6.	7.8	9
92	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
93	One Step Synthesis of Sr2Fe1.3Co0.2Mo0.5O6âˆ'Î´ -Gd0.1Ce0.9O2âˆ'Î´ for Symmetrical Solid Oxide Fuel Cells. Journal of the Electrochemical Society, 2020, 167, 084503.	2.9	8
94	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
95	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
96	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
97	Highly selective reduction of CO2 through a protonic ceramic electrochemical cell. Journal of Power Sources, 2022, 524, 231101.	7.8	6
98	Mangrove Root-Inspired Carbon Nanotube Film for Micro-Direct Methanol Fuel Cells. ACS Applied Materials & Interfaces, 2022, 14, 19897-19906.	8.0	6
99	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
100	New formulas for the tortuosity factor of electrochemically conducting channels. Electrochemistry Communications, 2015, 60, 52-55.	4.7	5
101	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
102	Nanocrystals-based Macroporous Materials Synthesized by Freeze-drying Combustion. Electrochimica Acta, 2016, 217, 187-194.	5.2	4
103	Development and Fabrication of a New Concept Planarâ€tubular Solid Oxide Fuel Cell (PTâ€SOFC). Fuel Cells, 2011, 11, 451-458.	2.4	3
104	Plasma Glow Discharge as a Tool for Surface Modification of Catalytic Solid Oxides: A Case Study of La0.6Sr0.4Co0.2Fe0.8O3âˆ'Î´ Perovskite. Energies, 2016, 9, 786.	3.1	3
105	(Invited) Robust and Active Mixed-Conducting Electrodes for Intermediate-Temperature Fuel Cells. ECS Transactions, 2017, 80, 3-12.	0.5	2
106	Triple-Phase Boundaries (TPBs) in Fuel Cells and Electrolyzers. , 2022, , 299-328.		2
107	A Microâ€Cracked Conductive Layer Made of Multiwalled Carbon Nanotubes for Lithiumâ€Ion Batteries. Energy Technology, 2018, 6, 658-669.	3.8	1
108	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

#	Article	IF	Citations
109	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
110	High Performance Solid Oxide Electrolysis Cells with Hierarchically Porous Ni-YSZ Electrode. ECS Transactions, 2017, 78, 3217-3228.	0.5	0
111	Toward a New Generation of Intermediate-Temperature Fuel Cells. ECS Transactions, 2017, 78, 1821-1829.	0.5	0
112	Domain Structures and PrCo Antisite Point Defects in Double-perovskite PrBaCo2O5+Î´. Microscopy and Microanalysis, 2019, 25, 2016-2017.	0.4	0
113	Toward a New Generation of Intermediate-Temperature Fuel Cells. ECS Meeting Abstracts, 2017, , .	0.0	0
114	High Performance Solid Oxide Electrolysis Cells with Hierarchically Porous Ni-YSZ Electrode. ECS Meeting Abstracts, 2017, , .	0.0	0
115	(Invited) Robust and Active Mixed-Conducting Electrodes for Intermediate-Temperature Fuel Cells. ECS Meeting Abstracts, 2017, , .	0.0	0
116	(Invited) Recent Developments in Intermediate-Temperature Reversible Fuel Cells. ECS Meeting Abstracts, 2019, , .	0.0	0
117	High-Performance and Durable Reversible Fuel Cells Based on Proton Conductors. ECS Meeting Abstracts, 2019, , .	0.0	0
118	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