Meng Ni

List of Publications by Year
in descending order

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371 papers	23,269 citations	14655 66 h-index	11607 135 g-index
377 all docs	377 docs citations	377 times ranked	18963 citing authors

#	Article	IF	Citations
1	A review and recent developments in photocatalytic water-splitting using TiO2 for hydrogen production. Renewable and Sustainable Energy Reviews, 2007, 11, 401-425.	16.4	3,632
2	A review on reforming bio-ethanol for hydrogen production. International Journal of Hydrogen Energy, 2007, 32, 3238-3247.	7.1	1,061
3	An overview of hydrogen production from biomass. Fuel Processing Technology, 2006, 87, 461-472.	7.2	1,032
4	Technological development of hydrogen production by solid oxide electrolyzer cell (SOEC). International Journal of Hydrogen Energy, 2008, 33, 2337-2354.	7.1	576
5	Recent Advances and Prospective in Ruthenium-Based Materials for Electrochemical Water Splitting. ACS Catalysis, 2019, 9, 9973-10011.	11.2	491
6	Flexible Znâ€“ and Liâ€“air batteries: recent advances, challenges, and future perspectives. Energy and Environmental Science, 2017, 10, 2056-2080.	30.8	477
7	A review on hydrogen production using aluminum and aluminum alloys. Renewable and Sustainable Energy Reviews, 2009, 13, 845-853.	16.4	443
8	Energy and exergy analysis of hydrogen production by a proton exchange membrane (PEM) electrolyzer plant. Energy Conversion and Management, 2008, 49, 2748-2756.	9.2	424
9	Hydrogen Production over Titaniaâ€Based Photocatalysts. ChemSusChem, 2010, 3, 681-694.	6.8	404
10	Thermal-expansion offset for high-performance fuel cell cathodes. Nature, 2021, 591, 246-251.	27.8	328
11	Parametric study of solid oxide fuel cell performance. Energy Conversion and Management, 2007, 48, 1525-1535.	9.2	300
12	A review of biomass-derived fuel processors for fuel cell systems. Renewable and Sustainable Energy Reviews, 2009, 13, 1301-1313.	16.4	252
13	Potential of renewable hydrogen production for energy supply in Hong Kong. International Journal of Hydrogen Energy, 2006, 31, 1401-1412.	7.1	232
14	Selfâ€Catalyzed Growth of Co, Nâ€Codoped CNTs on Carbonâ€Encased CoS_x Surface: A Nobleâ€Metalâ€Free Bifunctional Oxygen Electrocatalyst for Flexible Solid Znâ€“Air Batteries. Advanced Functional Materials, 2019, 29, 1904481.	14.9	217
15	Bigger is Surprisingly Better: Agglomerates of Larger RuP Nanoparticles Outperform Benchmark Pt Nanocatalysts for the Hydrogen Evolution Reaction. Advanced Materials, 2018, 30, e1800047.	21.0	212
16	Parametric study of solid oxide steam electrolyzer for hydrogen production. International Journal of Hydrogen Energy, 2007, 32, 2305-2313.	7.1	174
17	In-situ growth of Co3O4 nanowire-assembled clusters on nickel foam for aqueous rechargeable Zn-Co3O4 and Zn-air batteries. Applied Catalysis B: Environmental, 2019, 241, 104-112.	20.2	167
18	Energy and exergy analysis of hydrogen production by solid oxide steam electrolyzer plant. International Journal of Hydrogen Energy, 2007, 32, 4648-4660.	7.1	164

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19	2D thermal modeling of a solid oxide electrolyzer cell (SOEC) for syngas production by H2O/CO2 co-electrolysis. International Journal of Hydrogen Energy, 2012, 37, 6389-6399.	7.1	154
20	A modeling study on concentration overpotentials of a reversible solid oxide fuel cell. Journal of Power Sources, 2006, 163, 460-466.	7.8	149
21	An electrochemical model for syngas production by co-electrolysis of H2O and CO2. Journal of Power Sources, 2012, 202, 209-216.	7.8	148
22	Application of cascading thermoelectric generator and cooler for waste heat recovery from solid oxide fuel cells. Energy Conversion and Management, 2017, 148, 1382-1390.	9.2	148
23	Rechargeable alkaline zinc batteries: Progress and challenges. Energy Storage Materials, 2020, 31, 44-57.	18.0	139
24	Co₃O₄ Nanosheets as Active Material for Hybrid Zn Batteries. Small, 2018, 14, e1800225.	10.0	131
25	Recent Advances in Perovskite Oxides as Electrode Materials for Nonaqueous Lithiumâ€“Oxygen Batteries. Advanced Energy Materials, 2017, 7, 1602674.	19.5	129
26	Rechargeable Zn-air batteries: Recent trends and future perspectives. Renewable and Sustainable Energy Reviews, 2022, 154, 111771.	16.4	126
27	Micro-scale modelling of solid oxide fuel cells with micro-structurally graded electrodes. Journal of Power Sources, 2007, 168, 369-378.	7.8	125
28	Bifunctionality from Synergy: CoP Nanoparticles Embedded in Amorphous CoOx Nanoplates with Heterostructures for Highly Efficient Water Electrolysis. Advanced Science, 2018, 5, 1800514.	11.2	124
29	Mini-review of perovskite oxides as oxygen electrocatalysts for rechargeable zincâ€“air batteries. Chemical Engineering Journal, 2020, 397, 125516.	12.7	121
30	An analytical study of the porosity effect on dye-sensitized solar cell performance. Solar Energy Materials and Solar Cells, 2006, 90, 1331-1344.	6.2	120
31	Progress Report on Proton Conducting Solid Oxide Electrolysis Cells. Advanced Functional Materials, 2019, 29, 1903805.	14.9	120
32	Advances in Porous Perovskites: Synthesis and Electrocatalytic Performance in Fuel Cells and Metalâ€“Air Batteries. Energy and Environmental Materials, 2020, 3, 121-145.	12.8	119
33	A comprehensive review of solid oxide fuel cells operating on various promising alternative fuels. Energy Conversion and Management, 2022, 253, 115175.	9.2	117
34	Multiâ€Functional Hydrogels for Flexible Zincâ€Based Batteries Working under Extreme Conditions. Advanced Energy Materials, 2021, 11, 2101749.	19.5	116
35	Modeling of SOFC running on partially pre-reformed gas mixture. International Journal of Hydrogen Energy, 2012, 37, 1731-1745.	7.1	111
36	Modeling and parametric simulations of solid oxide fuel cells with methane carbon dioxide reforming. Energy Conversion and Management, 2013, 70, 116-129.	9.2	109

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37	All-solid-state flexible zinc-air battery with polyacrylamide alkaline gel electrolyte. Journal of Power Sources, 2020, 450, 227653.	7.8	108
38	Ammonia-fed solid oxide fuel cells for power generation-A review. International Journal of Energy Research, 2009, 33, 943-959.	4.5	101
39	The application of orthogonal test method in the parameters optimization of PEMFC under steady working condition. International Journal of Hydrogen Energy, 2016, 41, 11380-11390.	7.1	99
40	Experimental study of variable operating parameters effects on overall PEMFC performance and spatial performance distribution. Energy, 2016, 115, 550-560.	8.8	95
41	Mechanical failure and mitigation strategies for the membrane in a proton exchange membrane fuel cell. Renewable and Sustainable Energy Reviews, 2019, 113, 109289.	16.4	93
42	Mathematical modeling of the coupled transport and electrochemical reactions in solid oxide steam electrolyzer for hydrogen production. Electrochimica Acta, 2007, 52, 6707-6718.	5.2	92
43	Structural and oxygen-transport studies of double perovskites PrBa_{1â^'x}Co₂O_{5+Î´}(x = 0.00, 0.05, and 0.10) toward their application as superior oxygen reduction electrodes. Journal of Materials Chemistry A, 2014, 2, 20520-20529.	10.3	92
44	Computational fluid dynamics modeling of a solid oxide electrolyzer cell for hydrogen production. International Journal of Hydrogen Energy, 2009, 34, 7795-7806.	7.1	90
45	Rapid cold start of proton exchange membrane fuel cells by the printed circuit board technology. International Journal of Hydrogen Energy, 2014, 39, 18369-18378.	7.1	87
46	A high-performance Zn battery based on self-assembled nanostructured NiCo2O4 electrode. Journal of Power Sources, 2019, 421, 6-13.	7.8	87
47	Modeling of a solid oxide electrolysis cell for carbon dioxide electrolysis. Chemical Engineering Journal, 2010, 164, 246-254.	12.7	86
48	Two-stage thermoelectric generators for waste heat recovery from solid oxide fuel cells. Energy, 2017, 132, 280-288.	8.8	86
49	An Electrochemical Model of a Solid Oxide Steam Electrolyzer for Hydrogen Production. Chemical Engineering and Technology, 2006, 29, 636-642.	1.5	85
50	Thermodynamic analysis of ammonia fed solid oxide fuel cells: Comparison between proton-conducting electrolyte and oxygen ion-conducting electrolyte. Journal of Power Sources, 2008, 183, 682-686.	7.8	84
51	Modeling of all porous solid oxide fuel cells. Applied Energy, 2018, 219, 105-113.	10.1	84
52	Rich atomic interfaces between sub-1 nm RuOx clusters and porous Co3O4 nanosheets boost oxygen electrocatalysis bifunctionality for advanced Zn-air batteries. Energy Storage Materials, 2020, 32, 20-29.	18.0	84
53	Geometric Properties of Nanostructured Solid Oxide Fuel Cell Electrodes. Journal of the Electrochemical Society, 2013, 160, F278-F289.	2.9	83
54	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

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55	Theoretical modeling of TiO2/TCO interfacial effect on dye-sensitized solar cell performance. Solar Energy Materials and Solar Cells, 2006, 90, 2000-2009.	6.2	80
56	Thermo-electrochemical modeling of ammonia-fueled solid oxide fuel cells consideringÂammonia thermal decomposition in the anode. International Journal of Hydrogen Energy, 2011, 36, 3153-3166.	7.1	77
57	Simulation of sintering kinetics and microstructure evolution of composite solid oxide fuel cells electrodes. International Journal of Hydrogen Energy, 2012, 37, 3392-3402.	7.1	77
58	Modeling of direct carbon solid oxide fuel cell for CO and electricity cogeneration. Applied Energy, 2016, 178, 353-362.	10.1	77
59	Spherical Ruthenium Disulfide-Sulfur-Doped Graphene Composite as an Efficient Hydrogen Evolution Electrocatalyst. ACS Applied Materials & Interfaces, 2018, 10, 34098-34107.	8.0	75
60	Mathematical Modelling of Proton-Conducting Solid Oxide Fuel Cells and Comparison with Oxygen-Ion-Conducting Counterpart. Fuel Cells, 2007, 7, 269-278.	2.4	72
61	Mathematical modeling of ammonia-fed solid oxide fuel cells with different electrolytes. International Journal of Hydrogen Energy, 2008, 33, 5765-5772.	7.1	72
62	Electrochemical modeling and parametric study of methane fed solid oxide fuel cells. Energy Conversion and Management, 2009, 50, 268-278.	9.2	72
63	Monoclinic SrIrO₃: An Easily Synthesized Conductive Perovskite Oxide with Outstanding Performance for Overall Water Splitting in Alkaline Solution. Chemistry of Materials, 2020, 32, 4509-4517.	6.7	72
64	A-site deficient/excessive effects of LaMnO3 perovskite as bifunctional oxygen catalyst for zinc-air batteries. Electrochimica Acta, 2020, 333, 135566.	5.2	71
65	Performance assessment of a hybrid system integrating a molten carbonate fuel cell and a thermoelectric generator. Energy, 2016, 112, 520-527.	8.8	70
66	An efficient electrocatalyst as cathode material for solid oxide fuel cells: BaFe0Â·95Sn0Â·05O3â˜Î´. Journal of Power Sources, 2016, 326, 459-465.	7.8	70
67	BaCo_{0.7}Fe_{0.22}Y_{0.08}O_{3â˜Î´} as an Active Oxygen Reduction Electrocatalyst for Low-Temperature Solid Oxide Fuel Cells below 600 Â°C. ACS Energy Letters, 2017, 2, 301-305.	17.4	70
68	Integration of Znâ€“Ag and Znâ€“Air Batteries: A Hybrid Battery with the Advantages of Both. ACS Applied Materials & Interfaces, 2018, 10, 36873-36881.	8.0	70
69	Consistency analysis of polymer electrolyte membrane fuel cell stack during cold start. Applied Energy, 2019, 241, 420-432.	10.1	70
70	Advances in modeling and simulation of Liâ€“air batteries. Progress in Energy and Combustion Science, 2017, 62, 155-189.	31.2	68
71	Modeling of methane fed solid oxide fuel cells: Comparison between proton conducting electrolyte and oxygen ion conducting electrolyte. Journal of Power Sources, 2008, 183, 133-142.	7.8	67
72	Internal behavior of segmented fuel cell during cold start. International Journal of Hydrogen Energy, 2014, 39, 16025-16035.	7.1	66

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73	Modelling of SOEC-FT reactor: Pressure effects on methanation process. Applied Energy, 2017, 185, 814-824.	10.1	66
74	Modeling of CH4-assisted SOEC for H2O/CO2 co-electrolysis. International Journal of Hydrogen Energy, 2016, 41, 21839-21849.	7.1	65
75	Direct growth of ordered Nâ€doped carbon nanotube arrays on carbon fiber cloth as a freeâ€standing and binderâ€free air electrode for flexible quasiâ€solidâ€state rechargeable Znâ€Air batteries. , 2020, 2, 461-471.		64
76	Optimization of gas diffusion layer in high temperature PEMFC with the focuses on thickness and porosity. Applied Energy, 2021, 300, 117357.	10.1	63
77	Electrochemical modeling of hydrogen production by proton-conducting solid oxide steam electrolyzer. International Journal of Hydrogen Energy, 2008, 33, 4040-4047.	7.1	62
78	Thermodynamic analysis of combined Solid Oxide Electrolyzer andÂFischerâ€“Tropsch processes. Energy, 2015, 81, 682-690.	8.8	62
79	Low temperature durability and consistency analysis of proton exchange membrane fuel cell stack based on comprehensive characterizations. Applied Energy, 2020, 264, 114626.	10.1	62
80	Towards online optimisation of solid oxide fuel cell performance: Combining deep learning with multi-physics simulation. Energy and AI, 2020, 1, 100003.	10.6	61
81	Research progress of MXene-based catalysts for electrochemical water-splitting and metal-air batteries. Energy Storage Materials, 2021, 43, 509-530.	18.0	60
82	Production of sustainable methane from renewable energy and captured carbon dioxide with the use of Solid Oxide Electrolyzer: AÂthermodynamic assessment. Energy, 2015, 82, 714-721.	8.8	58
83	Simultaneous Enhancement of the Thermoelectric and Mechanical Performance in One-Step Sintered n-Type Bi₂Te₃-Based Alloys via a Facile MgB₂ Doping Strategy. ACS Applied Materials & Interfaces, 2019, 11, 45746-45754.	8.0	58
84	Continuum scale modelling and complementary experimentation of solid oxide cells. Progress in Energy and Combustion Science, 2021, 85, 100902.	31.2	58
85	Theoretical modelling of the electrode thickness effect on maximum power point of dyeâ€sensitized solar cell. Canadian Journal of Chemical Engineering, 2008, 86, 35-42.	1.7	57
86	Facile Synthesis of Nitrogen and Sulfur Codoped Carbon from Ionic Liquid as Metal-Free Catalyst for Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2015, 7, 7214-7221.	8.0	57
87	The mass transfer characteristics and energy improvement with various partially blocked flow channels in a PEM fuel cell. Energy, 2020, 206, 117977.	8.8	56
88	In-situ observation of the gas evolution process on the air electrode of Zn-air batteries during charging. Chemical Engineering Journal, 2022, 427, 130862.	12.7	55
89	Theoretical analysis of reversible solid oxide fuel cell based on proton-conducting electrolyte. Journal of Power Sources, 2008, 177, 369-375.	7.8	54
90	2D thermal-fluid modeling and parametric analysis of a planar solid oxide fuel cell. Energy Conversion and Management, 2010, 51, 714-721.	9.2	54

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91	Challenges and opportunities in modelling of proton exchange membrane fuel cells (PEMFC). International Journal of Energy Research, 2017, 41, 1793-1797.	4.5	54
92	Optimized microporous layer for improving polymer exchange membrane fuel cell performance using orthogonal test design. Applied Energy, 2019, 254, 113714.	10.1	54
93	Achieving high energy density and efficiency through integration: progress in hybrid zinc batteries. Journal of Materials Chemistry A, 2019, 7, 15564-15574.	10.3	54
94	Chaotic flow-based fuel cell built on counter-flow microfluidic network: Predicting the over-limiting current behavior. Journal of Power Sources, 2011, 196, 9391-9397.	7.8	53
95	Structure optimization of anode parallel flow field for local starvation of proton exchange membrane fuel cell. Journal of Power Sources, 2018, 403, 1-10.	7.8	52
96	Nitrogen-doped graphene derived from ionic liquid as metal-free catalyst for oxygen reduction reaction and its mechanisms. Applied Energy, 2018, 225, 513-521.	10.1	52
97	Toward a new generation of low cost, efficient, and durable metalâ€“air flow batteries. Journal of Materials Chemistry A, 2019, 7, 26744-26768.	10.3	51
98	2D heat and mass transfer modeling of methane steam reforming for hydrogen production in a compact reformer. Energy Conversion and Management, 2013, 65, 155-163.	9.2	50
99	Economic analysis of a solid oxide fuel cell cogeneration/trigeneration system for hotels in Hong Kong. Energy and Buildings, 2014, 75, 160-169.	6.7	50
100	Electrochemical Oxidation of Carbon at High Temperature: Principles and Applications. Energy & Fuels, 2018, 32, 4107-4117.	5.1	50
101	Mathematical modeling of a proton-conducting solid oxide fuel cell with current leakage. Journal of Power Sources, 2018, 400, 333-340.	7.8	50
102	Bifunctional electrocatalytic activity of La0.8Sr0.2MnO3-based perovskite with the A-site deficiency for oxygen reduction and evolution reactions in alkaline media. Applied Energy, 2019, 251, 113406.	10.1	50
103	Thermo-economic modeling and analysis of an NG-fueled SOFC-WGS-TSA-PEMFC hybrid energy conversion system for stationary electricity power generation. Energy, 2020, 192, 116613.	8.8	50
104	Physical principles for the calculation of equilibrium potential for co-electrolysis of steam and carbon dioxide in a Solid Oxide Electrolyzer Cell (SOEC). Electrochimica Acta, 2014, 147, 490-497.	5.2	49
105	A micro tri-generation system based on direct flame fuel cells for residential applications. International Journal of Hydrogen Energy, 2014, 39, 5996-6005.	7.1	49
106	Bridging the Charge Accumulation and High Reaction Order for Highâ€Rate Oxygen Evolution and Long Stable Znâ€Air Batteries. Advanced Functional Materials, 2022, 32, .	14.9	49
107	Modeling of direct carbon solid oxide fuel cells withÂH2O and CO2 as gasification agents. International Journal of Hydrogen Energy, 2017, 42, 15641-15651.	7.1	48
108	Performance analysis of a novel SOFC-HCCI engine hybrid system coupled with metal hydride reactor for H2 addition by waste heat recovery. Energy Conversion and Management, 2019, 191, 119-131.	9.2	48

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109	Fuel cells that operate at 300Â° to 500Â°C. Science, 2020, 369, 138-139.	12.6	48
110	Electrochemical modeling of ammonia-fed solid oxide fuel cells based on proton conducting electrolyte. Journal of Power Sources, 2008, 183, 687-692.	7.8	47
111	A novel layered perovskite electrode for symmetrical solid oxide fuel cells: PrBa(Fe0.8Sc0.2)2O5+Î´. Journal of Power Sources, 2017, 363, 16-19.	7.8	46
112	A high performance direct carbon solid oxide fuel cell fueled by Ca-loaded activated carbon. International Journal of Hydrogen Energy, 2017, 42, 21167-21176.	7.1	46
113	Investigation of the electrochemical active thickness of solid oxide fuel cell anode. International Journal of Hydrogen Energy, 2014, 39, 12904-12912.	7.1	45
114	Activation and failure mechanism of La0.6Sr0.4Co0.2Fe0.8O3â¯Î´ air electrode in solid oxide electrolyzer cells under high-current electrolysis. International Journal of Hydrogen Energy, 2018, 43, 5437-5450.	7.1	45
115	Syngas/power cogeneration from proton conducting solid oxide fuel cells assisted by dry methane reforming: A thermal-electrochemical modelling study. Energy Conversion and Management, 2018, 167, 37-44.	9.2	44
116	Engineering the interfaces in water-splitting photoelectrodes â€“ an overview of the technique development. Journal of Materials Chemistry A, 2020, 8, 6984-7002.	10.3	44
117	Tailoring charge and mass transport in cation/anion-codoped Ni3N / N-doped CNT integrated electrode toward rapid oxygen evolution for fast-charging zinc-air batteries. Energy Storage Materials, 2021, 39, 11-20.	18.0	44
118	Scientometric review of proton-conducting solid oxide fuel cells. International Journal of Hydrogen Energy, 2021, 46, 37406-37428.	7.1	44
119	Insights into the Thermopower of Thermally Regenerative Electrochemical Cycle for Low Grade Heat Harvesting. ACS Energy Letters, 2021, 6, 329-336.	17.4	43
120	Investigation on the electrode design of hybrid Zn-Co3O4/air batteries for performance improvements. Electrochimica Acta, 2018, 283, 1028-1036.	5.2	42
121	Electrochemical performance and effect of moisture on Ba0.5Sr0.5Sc0.175Nb0.025Co0.8O3-Î´ oxide as a promising electrode for proton-conducting solid oxide fuel cells. Applied Energy, 2019, 238, 344-350.	10.1	42
122	An improved electrochemical model for the NH3 fed proton conducting solid oxide fuel cells at intermediate temperatures. Journal of Power Sources, 2008, 185, 233-240.	7.8	41
123	Air-breathing membraneless laminar flow-based fuel cells: Do they breathe enough oxygen?. Applied Energy, 2013, 104, 400-407.	10.1	41
124	Dynamic modeling and operation strategy of an NG-fueled SOFC-WGS-TSA-PEMFC hybrid energy conversion system for fuel cell vehicle by using MATLAB/SIMULINK. Energy, 2019, 175, 567-579.	8.8	41
125	Materials Engineering in Perovskite for Optimized Oxygen Evolution Electrocatalysis in Alkaline Condition. Small, 2021, 17, e2006638.	10.0	41
126	Elementary reaction modeling and experimental characterization of solid oxide fuel-assisted steam electrolysis cells. International Journal of Hydrogen Energy, 2014, 39, 10359-10373.	7.1	39

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127	Numerical investigation on impacts on fuel velocity distribution nonuniformity among solid oxide fuel cell unit channels. International Journal of Hydrogen Energy, 2015, 40, 3035-3047.	7.1	39
128	Modeling of a novel SOFC-PEMFC hybrid system coupled with thermal swing adsorption for H2 purification: Parametric and exergy analyses. Energy Conversion and Management, 2018, 174, 802-813.	9.2	39
129	Performance evaluation of a novel photovoltaic-electrochemic hybrid system. Energy Conversion and Management, 2019, 195, 1227-1237.	9.2	39
130	Thermal modelling of ethanol-fuelled Solid Oxide Fuel Cells. Applied Energy, 2019, 237, 476-486.	10.1	39
131	Mathematical modeling and numerical analysis of alkaline zinc-iron flow batteries for energy storage applications. Chemical Engineering Journal, 2021, 405, 126684.	12.7	39
132	Thermo-electrochemical modelling of high temperature methanol-fuelled solid oxide fuel cells. Applied Energy, 2021, 291, 116832.	10.1	39
133	Hydrodynamic focusing in microfluidic membraneless fuel cells: Breaking the trade-off between fuel utilization and current density. International Journal of Hydrogen Energy, 2011, 36, 11075-11084.	7.1	38
134	A model for the delamination kinetics of La0.8Sr0.2MnO3 oxygen electrodes of solid oxide electrolysis cells. International Journal of Hydrogen Energy, 2012, 37, 13914-13920.	7.1	38
135	Experimental and modeling study of high performance direct carbon solid oxide fuel cell with in situ catalytic steam-carbon gasification reaction. Journal of Power Sources, 2018, 382, 135-143.	7.8	38
136	A direct carbon solid oxide fuel cell fueled with char from wheat straw. International Journal of Energy Research, 2019, 43, 2468-2477.	4.5	38
137	Three-dimensional modeling of flow field optimization for co-electrolysis solid oxide electrolysis cell. Applied Thermal Engineering, 2020, 172, 114959.	6.0	38
138	Interfacial La Diffusion in the CeO₂/LaFeO₃ Hybrid for Enhanced Oxygen Evolution Activity. ACS Applied Materials & Interfaces, 2021, 13, 2799-2806.	8.0	38
139	Performance improvement of a direct carbon solid oxide fuel cell system by combining with a Stirling cycle. Energy, 2017, 140, 979-987.	8.8	37
140	Noble-metal-free catalyst with enhanced hydrogen evolution reaction activity based on granulated Co-doped Ni-Mo phosphide nanorod arrays. Nano Research, 2020, 13, 3321-3329.	10.4	37
141	Numerical study of high temperature proton exchange membrane fuel cell (HT-PEMFC) with a focus on rib design. International Journal of Hydrogen Energy, 2021, 46, 21098-21111.	7.1	37
142	Enhancement of lithium-ion battery thermal management with the divergent-shaped channel cold plate. Journal of Energy Storage, 2021, 42, 103027.	8.1	37
143	The effect of electrolyte type on performance of solid oxide fuel cells running on hydrocarbon fuels. International Journal of Hydrogen Energy, 2013, 38, 2846-2858.	7.1	36
144	The thermal effect in direct carbon solid oxide fuel cells. Applied Thermal Engineering, 2017, 118, 652-662.	6.0	36

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145	Improved energy performance of a PEM fuel cell by introducing discontinuous S-shaped and crescent ribs into flowing channels. Energy, 2021, 222, 119920.	8.8	36
146	Integrating chemical kinetics with CFD modeling for autothermal reforming of biogas. International Journal of Hydrogen Energy, 2009, 34, 9076-9086.	7.1	35
147	Evolution of thermal drifting during and after cold start of proton exchange membrane fuel cell by segmented cell technology. International Journal of Hydrogen Energy, 2015, 40, 7370-7381.	7.1	35
148	Nanoporous NiO/Ni(OH)₂Plates Incorporated with Carbon Nanotubes as Active Materials of Rechargeable Hybrid Zinc Batteries for Improved Energy Efficiency and High-Rate Capability. Journal of the Electrochemical Society, 2018, 165, A2119-A2126.	2.9	35
149	Optimization of catalyst layer thickness for achieving high performance and low cost of high temperature proton exchange membrane fuel cell. Applied Energy, 2021, 294, 117012.	10.1	35
150	Partial modification of flow-through porous electrodes in microfluidic fuel cell. Energy, 2015, 88, 563-571.	8.8	34
151	Performance evaluation and parametric optimum design of a syngas molten carbonate fuel cell and gas turbine hybrid system. Renewable Energy, 2015, 80, 407-414.	8.9	34
152	Zr doped BaFeO3-Î´ as a robust electrode for symmetrical solid oxide fuel cells. International Journal of Hydrogen Energy, 2019, 44, 32164-32169.	7.1	34
153	3D thermo-electro-chemo-mechanical coupled modeling of solid oxide fuel cell with double-sided cathodes. International Journal of Hydrogen Energy, 2020, 45, 904-915.	7.1	34
154	Ni migration of Ni-YSZ electrode in solid oxide electrolysis cell: An integrated model study. Journal of Power Sources, 2021, 516, 230660.	7.8	34
155	Modeling of Direct Carbon-Assisted Solid Oxide Electrolysis Cell (SOEC) for Syngas Production at Two Different Electrodes. Journal of the Electrochemical Society, 2016, 163, F3029-F3035.	2.9	33
156	Performance improvement of a direct carbon solid oxide fuel cell through integrating an Otto heat engine. Energy Conversion and Management, 2018, 165, 761-770.	9.2	33
157	Microporous Layers with Different Decorative Patterns for Polymer Electrolyte Membrane Fuel Cells. ACS Applied Materials & Interfaces, 2020, 12, 24048-24058.	8.0	33
158	Scientometric review of advancements in the development of high-performance cathode for low and intermediate temperature solid oxide fuel cells: Three decades in retrospect. International Journal of Hydrogen Energy, 2021, 46, 26518-26536.	7.1	33
159	Percolation Theory in Solid Oxide Fuel Cell Composite Electrodes with a Mixed Electronic and Ionic Conductor. Energies, 2013, 6, 1632-1656.	3.1	32
160	Proton conducting intermediate-temperature solid oxide fuel cells using new perovskite type cathodes. Journal of Power Sources, 2014, 260, 197-204.	7.8	32
161	Thermodynamic and Thermo-economic Analysis of Integrated Organic Rankine Cycle for Waste Heat Recovery from Vapor Compression Refrigeration Cycle. Energy Procedia, 2017, 143, 192-198.	1.8	32
162	Review of Liquid-Based Systems to Recover Low-Grade Waste Heat for Electrical Energy Generation. Energy & Fuels, 2021, 35, 161-175.	5.1	32

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163	Highly active and durable catalyst for hydrogen generation by the NaBH4 hydrolysis reaction: CoWB/NF nanodendrite with an acicular array structure. Journal of Alloys and Compounds, 2020, 836, 155429.	5.5	32
164	Structural design of gas diffusion layer for proton exchange membrane fuel cell at varying humidification. Journal of Power Sources, 2020, 467, 228355.	7.8	32
165	Significantly Improving the Durability of Single-Chamber Solid Oxide Fuel Cells: A Highly Active CO₂-Resistant Perovskite Cathode. ACS Applied Energy Materials, 2018, 1, 1337-1343.	5.1	31
166	Achieving a stable zinc electrode with ultralong cycle life by implementing a flowing electrolyte. Journal of Power Sources, 2020, 453, 227856.	7.8	31
167	A Highly Reversible Zinc Anode for Rechargeable Aqueous Batteries. ACS Applied Materials & Interfaces, 2021, 13, 52659-52669.	8.0	31
168	Standardized Procedures Important for Improving Single-Component Ceramic Fuel Cell Technology. ACS Energy Letters, 2017, 2, 2752-2755.	17.4	30
169	Plastic waste fuelled solid oxide fuel cell system for power and carbon nanotube cogeneration. International Journal of Hydrogen Energy, 2019, 44, 1867-1876.	7.1	30
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