

Kevin Huang, Keqin Huang

List of Publications by Year in descending order

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220
papers

7,566
citations

57631

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all docs

226
docs citations

226
times ranked

7574
citing authors

#	ARTICLE	IF	CITATIONS
1	Atmospheric plasma spraying to fabricate metal-supported solid oxide fuel cells with open channel porous metal support. <i>Journal of the American Ceramic Society</i> , 2023, 106, 68-78.	1.9	3
2	Roadmap for Sustainable Mixed Ionic-Electronic Conducting Membranes. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	49
3	Unlocking bulk and surface oxygen transport properties of mixed oxide-ion and electron conducting membranes with combined oxygen permeation cell and oxygen probe method. <i>Journal of Membrane Science</i> , 2022, 644, 120082.	4.1	3
4	Determining the kinetic rate constants of Fe ₃ O ₄ -to-Fe and FeO-to-Fe reduction by H ₂ . <i>Chemical Engineering Journal</i> , 2022, 434, 134771.	6.6	13
5	Surface enhanced performance of La _{0.6} Sr _{0.4} Co _{0.2} Fe _{0.8} O _{3-δ} cathodes by infiltration Pr-Ni-Mn-O progress. <i>Journal of Alloys and Compounds</i> , 2022, 902, 163337.	2.8	14
6	Intermediate Temperature Solid Oxide Cell with a Barrier Layer Free Oxygen Electrode and Phase Inversion Derived Hydrogen Electrode. <i>Journal of the Electrochemical Society</i> , 2022, 169, 034516.	1.3	4
7	Mixed ion and electron transport theory and application in solid oxide conductors. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2022, 29, 870-875.	2.4	1
8	H ₂ O-enhanced CO ₂ transport through a proton conducting ceramic- molten carbonate dual-phase membrane. <i>Journal of Membrane Science</i> , 2022, 650, 120421.	4.1	12
9	Performance Projection of a High-Temperature CO ₂ Transport Membrane Reactor for Combined CO ₂ Capture and Methane-to-Ethylene Conversion. <i>Journal of the Electrochemical Society</i> , 2022, 169, 053501.	1.3	3
10	Electro-Chemical-Mechanical Coupled Modeling of Oxygen Electrodes in Solid Oxide Electrolyzer Cells. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 1621-1621.	0.0	0
11	Modeling Electrokinetics of Oxygen Electrodes in Solid Oxide Electrolyzer Cells. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 1744-1744.	0.0	0
12	(Invited) Developing Barrier Layer Free Oxygen Electrode for Solid Oxide Cells. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 1741-1741.	0.0	0
13	(Invited) Exploring the Safe Operational Boundary for High Temperature Solid Oxide Electrolyzer. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 1671-1671.	0.0	0
14	A Comprehensive Review on the Development of Solid-State Metal-Air Batteries Operated on Oxide-Ion Chemistry. <i>Advanced Energy Materials</i> , 2021, 11, 2000630.	10.2	20
15	A first-principles investigation of Janus MoSSe as a catalyst for photocatalytic water-splitting. <i>Applied Surface Science</i> , 2021, 537, 147919.	3.1	36
16	The current status of high temperature electrochemistry-based CO ₂ transport membranes and reactors for direct CO ₂ capture and conversion. <i>Progress in Energy and Combustion Science</i> , 2021, 82, 100888.	15.8	49
17	CoSe@N-Doped Carbon Nanotubes as a Potassium-Ion Battery Anode with High Initial Coulombic Efficiency and Superior Capacity Retention. <i>ACS Nano</i> , 2021, 15, 1121-1132.	7.3	98
18	A New Ceramic Carbonate Dual-Phase Membrane for High-Flux CO ₂ Capture. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 5454-5460.	3.2	9

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19	Identification of Active Surface Species in Molten Carbonates Using in situ Raman Spectroscopy. <i>Frontiers in Energy Research</i> , 2021, 9, .	1.2	0
20	Understanding the Dissolution and Phase Transformation Mechanisms in Aqueous Zn/V ₂ O ₅ Batteries. <i>Chemistry of Materials</i> , 2021, 33, 4089-4098.	3.2	74
21	Performance analysis of a 550MWe solid oxide fuel cell and air turbine hybrid system powered by coal-derived syngas. <i>Energy</i> , 2021, 222, 119917.	4.5	12
22	Metallopolymer as a Solid Electrolyte for Rechargeable Zn-Metal Alkaline Batteries. , 2021, 3, 799-806.		9
23	Rich Alkali Ions Preintercalated Vanadium Oxides for Durable and Fast Zinc-Ion Storage. <i>ACS Energy Letters</i> , 2021, 6, 2111-2120.	8.8	94
24	Electrical Properties, Defect Structures, and Ionic Conducting Mechanisms in Alkali Tungstate Li ₂ W ₂ O ₇ . <i>Inorganic Chemistry</i> , 2021, 60, 8631-8639.	1.9	5
25	Reversible Molecular and Ionic Storage Mechanisms in High-Performance Zn _{0.1} V ₂ O ₅ ·nH ₂ O Xerogel Cathode for Aqueous Zn-Ion Batteries. <i>ACS Nano</i> , 2021, 15, 10678-10688.	7.3	68
26	A high-voltage activated high-performance cathode for aqueous Zn-ion batteries. <i>Energy Storage Materials</i> , 2021, 38, 473-481.	9.5	53
27	Fe ₃ O ₄ /ZrO ₂ Composite as a Robust Chemical Looping Oxygen Carrier: A Kinetics Study on the Reduction Process. <i>ACS Applied Energy Materials</i> , 2021, 4, 7091-7100.	2.5	11
28	Plasma-sprayed lanthanum-doped strontium titanate as an interconnect for solid oxide fuel cells: Effects of powder size and process conditions. <i>Journal of Alloys and Compounds</i> , 2021, 876, 160212.	2.8	6
29	Dense and Low Oxygen Permeability Bilayer Ceramic Interconnect for Tubular Anode-Support Solid Oxide Cells. <i>ACS Applied Energy Materials</i> , 2021, 4, 341-349.	2.5	1
30	Modeling Electrokinetics of Oxygen Electrodes in Solid Oxide Electrolyzer Cells. <i>Journal of the Electrochemical Society</i> , 2021, 168, 114510.	1.3	5
31	LiGaOS is a fast Li-Ion conductor: A first-principles prediction. <i>Materials and Design</i> , 2020, 185, 108264.	3.3	6
32	Inorganic Materials Synthesis Planning with Literature-Trained Neural Networks. <i>Journal of Chemical Information and Modeling</i> , 2020, 60, 1194-1201.	2.5	85
33	A highly active and Cr-resistant infiltrated cathode for practical solid oxide fuel cells. <i>Journal of Materials Chemistry A</i> , 2020, 8, 82-86.	5.2	25
34	Binary Iron Sulfide as a Low-Cost and High-Performance Anode for Lithium-/Sodium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 52888-52898.	4.0	38
35	A High Performing Zn-Ion Battery Cathode Enabled by In Situ Transformation of V ₂ O ₅ Atomic Layers. <i>Angewandte Chemie</i> , 2020, 132, 17152-17159.	1.6	33
36	A High Performing Zn-Ion Battery Cathode Enabled by In Situ Transformation of V ₂ O ₅ Atomic Layers. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 17004-17011.	7.2	158

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37	Cobalt single atoms supported on N-doped carbon as an active and resilient sulfur host for lithium-sulfur batteries. <i>Energy Storage Materials</i> , 2020, 28, 196-204.	9.5	117
38	Colossal oxygen vacancy formation at a fluorite-bixbyite interface. <i>Nature Communications</i> , 2020, 11, 1371.	5.8	39
39	Three-dimensional hierarchical graphene and CNT-coated spinel ZnMn ₂ O ₄ as a high-stability anode for lithium-ion batteries. <i>Electrochimica Acta</i> , 2020, 338, 135853.	2.6	36
40	Hydrophilic engineering of VO _x -based nanosheets for ambient electrochemical ammonia synthesis at neutral pH. <i>Journal of Materials Chemistry A</i> , 2020, 8, 5913-5918.	5.2	35
41	Rational design and demonstration of a high-performance flexible Zn/V ₂ O ₅ battery with thin-film electrodes and para-polybenzimidazole electrolyte membrane. <i>Energy Storage Materials</i> , 2020, 27, 418-425.	9.5	39
42	Efficient and selective ethane-to-ethylene conversion assisted by a mixed proton and electron conducting membrane. <i>Journal of Membrane Science</i> , 2020, 599, 117840.	4.1	8
43	Understanding the Role of Graphene in Hydrated Layered V-Oxide Based Cathodes for Rechargeable Aqueous Zn-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2020, 167, 070515.	1.3	5
44	Synergistic H ⁺ /Zn ²⁺ dual ion insertion mechanism in high-capacity and ultra-stable hydrated VO ₂ cathode for aqueous Zn-ion batteries. <i>Energy Storage Materials</i> , 2020, 29, 60-70.	9.5	157
45	Atomic Layer Deposited Zirconia Overcoats as On-Board Strontium Getters for Improved Solid Oxide Fuel Cell Nanocomposite Cathode Durability. <i>ACS Applied Energy Materials</i> , 2020, 3, 4057-4067.	2.5	21
46	Electrode Materials for Practical Rechargeable Aqueous Zn-Ion Batteries: Challenges and Opportunities. <i>ChemElectroChem</i> , 2020, 7, 2714-2734.	1.7	54
47	Solid-oxide metal-air redox batteries. , 2020, , 217-250.		0
48	Precautions of Using Three-Electrode Configuration to Measure Electrode Overpotential in Solid Oxide Electrochemical Cells: Insights from Finite Element Modeling. <i>Journal of the Electrochemical Society</i> , 2020, 167, 124501.	1.3	8
49	A Superoxide Involved Oxygen Reduction Reaction Mechanism on a Glassy Carbon Electrode in Caustic Media. <i>Journal of the Electrochemical Society</i> , 2020, 167, 124518.	1.3	5
50	Mathematical Modeling of High-Temperature Multiphase Solid/Molten Carbonate Membranes for CO ₂ Capture. <i>Journal of the Electrochemical Society</i> , 2020, 167, 164512.	1.3	3
51	A robust sulfur host with dual lithium polysulfide immobilization mechanism for long cycle life and high capacity Li-S batteries. <i>Energy Storage Materials</i> , 2019, 16, 344-353.	9.5	150
52	Infiltrated Sr _{0.9} Y _{0.1} Co _{0.25} Î ⁺ nanoparticles as a cathode material for solid oxide fuel cells operated at 450-650°C. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 31305-31311.	3.8	3
53	Sequential hydrothermal synthesized Co-Mn-oxide/C electrocatalysts for oxygen reduction in alkaline media. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 21673-21682.	3.8	1
54	NaCa _{0.6} V ₆ O ₁₆ ·3H ₂ O as an Ultra-Stable Cathode for Zn-Ion Batteries: The Roles of Pre-Inserted Dual Cations and Structural Water in V ₃ O ₈ Layer. <i>Advanced Energy Materials</i> , 2019, 9, 1901968.	10.2	196

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55	A Semisolid Electrolyte for Flexible Zn-Ion Batteries. ACS Applied Energy Materials, 2019, 2, 6904-6910.	2.5	77
56	Heterostructured Nanocubeâ€Šshaped Binary Sulfide (SnCo) ₂ Interlaced with Sâ€ŠDoped Graphene as a Highâ€ŠPerformance Anode for Advanced Na⁺ Batteries. Advanced Functional Materials, 2019, 29, 1807971.	7.8	154
57	A perovskite/noble-metal composite as a bifunctional oxygen electrocatalyst for alkaline electrochemical cells. Journal of Energy Storage, 2019, 23, 537-543.	3.9	7
58	Role of CO ₂ in Catalytic Ethane-to-Ethylene Conversion Using a High-Temperature CO ₂ Transport Membrane Reactor. ACS Sustainable Chemistry and Engineering, 2019, 7, 6889-6897.	3.2	22
59	<i>In situ</i> synthesis of a high-performance bismuth oxide based composite cathode for low temperature solid oxide fuel cells. Chemical Communications, 2019, 55, 2801-2804.	2.2	14
60	Unraveling the role of structural water in bilayer V ₂ O ₅ during Zn ²⁺ -intercalation: insights from DFT calculations. Journal of Materials Chemistry A, 2019, 7, 5612-5620.	5.2	132
61	Hybridizing poly(vinylidene fluoride-co-hexafluoropropylene) with Li _{6.5} La ₃ Zr _{1.5} Ta _{0.5} O ₁₂ as a lithium-ion electrolyte for solid state lithium metal batteries. Chemical Engineering Journal, 2019, 367, 230-238.	6.6	127
62	Photosynthetic apparatus of Rhodobacter sphaeroides exhibits prolonged charge storage. Nature Communications, 2019, 10, 902.	5.8	40
63	A High Capacity Bilayer Cathode for Aqueous Zn-Ion Batteries. ACS Nano, 2019, 13, 14447-14458.	7.3	148
64	Understanding the role of carbon in alkaline oxygen electrocatalysis: A case study on La _{0.6} Sr _{0.4} CoO _{3-Î} /Vulcan carbon composite electrocatalyst. International Journal of Hydrogen Energy, 2019, 44, 2760-2769.	3.8	19
65	Performance and stability of SrCo _{0.9} Nb _{0.1} O _{3-Î} (La _{0.60} Sr _{0.40}) _{0.95} (Co _{0.20} Fe _{0.80})O _{3-Î} bilayer cathode for intermediate-temperature solid oxide fuel cells. Journal of Power Sources, 2019, 414, 24-30.	4.0	8
66	A renewable natural cotton derived and nitrogen/sulfur co-doped carbon as a high-performance sodium ion battery anode. Materials Today Energy, 2018, 8, 37-44.	2.5	61
67	Siligraphene as a promising anode material for lithium-ion batteries predicted from first-principles calculations. Nano Energy, 2018, 49, 67-76.	8.2	95
68	Defect structure, thermodynamic and transport properties of SrCo _{0.9} Nb _{0.1} O _{2.5+Î} : A combined experimental and defect chemistry approach. Solid State Ionics, 2018, 320, 159-171.	1.3	2
69	Oxygen vacancy localization and anisotropic oxygen anion transport in Sr _{1-x} Y _x CoO _{3-Î} (xâ€Š=â€Š0.1, 0.2) under solid oxide fuel cell cathode conditions. Solid State Ionics, 2018, 321, 34-42.	1.3	7
70	Crystal Structure and Transport Properties of Oxygen-Deficient Perovskite Sr _{0.9} Y _{0.1} CoO _{3-Î} . ACS Applied Energy Materials, 2018, 1, 822-832.	2.5	6
71	Life cycle analysis of a combined CO ₂ capture and conversion membrane reactor. Journal of Membrane Science, 2018, 549, 142-150.	4.1	20
72	Bulk properties and transport mechanisms of a solid state antiperovskite Li-ion conductor Li ₃ OCl: insights from first principles calculations. Journal of Materials Chemistry A, 2018, 6, 1150-1160.	5.2	56

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73	Temporal and thermal evolutions of surface Sr-segregation in pristine and atomic layer deposition modified La _{0.6} Sr _{0.4} CoO ₃ epitaxial films. Journal of Materials Chemistry A, 2018, 6, 24378-24388.	5.2	26
74	Can molten carbonate be a non-metal catalyst for CO oxidation?. New Journal of Chemistry, 2018, 42, 16372-16377.	1.4	2
75	Proton-mediated energy storage in intermediate-temperature solid-oxide metal-air batteries. Journal of Materials Chemistry A, 2018, 6, 20659-20662.	5.2	8
76	A Bismuth Attack at Grain-Boundaries of Ceria-Based Electrolytes. Journal of the Electrochemical Society, 2018, 165, F1110-F1114.	1.3	0
77	Understanding Structure-Activity Relationships in Sr _{1-x} Y _x CoO ₃ through in Situ Neutron Diffraction and Electrochemical Measurements. ACS Applied Materials & Interfaces, 2018, 10, 35984-35993.	4.0	5
78	Transport properties of SrCo _{0.9} Nb _{0.1} O ₃ and SrCo _{0.9} Ta _{0.1} O ₃ mixed conductors determined by combined oxygen permeation measurement and phenomenological modeling. Journal of Membrane Science, 2018, 568, 47-54.	4.1	11
79	Plasma-spray derived, corrosion-resistive electrolyte for liquid antimony anode direct carbon fuel cell. Journal of Power Sources, 2018, 403, 76-81.	4.0	13
80	Self-Formed, Mixed-Conducting, Triple-Phase Membrane for Efficient CO ₂ /O ₂ Capture from Flue Gas and in Situ Dry-Oxy Methane Reforming. ACS Sustainable Chemistry and Engineering, 2018, 6, 14162-14169.	3.2	23
81	The performance of syngas-fueled solid oxide fuel cell predicted by a Reduced Order Model (ROM): Pressurization and flow-pattern effects. Journal of Power Sources, 2018, 404, 96-105.	4.0	7
82	The Performance of Syngas-Fueled SOFCs Predicted by a Reduced Order Model (ROM): Temperature and Fuel Composition Effects. Journal of the Electrochemical Society, 2018, 165, F786-F798.	1.3	11
83	Atomic Layer Deposition on Porous Materials: Problems with Conventional Approaches to Catalyst and Fuel Cell Electrode Preparation. Inorganics, 2018, 6, 34.	1.2	73
84	Unraveling Oxygen Electrocatalysis Mechanisms on a Thin-Film Oxygen-Deficient Perovskite La _{0.6} Sr _{0.4} CoO ₃ . ACS Applied Energy Materials, 2018, 1, 3937-3946.	2.5	13
85	Determining Na ⁺ transport number in Na ₂ Si ₂ O ₅ glass with Na concentration cell. Solid State Ionics, 2018, 324, 65-68.	1.3	1
86	A New rGO-Overcoated Sb ₂ Se ₃ Nanorods Anode for Na ⁺ Battery: In Situ X-Ray Diffraction Study on a Live Sodiation/Desodiation Process. Advanced Functional Materials, 2017, 27, 1606242.	7.8	258
87	Ta-Doped SrCoO ₃ as a promising bifunctional oxygen electrode for reversible solid oxide fuel cells: a focused study on stability. Journal of Materials Chemistry A, 2017, 5, 8989-9002.	5.2	75
88	Toward Stabilizing Co ₃ O ₄ Nanoparticles as an Oxygen Reduction Reaction Catalyst for Intermediate-Temperature SOFCs. Journal of the Electrochemical Society, 2017, 164, F3001-F3007.	1.3	16
89	Dry-Oxy Methane Reforming with Mixed e ⁻ /CO ₃ ²⁻ Conducting Membranes. ACS Sustainable Chemistry and Engineering, 2017, 5, 5432-5439.	3.2	16
90	V ₅ S ₈ -graphite hybrid nanosheets as a high rate-capacity and stable anode material for sodium-ion batteries. Energy and Environmental Science, 2017, 10, 107-113.	15.6	274

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91	A self-forming dual-phase membrane for high-temperature electrochemical CO ₂ capture. <i>Journal of Materials Chemistry A</i> , 2017, 5, 12769-12773.	5.2	23
92	The Role of Pre-Lithiation in Activated Carbon/Li ₄ Ti ₅ O ₁₂ Asymmetric Capacitors. <i>Electrochimica Acta</i> , 2017, 236, 443-450.	2.6	47
93	Sodium Ion Batteries: A New rGO-coated Sb ₂ Se ₃ Nanorods Anode for Na ⁺ Battery: In Situ X-ray Diffraction Study on a Live Sodiation/Desodiation Process (Adv.) <i>Tj ETQq I7B0.7843d4 rgBT</i>		
94	Understanding Power Enhancement of SOFC by Built-in Chemical Iron Bed: A Computational Approach. <i>Journal of the Electrochemical Society</i> , 2017, 164, E3054-E3062.	1.3	1
95	A new composite cathode for intermediate temperature solid oxide fuel cells with zirconia-based electrolytes. <i>Journal of Power Sources</i> , 2017, 342, 419-426.	4.0	28
96	Recent advances in high-temperature carbon-air fuel cells. <i>Energy and Environmental Science</i> , 2017, 10, 460-490.	15.6	98
97	Structural and Electronic Features of Nb-Doped SrCoO ₃ : Insight from First-Principles Calculations. <i>Journal of Physical Chemistry C</i> , 2017, 121, 24987-24993.	1.5	4
98	Stretching Epitaxial La _{0.6} Sr _{0.4} CoO ₃ for Fast Oxygen Reduction. <i>Journal of Physical Chemistry C</i> , 2017, 121, 25651-25658.	1.5	38
99	Materials Synthesis Insights from Scientific Literature via Text Extraction and Machine Learning. <i>Chemistry of Materials</i> , 2017, 29, 9436-9444.	3.2	319
100	An Active and Robust Bifunctional Oxygen Electrocatalyst through Carbon-Free Hierarchical Functionalization. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 12826-12827.	7.2	8
101	A Combined Variable-Temperature Neutron Diffraction and Thermogravimetric Analysis Study on a Promising Oxygen Electrode, SrCo _{0.9} Nb _{0.1} O ₃ , for Reversible Solid Oxide Fuel Cells. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 34855-34864.	4.0	18
102	MOF-derived iron as an active energy storage material for intermediate-temperature solid oxide iron-air redox batteries. <i>Chemical Communications</i> , 2017, 53, 10564-10567.	2.2	22
103	A Dual Functional Solid Oxide Fuel Cell for Power Generation and Energy Storage. <i>ECS Transactions</i> , 2017, 78, 287-297.	0.3	0
104	Computational Analysis of Dynamic Tubular SOFC with a Built-in Chemical Iron Bed. <i>ECS Transactions</i> , 2017, 78, 2683-2698.	0.3	0
105	SnS nanoparticles electrostatically anchored on three-dimensional N-doped graphene as an active and durable anode for sodium-ion batteries. <i>Energy and Environmental Science</i> , 2017, 10, 1757-1763.	15.6	431
106	Group IVA Oxide Surface Modification of LSCF Cathode Powders by Atomic Layer Deposition. <i>ECS Transactions</i> , 2017, 78, 935-942.	0.3	6
107	Proton Transfer in Molten Lithium Carbonate: Mechanism and Kinetics by Density Functional Theory Calculations. <i>Scientific Reports</i> , 2017, 7, 7381.	1.6	7
108	Virtual screening of inorganic materials synthesis parameters with deep learning. <i>Npj Computational Materials</i> , 2017, 3, .	3.5	131

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109	Defect chemistry and transport properties of SrCo _{1-x} TaxO _{2.5+Î} as a promising oxygen electrocatalyst for reversible solid oxide fuel cells. <i>Solid State Ionics</i> , 2017, 309, 48-57.	1.3	11
110	CO ₂ capture performance of silver-carbonate membrane with electrochemically dealloyed porous silver matrix. <i>Journal of Membrane Science</i> , 2017, 523, 439-445.	4.1	19
111	A new defect chemistry model for Nb-doped SrCoO _{2.5+Î} : The role of oxygen interstitials and delocalized-to-localized electron holes. <i>Journal of Solid State Chemistry</i> , 2017, 246, 97-106.	1.4	14
112	A Study of Low-Cost NiO-MC Dual-Phase Membrane for High-Flux and Selective Electrochemistry-Based CO ₂ Capture. <i>ECS Transactions</i> , 2017, 80, 861-870.	0.3	4
113	Ein aktiver und widerstandsfähiger difunktionaler Sauerstoff-Elektrokatalysator durch kohlenstofffreie hierarchische Funktionalisierung. <i>Angewandte Chemie</i> , 2017, 129, 13002-13004.	1.6	4
114	Stabilizing a high-temperature electrochemical silver-carbonate CO ₂ capture membrane by atomic layer deposition of a ZrO ₂ overcoat. <i>Chemical Communications</i> , 2016, 52, 9817-9820.	2.2	29
115	A Finite Length Cylinder Model for Mixed Oxide-Ion and Electron Conducting Cathodes Suited for Intermediate-Temperature Solid Oxide Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2016, 163, F548-F563.	1.3	4
116	A novel sulfur-impregnated porous carbon matrix as a cathode material for a lithium-sulfur battery. <i>RSC Advances</i> , 2016, 6, 64228-64233.	1.7	12
117	Simulating Charge Transport in Solid Oxide Mixed Ionic and Electronic Conductors: Nernst-Planck Theory vs Modified Fick's Law. <i>Journal of the Electrochemical Society</i> , 2016, 163, A2702-A2719.	1.3	12
118	On the origin of high ionic conductivity in Na-doped SrSiO ₃ . <i>Chemical Science</i> , 2016, 7, 3667-3675.	3.7	23
119	Communication—Improving Intermediate-Temperature Performance of a Screen-Printed LSCF Cathode with Infiltrated LSCF Nanoparticles. <i>Journal of the Electrochemical Society</i> , 2016, 163, F626-F628.	1.3	4
120	Fast Li-Ion Transport in Amorphous Li ₂ Si ₂ O ₅ : An Ab Initio Molecular Dynamics Simulation. <i>Journal of the Electrochemical Society</i> , 2016, 163, A1401-A1407.	1.3	17
121	Combining Electrochemical CO ₂ Capture with Catalytic Dry Methane Reforming in a Single Reactor for Low-Cost Syngas Production. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 7056-7065.	3.2	33
122	Liquid plasma sprayed nano-network La _{0.4} Sr _{0.6} Co _{0.2} Fe _{0.8} O ₃ /Ce _{0.8} Gd _{0.2} O ₂ composite as a high-performance cathode for intermediate-temperature solid oxide fuel cells. <i>Journal of Power Sources</i> , 2016, 327, 622-628.	4.0	7
123	A Broad Stability Investigation of Nb-Doped SrCoO _{2.5+Î} as a Reversible Oxygen Electrode for Intermediate-Temperature Solid Oxide Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2016, 163, F891-F898.	1.3	39
124	Crystallization of amorphous Na ₂ Si ₂ O ₅ as a Na-ion conductor. <i>Solid State Ionics</i> , 2016, 296, 63-70.	1.3	8
125	An Intermediate-Temperature Solid Oxide Iron-Air Redox Battery Operated on O ₂ -Chemistry and Loaded with Pd-Catalyzed Iron-Based Energy Storage Material. <i>ACS Energy Letters</i> , 2016, 1, 1206-1211.	8.8	21
126	A dynamic solid oxide fuel cell empowered by the built-in iron-bed solid fuel. <i>Energy and Environmental Science</i> , 2016, 9, 3746-3753.	15.6	22

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127	Multiphysics modeling of solid-oxide iron-air redox battery: analysis and optimization of operation and performance parameters. <i>Science Bulletin</i> , 2016, 61, 1345-1354.	4.3	8
128	Enhanced interfacial proton migration on BaZr(Y)O ₃ by molten carbonate: A first principles study. <i>Solid State Ionics</i> , 2016, 289, 48-54.	1.3	7
129	Electrochemical and Catalytic Properties of Fe-Doped SrCo _{0.9-x} Nb _{0.1} Fe _x O _{3-δ} Cathode Materials. <i>Journal of the Electrochemical Society</i> , 2016, 163, F979-F987.	1.3	4
130	A superior mixed electron and carbonate-ion conducting metal-carbonate composite membrane for advanced flue-gas carbon capture. <i>Journal of Membrane Science</i> , 2016, 505, 225-230.	4.1	31
131	Na-X zeolite templated and sulfur-impregnated porous carbon as the cathode for a high-performance Li-S battery. <i>RSC Advances</i> , 2016, 6, 9117-9123.	1.7	10
132	Thermal and Electrical Stability of Sr _{0.9} Y _{0.1} Co _{2.5} as a Promising Cathode for Intermediate-Temperature Solid Oxide Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2016, 163, F330-F335.	1.3	21
133	Phase Relationship and Ionic Conductivity in Na-SrSiO ₃ Ionic Conductor. <i>Journal of the American Ceramic Society</i> , 2016, 99, 324-331.	1.9	19
134	Fabrication of La ₂ NiO ₄ nanoparticles as an efficient bifunctional cathode catalyst for rechargeable lithium-oxygen batteries. <i>RSC Advances</i> , 2016, 6, 17430-17437.	1.7	17
135	Remarkable O ₂ permeation through a mixed conducting carbon capture membrane functionalized by atomic layer deposition. <i>Journal of Materials Chemistry A</i> , 2016, 4, 1828-1837.	5.2	26
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