# Wei Zhou

List of Publications by Year
in descending order

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|---|---|---|---|
| 711<br>papers | 59,236<br>citations | 764<br>119<br>h-index | 2233<br>201<br>g-index |
| 734<br>all docs | 734<br>docs citations | 734<br>times ranked | 31722<br>citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | A high-performance cathode for the next generation of solid-oxide fuel cells. Nature, 2004, 431, 170-173. | 13.7 | 2,737 |
| 2 | Investigation of the permeation behavior and stability of a Ba0.5Sr0.5Co0.8Fe0.2O3â˜Î´ oxygen membrane. Journal of Membrane Science, 2000, 172, 177-188. | 4.1 | 983 |
| 3 | Nonstoichiometric Oxides as Low-Cost and Highly-Efficient Oxygen Reduction/Evolution Catalysts for Low-Temperature Electrochemical Devices. Chemical Reviews, 2015, 115, 9869-9921. | 23.0 | 770 |
| 4 | Research progress of perovskite materials in photocatalysis- and photovoltaics-related energy conversion and environmental treatment. Chemical Society Reviews, 2015, 44, 5371-5408. | 18.7 | 725 |
| 5 | Nonradical reactions in environmental remediation processes: Uncertainty and challenges. Applied Catalysis B: Environmental, 2018, 224, 973-982. | 10.8 | 694 |
| 6 | Enhancing Electrocatalytic Activity of Perovskite Oxides by Tuning Cation Deficiency for Oxygen Reduction and Evolution Reactions. Chemistry of Materials, 2016, 28, 1691-1697. | 3.2 | 635 |
| 7 | Recent Progress in Metalâ€Organic Frameworks for Applications in Electrocatalytic and Photocatalytic Water Splitting. Advanced Science, 2017, 4, 1600371. | 5.6 | 594 |
| 8 | A thermally self-sustained micro solid-oxide fuel-cell stack with high power density. Nature, 2005, 435, 795-798. | 13.7 | 583 |
| 9 | A comprehensive review of Li4Ti5O12-based electrodes for lithium-ion batteries: The latest advancements and future perspectives. Materials Science and Engineering Reports, 2015, 98, 1-71. | 14.8 | 501 |
| 10 | Recent Advances and Prospective in Ruthenium-Based Materials for Electrochemical Water Splitting. ACS Catalysis, 2019, 9, 9973-10011. | 5.5 | 491 |
| 11 | Flexible Znâ€“ and Liâ€“air batteries: recent advances, challenges, and future perspectives. Energy and Environmental Science, 2017, 10, 2056-2080. | 15.6 | 477 |
| 12 | Synthesis, characterization and evaluation of cation-ordered LnBaCo2O5+ as materials of oxygen permeation membranes and cathodes of SOFCs. Acta Materialia, 2008, 56, 4876-4889. | 3.8 | 461 |
| 13 | Dynamic traction of lattice-confined platinum atoms into mesoporous carbon matrix for hydrogen evolution reaction. Science Advances, 2018, 4, eaao6657. | 4.7 | 460 |
| 14 | Non-precious-metal catalysts for alkaline water electrolysis: operando characterizations, theoretical calculations, and recent advances. Chemical Society Reviews, 2020, 49, 9154-9196. | 18.7 | 448 |
| 15 | Stable Hierarchical Bimetalâ€“Organic Nanostructures as HighPerformance Electrocatalysts for the Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2019, 58, 4227-4231. | 7.2 | 430 |
| 16 | A Perovskite Electrocatalyst for Efficient Hydrogen Evolution Reaction. Advanced Materials, 2016, 28, 6442-6448. | 11.1 | 429 |
| 17 | Insights into perovskite-catalyzed peroxymonosulfate activation: Maneuverable cobalt sites for promoted evolution of sulfate radicals. Applied Catalysis B: Environmental, 2018, 220, 626-634. | 10.8 | 428 |
| 18 | Progress in Solid Oxide Fuel Cells with Nickel-Based Anodes Operating on Methane and Related Fuels. Chemical Reviews, 2013, 113, 8104-8151. | 23.0 | 420 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Progress in understanding and development of Ba0.5Sr0.5Co0.8Fe0.2O3â^Î´-based cathodes for intermediate-temperature solid-oxide fuel cells: A review. Journal of Power Sources, 2009, 192, 231-246. | 4.0 | 409 |
| 20 | SrNb<sub>0.1</sub>Co<sub>0.7</sub>Fe<sub>0.2</sub>O<sub>3â^'Î´</sub> Perovskite as a Nextâ€Generation Electrocatalyst for Oxygen Evolution in Alkaline Solution. Angewandte Chemie - International Edition, 2015, 54, 3897-3901. | 7.2 | 400 |
| 21 | Hydrogen Storage in a Prototypical Zeolitic Imidazolate Framework-8. Journal of the American Chemical Society, 2007, 129, 5314-5315. | 6.6 | 393 |
| 22 | Recent advances in nanostructured metal nitrides for water splitting. Journal of Materials Chemistry A, 2018, 6, 19912-19933. | 5.2 | 392 |
| 23 | Surface controlled generation of reactive radicals from persulfate by carbocatalysis on nanodiamonds. Applied Catalysis B: Environmental, 2016, 194, 7-15. | 10.8 | 390 |
| 24 | Advanced synthesis of materials for intermediate-temperature solid oxide fuel cells. Progress in Materials Science, 2012, 57, 804-874. | 16.0 | 372 |
| 25 | Metal oxide-based materials as an emerging family of hydrogen evolution electrocatalysts. Energy and Environmental Science, 2020, 13, 3361-3392. | 15.6 | 370 |
| 26 | A Perovskite Nanorod as Bifunctional Electrocatalyst for Overall Water Splitting. Advanced Energy Materials, 2017, 7, 1602122. | 10.2 | 369 |
| 27 | Direct evidence of boosted oxygen evolution over perovskite by enhanced lattice oxygen participation. Nature Communications, 2020, 11, 2002. | 5.8 | 366 |
| 28 | Advances in non-enzymatic glucose sensors based on metal oxides. Journal of Materials Chemistry B, 2016, 4, 7333-7349. | 2.9 | 348 |
| 29 | Surfactantâ€Assisted Phaseâ€Selective Synthesis of New Cobalt MOFs and Their Efficient Electrocatalytic Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2017, 56, 13001-13005. | 7.2 | 334 |
| 30 | Intermediate-temperature electrochemical performance of a polycrystalline PrBaCo2O5+ cathode on samarium-doped ceria electrolyte. Journal of Power Sources, 2009, 188, 96-105. | 4.0 | 330 |
| 31 | Thermal-expansion offset for high-performance fuel cell cathodes. Nature, 2021, 591, 246-251. | 13.7 | 328 |
| 32 | Perovskite oxides applications in high temperature oxygen separation, solid oxide fuel cell and membrane reactor: A review. Progress in Energy and Combustion Science, 2017, 61, 57-77. | 15.8 | 314 |
| 33 | Enhancing Electrocatalytic Activity for Hydrogen Evolution by Strongly Coupled Molybdenum Nitride@Nitrogen-Doped Carbon Porous Nano-Octahedrons. ACS Catalysis, 2017, 7, 3540-3547. | 5.5 | 306 |
| 34 | Molten salt synthesis of nitrogen-doped carbon with hierarchical pore structures for use as high-performance electrodes in supercapacitors. Carbon, 2015, 93, 48-58. | 5.4 | 293 |
| 35 | Self-Assembled Triple-Conducting Nanocomposite as a Superior Protonic Ceramic Fuel Cell Cathode. Joule, 2019, 3, 2842-2853. | 11.7 | 292 |
| 36 | Recent Advances in Novel Nanostructuring Methods of Perovskite Electrocatalysts for Energyâ€Related Applications. Small Methods, 2018, 2, 1800071. | 4.6 | 285 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Perovskite/Carbon Composites: Applications in Oxygen Electrocatalysis. Small, 2017, 13, 1603793. | 5.2 | 277 |
| 38 | The use of nitrogen-doped graphene supporting Pt nanoparticles as a catalyst for methanol electrocatalytic oxidation. Carbon, 2013, 52, 181-192. | 5.4 | 275 |
| 39 | Phosphorusâ€Doped Perovskite Oxide as Highly Efficient Water Oxidation Electrocatalyst in Alkaline Solution. Advanced Functional Materials, 2016, 26, 5862-5872. | 7.8 | 271 |
| 40 | Ba effect in doped Sr(Co0.8Fe0.2)O3-Î´ on the phase structure and oxygen permeation properties of the dense ceramic membranes. Separation and Purification Technology, 2001, 25, 419-429. | 3.9 | 267 |
| 41 | Mixed Conducting Perovskite Materials as Superior Catalysts for Fast Aqueous-Phase Advanced Oxidation: A Mechanistic Study. ACS Catalysis, 2017, 7, 388-397. | 5.5 | 260 |
| 42 | Recent Progress on Advanced Materials for Solidâ€Oxide Fuel Cells Operating Below 500 Â°C. Advanced Materials, 2017, 29, 1700132. | 11.1 | 257 |
| 43 | Nitrogen-doped simple and complex oxides for photocatalysis: A review. Progress in Materials Science, 2018, 92, 33-63. | 16.0 | 257 |
| 44 | Oxygen Reduction Reaction Activity of La-Based Perovskite Oxides in Alkaline Medium: A Thin-Film Rotating Ring-Disk Electrode Study. Journal of Physical Chemistry C, 2012, 116, 5827-5834. | 1.5 | 253 |
| 45 | Perovskite Oxide Based Electrodes for Highâ€Performance Photoelectrochemical Water Splitting. Angewandte Chemie - International Edition, 2020, 59, 136-152. | 7.2 | 253 |
| 46 | Biogas reforming for hydrogen production over nickel and cobalt bimetallic catalysts. International Journal of Hydrogen Energy, 2009, 34, 6646-6654. | 3.8 | 252 |
| 47 | A Highâ€Performance Electrocatalyst for Oxygen Evolution Reaction: LiCo<sub>0.8</sub>Fe<sub>0.2</sub>O<sub>2</sub>. Advanced Materials, 2015, 27, 7150-7155. | 11.1 | 249 |
| 48 | Coâ€doping Strategy for Developing Perovskite Oxides as Highly Efficient Electrocatalysts for Oxygen Evolution Reaction. Advanced Science, 2016, 3, 1500187. | 5.6 | 245 |
| 49 | An Amorphous Nickelâ€“Ironâ€Based Electrocatalyst with Unusual Local Structures for Ultrafast Oxygen Evolution Reaction. Advanced Materials, 2019, 31, e1900883. | 11.1 | 243 |
| 50 | Zirconium doping effect on the performance of proton-conducting BaZryCe0.8â^'yY0.2O3â^'Î´ (0.0â‰¤yâ‰¤0.8) for fuel cell applications. Journal of Power Sources, 2009, 193, 400-407. | 4.0 | 242 |
| 51 | Performance of a mixed-conducting ceramic membrane reactor with high oxygen permeability for methane conversion. Journal of Membrane Science, 2001, 183, 181-192. | 4.1 | 237 |
| 52 | Interfacial polymerization of covalent organic frameworks (COFs) on polymeric substrates for molecular separations. Journal of Membrane Science, 2018, 566, 197-204. | 4.1 | 236 |
| 53 | Intramolecular electronic coupling in porous iron cobalt (oxy)phosphide nanoboxes enhances the electrocatalytic activity for oxygen evolution. Energy and Environmental Science, 2019, 12, 3348-3355. | 15.6 | 234 |
| 54 | Molecular Design of Mesoporous NiCo<sub>2</sub>O<sub>4</sub> and NiCo<sub>2</sub>S<sub>4</sub> with Subâ€Micrometerâ€Polyhedron Architectures for Efficient Pseudocapacitive Energy Storage. Advanced Functional Materials, 2017, 27, 1701229. | 7.8 | 230 |

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|---|---|---|---|
| 55 | Recent advances in the interface engineering of solid-state Li-ion batteries with artificial buffer layers: challenges, materials, construction, and characterization. Energy and Environmental Science, 2019, 12, 1780-1804. | 15.6 | 230 |
| 56 | Advances in Cathode Materials for Solid Oxide Fuel Cells: Complex Oxides without Alkaline Earth Metal Elements. Advanced Energy Materials, 2015, 5, 1500537. | 10.2 | 229 |
| 57 | Double Perovskites in Catalysis, Electrocatalysis, and Photo(electro)catalysis. Trends in Chemistry, 2019, 1, 410-424. | 4.4 | 227 |
| 58 | Re-evaluation of Ba0.5Sr0.5Co0.8Fe0.2O3â^'Î´ perovskite as oxygen semi-permeable membrane. Journal of Membrane Science, 2007, 291, 148-156. | 4.1 | 226 |
| 59 | Highly defective CeO<sub>2</sub> as a promoter for efficient and stable water oxidation. Journal of Materials Chemistry A, 2015, 3, 634-640. | 5.2 | 225 |
| 60 | Fundamental Understanding of Photocurrent Hysteresis in Perovskite Solar Cells. Advanced Energy Materials, 2019, 9, 1803017. | 10.2 | 224 |
| 61 | Evaluation of A-site cation-deficient (Ba0.5Sr0.5)1â^'xCo0.8Fe0.2O3â^'Î´ (x>0) perovskite as a solid-oxide fuel cell cathode. Journal of Power Sources, 2008, 182, 24-31. | 4.0 | 218 |
| 62 | Selfâ€Catalyzed Growth of Co, Nâ€Codoped CNTs on Carbonâ€Encased CoS<sub>x</sub> Surface: A Nobleâ€Metalâ€Free Bifunctional Oxygen Electrocatalyst for Flexible Solid Znâ€"Air Batteries. Advanced Functional Materials, 2019, 29, 1904481. | 7.8 | 217 |
| 63 | Carbon-based electrocatalysts for sustainable energy applications. Progress in Materials Science, 2021, 116, 100717. | 16.0 | 216 |
| 64 | Nanodiamonds in sp 2 /sp 3 configuration for radical to nonradical oxidation: Core-shell layer dependence. Applied Catalysis B: Environmental, 2018, 222, 176-181. | 10.8 | 214 |
| 65 | Bigger is Surprisingly Better: Agglomerates of Larger RuP Nanoparticles Outperform Benchmark Pt Nanocatalysts for the Hydrogen Evolution Reaction. Advanced Materials, 2018, 30, e1800047. | 11.1 | 212 |
| 66 | Metal-organic frameworks derived porous carbon, metal oxides and metal sulfides-based compounds for supercapacitors application. Energy Storage Materials, 2020, 26, 1-22. | 9.5 | 208 |
| 67 | Promotion of Oxygen Reduction by Exsolved Silver Nanoparticles on a Perovskite Scaffold for Low-Temperature Solid Oxide Fuel Cells. Nano Letters, 2016, 16, 512-518. | 4.5 | 202 |
| 68 | Anion Doping: A New Strategy for Developing Highâ€Performance Perovskiteâ€Type Cathode Materials of Solid Oxide Fuel Cells. Advanced Energy Materials, 2017, 7, 1700242. | 10.2 | 198 |
| 69 | Designing Highâ€Valence Metal Sites for Electrochemical Water Splitting. Advanced Functional Materials, 2021, 31, 2009779. | 7.8 | 195 |
| 70 | Tunable titanium metalâ€"organic frameworks with infinite 1D Tiâ€"O rods for efficient visible-light-driven photocatalytic H<sub>2</sub> evolution. Journal of Materials Chemistry A, 2019, 7, 11928-11933. | 5.2 | 192 |
| 71 | Boosting Oxygen Evolution Reaction by Creating Both Metal Ion and Latticeâ€Oxygen Active Sites in a Complex Oxide. Advanced Materials, 2020, 32, e1905025. | 11.1 | 190 |
| 72 | Unusual synergistic effect in layered Ruddlesdenâ^'Popper oxide enables ultrafast hydrogen evolution. Nature Communications, 2019, 10, 149. | 5.8 | 187 |

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|---|---|---|---|
| 73 | Water Splitting with an Enhanced Bifunctional Double Perovskite. ACS Catalysis, 2018, 8, 364-371. | 5.5 | 186 |
| 74 | Developing a â€œWaterâ€Defendableâ€•and â€œDendriteâ€Freeâ€•Lithiumâ€Metal Anode Using a Simple and Promising GeCl<sub>4</sub> Pretreatment Method. Advanced Materials, 2018, 30, e1705711. | 11.1 | 186 |
| 75 | La-doped BaFeO3â^'Î´ perovskite as a cobalt-free oxygen reduction electrode for solid oxide fuel cells with oxygen-ion conducting electrolyte. Journal of Materials Chemistry, 2012, 22, 15071. | 6.7 | 184 |
| 76 | Assessment of Ba0.5Sr0.5Co1â^'yFeyO3â^'Î´ (y=0.0â€“1.0) for prospective application as cathode for IT-SOFCs or oxygen permeating membrane. Electrochimica Acta, 2007, 52, 7343-7351. | 2.6 | 182 |
| 77 | Highâ€Quality Ruddlesdenâ€“Popper Perovskite Film Formation for Highâ€Performance Perovskite Solar Cells. Advanced Materials, 2021, 33, e2002582. | 11.1 | 182 |
| 78 | A niobium and tantalum co-doped perovskite cathode for solid oxide fuel cells operating below 500â€‰Â°C. Nature Communications, 2017, 8, 13990. | 5.8 | 180 |
| 79 | Anion Etching for Accessing Rapid and Deep Self-Reconstruction of Precatalysts for Water Oxidation. Matter, 2020, 3, 2124-2137. | 5.0 | 177 |
| 80 | Systematic Study of Oxygen Evolution Activity and Stability on La<sub>1â€“x</sub>Sr<sub>x</sub>FeO<sub>3â^'Î´</sub> Perovskite Electrocatalysts in Alkaline Media. ACS Applied Materials & Interfaces, 2018, 10, 11715-11721. | 4.0 | 173 |
| 81 | Enhancing Bi-functional Electrocatalytic Activity of Perovskite by Temperature Shock: A Case Study of LaNiO<sub>3â^'Î´</sub>. Journal of Physical Chemistry Letters, 2013, 4, 2982-2988. | 2.1 | 172 |
| 82 | Two orders of magnitude enhancement in oxygen evolution reactivity on amorphous Ba <sub>0.5</sub> Sr <sub>0.5</sub> Co <sub>0.8</sub> Fe <sub>0.2</sub> O <sub>3â^'Î´</sub> nanofilms with tunable oxidation state. Science Advances, 2017, 3, e1603206. | 4.7 | 170 |
| 83 | Simultaneous Power Conversion Efficiency and Stability Enhancement of Cs<sub>2</sub>AgBiBr<sub>6</sub> Leadâ€Free Inorganic Perovskite Solar Cell through Adopting a Multifunctional Dye Interlayer. Advanced Functional Materials, 2020, 30, 2001557. | 7.8 | 169 |
| 84 | Advances in three-dimensional graphene-based materials: configurations, preparation and application in secondary metal (Li, Na, K, Mg, Al)-ion batteries. Energy and Environmental Science, 2019, 12, 2030-2053. | 15.6 | 163 |
| 85 | Surface exchange and bulk diffusion properties of Ba0.5Sr0.5Co0.8Fe0.2O3â^'Î´ mixed conductor. International Journal of Hydrogen Energy, 2011, 36, 6948-6956. | 3.8 | 161 |
| 86 | Synthesis, oxygen permeation study and membrane performance of a Ba0.5Sr0.5Co0.8Fe0.2O3â^'Î´ oxygen-permeable dense ceramic reactor for partial oxidation of methane to syngas. Separation and Purification Technology, 2001, 25, 97-116. | 3.9 | 160 |
| 87 | Highâ€Performance GeTeâ€Based Thermoelectrics: from Materials to Devices. Advanced Energy Materials, 2020, 10, 2000367. | 10.2 | 160 |
| 88 | A new symmetric solid-oxide fuel cell with La0.8Sr0.2Sc0.2Mn0.8O3-Î´ perovskite oxide as both the anode and cathode. Acta Materialia, 2009, 57, 1165-1175. | 3.8 | 158 |
| 89 | Evaluation of Ba0.5Sr0.5Co0.8Fe0.2O3â^'Î´ as a potential cathode for an anode-supported proton-conducting solid-oxide fuel cell. Journal of Power Sources, 2008, 180, 15-22. | 4.0 | 156 |
| 90 | Toward Reducing the Operation Temperature of Solid Oxide Fuel Cells: Our Past 15 Years of Efforts in Cathode Development. Energy & Fuels, 2020, 34, 15169-15194. | 2.5 | 152 |

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|---|---|---|---|
| 91 | Calcium-doped lanthanum nickelate layered perovskite and nickel oxide nano-hybrid for highly efficient water oxidation. Nano Energy, 2015, 12, 115-122. | 8.2 | 144 |
| 92 | Research progress and materials selection guidelines on mixed conducting perovskite-type ceramic membranes for oxygen production. RSC Advances, 2011, 1, 1661. | 1.7 | 143 |
| 93 | Mixed matrix membranes incorporated with size-reduced Cu-BTC for improved gas separation. Journal of Materials Chemistry A, 2013, 1, 6350. | 5.2 | 140 |
| 94 | High activity electrocatalysts from metalâ€“organic framework-carbon nanotube templates for the oxygen reduction reaction. Carbon, 2015, 82, 417-424. | 5.4 | 140 |
| 95 | Constructing Conductive Interfaces between Nickel Oxide Nanocrystals and Polymer Carbon Nitride for Efficient Electrocatalytic Oxygen Evolution Reaction. Advanced Functional Materials, 2019, 29, 1904020. | 7.8 | 140 |
| 96 | Defect engineering of oxide perovskites for catalysis and energy storage: synthesis of chemistry and materials science. Chemical Society Reviews, 2021, 50, 10116-10211. | 18.7 | 140 |
| 97 | Screening highly active perovskites for hydrogen-evolving reaction via unifying ionic electronegativity descriptor. Nature Communications, 2019, 10, 3755. | 5.8 | 139 |
| 98 | Ruddlesdenâ€“Popper perovskites in electrocatalysis. Materials Horizons, 2020, 7, 2519-2565. | 6.4 | 139 |
| 99 | Recent Advances in Cs<sub>2</sub>AgBiBr<sub>6</sub>-Based Halide Double Perovskites as Lead-Free and Inorganic Light Absorbers for Perovskite Solar Cells. Energy & Fuels, 2020, 34, 10513-10528. | 2.5 | 139 |
| 100 | A Highly Active Perovskite Electrode for the Oxygen Reduction Reaction Below 600â€‰Â°C. Angewandte Chemie - International Edition, 2013, 52, 14036-14040. | 7.2 | 138 |
| 101 | Fast Desalination by Multilayered Covalent Organic Framework (COF) Nanosheets. ACS Applied Materials & Interfaces, 2019, 11, 16847-16854. | 4.0 | 135 |
| 102 | Single-phase perovskite oxide with super-exchange induced atomic-scale synergistic active centers enables ultrafast hydrogen evolution. Nature Communications, 2020, 11, 5657. | 5.8 | 134 |
| 103 | High performance cobalt-free perovskite cathode for intermediate temperature solid oxide fuel cells. Journal of Materials Chemistry, 2010, 20, 9619. | 6.7 | 133 |
| 104 | Recent advances in anion-doped metal oxides for catalytic applications. Journal of Materials Chemistry A, 2019, 7, 7280-7300. | 5.2 | 133 |
| 105 | Efficient stabilization of cubic perovskite SrCoO3â˜Î´ by B-site low concentration scandium doping combined with solâ€“gel synthesis. Journal of Alloys and Compounds, 2008, 455, 465-470. | 2.8 | 132 |
| 106 | Boosting performance of lanthanide magnetism perovskite for advanced oxidation through lattice doping with catalytically inert element. Chemical Engineering Journal, 2019, 355, 721-730. | 6.6 | 132 |
| 107 | Advances in Zeolite Imidazolate Frameworks (ZIFs) Derived Bifunctional Oxygen Electrocatalysts and Their Application in Zincâ€“Air Batteries. Advanced Energy Materials, 2021, 11, 2100514. | 10.2 | 132 |
| 108 | Co<sub>3</sub>O<sub>4</sub> Nanosheets as Active Material for Hybrid Zn Batteries. Small, 2018, 14, e1800225. | 5.2 | 131 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Combustion synthesis of high-performance Li4Ti5O12 for secondary Li-ion battery. Ceramics International, 2009, 35, 1757-1768. | 2.3 | 130 |
| 110 | Recent Advances in Perovskite Oxides as Electrode Materials for Nonaqueous Lithiumâ€“Oxygen Batteries. Advanced Energy Materials, 2017, 7, 1602674. | 10.2 | 129 |
| 111 | Electrolyte materials for intermediate-temperature solid oxide fuel cells. Progress in Natural Science: Materials International, 2020, 30, 764-774. | 1.8 | 129 |
| 112 | Progress and Prospects in Symmetrical Solid Oxide Fuel Cells with Two Identical Electrodes. Advanced Energy Materials, 2015, 5, 1500188. | 10.2 | 128 |
| 113 | High activity and durability of novel perovskite electrocatalysts for water oxidation. Materials Horizons, 2015, 2, 495-501. | 6.4 | 128 |
| 114 | Rationally Designed Hierarchically Structured Tungsten Nitride and Nitrogenâ€Rich Grapheneâ€Like Carbon Nanocomposite as Efficient Hydrogen Evolution Electrocatalyst. Advanced Science, 2018, 5, 1700603. | 5.6 | 128 |
| 115 | Highâ€Performance Perovskite Composite Electrocatalysts Enabled by Controllable Interface Engineering. Small, 2021, 17, e2101573. | 5.2 | 128 |
| 116 | Homologous NiO//Ni<sub>2</sub>P nanoarrays grown on nickel foams: a well matched electrode pair with high stability in overall water splitting. Nanoscale, 2017, 9, 4409-4418. | 2.8 | 127 |
| 117 | SrTiO3-based thermoelectrics: Progress and challenges. Nano Energy, 2020, 78, 105195. | 8.2 | 127 |
| 118 | A new carbon fuel cell with high power output by integrating with in situ catalytic reverse Boudouard reaction. Electrochemistry Communications, 2009, 11, 1265-1268. | 2.3 | 126 |
| 119 | A novel efficient oxide electrode for electrocatalytic oxygen reduction at 400â€“600 Â°C. Chemical Communications, 2008, , 5791. | 2.2 | 125 |
| 120 | SrCo<sub>0.9</sub>Ti<sub>0.1</sub>O<sub>3â^Î´</sub> As a New Electrocatalyst for the Oxygen Evolution Reaction in Alkaline Electrolyte with Stable Performance. ACS Applied Materials & Interfaces, 2015, 7, 17663-17670. | 4.0 | 125 |
| 121 | New reduced-temperature ceramic fuel cells with dual-ion conducting electrolyte and triple-conducting double perovskite cathode. Journal of Materials Chemistry A, 2019, 7, 13265-13274. | 5.2 | 125 |
| 122 | Bifunctionality from Synergy: CoP Nanoparticles Embedded in Amorphous CoOx Nanoplates with Heterostructures for Highly Efficient Water Electrolysis. Advanced Science, 2018, 5, 1800514. | 5.6 | 124 |
| 123 | Utilizing ion leaching effects for achieving high oxygen-evolving performance on hybrid nanocomposite with self-optimized behaviors. Nature Communications, 2020, 11, 3376. | 5.8 | 122 |
| 124 | Hydrogen spillover in complex oxide multifunctional sites improves acidic hydrogen evolution electrocatalysis. Nature Communications, 2022, 13, 1189. | 5.8 | 122 |
| 125 | Recent Advances in Metalâ€Organic Framework Derivatives as Oxygen Catalysts for Zincâ€Air Batteries. Batteries and Supercaps, 2019, 2, 272-289. | 2.4 | 121 |
| 126 | Advances in Porous Perovskites: Synthesis and Electrocatalytic Performance in Fuel Cells and Metalâ€“Air Batteries. Energy and Environmental Materials, 2020, 3, 121-145. | 7.3 | 119 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | Barium- and strontium-enriched (Ba0.5Sr0.5)1+xCo0.8Fe0.2O3â^'Î´ oxides as high-performance cathodes for intermediate-temperature solid-oxide fuel cells. Acta Materialia, 2008, 56, 2687-2698. | 3.8 | 118 |
| 128 | Synthesis of nanocrystalline conducting composite oxides based on a non-ion selective combined complexing process for functional applications. Journal of Alloys and Compounds, 2006, 426, 368-374. | 2.8 | 117 |
| 129 | Boosting Oxygen Reduction Reaction Activity of Palladium by Stabilizing Its Unusual Oxidation States in Perovskite. Chemistry of Materials, 2015, 27, 3048-3054. | 3.2 | 117 |
| 130 | Advanced perovskite anodes for solid oxide fuel cells: A review. International Journal of Hydrogen Energy, 2019, 44, 31275-31304. | 3.8 | 117 |
| 131 | Systematic investigation on new SrCo1â^'yNbyO3â^'Î´ ceramic membranes with high oxygen semi-permeability. Journal of Membrane Science, 2008, 323, 436-443. | 4.1 | 114 |
| 132 | Flexible, Flameâ€Resistant, and Dendriteâ€Impermeable Gelâ€Polymer Electrolyte for Liâ€"O<sub>2</sub>/Air Batteries Workable Under Hurdle Conditions. Small, 2018, 14, e1801798. | 5.2 | 113 |
| 133 | One-Pot Synthesis of NiCo<sub>2</sub>S<sub>4</sub> Hollow Spheres via Sequential Ion-Exchange as an Enhanced Oxygen Bifunctional Electrocatalyst in Alkaline Solution. ACS Applied Materials & Interfaces, 2018, 10, 29521-29531. | 4.0 | 113 |
| 134 | A Cobaltâ€Free Multiâ€Phase Nanocomposite as Nearâ€Ideal Cathode of Intermediateâ€Temperature Solid Oxide Fuel Cells Developed by Smart Selfâ€Assembly. Advanced Materials, 2020, 32, e1906979. | 11.1 | 113 |
| 135 | Fundamental Understanding and Application of Ba<sub>0.5</sub>Sr<sub>0.5</sub>Co<sub>0.8</sub>Fe<sub>0.2</sub>O<sub>3â^'Î´</sub>Perovskite in Energy Storage and Conversion: Past, Present, and Future. Energy & Fuels, 2021, 35, 13585-13609. | 2.5 | 113 |
| 136 | Novel B-site ordered double perovskite Ba<sub>2</sub>Bi<sub>0.1</sub>Sc<sub>0.2</sub>Co<sub>1.7</sub>O<sub>6â^'x</sub>for highly efficient oxygen reduction reaction. Energy and Environmental Science, 2011, 4, 872-875. | 15.6 | 112 |
| 137 | Properties and performance of A-site deficient (Ba0.5Sr0.5)1â^'xCo0.8Fe0.2O3â^'Î´ for oxygen permeating membrane. Journal of Membrane Science, 2007, 306, 318-328. | 4.1 | 111 |
| 138 | Boosting the Activity of BaCo<sub>0.4</sub>Fe<sub>0.4</sub>Zr<sub>0.1</sub>Y<sub>0.1</sub>O<sub>3â^'</sub><sub>Î´</sub> Perovskite for Oxygen Reduction Reactions at Lowâ€toâ€Intermediate Temperatures through Tuning Bâ€Site Cation Deficiency. Advanced Energy Materials, 2019, 9, 1902384. | 10.2 | 111 |
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