Wei Zhou

List of Publications by Citations

708 papers	41,523 citations	100 h-index	169 g-index
734 ext. papers	49,994 ext. citations	10.7 avg, IF	8.23 L-index

#	Paper	IF	Citations
708	A high-performance cathode for the next generation of solid-oxide fuel cells. *Nature*, **2004**, 431, 170-3	50.4	2425
707	Investigation of the permeation behavior and stability of a Ba0.5Sr0.5Co0.8Fe0.2O3□oxygen membrane. *Journal of Membrane Science*, **2000**, 172, 177-188	9.6	862
706	Nonstoichiometric Oxides as Low-Cost and Highly-Efficient Oxygen Reduction/Evolution Catalysts for Low-Temperature Electrochemical Devices. *Chemical Reviews*, **2015**, 115, 9869-921	68.1	631
705	Research progress of perovskite materials in photocatalysis- and photovoltaics-related energy conversion and environmental treatment. *Chemical Society Reviews*, **2015**, 44, 5371-408	58.5	580
704	A thermally self-sustained micro solid-oxide fuel-cell stack with high power density. *Nature*, **2005**, 435, 795-8	50.4	517
703	Enhancing Electrocatalytic Activity of Perovskite Oxides by Tuning Cation Deficiency for Oxygen Reduction and Evolution Reactions. *Chemistry of Materials*, **2016**, 28, 1691-1697	9.6	443
702	Recent Progress in Metal-Organic Frameworks for Applications in Electrocatalytic and Photocatalytic Water Splitting. *Advanced Science*, **2017**, 4, 1600371	13.6	440
701	Nonradical reactions in environmental remediation processes: Uncertainty and challenges. *Applied Catalysis B: Environmental*, **2018**, 224, 973-982	21.8	397
700	Synthesis, characterization and evaluation of cation-ordered LnBaCo2O5+□as materials of oxygen permeation membranes and cathodes of SOFCs. *Acta Materialia*, **2008**, 56, 4876-4889	8.4	391
699	A comprehensive review of Li 4 Ti 5 O 12 -based electrodes for lithium-ion batteries: The latest advancements and future perspectives. *Materials Science and Engineering Reports*, **2015**, 98, 1-71	30.9	389
698	Progress in understanding and development of Ba0.5Sr0.5Co0.8Fe0.2O3□based cathodes for intermediate-temperature solid-oxide fuel cells: A review. *Journal of Power Sources*, **2009**, 192, 231-246	8.9	367
697	Hydrogen storage in a prototypical zeolitic imidazolate framework-8. *Journal of the American Chemical Society*, **2007**, 129, 5314-5	16.4	357
696	Flexible Zn□and Li□ir batteries: recent advances, challenges, and future perspectives. *Energy and Environmental Science*, **2017**, 10, 2056-2080	35.4	353
695	SrNb(0.1)Co(0.7)Fe(0.2)O(3-□perovskite as a next-generation electrocatalyst for oxygen evolution in alkaline solution. *Angewandte Chemie - International Edition*, **2015**, 54, 3897-901	16.4	345
694	Dynamic traction of lattice-confined platinum atoms into mesoporous carbon matrix for hydrogen evolution reaction. *Science Advances*, **2018**, 4, eaao6657	14.3	344
693	Progress in solid oxide fuel cells with nickel-based anodes operating on methane and related fuels. *Chemical Reviews*, **2013**, 113, 8104-51	68.1	342
692	A Perovskite Electrocatalyst for Efficient Hydrogen Evolution Reaction. *Advanced Materials*, **2016**, 28, 6442-8	24	315

691	Stable Hierarchical Bimetal-Organic Nanostructures as HighPerformance Electrocatalysts for the Oxygen Evolution Reaction. *Angewandte Chemie - International Edition*, **2019**, 58, 4227-4231	16.4	309
690	Advanced synthesis of materials for intermediate-temperature solid oxide fuel cells. *Progress in Materials Science*, **2012**, 57, 804-874	42.2	306
689	Intermediate-temperature electrochemical performance of a polycrystalline PrBaCo2O5+□cathode on samarium-doped ceria electrolyte. *Journal of Power Sources*, **2009**, 188, 96-105	8.9	282
688	Surface controlled generation of reactive radicals from persulfate by carbocatalysis on nanodiamonds. *Applied Catalysis B: Environmental*, **2016**, 194, 7-15	21.8	277
687	Surfactant-Assisted Phase-Selective Synthesis of New Cobalt MOFs and Their Efficient Electrocatalytic Hydrogen Evolution Reaction. *Angewandte Chemie - International Edition*, **2017**, 56, 13001-13005	16.4	275
686	Insights into perovskite-catalyzed peroxymonosulfate activation: Maneuverable cobalt sites for promoted evolution of sulfate radicals. *Applied Catalysis B: Environmental*, **2018**, 220, 626-634	21.8	274
685	Recent Advances and Prospective in Ruthenium-Based Materials for Electrochemical Water Splitting. *ACS Catalysis*, **2019**, 9, 9973-10011	13.1	269
684	A Perovskite Nanorod as Bifunctional Electrocatalyst for Overall Water Splitting. *Advanced Energy Materials*, **2017**, 7, 1602122	21.8	262
683	Advances in non-enzymatic glucose sensors based on metal oxides. *Journal of Materials Chemistry B* , **2016**, 4, 7333-7349	7.3	252
682	Recent advances in nanostructured metal nitrides for water splitting. *Journal of Materials Chemistry A*, **2018**, 6, 19912-19933	13	243
681	The use of nitrogen-doped graphene supporting Pt nanoparticles as a catalyst for methanol electrocatalytic oxidation. *Carbon*, **2013**, 52, 181-192	10.4	242
680	Molten salt synthesis of nitrogen-doped carbon with hierarchical pore structures for use as high-performance electrodes in supercapacitors. *Carbon*, **2015**, 93, 48-58	10.4	240
679	Ba effect in doped Sr(Co0.8Fe0.2)O3-□on the phase structure and oxygen permeation properties of the dense ceramic membranes. *Separation and Purification Technology*, **2001**, 25, 419-429	8.3	238
678	Enhancing Electrocatalytic Activity for Hydrogen Evolution by Strongly Coupled Molybdenum [email□protected] Carbon Porous Nano-Octahedrons. *ACS Catalysis*, **2017**, 7, 3540-3547	13.1	235
677	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	3.8	228
676	Biogas reforming for hydrogen production over nickel and cobalt bimetallic catalysts. *International Journal of Hydrogen Energy*, **2009**, 34, 6646-6654	6.7	218
675	Performance of a mixed-conducting ceramic membrane reactor with high oxygen permeability for methane conversion. *Journal of Membrane Science*, **2001**, 183, 181-192	9.6	209
674	A High-Performance Electrocatalyst for Oxygen Evolution Reaction: LiCo0.8 Fe0.2 O2. *Advanced Materials*, **2015**, 27, 7150-5	24	205

673	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	33.6	202
672	Zirconium doping effect on the performance of proton-conducting BaZryCe0.8−yY0.2O3−δ (0.0 ≤ y ≤ 0.8) for fuel cell applications. *Journal of Power Sources*, **2009**, 193, 400-407	8.9	202
671	Re-evaluation of Ba0.5Sr0.5Co0.8Fe0.2O3−δ perovskite as oxygen semi-permeable membrane. *Journal of Membrane Science*, **2007**, 291, 148-156	9.6	202
670	Phosphorus-Doped Perovskite Oxide as Highly Efficient Water Oxidation Electrocatalyst in Alkaline Solution. *Advanced Functional Materials*, **2016**, 26, 5862-5872	15.6	199
669	Perovskite/Carbon Composites: Applications in Oxygen Electrocatalysis. *Small*, **2017**, 13, 1603793	11	197
668	Co-doping Strategy for Developing Perovskite Oxides as Highly Efficient Electrocatalysts for Oxygen Evolution Reaction. *Advanced Science*, **2016**, 3, 1500187	13.6	196
667	Nitrogen-doped simple and complex oxides for photocatalysis: A review. *Progress in Materials Science*, **2018**, 92, 33-63	42.2	189
666	Mixed Conducting Perovskite Materials as Superior Catalysts for Fast Aqueous-Phase Advanced Oxidation: A Mechanistic Study. *ACS Catalysis*, **2017**, 7, 388-397	13.1	186
665	Evaluation of A-site cation-deficient (Ba0.5Sr0.5)1−xCo0.8Fe0.2O3−δ (x>0) perovskite as a solid-oxide fuel cell cathode. *Journal of Power Sources*, **2008**, 182, 24-31	8.9	186
664	Molecular Design of Mesoporous NiCo2O4 and NiCo2S4 with Sub-Micrometer-Polyhedron Architectures for Efficient Pseudocapacitive Energy Storage. *Advanced Functional Materials*, **2017**, 27, 1701229	15.6	185
663	Highly defective CeO2 as a promoter for efficient and stable water oxidation. *Journal of Materials Chemistry A*, **2015**, 3, 634-640	13	169
662	Advances in Cathode Materials for Solid Oxide Fuel Cells: Complex Oxides without Alkaline Earth Metal Elements. *Advanced Energy Materials*, **2015**, 5, 1500537	21.8	169
661	Recent Advances in Novel Nanostructuring Methods of Perovskite Electrocatalysts for Energy-Related Applications. *Small Methods*, **2018**, 2, 1800071	12.8	169
660	Recent Progress on Advanced Materials for Solid-Oxide Fuel Cells Operating Below 500 °C. *Advanced Materials*, **2017**, 29, 1700132	24	167
659	Direct evidence of boosted oxygen evolution over perovskite by enhanced lattice oxygen participation. *Nature Communications*, **2020**, 11, 2002	17.4	166
658	Promotion of Oxygen Reduction by Exsolved Silver Nanoparticles on a Perovskite Scaffold for Low-Temperature Solid Oxide Fuel Cells. *Nano Letters*, **2016**, 16, 512-8	11.5	164
657	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	35.4	163
656	An Amorphous Nickel-Iron-Based Electrocatalyst with Unusual Local Structures for Ultrafast Oxygen Evolution Reaction. *Advanced Materials*, **2019**, 31, e1900883	24	161

655	Assessment of Ba0.5Sr0.5Co1−yFeyO3−δ (y=0.0–1.0) for prospective application as cathode for IT-SOFCs or oxygen permeating membrane. *Electrochimica Acta*, **2007**, 52, 7343-7351	6.7	160
654	Nanodiamonds in sp2/sp3 configuration for radical to nonradical oxidation: Core-shell layer dependence. *Applied Catalysis B: Environmental*, **2018**, 222, 176-181	21.8	157
653	La-doped BaFeO3−δ 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		156
652	Tunable titanium metal–organic frameworks with infinite 1D Ti–O rods for efficient visible-light-driven photocatalytic H2 evolution. *Journal of Materials Chemistry A*, **2019**, 7, 11928-11933	13	153
651	Metal oxide-based materials as an emerging family of hydrogen evolution electrocatalysts. *Energy and Environmental Science*, **2020**, 13, 3361-3392	35.4	151
650	Fundamental Understanding of Photocurrent Hysteresis in Perovskite Solar Cells. *Advanced Energy Materials*, **2019**, 9, 1803017	21.8	148
649	Non-precious-metal catalysts for alkaline water electrolysis: operando characterizations, theoretical calculations, and recent advances. *Chemical Society Reviews*, **2020**, 49, 9154-9196	58.5	147
648	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	35.4	147
647	Interfacial polymerization of covalent organic frameworks (COFs) on polymeric substrates for molecular separations. *Journal of Membrane Science*, **2018**, 566, 197-204	9.6	145
646	A niobium and tantalum co-doped perovskite cathode for solid oxide fuel cells operating below 500 °C. *Nature Communications*, **2017**, 8, 13990	17.4	144
645	Self-Catalyzed Growth of Co, N-Codoped CNTs on Carbon-Encased CoSx Surface: A Noble-Metal-Free Bifunctional Oxygen Electrocatalyst for Flexible Solid Zn–Air Batteries. *Advanced Functional Materials*, **2019**, 29, 1904481	15.6	144
644	Developing a "Water-Defendable" and "Dendrite-Free" Lithium-Metal Anode Using a Simple and Promising GeCl Pretreatment Method. *Advanced Materials*, **2018**, 30, e1705711	24	142
643	Enhancing Bi-functional Electrocatalytic Activity of Perovskite by Temperature Shock: A Case Study of LaNiO3−δ. *Journal of Physical Chemistry Letters*, **2013**, 4, 2982-2988	6.4	142
642	Synthesis, oxygen permeation study and membrane performance of a Ba0.5Sr0.5Co0.8Fe0.2O3−δ oxygen-permeable dense ceramic reactor for partial oxidation of methane to syngas. *Separation and Purification Technology*, **2001**, 25, 97-116	8.3	141
641	A new symmetric solid-oxide fuel cell with La0.8Sr0.2Sc0.2Mn0.8O3-δ perovskite oxide as both the anode and cathode. *Acta Materialia*, **2009**, 57, 1165-1175	8.4	140
640	Bigger is Surprisingly Better: Agglomerates of Larger RuP Nanoparticles Outperform Benchmark Pt Nanocatalysts for the Hydrogen Evolution Reaction. *Advanced Materials*, **2018**, 30, e1800047	24	139
639	Evaluation of Ba0.5Sr0.5Co0.8Fe0.2O3−δ as a potential cathode for an anode-supported proton-conducting solid-oxide fuel cell. *Journal of Power Sources*, **2008**, 180, 15-22	8.9	138
638	Perovskite Oxide Based Electrodes for High-Performance Photoelectrochemical Water Splitting. *Angewandte Chemie - International Edition*, **2020**, 59, 136-152	16.4	135

637	Two orders of magnitude enhancement in oxygen evolution reactivity on amorphous BaSrCoFeO nanofilms with tunable oxidation state. *Science Advances*, **2017**, 3, e1603206	14.3	134
636	Anion Doping: A New Strategy for Developing High-Performance Perovskite-Type Cathode Materials of Solid Oxide Fuel Cells. *Advanced Energy Materials*, **2017**, 7, 1700242	21.8	132
635	Water Splitting with an Enhanced Bifunctional Double Perovskite. *ACS Catalysis*, **2018**, 8, 364-371	13.1	132
634	Self-Assembled Triple-Conducting Nanocomposite as a Superior Protonic Ceramic Fuel Cell Cathode. *Joule*, **2019**, 3, 2842-2853	27.8	127
633	Surface exchange and bulk diffusion properties of Ba0.5Sr0.5Co0.8Fe0.2O3□mixed conductor. *International Journal of Hydrogen Energy*, **2011**, 36, 6948-6956	6.7	124
632	Double Perovskites in Catalysis, Electrocatalysis, and Photo(electro)catalysis. *Trends in Chemistry*, **2019**, 1, 410-424	14.8	123
631	A highly active perovskite electrode for the oxygen reduction reaction below 600 □C. *Angewandte Chemie - International Edition*, **2013**, 52, 14036-40	16.4	123
630	Research progress and materials selection guidelines on mixed conducting perovskite-type ceramic membranes for oxygen production. *RSC Advances*, **2011**, 1, 1661	3.7	123
629	High performance cobalt-free perovskite cathode for intermediate temperature solid oxide fuel cells. *Journal of Materials Chemistry*, **2010**, 20, 9619		123
628	Mixed matrix membranes incorporated with size-reduced Cu-BTC for improved gas separation. *Journal of Materials Chemistry A*, **2013**, 1, 6350	13	122
627	Boosting Oxygen Evolution Reaction by Creating Both Metal Ion and Lattice-Oxygen Active Sites in a Complex Oxide. *Advanced Materials*, **2020**, 32, e1905025	24	122
626	High activity electrocatalysts from metal□rganic framework-carbon nanotube templates for the oxygen reduction reaction. *Carbon*, **2015**, 82, 417-424	10.4	121
625	Combustion synthesis of high-performance Li4Ti5O12 for secondary Li-ion battery. *Ceramics International*, **2009**, 35, 1757-1768	5.1	121
624	Calcium-doped lanthanum nickelate layered perovskite and nickel oxide nano-hybrid for highly efficient water oxidation. *Nano Energy*, **2015**, 12, 115-122	17.1	120
623	High activity and durability of novel perovskite electrocatalysts for water oxidation. *Materials Horizons*, **2015**, 2, 495-501	14.4	119
622	Unusual synergistic effect in layered Ruddlesden-Popper oxide enables ultrafast hydrogen evolution. *Nature Communications*, **2019**, 10, 149	17.4	116
621	A novel efficient oxide electrode for electrocatalytic oxygen reduction at 400-600 degrees C. *Chemical Communications*, **2008**, 5791-3	5.8	115
620	Efficient stabilization of cubic perovskite SrCoO3□by B-site low concentration scandium doping combined with sol□el synthesis. *Journal of Alloys and Compounds*, **2008**, 455, 465-470	5.7	114

619	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	35.4	113
618	A new carbon fuel cell with high power output by integrating with in situ catalytic reverse Boudouard reaction. *Electrochemistry Communications*, **2009**, 11, 1265-1268	5.1	112
617	Metal-organic frameworks derived porous carbon, metal oxides and metal sulfides-based compounds for supercapacitors application. *Energy Storage Materials*, **2020**, 26, 1-22	19.4	110
616	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	5.7	109
615	Novel B-site ordered double perovskite Ba2Bi0.1Sc0.2Co1.7O6 for highly efficient oxygen reduction reaction. *Energy and Environmental Science*, **2011**, 4, 872-875	35.4	108
614	Systematic Study of Oxygen Evolution Activity and Stability on LaSr FeO Perovskite Electrocatalysts in Alkaline Media. *ACS Applied Materials & Interfaces*, **2018**, 10, 11715-11721	9.5	107
613	Co O Nanosheets as Active Material for Hybrid Zn Batteries. *Small*, **2018**, 14, e1800225	11	103
612	Systematic investigation on new SrCo1 NbyO3 ceramic membranes with high oxygen semi-permeability. *Journal of Membrane Science*, **2008**, 323, 436-443	9.6	103
611	Recent Advances in Perovskite Oxides as Electrode Materials for Nonaqueous Lithium Oxygen Batteries. *Advanced Energy Materials*, **2017**, 7, 1602674	21.8	102
610	Boosting Oxygen Reduction Reaction Activity of Palladium by Stabilizing Its Unusual Oxidation States in Perovskite. *Chemistry of Materials*, **2015**, 27, 3048-3054	9.6	102
609	Barium- and strontium-enriched (Ba0.5Sr0.5)1+xCo0.8Fe0.2O3 oxides as high-performance cathodes for intermediate-temperature solid-oxide fuel cells. *Acta Materialia*, **2008**, 56, 2687-2698	8.4	101
608	Homologous NiO//NiP nanoarrays grown on nickel foams: a well matched electrode pair with high stability in overall water splitting. *Nanoscale*, **2017**, 9, 4409-4418	7.7	100
607	SrCo(0.9)Ti(0.1)O(3-) As a New Electrocatalyst for the Oxygen Evolution Reaction in Alkaline Electrolyte with Stable Performance. *ACS Applied Materials & Interfaces*, **2015**, 7, 17663-70	9.5	97
606	Novel SrSc0.2Co0.8O3 as a cathode material for low temperature solid-oxide fuel cell. *Electrochemistry Communications*, **2008**, 10, 1647-1651	5.1	97
605	Thermal-expansion offset for high-performance fuel cell cathodes. *Nature*, **2021**, 591, 246-251	50.4	97
604	Progress and Prospects in Symmetrical Solid Oxide Fuel Cells with Two Identical Electrodes. *Advanced Energy Materials*, **2015**, 5, 1500188	21.8	96
603	Properties and performance of A-site deficient (Ba0.5Sr0.5)1 Co0.8Fe0.2O3 for oxygen permeating membrane. *Journal of Membrane Science*, **2007**, 306, 318-328	9.6	96
602	Rationally Designed Hierarchically Structured Tungsten Nitride and Nitrogen-Rich Graphene-Like Carbon Nanocomposite as Efficient Hydrogen Evolution Electrocatalyst. *Advanced Science*, **2018**, 5, 1700603	13.6	95

601	High-Performance GeTe-Based Thermoelectrics: from Materials to Devices. *Advanced Energy Materials*, **2020**, 10, 2000367	21.8	94
600	BaNb0.05Fe0.95O3 as a new oxygen reduction electrocatalyst for intermediate temperature solid oxide fuel cells. *Journal of Materials Chemistry A*, **2013**, 1, 9781	13	93
599	Cobalt Oxide and Cobalt-Graphitic Carbon Core-Shell Based Catalysts with Remarkably High Oxygen Reduction Reaction Activity. *Advanced Science*, **2016**, 3, 1600060	13.6	92
598	Facile mechanochemical synthesis of nano SnO2/graphene composite from coarse metallic Sn and graphite oxide: an outstanding anode material for lithium-ion batteries. *Chemistry - A European Journal*, **2014**, 20, 4055-63	4.8	90
597	Simultaneous Power Conversion Efficiency and Stability Enhancement of Cs2AgBiBr6 Lead-Free Inorganic Perovskite Solar Cell through Adopting a Multifunctional Dye Interlayer. *Advanced Functional Materials*, **2020**, 30, 2001557	15.6	90
596	Scalable synthesis of self-standing sulfur-doped flexible graphene films as recyclable anode materials for low-cost sodium-ion batteries. *Carbon*, **2016**, 107, 67-73	10.4	89
595	Facile synthesis of nitrogen-doped carbon nanotubes encapsulating nickel cobalt alloys 3D networks for oxygen evolution reaction in an alkaline solution. *Journal of Power Sources*, **2017**, 338, 26-33	8.9	89
594	Trapping sulfur in hierarchically porous, hollow indented carbon spheres: a high-performance cathode for lithium sulfur batteries. *Journal of Materials Chemistry A*, **2016**, 4, 9526-9535	13	87
593	Recent Advances in Metal-Organic Framework Derivatives as Oxygen Catalysts for Zinc-Air Batteries. *Batteries and Supercaps*, **2019**, 2, 272-289	5.6	87
592	Anion Etching for Accessing Rapid and Deep Self-Reconstruction of Precatalysts for Water Oxidation. *Matter*, **2020**, 3, 2124-2137	12.7	86
591	A Universal Strategy to Design Superior Water-Splitting Electrocatalysts Based on Fast In Situ Reconstruction of Amorphous Nanofilm Precursors. *Advanced Materials*, **2018**, 30, e1804333	24	86
590	Synthesis and oxygen permeation study of novel perovskite-type BaBixCo0.2Fe0.8 O3 ceramic membranes. *Journal of Membrane Science*, **2000**, 164, 167-176	9.6	85
589	Flexible, Flame-Resistant, and Dendrite-Impermeable Gel-Polymer Electrolyte for Li-O /Air Batteries Workable Under Hurdle Conditions. *Small*, **2018**, 14, e1801798	11	83
588	A Comparative Study of Oxygen Reduction Reaction on Bi- and La-Doped SrFeO[sub 3] Perovskite Cathodes. *Journal of the Electrochemical Society*, **2011**, 158, B132	3.9	83
587	Facile synthesis of a MoO2 Mo2C composite and its application as favorable anode material for lithium-ion batteries. *Journal of Power Sources*, **2016**, 307, 552-560	8.9	82
586	Systematic evaluation of Co-free LnBaFe2O5+ (Ln=Lanthanides or Y) oxides towards the application as cathodes for intermediate-temperature solid oxide fuel cells. *Electrochimica Acta*, **2012**, 78, 466-474	6.7	80
585	High power-density single-chamber fuel cells operated on methane. *Journal of Power Sources*, **2006** , 162, 589-596	8.9	80
584	Activity and Stability of Ruddlesden-Popper-Type La(n+1) Ni(n) O(3n+1) (n=1, 2, 3, and) Electrocatalysts for Oxygen Reduction and Evolution Reactions in Alkaline Media. *Chemistry - A European Journal*, **2016**, 22, 2719-27	4.8	80

583	Highly flexible self-standing film electrode composed of mesoporous rutile TiO2/C nanofibers for lithium-ion batteries. *Electrochimica Acta*, **2012**, 85, 636-643	6.7	78
582	Properties and performance of Ba0.5Sr0.5Co0.8Fe0.2O3−δ–Sm0.2Ce0.8O1.9 composite cathode. *Journal of Power Sources*, **2008**, 179, 60-68	8.9	78
581	Boosting performance of lanthanide magnetism perovskite for advanced oxidation through lattice doping with catalytically inert element. *Chemical Engineering Journal*, **2019**, 355, 721-730	14.7	78
580	An A-site-deficient perovskite offers high activity and stability for low-temperature solid-oxide fuel cells. *ChemSusChem*, **2013**, 6, 2249-54	8.3	77
579	Proton-conducting fuel cells operating on hydrogen, ammonia and hydrazine at intermediate temperatures. *International Journal of Hydrogen Energy*, **2010**, 35, 2637-2642	6.7	77
578	Recent advances in anion-doped metal oxides for catalytic applications. *Journal of Materials Chemistry A*, **2019**, 7, 7280-7300	13	76
577	Highly Defective Layered Double Perovskite Oxide for Efficient Energy Storage via Reversible Pseudocapacitive Oxygen-Anion Intercalation. *Advanced Energy Materials*, **2018**, 8, 1702604	21.8	76
576	A universal and facile way for the development of superior bifunctional electrocatalysts for oxygen reduction and evolution reactions utilizing the synergistic effect. *Chemistry - A European Journal*, **2014**, 20, 15533-42	4.8	76
575	Enhancing Electrode Performance by Exsolved Nanoparticles: A Superior Cobalt-Free Perovskite Electrocatalyst for Solid Oxide Fuel Cells. *ACS Applied Materials & Interfaces*, **2016**, 8, 35308-35314	9.5	76
574	Design of Perovskite Oxides as Anion-Intercalation-Type Electrodes for Supercapacitors: Cation Leaching Effect. *ACS Applied Materials & Interfaces*, **2016**, 8, 23774-83	9.5	75
573	Screening highly active perovskites for hydrogen-evolving reaction via unifying ionic electronegativity descriptor. *Nature Communications*, **2019**, 10, 3755	17.4	75
572	Surprisingly high activity for oxygen reduction reaction of selected oxides lacking long oxygen-ion diffusion paths at intermediate temperatures: a case study of cobalt-free BaFeO(3-δ) *ACS Applied Materials & Interfaces*, **2014**, 6, 11180-9	9.5	75
571	Porous Polyethersulfone-Supported Zeolitic Imidazolate Framework Membranes for Hydrogen Separation. *Journal of Physical Chemistry C*, **2012**, 116, 13264-13270	3.8	75
570	Ba0.5Sr0.5Co0.8Fe0.2O3 −δ + LaCoO3 composite cathode for Sm0.2Ce0.8O1.9-electrolyte based intermediate-temperature solid-oxide fuel cells. *Journal of Power Sources*, **2007**, 168, 330-337	8.9	75
569	Facile Synthesis of a 3D Nanoarchitectured Li4Ti5O12 Electrode for Ultrafast Energy Storage. *Advanced Energy Materials*, **2016**, 6, 1500924	21.8	74
568	One-Pot Synthesis of NiCoS Hollow Spheres via Sequential Ion-Exchange as an Enhanced Oxygen Bifunctional Electrocatalyst in Alkaline Solution. *ACS Applied Materials & Interfaces*, **2018**, 10, 29521-29531	9.5	74
567	Anode-supported ScSZ-electrolyte SOFC with whole cell materials from combined EDTA–citrate complexing synthesis process. *Journal of Power Sources*, **2007**, 172, 704-712	8.9	74
566	Fast Desalination by Multilayered Covalent Organic Framework (COF) Nanosheets. *ACS Applied Materials & Interfaces*, **2019**, 11, 16847-16854	9.5	73

565	Structural and oxygen-transport studies of double perovskites PrBa1−xCo2O5+δ (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	13	73
564	Advanced Symmetric Solid Oxide Fuel Cell with an Infiltrated K2NiF4-Type La2NiO4 Electrode. *Energy & Fuels*, **2014**, 28, 356-362	4.1	73
563	Novel CO2-tolerant ion-transporting ceramic membranes with an external short circuit for oxygen separation at intermediate temperatures. *Energy and Environmental Science*, **2012**, 5, 5257-5264	35.4	73
562	Cellulose-assisted combustion synthesis of Li4Ti5O12 adopting anatase TiO2 solid as raw material with high electrochemical performance. *Journal of Alloys and Compounds*, **2009**, 477, 665-672	5.7	73
561	Amorphous Iron Oxide Decorated 3D Heterostructured Electrode for Highly Efficient Oxygen Reduction. *Chemistry of Materials*, **2011**, 23, 4193-4198	9.6	72
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559	Evaluation of the CO2 Poisoning Effect on a Highly Active Cathode SrSc(0.175)Nb(0.025)Co(0.8)O(3-δ) in the Oxygen Reduction Reaction. *ACS Applied Materials & Interfaces*, **2016**, 8, 3003-11	9.5	71
558	Bifunctionality from Synergy: CoP Nanoparticles Embedded in Amorphous CoOx Nanoplates with Heterostructures for Highly Efficient Water Electrolysis. *Advanced Science*, **2018**, 5, 1800514	13.6	71
557	A new cathode for solid oxide fuel cells capable of in situ electrochemical regeneration. *Journal of Materials Chemistry*, **2011**, 21, 15343		71
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