

# Tao Wei

## List of Publications by Year in descending order

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80  
papers

2,619  
citations

185998

28  
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205818

48  
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81  
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docs citations

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times ranked

2881  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Photoresponsive Rutile TiO <sub>2</sub> Heterojunction with Enhanced Electron-Hole Separation for High-Performance Hydrogen Evolution. <i>Advanced Materials</i> , 2019, 31, e1806596.	11.1	240
2	Thermal and electrochemical properties of PrBa <sub>0.5</sub> Sr <sub>0.5</sub> Co <sub>2-x</sub> Fe <sub>x</sub> O <sub>5+δ</sub> (x=0.5, 1.0, 1.5) cathode materials for solid-oxide fuel cells. <i>Journal of Power Sources</i> , 2013, 232, 279-285.	4.0	134
3	Methanation of CO <sub>2</sub> over Ni/Al <sub>2</sub> O <sub>3</sub> modified with alkaline earth metals: Impacts of oxygen vacancies on catalytic activity. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 8197-8213.	3.8	99
4	High-performance piezoelectric composite nanogenerator based on Ag/(K,Na)NbO <sub>3</sub> heterostructure. <i>Nano Energy</i> , 2018, 50, 62-69.	8.2	93
5	Cobalt-based double-perovskite symmetrical electrodes with low thermal expansion for solid oxidefuel cells. <i>Journal of Materials Chemistry</i> , 2012, 22, 225-231.	6.7	90
6	Catalytic pyrolysis of poplar wood over transition metal oxides: Correlation of catalytic behaviors with physiochemical properties of the oxides. <i>Biomass and Bioenergy</i> , 2019, 124, 125-141.	2.9	82
7	Steam reforming of guaiacol over Ni/Al <sub>2</sub> O <sub>3</sub> and Ni/SBA-15: Impacts of support on catalytic behaviors of nickel and properties of coke. <i>Fuel Processing Technology</i> , 2019, 191, 138-151.	3.7	78
8	Sr <sub>3-3x</sub> Na <sub>3x</sub> Si <sub>3</sub> O <sub>9-1.5x</sub> (x = 0.45) as a superior solid oxide-ion electrolyte for intermediate temperature-solid oxide fuel cells. <i>Energy and Environmental Science</i> , 2014, 7, 1680-1684.	15.6	75
9	Electrochemical performance of double-perovskite Ba <sub>2</sub> MMoO <sub>6</sub> (M=Fe, Co, Mn, Ni) anode materials for solid oxide fuel cells. <i>Journal of Power Sources</i> , 2012, 198, 59-65.	4.0	71
10	Optimizing the grain size and grain boundary morphology of (K,Na)NbO <sub>3</sub> -based ceramics: Paving the way for ultrahigh energy storage capacitors. <i>Journal of Materiomics</i> , 2021, 7, 780-789.	2.8	69
11	Sr <sub>2</sub> NiMoO <sub>6</sub> as anode material for LaGaO <sub>3</sub> -based solid oxide fuel cell. <i>Electrochemistry Communications</i> , 2008, 10, 1369-1372.	2.3	65
12	Evaluation of Pr <sub>1-x</sub> Ba <sub>1-x</sub> Co <sub>2</sub> O <sub>5+δ</sub> (x = 0 - 0.30) as cathode materials for solid-oxide fuel cells. <i>Electrochimica Acta</i> , 2014, 133, 364-372.	2.6	65
13	Achieving ultrahigh energy storage efficiency in local-composition gradient-structured ferroelectric ceramics. <i>Chemical Engineering Journal</i> , 2021, 425, 129506.	6.6	65
14	Characterization of Pr <sub>1-x</sub> Sr <sub>x</sub> Co <sub>0.8</sub> Fe <sub>0.2</sub> O <sub>3+δ</sub> (0.2%≤x≤0.6) cathode materials for intermediate-temperature solid oxide fuel cells. <i>Journal of Power Sources</i> , 2008, 183, 581-585.	4.0	64
15	Intrinsic Effects of Ruddlesden-Popper-Based Bifunctional Catalysts for High-Temperature Oxygen Reduction and Evolution. <i>Advanced Energy Materials</i> , 2019, 9, 1901573.	10.2	58
16	Understanding correlation of the interaction between nickel and alumina with the catalytic behaviors in steam reforming and methanation. <i>Fuel</i> , 2019, 250, 176-193.	3.4	56
17	A Combined Optimization Strategy for Improvement of Comprehensive Energy Storage Performance in Sodium Niobate-Based Antiferroelectric Ceramics. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 9330-9339.	4.0	56
18	An All-Ceramic Solid-State Rechargeable Na <sup>+</sup> Battery Operated at Intermediate Temperatures. <i>Advanced Functional Materials</i> , 2014, 24, 5380-5384.	7.8	52

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19	High conductive and long-term phase stable anode materials for SOFCs: A $2\text{FeMoO}_6$ ( $\text{A}=\text{Ca, Sr, Ba}$ ). <i>Journal of Power Sources</i> , 2017, 359, 384-390.	4.0	51
20	A reversible and stable flake-like $\text{LiCoO}_2$ cathode for lithium ion batteries. <i>Chemical Communications</i> , 2014, 50, 1962.	2.2	47
21	Steam reforming of guaiacol over $\text{Ni/SiO}_2$ catalyst modified with basic oxides: Impacts of alkalinity on properties of coke. <i>Energy Conversion and Management</i> , 2020, 205, 112301.	4.4	40
22	Ultrathin and Highly Crystalline $\text{Co}_3\text{O}_4$ Nanosheets In Situ Grown on Graphene toward Enhanced Supercapacitor Performance. <i>Advanced Materials Interfaces</i> , 2017, 4, 1600884.	1.9	33
23	Defect control for enhanced piezoelectric properties in $\text{SnO}_2$ and $\text{ZrO}_2$ co-modified KNN ceramics fired under reducing atmosphere. <i>Journal of the European Ceramic Society</i> , 2017, 37, 2057-2065.	2.8	33
24	Evaluation of $\text{La}_{0.4}\text{Ba}_{0.6}\text{Fe}_{0.8}\text{Zn}_{0.2}\text{O}_{3+\delta}+\text{Sm}_{0.2}\text{Ce}_{0.8}\text{O}_{1.9}$ as a potential cobalt-free composite cathode for intermediate temperature solid oxide fuel cells. <i>Journal of Power Sources</i> , 2015, 275, 808-814.	4.0	32
25	Defect engineering of BCZT-based piezoelectric ceramics with high piezoelectric properties. <i>Journal of Advanced Ceramics</i> , 2022, 11, 184-195.	8.9	32
26	Oxidase-Inspired Selective $2e/4e$ Reduction of Oxygen on Electron-Deficient Cu. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 4833-4842.	4.0	31
27	A high-performance, cobalt-free cathode for intermediate-temperature solid oxide fuel cells with excellent $\text{CO}_2$ tolerance. <i>Journal of Power Sources</i> , 2016, 319, 178-184.	4.0	30
28	Defect engineering of high-performance potassium sodium niobate piezoelectric ceramics sintered in reducing atmosphere. <i>Journal of the American Ceramic Society</i> , 2017, 100, 2024-2033.	1.9	28
29	Polarization switching and rotation in KNN-based lead-free piezoelectric ceramics near the polymorphic phase boundary. <i>Journal of the European Ceramic Society</i> , 2019, 39, 1002-1010.	2.8	28
30	Autothermal reforming of methane over an integrated solid oxide fuel cell reactor for power and syngas co-generation. <i>Journal of Power Sources</i> , 2021, 513, 230536.	4.0	28
31	Impacts of La addition on formation of the reaction intermediates over alumina and silica supported nickel catalysts in methanation of $\text{CO}_2$ . <i>Journal of the Energy Institute</i> , 2020, 93, 723-738.	2.7	27
32	Flux of silver-carbonate membranes for post-combustion $\text{CO}_2$ capture: The effects of membrane thickness, gas concentration and time. <i>Journal of Membrane Science</i> , 2014, 455, 162-167.	4.1	25
33	Thermally sprayed high-performance porous metal-supported solid oxide fuel cells with nanostructured $\text{La}_{0.6}\text{Sr}_{0.4}\text{Co}_{0.2}\text{Fe}_{0.8}\text{O}_{3+\delta}$ cathodes. <i>Journal of Materials Chemistry A</i> , 2016, 4, 7461-7468.	5.2	25
34	Promising Proton Conductor for Intermediate-Temperature Fuel Cells: $\text{Li}_{13.9}\text{Sr}_{0.1}\text{Zn}(\text{GeO}_4)_4$ . <i>Chemistry of Materials</i> , 2017, 29, 1490-1495.	3.2	25
35	High-Voltage All-Solid-State Na-Ion-Based Full Cells Enabled by All NASICON-Structured Materials. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 24192-24197.	4.0	25
36	Synergetic effects of hydrogenation and acidic sites in phosphorus-modified nickel catalysts for the selective conversion of furfural to cyclopentanone. <i>Catalysis Science and Technology</i> , 2021, 11, 575-593.	2.1	25

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37	A microchannel reactor-integrated ceramic fuel cell with dual-coupling effect for efficient power and syngas co-generation from methane. Applied Catalysis B: Environmental, 2021, 297, 120443.	10.8	25
38	Optimizing energy harvesting performance by tailoring ferroelectric/relaxor behavior in KNN-based piezoceramics. Journal of Advanced Ceramics, 2022, 11, 935-944.	8.9	25
39	BaCo <sub>0.7</sub> Fe <sub>0.2</sub> Nb <sub>0.1</sub> O <sub>3</sub> Perovskite Oxide as Cathode Material for Intermediate-Temperature Solid Oxide Fuel Cells. Electrochemical and Solid-State Letters, 2009, 12, B103.	2.2	23
40	Electrical conduction and dielectric relaxation mechanisms in the KNN-based ceramics. Journal of Applied Physics, 2019, 126, .	1.1	23
41	Evaluation of Ca <sub>3</sub> Co <sub>2</sub> O <sub>6</sub> as cathode material for high-performance solid-oxide fuel cell. Scientific Reports, 2013, 3, 1125.	1.6	22
42	Thermoelectric Solid-Oxide Fuel Cells with Extra Power Conversion from Waste Heat. Chemistry of Materials, 2012, 24, 1401-1403.	3.2	21
43	Elevated-temperature bio-ethanol-assisted water electrolysis for efficient hydrogen production. Chemical Engineering Journal, 2022, 434, 134699.	6.6	21
44	Amelioration on energy storage performance of KNN-based transparent ceramics by optimizing the polarization and breakdown strength. Journal of the American Ceramic Society, 2022, 105, 6158-6167.	1.9	20
45	Essential microstructure of cathode functional layers of solid oxide electrolysis cells for CO <sub>2</sub> electrolysis. Journal of CO <sub>2</sub> Utilization, 2019, 32, 214-218.	3.3	19
46	Design of p-type KNN-based piezoelectric ceramics sintered in low oxygen partial pressure by defect engineering. Journal of the American Ceramic Society, 2020, 103, 3667-3675.	1.9	17
47	Achieving excellent energy storage reliability and endurance via mechanical performance optimization strategy in engineered ceramics with core-shell grain structure. Journal of Materiomics, 2022, 8, 601-610.	2.8	16
48	One-pot synthesized hetero-structured Ca <sub>3</sub> Co <sub>2</sub> O <sub>6</sub> /La <sub>0.6</sub> Ca <sub>0.4</sub> CoO <sub>3</sub> dual-phase composite cathode materials for solid-oxide fuel cells. International Journal of Hydrogen Energy, 2015, 40, 12750-12760.	3.8	15
49	La <sub>2</sub> NiO <sub>4</sub> Infiltration of Plasma-Sprayed LSCF Coating for Cathode Performance Improvement. Journal of Thermal Spray Technology, 2016, 25, 392-400.	1.6	15
50	Anode-supported solid oxide fuel cells based on Sm <sub>0.2</sub> Ce <sub>0.8</sub> O <sub>1.9</sub> electrolyte fabricated by a phase-inversion and drop-coating process. International Journal of Hydrogen Energy, 2016, 41, 10907-10913.	3.8	15
51	A highly active CH <sub>4</sub> catalyst correlated with solid oxide fuel cell anode performance. Journal of Materials Chemistry A, 2021, 9, 5067-5074.	5.2	15
52	Revealing the Intrinsic Origin for Performance-Enhancing V <sub>2</sub> O <sub>5</sub> Electrode Materials. ACS Applied Materials & Interfaces, 2020, 12, 45961-45967.	4.0	14
53	Catalytic CeO <sub>2</sub> washcoat over microchanneled supporting cathodes of solid oxide electrolysis cells for efficient and stable CO <sub>2</sub> reduction. Journal of Power Sources, 2019, 412, 344-349.	4.0	13
54	Robust Anode-Supported Cells with Fast Oxygen Release Channels for Efficient and Stable CO <sub>2</sub> Electrolysis at Ultrahigh Current Densities. Small, 2021, 17, e2007211.	5.2	13

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55	Controlling grain size in columnar YSZ coating formation by droplet filtering assisted PS-PVD processing. RSC Advances, 2015, 5, 102126-102133.	1.7	11
56	Composites of Single/Double Perovskites as Cathodes for Solid Oxide Fuel Cells. Energy Technology, 2016, 4, 804-808.	1.8	11
57	A Comparative Study on the Li <sup>+</sup> /Na <sup>+</sup> Transportation in NASICON-Type Electrolytes. Journal of Physical Chemistry C, 2018, 122, 20565-20570.	1.5	11
58	Enhanced thermal and cycling reliabilities in (K,Na)(Nb,Sb)O <sub>3</sub> -CaZrO <sub>3</sub> -(Bi,Na)HfO <sub>3</sub> ceramics. Journal of Advanced Ceramics, 2020, 9, 349-359.	8.9	11
59	Efficient conversion of methane into power via microchanneled solid oxide fuel cells. Journal of Power Sources, 2020, 453, 227848.	4.0	11
60	3D Vertically Aligned Microchannel Three-Layer All Ceramic Lithium Ion Battery for High-Rate and Long-Cycle Electrochemical Energy Storage. Small, 2022, 18, e2107442.	5.2	11
61	Review "Double-Perovskite Electrode Design Strategies and Research Progress for SOFCs. Journal of the Electrochemical Society, 2022, 169, 064508.	1.3	11
62	Thermoelectric solid-oxide fuel cell with Ca <sub>2</sub> Co <sub>2</sub> O <sub>5</sub> as cathode material. RSC Advances, 2013, 3, 2336.	1.7	10
63	Interfacial effects on electrical conductivity in ultrafine-grained Sm <sub>0.2</sub> Ce <sub>0.8</sub> O <sub>2-<math>\delta</math></sub> electrolytes fabricated by a two-step sintering process. International Journal of Hydrogen Energy, 2017, 42, 11823-11829.	3.8	10
64	Impacts of Solvents on the Stability of the Biomass-Derived Sugars and Furans. Energy & Fuels, 2020, 34, 3250-3261.	2.5	10
65	Activating ORR and OER in Ruddlesden-Popper based catalysts by enhancing interstitial oxygen and lattice oxygen redox reactions. Electrochimica Acta, 2021, 370, 137747.	2.6	10
66	Defect engineering on sea-urchin-like transition-metal oxides for high-performance supercapacitors. Journal of Power Sources, 2022, 533, 231409.	4.0	10
67	Ultrahigh energy harvesting properties in Ag decorated potassium-sodium niobite particle-polymer composite. Journal of Materiomics, 2020, 6, 355-363.	2.8	9
68	Enhanced ferro-photocatalytic performance for ANbO <sub>3</sub> (A = Na, K) nanoparticles. Mathematical Biosciences and Engineering, 2019, 16, 4122-4134.	1.0	9
69	Systematic effect of contaminations on IT-SOFCs cathode stability: a quantifiable correlation versus cathode-side poisoning and protection. Journal of Materials Chemistry A, 2018, 6, 5172-5184.	5.2	8
70	Enhanced photocatalytic activity and cycle stability driven by ultrasonic vibration for ferroelectric photocatalysts. IET Nanodielectrics, 2019, 2, 48-53.	2.0	8
71	Enhanced Photocatalytic Activity by the Combined Influence of Ferroelectric Domain and Au Nanoparticles for BaTiO <sub>3</sub> Fibers. Nano, 2018, 13, 1850149.	0.5	7
72	Factors influencing Li <sup>+</sup> migration in garnet-type ceramic electrolytes. Journal of Materiomics, 2019, 5, 214-220.	2.8	7

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73	Achieving high mechanical-strength CH <sub>4</sub> -based SOFCs by low-temperature sintering (1100Å°). International Journal of Hydrogen Energy, 2020, 45, 3086-3093.	3.8	7
74	Medium-Entropy SrV <sub>1/3</sub> Fe <sub>1/3</sub> Mo <sub>1/3</sub> O <sub>3</sub> with High Conductivity and Strong Stability as SOFCs High-Performance Anode. Materials, 2022, 15, 2298.	1.3	7
75	Enhanced electrochemical activity in Ca <sub>3</sub> Co <sub>2</sub> O <sub>6</sub> cathode for solid-oxide fuel cells by Cu substitution. Journal of Materiomics, 2015, 1, 60-67.	2.8	5
76	Optimization of Cathode Functional Layers of Solid Oxide Electrolysis Cells. ACS Applied Materials & Interfaces, 2020, 12, 40917-40924.	4.0	5
77	Enhanced thermal reliability of Mn-doped (K, Na)NbO <sub>3</sub> -based piezoelectric ceramics. Journal of Materials Science: Materials in Electronics, 2019, 30, 18659-18665.	1.1	4
78	Evaluation of Ca <sub>3</sub> (Co,M) <sub>2</sub> O <sub>6</sub> (M=Co, Fe, Mn, Ni) as new cathode materials for solid-oxide fuel cells. Progress in Natural Science: Materials International, 2015, 25, 370-378.	1.8	3
79	Optimizing coupling agent for the enhanced energy storage density of BaTiO <sub>3</sub> /P(VDF&HFP)&PMMA nanocomposite films. Journal of Polymer Research, 2021, 28, 1.	1.2	3
80	The optimal sintering atmosphere and defect structure of CuO-doped NKN-based ceramic with p/n-type conduction mechanism. Journal of Materials Science: Materials in Electronics, 2021, 32, 1928-1940.	1.1	1