

# Xh Zheng

## List of Publications by Year in descending order

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69  
papers

3,418  
citations

147801

31  
h-index

144013

57  
g-index

69  
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69  
docs citations

69  
times ranked

3877  
citing authors

#	ARTICLE	IF	CITATIONS
1	Defect-Rich Heterogeneous MoS <sub>2</sub> /NiS <sub>2</sub> Nanosheets Electrocatalysts for Efficient Overall Water Splitting. <i>Advanced Science</i> , 2019, 6, 1900246.	11.2	468
2	Hierarchical NiCo-LDH/NiCoP@NiMn-LDH hybrid electrodes on carbon cloth for excellent supercapacitors. <i>Journal of Materials Chemistry A</i> , 2018, 6, 15040-15046.	10.3	233
3	Activating and optimizing the activity of NiCoP nanosheets for electrocatalytic alkaline water splitting through the V doping effect enhanced by P vacancies. <i>Journal of Materials Chemistry A</i> , 2019, 7, 24486-24492.	10.3	227
4	Core-branched CoSe <sub>2</sub> /Ni <sub>0.85</sub> Se nanotube arrays on Ni foam with remarkable electrochemical performance for hybrid supercapacitors. <i>Journal of Materials Chemistry A</i> , 2018, 6, 19151-19158.	10.3	171
5	Atomic scale insights into structure instability and decomposition pathway of methylammonium lead iodide perovskite. <i>Nature Communications</i> , 2018, 9, 4807.	12.8	161
6	Nanoarchitected Design of Vertical Standing Arrays for Supercapacitors: Progress, Challenges, and Perspectives. <i>Advanced Functional Materials</i> , 2021, 31, 2006030.	14.9	150
7	Bifunctional Electrocatalysts Based on Mo-Doped NiCoP Nanosheet Arrays for Overall Water Splitting. <i>Nano-Micro Letters</i> , 2019, 11, 55.	27.0	125
8	In Situ Synthesis of Vertical Standing Nanosized NiO Encapsulated in Graphene as Electrodes for High-Performance Supercapacitors. <i>Advanced Science</i> , 2018, 5, 1700687.	11.2	117
9	Atomic-Level Platinum Filling into Ni Vacancies of Dual-Deficient NiO for Boosting Electrocatalytic Hydrogen Evolution. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	110
10	In situ encapsulated Fe <sub>3</sub> O <sub>4</sub> nanosheet arrays with graphene layers as an anode for high-performance asymmetric supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24594-24601.	10.3	105
11	Designing oxygen bonding between reduced graphene oxide and multishelled Mn <sub>3</sub> O <sub>4</sub> hollow spheres for enhanced performance of supercapacitors. <i>Journal of Materials Chemistry A</i> , 2019, 7, 6686-6694.	10.3	103
12	Corrosion behavior of stainless steel-tungsten carbide joints brazed with AgCuX (X=Al, Ti) alloys. <i>Corrosion Science</i> , 2022, 200, 110231.	6.6	80
13	P-Doped NiCo <sub>2</sub> S <sub>4</sub> nanotubes as battery-type electrodes for high-performance asymmetric supercapacitors. <i>Dalton Transactions</i> , 2018, 47, 8771-8778.	3.3	75
14	Oxygen-vacancy-rich nickel-cobalt layered double hydroxide electrode for high-performance supercapacitors. <i>Journal of Colloid and Interface Science</i> , 2019, 554, 59-65.	9.4	70
15	Designing and constructing core-shell NiCo <sub>2</sub> S <sub>4</sub> @Ni <sub>3</sub> S <sub>2</sub> on Ni foam by facile one-step strategy as advanced battery-type electrodes for supercapattery. <i>Journal of Colloid and Interface Science</i> , 2019, 536, 456-462.	9.4	70
16	Mesostructured Carbon Nanotube-on-MnO <sub>2</sub> Nanosheet Composite for High-Performance Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 38963-38969.	8.0	65
17	Hierarchical CuCo <sub>2</sub> O <sub>4</sub> @NiMoO <sub>4</sub> core-shell hybrid arrays as a battery-like electrode for supercapacitors. <i>Inorganic Chemistry Frontiers</i> , 2017, 4, 1575-1581.	6.0	55
18	Thermal stability and high-temperature shape memory effect of Ti-Ta-Zr alloy. <i>Scripta Materialia</i> , 2013, 68, 1008-1011.	5.2	50

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19	Free-standing porous Ni <sub>2</sub> P-Ni <sub>5</sub> P <sub>4</sub> heterostructured arrays for efficient electrocatalytic water splitting. <i>Journal of Colloid and Interface Science</i> , 2019, 552, 332-336.	9.4	49
20	W doping dominated NiO/NiS <sub>2</sub> interfaced nanosheets for highly efficient overall water splitting. <i>Journal of Colloid and Interface Science</i> , 2020, 562, 363-369.	9.4	47
21	Fe doped Ni <sub>5</sub> P <sub>4</sub> nanosheet arrays with rich P vacancies via phase transformation for efficient overall water splitting. <i>Nanoscale</i> , 2020, 12, 6204-6210.	5.6	47
22	Engineering Se vacancies to promote the intrinsic activities of P doped NiSe <sub>2</sub> nanosheets for overall water splitting. <i>Journal of Colloid and Interface Science</i> , 2020, 571, 260-266.	9.4	47
23	Modifying the electrochemical performance of vertically-oriented few-layered graphene through rotary plasma processing. <i>Journal of Materials Chemistry A</i> , 2018, 6, 908-917.	10.3	46
24	Welding and Joining of Titanium Aluminides. <i>Materials</i> , 2014, 7, 4930-4962.	2.9	45
25	Hierarchical Fe <sub>2</sub> O <sub>3</sub> and NiO nanotube arrays as advanced anode and cathode electrodes for high-performance asymmetric supercapacitors. <i>Journal of Alloys and Compounds</i> , 2019, 794, 255-260.	5.5	45
26	Rich P vacancies modulate Ni <sub>2</sub> P/Cu <sub>3</sub> P interfaced nanosheets for electrocatalytic alkaline water splitting. <i>Journal of Colloid and Interface Science</i> , 2020, 564, 37-42.	9.4	43
27	General Decomposition Pathway of Organic-Inorganic Hybrid Perovskites through an Intermediate Superstructure and its Suppression Mechanism. <i>Advanced Materials</i> , 2020, 32, e2001107.	21.0	42
28	Exploring CoP core-shell nanosheets by Fe and Zn dual cation doping as efficient electrocatalysts for overall water splitting. <i>Catalysis Science and Technology</i> , 2020, 10, 1395-1400.	4.1	40
29	Rational construction of core-shell Ni <sub>3</sub> S <sub>2</sub> @Ni(OH) <sub>2</sub> nanostructures as battery-like electrodes for supercapacitors. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 1985-1991.	6.0	37
30	Nickel-doped MoSe <sub>2</sub> nanosheets with Ni-Se bond for alkaline electrocatalytic hydrogen evolution. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 10724-10728.	7.1	37
31	Atomic-scale imaging of CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> structure and its decomposition pathway. <i>Nature Communications</i> , 2021, 12, 5516.	12.8	36
32	In situ synthesis of core-shell vanadium nitride@N-doped carbon microsheet sponges as high-performance anode materials for solid-state supercapacitors. <i>Journal of Colloid and Interface Science</i> , 2020, 560, 122-129.	9.4	34
33	A fast micro-nano liquid layer induced construction of scaled-up oxyhydroxide based electrocatalysts for alkaline water splitting. <i>Journal of Materials Chemistry A</i> , 2021, 9, 26777-26787.	10.3	27
34	Mn and S dual-doping of MOF-derived Co <sub>3</sub> O <sub>4</sub> electrode array increases the efficiency of electrocatalytic generation of oxygen. <i>Journal of Colloid and Interface Science</i> , 2019, 557, 28-33.	9.4	26
35	All-in-One Sulfur Host: Smart Controls of Architecture and Composition for Accelerated Liquid-Solid Redox Conversion in Lithium-Sulfur Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 39424-39434.	8.0	22
36	Synthesis of graphene on a Ni film by radio-frequency plasma-enhanced chemical vapor deposition. <i>Science Bulletin</i> , 2012, 57, 3040-3044.	1.7	21

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37	Effect of Ni substitution for Ga on the polycrystalline Ni <sub>54</sub> Mn <sub>25</sub> Ga <sub>20.9</sub> Gd <sub>0.1</sub> high-temperature shape memory alloys. <i>Journal of Alloys and Compounds</i> , 2013, 557, 60-66.	5.5	21
38	Sea urchin-like CuCo <sub>2</sub> S <sub>4</sub> microspheres with a controllable interior structure as advanced electrode materials for high-performance supercapacitors. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 603-609.	6.0	20
39	Self-Assembly Lightweight Honeycomb-Like Prussian Blue Analogue on Cu Foam for Lithium Metal Anode. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 23803-23810.	8.0	19
40	Lattice Mismatch in Ni <sub>3</sub> Se <sub>4</sub> –MoSe <sub>2</sub> Nanoheterostructures with an Abundant Interface for Catalytic Hydrogen Evolution. <i>ACS Applied Nano Materials</i> , 2021, 4, 3493-3499.	5.0	18
41	Constructing MoS <sub>2</sub> /CoMo <sub>2</sub> S <sub>4</sub> /Co <sub>3</sub> S <sub>4</sub> nanostructures supported by graphene layers as the anode for lithium-ion batteries. <i>Dalton Transactions</i> , 2020, 49, 1167-1172.	3.3	17
42	In situ formation of TiB whiskers to reinforce SiO <sub>2</sub> -BN/Ti6Al4V brazed joints. <i>Ceramics International</i> , 2019, 45, 8054-8057.	4.8	16
43	Tailoring the microstructure, martensitic transformation and strain recovery characteristics of Ti-Ta shape memory alloys by changing Hf content. <i>Journal of Materials Science and Technology</i> , 2021, 83, 123-130.	10.7	16
44	Surface activation towards manganese dioxide nanosheet arrays via plasma engineering as cathode and anode for efficient water splitting. <i>Journal of Colloid and Interface Science</i> , 2021, 586, 95-102.	9.4	15
45	Characterization of free-standing nanocrystalline Ni <sub>55.2</sub> Mn <sub>24.7</sub> Ga <sub>19.9</sub> Gd <sub>0.2</sub> high temperature shape memory thin film. <i>Journal of Alloys and Compounds</i> , 2016, 661, 43-48.	5.5	11
46	Antimony nanocrystals self-encapsulated within bio-oil derived carbon for ultra-stable sodium storage. <i>Journal of Colloid and Interface Science</i> , 2021, 582, 459-466.	9.4	11
47	Plasma-induced surface reorganization of porous Co <sub>3</sub> O <sub>4</sub> -CoO heterostructured nanosheets for electrocatalytic water oxidation. <i>Journal of Colloid and Interface Science</i> , 2020, 565, 400-404.	9.4	10
48	Bioinspired Metal-Intermetallic Laminated Composites for the Fabrication of Superhydrophobic Surfaces with Responsive Wettability. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 5834-5843.	8.0	10
49	Stable lithium metal anode achieved by shortening diffusion path on solid electrolyte interface derived from Cu <sub>2</sub> O lithiophilic layer. <i>Chemical Engineering Journal</i> , 2022, 433, 133689.	12.7	10
50	Thermal stability of Ni <sub>54</sub> Mn <sub>25</sub> Ga <sub>20.9</sub> Gd <sub>0.1</sub> high-temperature shape memory alloy with large reversible strain. <i>Materials Letters</i> , 2014, 123, 250-253.	2.6	9
51	Direct Observation of Li Migration into V <sub>5</sub> S <sub>8</sub> : Order to Antisite Disorder Intercalation Followed by the Topotactic-Based Conversion Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 36320-36328.	8.0	9
52	Making Superhydrophobic Surfaces with Microstripe Array Structure by Diffusion Bonding and Their Applications in Magnetic Control Microdroplet Release Systems. <i>Advanced Materials Interfaces</i> , 2017, 4, 1700918.	3.7	8
53	The effect of annealing treatment on microstructure and shape memory behavior of Ti-Ta-Zr thin films. <i>Vacuum</i> , 2018, 153, 1-5.	3.5	8
54	Atomic-scale structural and chemical evolution of Li <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> cathode cycled at high voltage window. <i>Nano Research</i> , 2019, 12, 1675-1681.	10.4	8

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55	Constructing NiS <sub>2</sub> /VS heterostructured nanosheets for efficient overall water splitting. Inorganic Chemistry Frontiers, 2020, 7, 4924-4929.	6.0	7
56	Rationally designed C/Co <sub>9</sub> S <sub>8</sub> @SnS <sub>2</sub> nanocomposite as a highly efficient anode for lithium-ion batteries. Nanotechnology, 2020, 31, 395401.	2.6	7
57	Periodic Corrosion Turns Bulk Ni into Zr-Incorporated Polycrystalline Ni(OH) <sub>2</sub> Nanoarrays for Overall Water Decomposition. ACS Applied Energy Materials, 2022, 5, 5711-5718.	5.1	7
58	Understanding the Effect of Surface Machining on the YSZ/Ti6Al4V Joint via Image Based Modelling. Scientific Reports, 2019, 9, 12027.	3.3	6
59	Thermal stability and high-temperature shape memory effect of Ni 55.2 Mn 24.7 Ga 19.9 Gd 0.2 thin film. Vacuum, 2018, 147, 78-81.	3.5	5
60	Cu-Based Multicomponent Metallic Compound Materials as Electrocatalyst for Water Splitting. Frontiers in Chemistry, 0, 10, .	3.6	5
61	High-Performance Supercapacitors: In Situ Synthesis of Vertical Standing Nanosized NiO Encapsulated in Graphene as Electrodes for High-Performance Supercapacitors (Adv. Sci. 3/2018). Advanced Science, 2018, 5, 1870019.	11.2	4
62	Facile Synthesis of FeOOH <sup>•</sup> Ni <sub>3</sub> S <sub>2</sub> Nanosheet Arrays on Nickel Foam via Chemical Immersion toward Electrocatalytic Water Splitting. ChemistrySelect, 2022, 7, .	1.5	4
63	Joining 3YSZ Electrolyte to AISI 441 Interconnect Using the Ag Particle Interlayer: Enhanced Mechanical and Aging Properties. Crystals, 2021, 11, 1573.	2.2	3
64	The effects of indium addition on mechanical properties and shape memory behavior of Ti-Ta-Zr high temperature alloys. Materials Chemistry and Physics, 2020, 249, 123189.	4.0	2
65	Joining Alumina and Sapphire by Growing Aluminium Borate Whiskers In-Situ, and the Whiskers <sup>TM</sup> Orientation Relationship with the Sapphire Substrate. Materials, 2020, 13, 175.	2.9	2
66	Microstructure and mechanical properties of Al <sub>2</sub> O <sub>3</sub> ceramic joints achieved by Ag <sub>60</sub> SiO <sub>2</sub> braze in air. International Journal of Applied Ceramic Technology, 2022, 19, 508-513.	2.1	2
67	Damping Capacity of Ni <sup>•</sup> Mn <sup>•</sup> Ga <sup>•</sup> Gd High-Temperature Shape Memory Thin Film. Shape Memory and Superelasticity, 2018, 4, 369-376.	2.2	1
68	Effect of Ni concentration on solderability, microstructure and hardness of SAC0705-xNi solder joints on Cu and graphene-coated Cu substrates. Modern Physics Letters B, 2019, 33, 1850425.	1.9	1
69	Superhydrophobicity: Making Superhydrophobic Surfaces with Microstripe Array Structure by Diffusion Bonding and Their Applications in Magnetic Control Microdroplet Release Systems (Adv.) Tj ETQq1 1 0.784314 rgB0/Overlook		