

Zhao Qian

List of Publications by Year in descending order

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45
papers

1,482
citations

331642

21
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315719

38
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45
all docs

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docs citations

45
times ranked

1889
citing authors

#	ARTICLE	IF	CITATIONS
1	Voltage-Modulated Structure Stress for Enhanced Electrochemical Performances: The Case of $\frac{1}{4}$ -Sn in Sodium-Ion Batteries. Nano Letters, 2021, 21, 3588-3595.	9.1	38
2	Bifunctional Catalytic Activity Guided by Rich Crystal Defects in $\text{Ti}_3\text{C}_2\text{MXene}$ Quantum Dot Clusters for Li-O_2 Batteries. Advanced Energy Materials, 2021, 11, 2003069.	19.5	52
3	Nitrogen-Containing Gas Sensing Properties of 2-D Ti_2N and Its Derivative Nanosheets: Electronic Structures Insight. Nanomaterials, 2021, 11, 2459.	4.1	5
4	Eu^{2+} ions as an antioxidant additive for Sn-based perovskite light-emitting diodes. Journal of Materials Chemistry C, 2021, 9, 12079-12085.	5.5	18
5	Reduced bandgap and enhanced <i>p</i> -type electrical conduction in Ag-alloyed Cu_2O thin films. Journal of Applied Physics, 2020, 128, .	2.5	3
6	Controllable Phosphorylation Strategy for Free-Standing Phosphorus/Nitrogen Cofunctionalized Porous Carbon Monoliths as High-Performance Potassium Ion Battery Anodes. ACS Nano, 2020, 14, 14057-14069.	14.6	67
7	Poisonous Vapor Adsorption on Pure and Modified Aluminum Nitride Nanosheet for Environmental Safety: A DFT Exploration. Sustainability, 2020, 12, 10097.	3.2	3
8	First-principles calculations into $\text{LiAl}(\text{NH}_2)_4$ and its derivative hydrides for potential sodium storage. Results in Physics, 2020, 19, 103408.	4.1	2
9	First-Principles Exploration of Hazardous Gas Molecule Adsorption on Pure and Modified $\text{Al}_6\text{ON}_6\text{O}$ Nanoclusters. Nanomaterials, 2020, 10, 2156.	4.1	2
10	Defective and doped aluminum nitride monolayers for NO adsorption: Physical insight. Chemical Physics Letters, 2020, 753, 137592.	2.6	11
11	Cobalt(II) Tetraaminophthalocyanine-Modified Multiwall Carbon Nanotubes as an Efficient Sulfur Redox Catalyst for Lithium-Sulfur Batteries. ChemSusChem, 2020, 13, 3034-3044.	6.8	27
12	Atomically dispersed cobalt catalyst anchored on nitrogen-doped carbon nanosheets for lithium-oxygen batteries. Nature Communications, 2020, 11, 1576.	12.8	237
13	Sodium Carboxymethyl Cellulose as an Effective Modifier for Boosting the Electrochemical Performance of Commercial TiO_2 . Energy Technology, 2020, 8, 1901253.	3.8	1
14	Molecular-level heterostructures assembled from layered black phosphorene and $\text{Ti}_3\text{C}_2\text{MXene}$ as superior anodes for high-performance sodium ion batteries. Nano Energy, 2019, 65, 104037.	16.0	143
15	Ab Initio Screening of Doped $\text{Mg}(\text{AlH}_4)_2$ Systems for Conversion-Type Lithium Storage. Materials, 2019, 12, 2599.	2.9	5
16	Theoretical prediction of a novel aluminum nitride nanostructure: Atomistic exposure. Ceramics International, 2019, 45, 23690-23693.	4.8	3
17	Structural Evolution of AlN Nanoclusters and the Elemental Chemisorption Characteristics: Atomistic Insight. Nanomaterials, 2019, 9, 1420.	4.1	4
18	Atomistic Modeling of Various Doped Mg_2NiH_4 as Conversion Electrode Materials for Lithium Storage. Crystals, 2019, 9, 254.	2.2	5

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19	Effective enhancement in rate capability and cyclability of Li ₄ Ti ₅ O ₁₂ enabled by coating lithium magnesium silicate. <i>Electrochimica Acta</i> , 2019, 295, 891-899.	5.2	25
20	The in-situ synthesis and strengthening mechanism of the multi-scale SiC particles in Al-Si-C alloys. <i>Journal of Alloys and Compounds</i> , 2018, 750, 935-944.	5.5	22
21	First-principles investigation of CO adsorption on pristine, C-doped and N-vacancy defected hexagonal AlN nanosheets. <i>Applied Surface Science</i> , 2018, 439, 196-201.	6.1	47
22	Co@C/CoO _x coupled with N-doped layer-structured carbons for excellent CO ₂ capture and oxygen reduction reaction. <i>Carbon</i> , 2018, 133, 306-315.	10.3	34
23	Exploring pristine and Li-doped Mg ₂ NiH ₄ compounds with potential lithium-storage properties: Ab initio insight. <i>Journal of Alloys and Compounds</i> , 2018, 746, 140-146.	5.5	8
24	The grain refinement performance of B-doped TiC on Zr-containing Al alloys. <i>Journal of Alloys and Compounds</i> , 2018, 731, 774-783.	5.5	22
25	Bread-making synthesis of hierarchically Co@C nanoarchitecture in heteroatom doped porous carbons for oxidative degradation of emerging contaminants. <i>Applied Catalysis B: Environmental</i> , 2018, 225, 76-83.	20.2	194
26	Effect of defects on adsorption characteristics of AlN monolayer towards SO ₂ and NO ₂ : Ab initio exposure. <i>Applied Surface Science</i> , 2018, 462, 615-622.	6.1	42
27	Morphological transformation mechanism of eutectic Si phases in Al–Si alloys by nano-AlNp. <i>Journal of Alloys and Compounds</i> , 2018, 765, 113-120.	5.5	22
28	Ab initio insight into graphene nanofibers to destabilize hydrazine borane for hydrogen release. <i>Chemical Physics Letters</i> , 2017, 669, 110-114.	2.6	3
29	Revisiting Mg–Mg ₂ Ni System from Electronic Perspective. <i>Metals</i> , 2017, 7, 489.	2.3	5
30	Unveiling the Semicoherent Interface with Definite Orientation Relationships between Reinforcements and Matrix in Novel Al ₃ BC/Al Composites. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 28194-28201.	8.0	53
31	Influences of Fe, Si and homogenization on electrical conductivity and mechanical properties of dilute Al–Mg–Si alloy. <i>Journal of Alloys and Compounds</i> , 2016, 666, 50-57.	5.5	51
32	Identification of novel dual-scale Al ₃ BC particles in Al based composites. <i>Materials and Design</i> , 2016, 93, 283-290.	7.0	42
33	Generation and evolution of nanoscale AlP and Al ₁₃ Fe ₄ particles in Al–Fe–P system. <i>Journal of Alloys and Compounds</i> , 2015, 622, 662-668.	5.5	10
34	The synergistic effect of Al–B–C master alloy to improve conductivity and strength of 1070 alloy. <i>Journal of Alloys and Compounds</i> , 2015, 639, 478-482.	5.5	19
35	Optimizing microstructures of dilute Al–Fe–Si alloys designed with enhanced electrical conductivity and tensile strength. <i>Journal of Alloys and Compounds</i> , 2015, 650, 768-776.	5.5	44
36	Screening study of light-metal and transition-metal-doped NiTiH hydrides as Li-ion battery anode materials. <i>Solid State Ionics</i> , 2014, 258, 88-91.	2.7	9

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37	Energetic and structural analysis of N ₂ H ₄ BH ₃ inorganic solid and its modified material for hydrogen storage. International Journal of Hydrogen Energy, 2013, 38, 6718-6725.	7.1	7
38	Metal-decorated graphene oxide for ammonia adsorption. Europhysics Letters, 2013, 103, 28007.	2.0	17
39	Lithium storage in amorphous TiNi hydride: Electrode for rechargeable lithium-ion batteries. Materials Chemistry and Physics, 2013, 141, 348-354.	4.0	15
40	Pure and Li-doped NiTiH: Potential anode materials for Li-ion rechargeable batteries. Applied Physics Letters, 2013, 103, 033902.	3.3	11
41	C ₆₀ -mediated hydrogen desorption in Li-N-H systems. Nanotechnology, 2012, 23, 485406.	2.6	5
42	Oxygen- and nitrogen-chemisorbed carbon nanostructures for Z-scheme photocatalysis applications. Journal of Nanoparticle Research, 2012, 14, 1.	1.9	8
43	Excellent Catalytic Effects of Graphene Nanofibers on Hydrogen Release of Sodium alanate. Journal of Physical Chemistry C, 2012, 116, 10861-10866.	3.1	33
44	Effect of co-addition of RE, Fe and Mn on the microstructure and performance of A390 alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 527, 146-149.	5.6	27
45	Effects of trace Mn addition on the elevated temperature tensile strength and microstructure of a low-iron Al-Si piston alloy. Materials Letters, 2008, 62, 2146-2149.	2.6	81