Guohua Gao

List of Publications by Year
in descending order

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82 papers	3,871 citations	147566 31 h-index	128067 60 g-index
83 all docs	83 docs citations	83 times ranked	5590 citing authors

#	Article	IF	Citations
1	When Cubic Cobalt Sulfide Meets Layered Molybdenum Disulfide: A Coreâ€“Shell System Toward Synergetic Electrocatalytic Water Splitting. Advanced Materials, 2015, 27, 4752-4759.	11.1	705
2	Thermal, electrochemical and radiolytic stabilities of ionic liquids. Physical Chemistry Chemical Physics, 2018, 20, 8382-8402.	1.3	248
3	Unraveling the electronegativity-dominated intermediate adsorption on high-entropy alloy electrocatalysts. Nature Communications, 2022, 13, 2662.	5.8	196
4	Toward Superior Capacitive Energy Storage: Recent Advances in Pore Engineering for Dense Electrodes. Advanced Materials, 2018, 30, e1705713.	11.1	195
5	Self-assembled three-dimensional hierarchical porous V₂O₅/graphene hybrid aerogels for supercapacitors with high energy density and long cycle life. Journal of Materials Chemistry A, 2015, 3, 1828-1832.	5.2	178
6	Atomicâ€Scale Core/Shell Structure Engineering Induces Precise Tensile Strain to Boost Hydrogen Evolution Catalysis. Advanced Materials, 2018, 30, e1707301.	11.1	148
7	Gasochromic smart window: optical and thermal properties, energy simulation and feasibility analysis. Solar Energy Materials and Solar Cells, 2016, 144, 316-323.	3.0	121
8	Sodium vanadate/PEDOT nanocables rich with oxygen vacancies for high energy conversion efficiency zinc ion batteries. Energy Storage Materials, 2021, 40, 209-218.	9.5	86
9	Formation of Si Hollow Structures as Promising Anode Materials through Reduction of Silica in AlCl₃â€“NaCl Molten Salt. ACS Nano, 2018, 12, 11481-11490.	7.3	84
10	Controlled synthesis of V₂O₅/MWCNT core/shell hybrid aerogels through a mixed growth and self-assembly methodology for supercapacitors with high capacitance and ultralong cycle life. Journal of Materials Chemistry A, 2015, 3, 15692-15699.	5.2	82
11	Constructing metallic zincâ€“cobalt sulfide hierarchical coreâ€“shell nanosheet arrays derived from 2D metalâ€“organic-frameworks for flexible asymmetric supercapacitors with ultrahigh specific capacitance and performance. Journal of Materials Chemistry A, 2019, 7, 7138-7150.	5.2	82
12	A facile strategy for fabricating hierarchical nanocomposites of V₂O₅nanowire arrays on a three-dimensional N-doped graphene aerogel with a synergistic effect for supercapacitors. Journal of Materials Chemistry A, 2018, 6, 9938-9947.	5.2	74
13	First Principles Study of NO and NNO Chemisorption on Silicon Carbide Nanotubes and Other Nanotubes. Journal of Chemical Theory and Computation, 2008, 4, 1690-1697.	2.3	70
14	Self-assembled 3D N-CNFs/V2O5 aerogels with core/shell nanostructures through vacancies control and seeds growth as an outstanding supercapacitor electrode material. Carbon, 2018, 132, 667-677.	5.4	68
15	Multiwalled carbon nanotubesâ€“V2O5 integrated composite with nanosized architecture as a cathode material for high performance lithium ion batteries. Journal of Materials Chemistry A, 2013, 1, 15459.	5.2	67
16	Ultrafast Coloring-Bleaching Performance of Nanoporous WO₃â€“SiO₂ Gasochromic Films Doped with Pd Catalyst. ACS Applied Materials & Interfaces, 2011, 3, 4573-4579.	4.0	66
17	Interface Engineering V₂O₅ Nanofibers for Highâ€Energy and Durable Supercapacitors. Small, 2019, 15, e1901747.	5.2	66
18	Carbon black anchored vanadium oxide nanobelts and their post-sintering counterpart (V2O5) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 67 Chemical Physics, 2014, 16, 3973.	1.3	62

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19	The synthesis, characterization and electrochemical properties of Multi-Wall Carbon Nanotube-induced vanadium oxide nanosheet composite as a novel cathode material for lithium ion batteries. Electrochimica Acta, 2012, 74, 32-38.	2.6	60
20	Gradient Oxygen Vacancies in V₂O₅/PEDOT Nanocables for High-Performance Supercapacitors. ACS Applied Energy Materials, 2019, 2, 668-677.	2.5	58
21	Ordered mesoporous WO₃film with outstanding gasochromic properties. Journal of Materials Chemistry A, 2014, 2, 585-590.	5.2	57
22	Tailoring Energy and Power Density through Controlling the Concentration of Oxygen Vacancies in V₂O₅/PEDOT Nanocable-Based Supercapacitors. ACS Applied Materials & Interfaces, 2019, 11, 16647-16655.	4.0	57
23	Tandem gasochromic-Pd-WO3/graphene/Si device for room-temperature high-performance optoelectronic hydrogen sensors. Carbon, 2018, 130, 281-287.	5.4	56
24	V₂O₅â€“Conductive polymer nanocables with built-in local electric field derived from interfacial oxygen vacancies for high energy density supercapacitors. Journal of Materials Chemistry A, 2019, 7, 17966-17973.	5.2	53
25	Low-Electronegativity Vanadium Substitution in Cobalt Carbide Induced Enhanced Electron Transfer for Efficient Overall Water Splitting. ACS Applied Materials & Interfaces, 2019, 11, 43261-43269.	4.0	49
26	New Efficient Ruthenium Sensitizers with Unsymmetrical Indeno[1,2-b]thiophene or a Fused Dithiophene Ligand for Dye-Sensitized Solar Cells. Inorganic Chemistry, 2010, 49, 8351-8357.	1.9	47
27	Electrochemical Performance Improvement of Vanadium Oxide Nanotubes as Cathode Materials for Lithium Ion Batteries through Ferric Ion Exchange Technique. Journal of Physical Chemistry C, 2012, 116, 21685-21692.	1.5	44
28	Graphene-templated carbon aerogels combining with ultra-high electrical conductivity and ultra-low thermal conductivity. Microporous and Mesoporous Materials, 2017, 253, 71-79.	2.2	40
29	Understanding the electrochemical potential and diffusivity of MnO/C nanocomposites at various charge/discharge states. Journal of Materials Chemistry A, 2019, 7, 7831-7842.	5.2	34
30	A novel and facile way to synthesize vanadium pentoxide nanospike as cathode materials for high performance lithium ion batteries. Journal of Power Sources, 2013, 238, 95-102.	4.0	32
31	MgVPO₄F as a one-dimensional Mg-ion conductor for Mg ion battery positive electrode: a first principles calculation. RSC Advances, 2014, 4, 15014-15017.	1.7	32
32	Novel three-dimensional island-chain structured V₂O₅/graphene/MWCNT hybrid aerogels for supercapacitors with ultralong cycle life. RSC Advances, 2017, 7, 7179-7187.	1.7	31
33	Swelling Poly(ionic liquid) Supported by Three-Dimensional Wire Mesh for Oil/Water Separation. ACS Applied Materials & Interfaces, 2019, 11, 14347-14353.	4.0	30
34	Template-free synthesis of porous V2O5 yolk-shell microspheres as cathode materials for lithium ion batteries. Journal of Alloys and Compounds, 2018, 735, 109-116.	2.8	28
35	Agglomeration-resistant 2D nanoflakes configured with super electronic networks for extraordinary fast and stable sodium-ion storage. Nano Energy, 2019, 56, 502-511.	8.2	27
36	Selfâ€Standing Nanofiber Electrodes with Ptâ€“Co Derived from Electrospun Zeolitic Imidazolate Framework for High Temperature PEM Fuel Cells. Advanced Functional Materials, 2021, 31, 2006771.	7.8	27

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37	Phase transition effect on durability of WO3 hydrogen sensing films: An insight by experiment and first-principle method. Sensors and Actuators B: Chemical, 2012, 171-172, 1288-1291.	4.0	24
38	Engineering of coloration responses of porous WO₃ gasochromic films by ultraviolet irradiation. RSC Advances, 2014, 4, 30300-30307.	1.7	24
39	Synthesis and characterization of Fe-doped vanadium oxide nanorods and their electrochemical performance. Journal of Alloys and Compounds, 2017, 715, 374-383.	2.8	24
40	Synthesis and characterization of novel hierarchical starfish-like vanadium oxide and their electrochemical performance. Electrochimica Acta, 2016, 188, 625-635.	2.6	22
41	Enhanced electrochemical performance of electrospun V2O5 nanotubes as cathodes for lithium ion batteries. Journal of Alloys and Compounds, 2017, 726, 922-929.	2.8	22
42	A molecular-clip-based approach to cofacial zincâ€“porphyrin complexes. Journal of Organometallic Chemistry, 2010, 695, 111-119.	0.8	21
43	A new method to prepare vanadium oxide nano-urchins as a cathode for lithium ion batteries. RSC Advances, 2015, 5, 47522-47528.	1.7	21
44	Hierarchical microstructure and formative mechanism of low-density molybdena-based aerogel derived from MoCl5. Journal of Sol-Gel Science and Technology, 2011, 58, 225-231.	1.1	18
45	Flexible gasochromic films with favorable high temperature resistance and energy efficiency. Solar Energy Materials and Solar Cells, 2019, 195, 63-70.	3.0	17
46	Preparation of Hydrophobic PPy Coated V₂O₅ Yolkâ€“Shell Nanospheres-Based Cathode Materials with Excellent Cycling Performance. ACS Applied Energy Materials, 2020, 3, 2791-2802.	2.5	17
47	Decreasing Ion-Diffusion Barrier Enables Superior Na-Ion Storage by Synergizing Hierarchical Architecture and Lattice Distortion. ACS Applied Materials & Interfaces, 2019, 11, 27024-27032.	4.0	16
48	Fast hydrogen diffusion induced by hydrogen pre-split for gasochromic based optical hydrogen sensors. International Journal of Hydrogen Energy, 2019, 44, 15665-15676.	3.8	16
49	Tavorite-FeSO₄F as a potential cathode material for Mg ion batteries: a first principles calculation. Physical Chemistry Chemical Physics, 2014, 16, 22974-22978.	1.3	15
50	A low cost preparation of WO₃ nanospheres film with improved thermal stability of gasochromic and its application in smart windows. Materials Research Express, 2017, 4, 115702.	0.8	15
51	Synthesis and characterization of hollow and core-shell structured V2O5 microspheres and their electrochemical properties. Journal of Alloys and Compounds, 2017, 725, 923-934.	2.8	15
52	Thermal conductivity of V₂O₅ nanowires and their contact thermal conductance. Nanoscale, 2020, 12, 1138-1143.	2.8	15
53	Suppressing the metal-metal interaction by CoZn0.5V1.5O4 derived from two-dimensional metal-organic frameworks for supercapacitors. Science China Materials, 2022, 65, 105-114.	3.5	14
54	Carbon nanotubes/vanadium oxide composites as cathode materials for lithium-ion batteries. Journal of Sol-Gel Science and Technology, 2017, 82, 224-232.	1.1	13

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55	Nanoporous WO₃ Gasochromic Films for Gas Sensing. ACS Applied Nano Materials, 2021, 4, 8368-8375.	2.4	13
56	Large interlayer spacing vanadium oxide nanotubes as cathodes for high performance sodium ion batteries. RSC Advances, 2018, 8, 22053-22061.	1.7	11
57	Gasochromic properties of novel tungsten oxide thin films compounded with methyltrimethoxysilane (MTMS). RSC Advances, 2017, 7, 41289-41296.	1.7	10
58	First-principles study of silicon nitride nanotubes. Physical Review B, 2008, 78, .	1.1	9
59	Engineering of the electronic structures of metal-porphyrin tapes and metal-hexaphyrin tapes: A first-principles study. Chemical Physics, 2010, 369, 66-70.	0.9	9
60	An investigation on the assembling of WO3 particles on the matrix of silica solution. Journal of Sol-Gel Science and Technology, 2012, 64, 427-435.	1.1	9
61	A facile method to prepare bi-phase lithium vanadate as cathode materials for Li-ion batteries. Journal of Solid State Electrochemistry, 2014, 18, 2459-2467.	1.2	9
62	A facile strategy for the synthesis of graphene/V₂O₅ nanospheres and graphene/VN nanospheres derived from a single graphene oxide-wrapped VO_x nanosphere precursor for hybrid supercapacitors. RSC Advances, 2018, 8, 27924-27934.	1.7	9
63	Synthesis and characterization of carbon supported V2O5 nanotubes and their electrochemical properties. Journal of Alloys and Compounds, 2019, 772, 429-437.	2.8	9
64	Highly Thermally Stable and Transparent WO₃â€“SiO₂ Gasochromic Films Obtained by an Automated Printing Method. ACS Sustainable Chemistry and Engineering, 2021, 9, 17319-17329.	3.2	9
65	Medium-scale production of gasochromic windows by sol-gel. Journal of Sol-Gel Science and Technology, 2023, 106, 331-340.	1.1	8
66	Coherent V4+-rich V2O5/carbon aerogel nanocomposites for high performance supercapacitors. Science China Materials, 2022, 65, 1797-1804.	3.5	8
67	Nanofibers of V2O5/C@MWCNTs as the cathode material for lithium-ion batteries. Journal of Solid State Electrochemistry, 2018, 22, 2385-2393.	1.2	7
68	è¡¨é¢æ°§åŒ–æž„å»ºPPy@VNO/NGæ¸£ç»“æž„ä½œä¸ºé•¿å¯¿å‘½è¶…çº§ç”µå®¹å™¨è‰¯æ€§èƒ½—™. Science China Materials, 2021, 64, 21	3.5	
69	A theoretical study on fullereneâ€dizincocene hybrids. Journal of Computational Chemistry, 2009, 30, 978-982.	1.5	6
70	Synthesis and characterization of various V2O5 microsphere structures and their electrochemical performance. Journal of Alloys and Compounds, 2018, 757, 177-187.	2.8	6
71	First-principles study of VPO₄O as a cathode material for rechargeable Mg batteries. Physical Chemistry Chemical Physics, 2019, 21, 4947-4952.	1.3	5
72	Statistical analysis on hollow and core-shell structured vanadium oxide microspheres as cathode materials for Lithium ion batteries. Data in Brief, 2018, 18, 719-722.	0.5	4

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73	Hybrid Lithographic Arbitrary Patterning of TiO₂ Nanorod Arrays. ACS Omega, 2022, 7, 22039-22045.	1.6	3
74	Preparation of Pd doped WO 3 films via sol-gel method and their gasochromic properties. Proceedings of SPIE, 2008, , .	0.8	2
75	Influence of MoO 3 addition on the gasochromism of WO 3 thin films. Proceedings of SPIE, 2010, , .	0.8	2
76	Synthesis of Metal Oxide/Carbon Nanofibers via Biostructure Confinement as High-Capacity Anode Materials. ACS Applied Materials & Interfaces, 2020, 12, 29566-29574.	4.0	2
77	Effects of Valence States of Working Cations on the Electrochemical Performance of Sodium Vanadate. ACS Applied Materials & Interfaces, 2022, 14, 19714-19724.	4.0	2
78	Effect of silica doping on the stability of gasochromic films. Proceedings of SPIE, 2010, , .	0.8	1
79	Electrocatalytic Nanomaterials: Atomicâ€Scale Core/Shell Structure Engineering Induces Precise Tensile Strain to Boost Hydrogen Evolution Catalysis (Adv. Mater. 26/2018). Advanced Materials, 2018, 30, 1870191.	11.1	1
80	Effect of UV and vacuum treatment on stability of WO 3 gas sensing films. Proceedings of SPIE, 2010, , .	0.8	0
81	Nanofiber Electrodes: Selfâ€Standing Nanofiber Electrodes with Ptâ€“Co Derived from Electrospun Zeolitic Imidazolate Framework for High Temperature PEM Fuel Cells (Adv. Funct. Mater. 7/2021). Advanced Functional Materials, 2021, 31, 2170047.	7.8	0
82	rGO/VNTs as Cathodes for High Performance Sodium Ion Batteries with Good Cycling Performance. Electronic Materials Letters, 0, , .	1.0	0