Teng Zhai

List of Publications by Year
in descending order

79 papers	15,316 citations	34076 52 h-index	69214 77 g-index
81 all docs	81 docs citations	81 times ranked	16051 citing authors

#	Article	IF	Citations
1	Regulating the Ï€-Ï€ interaction with shortened electron tunneling distance for efficient charge storage. Energy Storage Materials, 2022, 48, 403-411.	9.5	13
2	Manganese-based layered oxides for electrochemical energy storage: a review of degradation mechanisms and engineering strategies at the atomic level. Journal of Materials Chemistry A, 2022, 10, 19231-19253.	5.2	14
3	Harnessing the Defects at Heteroâ€Interface of Transition Metal Compounds for Advanced Charge Storage: A Review. Small Structures, 2022, 3, .	6.9	11
4	Boosting Energy Storage via Confining Soluble Redox Species onto Solidâ€“Liquid Interface. Advanced Energy Materials, 2021, 11, 2003599.	10.2	35
5	Soluble Redox Species: Boosting Energy Storage via Confining Soluble Redox Species onto Solidâ€“Liquid Interface (Adv. Energy Mater. 8/2021). Advanced Energy Materials, 2021, 11, 2170033.	10.2	1
6	Recent advances in coupling carbon-based electrodeâ€”Redox electrolyte system. Materials Research Bulletin, 2021, 139, 111249.	2.7	9
7	Coupling electrode-redox electrolyte within carbon nanotube arrays for supercapacitors with suppressed self-discharge. Sustainable Materials and Technologies, 2021, 28, e00284.	1.7	3
8	Novel Gramâ€Scale Synthesis of Carbon Nanoâ€Onions from Heavy Oil for Supercapacitors. Advanced Materials Interfaces, 2021, 8, 2101208.	1.9	9
9	Editorial: Three-Dimensional Carbon Architectures for Energy Conversion and Storage. Frontiers in Energy Research, 2020, 8, .	1.2	0
10	Synergistic Interfaceâ€Assisted Electrodeâ€“Electrolyte Coupling Toward Advanced Charge Storage. Advanced Materials, 2020, 32, e2005344.	11.1	64
11	Two novel fan-shaped trinuclear Pt(ii) complexes act as G-quadruplex binders and telomerase inhibitors. Dalton Transactions, 2020, 49, 9322-9329.	1.6	9
12	Three-Dimensional Carbon-Supported MoS2 With Sulfur Defects as Oxygen Electrodes for Li-O2 Batteries. Frontiers in Energy Research, 2020, 8, .	1.2	9
13	Oxygenâ€Deficient Homoâ€Interface toward Exciting Boost of Pseudocapacitance. Advanced Functional Materials, 2020, 30, 1909546.	7.8	54
14	Birnessite Nanosheet Arrays with High K Content as a Highâ€Capacity and Ultrastable Cathode for Kâ€Ion Batteries. Advanced Materials, 2019, 31, e1900060.	11.1	183
15	Carbon shelled porous SnO2-Î´ nanosheet arrays as advanced anodes for lithium-ion batteries. Energy Storage Materials, 2018, 13, 303-311.	9.5	108
16	Achieving Insertionâ€Like Capacity at Ultrahigh Rate via Tunable Surface Pseudocapacitance. Advanced Materials, 2018, 30, e1706640.	11.1	202
17	Boosted crystalline/amorphous Fe2O3-Î´ core/shell heterostructure for flexible solid-state pseudocapacitors in large scale. Nano Energy, 2018, 45, 390-397.	8.2	233
18	Multiscale porous graphene oxide network with high packing density for asymmetric supercapacitors. Journal of Materials Research, 2018, 33, 1155-1166.	1.2	4

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19	Yolkâ€“Shell NiS₂ Nanoparticleâ€Embedded Carbon Fibers forÂFlexible Fiberâ€Shaped Sodium Battery. Advanced Energy Materials, 2018, 8, 1800054.	10.2	162
20	Highly efficient sol-gel synthesis for ZnS@N, S co-doped carbon nanosheets with embedded heterostructure for sodium ion batteries. Journal of Power Sources, 2018, 402, 340-344.	4.0	42
21	Phosphate Ion Functionalized Co₃O₄ Ultrathin Nanosheets with Greatly Improved Surface Reactivity for High Performance Pseudocapacitors. Advanced Materials, 2017, 29, 1604167.	11.1	540
22	Dual support ensuring high-energy supercapacitors via high-performance NiCo2S4@Fe2O3 anode and working potential enlarged MnO2 cathode. Journal of Power Sources, 2017, 341, 427-434.	4.0	116
23	Functional Nanomaterials for Energy Conversion and Storage. Journal of Nanomaterials, 2016, 2016, 1-1.	1.5	2
24	Acid Treatment Enables Suppression of Electronâ€“Hole Recombination in Hematite for Photoelectrochemical Water Splitting. Angewandte Chemie - International Edition, 2016, 55, 3403-3407.	7.2	132
25	Acid Treatment Enables Suppression of Electronâ€“Hole Recombination in Hematite for Photoelectrochemical Water Splitting. Angewandte Chemie, 2016, 128, 3464-3468.	1.6	27
26	MnO₂nanomaterials for flexible supercapacitors: performance enhancement via intrinsic and extrinsic modification. Nanoscale Horizons, 2016, 1, 109-124.	4.1	82
27	Three dimensional architectures: design, assembly and application in electrochemical capacitors. Journal of Materials Chemistry A, 2015, 3, 15792-15823.	5.2	135
28	Effects of the size and morphology of zinc oxide nanoparticles on the germination of Chinese cabbage seeds. Environmental Science and Pollution Research, 2015, 22, 10452-10462.	2.7	82
29	An Electrochemical Capacitor with Applicable Energy Density of 7.4 Wh/kg at Average Power Density of 3000 W/kg. Nano Letters, 2015, 15, 3189-3194.	4.5	118
30	Photohole Induced Corrosion of Titanium Dioxide: Mechanism and Solutions. Nano Letters, 2015, 15, 7051-7057.	4.5	57
31	Hierarchical Fe₃O₄@Fe₂O₃ Coreâ€“Shell Nanorod Arrays as High-Performance Anodes for Asymmetric Supercapacitors. ACS Applied Materials & Interfaces, 2015, 7, 27518-27525.	4.0	256
32	Investigation of hematite nanorodâ€“nanoflake morphological transformation and the application of ultrathin nanoflakes for electrochemical devices. Nano Energy, 2015, 12, 169-177.	8.2	83
33	Scalable self-growth of Ni@NiO core-shell electrode with ultrahigh capacitance and super-long cyclic stability for supercapacitors. NPG Asia Materials, 2014, 6, e129-e129.	3.8	284
34	Solidâ€State Supercapacitor Based on Activated Carbon Cloths Exhibits Excellent Rate Capability. Advanced Materials, 2014, 26, 2676-2682.	11.1	660
35	Facile synthesis of titanium nitride nanowires on carbon fabric for flexible and high-rate lithium ion batteries. Journal of Materials Chemistry A, 2014, 2, 10825-10829.	5.2	145
36	Oxygenâ€Deficient Hematite Nanorods as Highâ€Performance and Novel Negative Electrodes for Flexible Asymmetric Supercapacitors. Advanced Materials, 2014, 26, 3148-3155.	11.1	838

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37	Gold nanoparticles inducing surface disorders of titanium dioxide photoanode for efficient water splitting. Nano Energy, 2014, 10, 313-321.	8.2	42
38	Oxygen vacancies enhancing capacitive properties of MnO2 nanorods for wearable asymmetric supercapacitors. Nano Energy, 2014, 8, 255-263.	8.2	381
39	A New Benchmark Capacitance for Supercapacitor Anodes by Mixedâ€Valence Sulfurâ€Doped V₆O_{13â^'x}. Advanced Materials, 2014, 26, 5869-5875.	11.1	305
40	Polyaniline and Polypyrrole Pseudocapacitor Electrodes with Excellent Cycling Stability. Nano Letters, 2014, 14, 2522-2527.	4.5	688
41	Fe₃O₄/reduced graphene oxide with enhanced electrochemical performance towards lithium storage. Journal of Materials Chemistry A, 2014, 2, 7214-7220.	5.2	79
42	NiO decorated Mo:BiVO4 photoanode with enhanced visible-light photoelectrochemical activity. International Journal of Hydrogen Energy, 2014, 39, 4820-4827.	3.8	72
43	Improving the Cycling Stability of Metalâ€“Nitride Supercapacitor Electrodes with a Thin Carbon Shell. Advanced Energy Materials, 2014, 4, 1300994.	10.2	217
44	Hydrogen production from solar driven glucose oxidation over Ni(OH)2 functionalized electroreduced-TiO2 nanowire arrays. Green Chemistry, 2013, 15, 2434.	4.6	72
45	Improving the photoelectrochemical and photocatalytic performance of CdO nanorods with CdS decoration. CrystEngComm, 2013, 15, 4212.	1.3	110
46	A mechanistic study into the catalytic effect of Ni(OH)2 on hematite for photoelectrochemical water oxidation. Nanoscale, 2013, 5, 4129.	2.8	169
47	Efficient electroless nickel plating from highly active Niâ€“B nanoparticles for electric circuit patterns on Al2O3 ceramics. Journal of Materials Chemistry C, 2013, 1, 5149.	2.7	6
48	Conductive membranes of EVA filled with carbon black and carbon nanotubes for flexible energy-storage devices. Journal of Materials Chemistry A, 2013, 1, 505-509.	5.2	41
49	Hierarchical CeO2 nanospheres as highly-efficient adsorbents for dye removal. New Journal of Chemistry, 2013, 37, 585.	1.4	62
50	Manganese dioxide nanorod arrays on carbon fabric for flexible solid-state supercapacitors. Journal of Power Sources, 2013, 239, 64-71.	4.0	121
51	High Energy Density Asymmetric Quasi-Solid-State Supercapacitor Based on Porous Vanadium Nitride Nanowire Anode. Nano Letters, 2013, 13, 2628-2633.	4.5	691
52	3D MnO2â€“graphene composites with large areal capacitance for high-performance asymmetric supercapacitors. Nanoscale, 2013, 5, 6790.	2.8	258
53	TiO₂@C coreâ€“shell nanowires for high-performance and flexible solid-state supercapacitors. Journal of Materials Chemistry C, 2013, 1, 225-229.	2.7	192
54	Oxygen vacancies promoting photoelectrochemical performance of In2O3 nanocubes. Scientific Reports, 2013, 3, 1021.	1.6	427

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55	Hâ€TiO₂@MnO₂//Hâ€TiO₂@C Coreâ€“Shell Nanowires for High Performance and Flexible Asymmetric Supercapacitors. Advanced Materials, 2013, 25, 267-272.	11.1	894
56	Semiconductor Nanowires and Nanowire Heterostructures for Supercapacitors. , 2013, , .		0
57	Manganese dioxide nanorod arrays on carbon fabric for flexible solid-state supercapacitors. , 2013, , .		0
58	Free-standing nickel oxide nanoflake arrays: synthesis and application for highly sensitive non-enzymatic glucose sensors. Nanoscale, 2012, 4, 3123.	2.8	228
59	Flexible Solid-State Supercapacitors Based on Carbon Nanoparticles/MnO₂ Nanorods Hybrid Structure. ACS Nano, 2012, 6, 656-661.	7.3	961
60	LiCl/PVA Gel Electrolyte Stabilizes Vanadium Oxide Nanowire Electrodes for Pseudocapacitors. ACS Nano, 2012, 6, 10296-10302.	7.3	310
61	Enhanced photoactivity and stability of carbon and nitrogen co-treated ZnO nanorod arrays for photoelectrochemical water splitting. Journal of Materials Chemistry, 2012, 22, 14272.	6.7	85
62	Porous Pr(OH)₃ Nanostructures as High-Efficiency Adsorbents for Dye Removal. Langmuir, 2012, 28, 11078-11085.	1.6	49
63	Stabilized TiN Nanowire Arrays for High-Performance and Flexible Supercapacitors. Nano Letters, 2012, 12, 5376-5381.	4.5	627
64	WO_{3â^'x}/MoO_{3â^'x} Core/Shell Nanowires on Carbon Fabric as an Anode for Allâ€Solidâ€State Asymmetric Supercapacitors. Advanced Energy Materials, 2012, 2, 1328-1332.	10.2	401
65	Hydrogenated TiO₂ Nanotube Arrays for Supercapacitors. Nano Letters, 2012, 12, 1690-1696.	4.5	1,226
66	Controllable synthesis of hierarchical ZnO nanodisks for highly photocatalytic activity. CrystEngComm, 2012, 14, 1850.	1.3	75
67	Large-area manganese oxide nanorod arrays as efficient electrocatalyst for oxygen evolution reaction. International Journal of Hydrogen Energy, 2012, 37, 13350-13354.	3.8	28
68	Facile synthesis of CuO nanorods with abundant adsorbed oxygen concomitant with high surface oxidation states for CO oxidation. RSC Advances, 2012, 2, 11520.	1.7	42
69	Controllable synthesis of porous nickelâ€“cobalt oxide nanosheets for supercapacitors. Journal of Materials Chemistry, 2012, 22, 13357.	6.7	207
70	Preparation and Magnetic Properties of Polycrystalline Eu₂O₃Microwires. Journal of the Electrochemical Society, 2012, 159, D204-D207.	1.3	27
71	Controllable Synthesis of Zn_xCd_{1â€“x}S@ZnO Coreâ€“Shell Nanorods with Enhanced Photocatalytic Activity. Langmuir, 2012, 28, 10558-10564.	1.6	83
72	Facile preparation and photoelectrochemical properties of CdSe/TiO2 NTAs. Materials Research Bulletin, 2012, 47, 580-585.	2.7	26

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73	Facile synthesis of Pr(OH)3 nanostructures and their application in water treatment. Materials Research Bulletin, 2012, 47, 1783-1786.	2.7	9
74	WO_{3â€“x}@Au@MnO₂ Coreâ€“Shell Nanowires on Carbon Fabric for Highâ€Performance Flexible Supercapacitors. Advanced Materials, 2012, 24, 938-944.	11.1	641
75	Monodisperse CeO2/CdS heterostructured spheres: one-pot synthesis and enhanced photocatalytic hydrogen activity. RSC Advances, 2011, 1, 1207.	1.7	80
76	Redox cycles promoting photocatalytic hydrogen evolution of CeO2 nanorods. Journal of Materials Chemistry, 2011, 21, 5569.	6.7	120
77	Facile synthesis of large-area manganese oxide nanorod arrays as a high-performance electrochemical supercapacitor. Energy and Environmental Science, 2011, 4, 2915.	15.6	479
78	Vertically aligned In2O3 nanorods on FTO substrates for photoelectrochemical applications. Journal of Materials Chemistry, 2011, 21, 14685.	6.7	59
79	Electrochemical preparation and photoluminescence of Y1.95Eu0.05O3 hierarchical nanosheets. Inorganic Chemistry Communication, 2011, 14, 1032-1035.	1.8	3