# Teng Zhai

List of Publications by Year
in descending order



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|---|---|---|---|
| 79 papers | 15,316 citations | 34105 52 h-index | 69250 77 g-index |
| 81 all docs | 81 docs citations | 81 times ranked | 16051 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Hydrogenated TiO<sub>2</sub> Nanotube Arrays for Supercapacitors. Nano Letters, 2012, 12, 1690-1696. | 9.1 | 1,226 |
| 2 | Flexible Solid-State Supercapacitors Based on Carbon Nanoparticles/MnO<sub>2</sub> Nanorods Hybrid Structure. ACS Nano, 2012, 6, 656-661. | 14.6 | 961 |
| 3 | Hâ€TiO<sub>2</sub>@MnO<sub>2</sub>//Hâ€TiO<sub>2</sub>@C Coreâ€“Shell Nanowires for High Performance and Flexible Asymmetric Supercapacitors. Advanced Materials, 2013, 25, 267-272. | 21.0 | 894 |
| 4 | Oxygenâ€Deficient Hematite Nanorods as Highâ€Performance and Novel Negative Electrodes for Flexible Asymmetric Supercapacitors. Advanced Materials, 2014, 26, 3148-3155. | 21.0 | 838 |
| 5 | High Energy Density Asymmetric Quasi-Solid-State Supercapacitor Based on Porous Vanadium Nitride Nanowire Anode. Nano Letters, 2013, 13, 2628-2633. | 9.1 | 691 |
| 6 | Polyaniline and Polypyrrole Pseudocapacitor Electrodes with Excellent Cycling Stability. Nano Letters, 2014, 14, 2522-2527. | 9.1 | 688 |
| 7 | Solidâ€State Supercapacitor Based on Activated Carbon Cloths Exhibits Excellent Rate Capability. Advanced Materials, 2014, 26, 2676-2682. | 21.0 | 660 |
| 8 | WO<sub>3â€“x</sub>@Au@MnO<sub>2</sub> Coreâ€“Shell Nanowires on Carbon Fabric for Highâ€Performance Flexible Supercapacitors. Advanced Materials, 2012, 24, 938-944. | 21.0 | 641 |
| 9 | Stabilized TiN Nanowire Arrays for High-Performance and Flexible Supercapacitors. Nano Letters, 2012, 12, 5376-5381. | 9.1 | 627 |
| 10 | Phosphate Ion Functionalized Co<sub>3</sub>O<sub>4</sub> Ultrathin Nanosheets with Greatly Improved Surface Reactivity for High Performance Pseudocapacitors. Advanced Materials, 2017, 29, 1604167. | 21.0 | 540 |
| 11 | Facile synthesis of large-area manganese oxide nanorod arrays as a high-performance electrochemical supercapacitor. Energy and Environmental Science, 2011, 4, 2915. | 30.8 | 479 |
| 12 | Oxygen vacancies promoting photoelectrochemical performance of In2O3 nanocubes. Scientific Reports, 2013, 3, 1021. | 3.3 | 427 |
| 13 | WO<sub>3âˆ’<i>x</i></sub>/MoO<sub>3âˆ’<i>x</i></sub> Core/Shell Nanowires on Carbon Fabric as an Anode for Allâ€Solidâ€State Asymmetric Supercapacitors. Advanced Energy Materials, 2012, 2, 1328-1332. | 19.5 | 401 |
| 14 | Oxygen vacancies enhancing capacitive properties of MnO2 nanorods for wearable asymmetric supercapacitors. Nano Energy, 2014, 8, 255-263. | 16.0 | 381 |
| 15 | LiCl/PVA Gel Electrolyte Stabilizes Vanadium Oxide Nanowire Electrodes for Pseudocapacitors. ACS Nano, 2012, 6, 10296-10302. | 14.6 | 310 |
| 16 | A New Benchmark Capacitance for Supercapacitor Anodes by Mixedâ€Valence Sulfurâ€Doped V<sub>6</sub>O<sub>13âˆ’<i>x</i></sub>. Advanced Materials, 2014, 26, 5869-5875. | 21.0 | 305 |
| 17 | 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. | 7.9 | 284 |
| 18 | 3D MnO2â€“graphene composites with large areal capacitance for high-performance asymmetric supercapacitors. Nanoscale, 2013, 5, 6790. | 5.6 | 258 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 19 | Hierarchical Fe<sub>3</sub>O<sub>4</sub>@Fe<sub>2</sub>O<sub>3</sub> Coreâ€“Shell Nanorod Arrays as High-Performance Anodes for Asymmetric Supercapacitors. ACS Applied Materials & Interfaces, 2015, 7, 27518-27525. | 8.0 | 256 |
| 20 | Boosted crystalline/amorphous Fe2O3-Î´ core/shell heterostructure for flexible solid-state pseudocapacitors in large scale. Nano Energy, 2018, 45, 390-397. | 16.0 | 233 |
| 21 | Free-standing nickel oxide nanoflake arrays: synthesis and application for highly sensitive non-enzymatic glucose sensors. Nanoscale, 2012, 4, 3123. | 5.6 | 228 |
| 22 | Improving the Cycling Stability of Metalâ€“Nitride Supercapacitor Electrodes with a Thin Carbon Shell. Advanced Energy Materials, 2014, 4, 1300994. | 19.5 | 217 |
| 23 | Controllable synthesis of porous nickelâ€“cobalt oxide nanosheets for supercapacitors. Journal of Materials Chemistry, 2012, 22, 13357. | 6.7 | 207 |
| 24 | Achieving Insertionâ€Like Capacity at Ultrahigh Rate via Tunable Surface Pseudocapacitance. Advanced Materials, 2018, 30, e1706640. | 21.0 | 202 |
| 25 | TiO<sub>2</sub>@C coreâ€“shell nanowires for high-performance and flexible solid-state supercapacitors. Journal of Materials Chemistry C, 2013, 1, 225-229. | 5.5 | 192 |
| 26 | Birnessite Nanosheet Arrays with High K Content as a Highâ€Capacity and Ultrastable Cathode for Kâ€Ion Batteries. Advanced Materials, 2019, 31, e1900060. | 21.0 | 183 |
| 27 | A mechanistic study into the catalytic effect of Ni(OH)2 on hematite for photoelectrochemical water oxidation. Nanoscale, 2013, 5, 4129. | 5.6 | 169 |
| 28 | Yolkâ€“Shell NiS<sub>2</sub> Nanoparticleâ€Embedded Carbon Fibers forÂFlexible Fiberâ€Shaped Sodium Battery. Advanced Energy Materials, 2018, 8, 1800054. | 19.5 | 162 |
| 29 | 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. | 10.3 | 145 |
| 30 | Three dimensional architectures: design, assembly and application in electrochemical capacitors. Journal of Materials Chemistry A, 2015, 3, 15792-15823. | 10.3 | 135 |
| 31 | Acid Treatment Enables Suppression of Electronâ€“Hole Recombination in Hematite for Photoelectrochemical Water Splitting. Angewandte Chemie - International Edition, 2016, 55, 3403-3407. | 13.8 | 132 |
| 32 | Manganese dioxide nanorod arrays on carbon fabric for flexible solid-state supercapacitors. Journal of Power Sources, 2013, 239, 64-71. | 7.8 | 121 |
| 33 | Redox cycles promoting photocatalytic hydrogen evolution of CeO2 nanorods. Journal of Materials Chemistry, 2011, 21, 5569. | 6.7 | 120 |
| 34 | 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. | 9.1 | 118 |
| 35 | 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. | 7.8 | 116 |
| 36 | Improving the photoelectrochemical and photocatalytic performance of CdO nanorods with CdS decoration. CrystEngComm, 2013, 15, 4212. | 2.6 | 110 |

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|---|---|---|---|
| 37 | Carbon shelled porous SnO2-Î´ nanosheet arrays as advanced anodes for lithium-ion batteries. Energy Storage Materials, 2018, 13, 303-311. | 18.0 | 108 |
| 38 | 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 |
| 39 | Controllable Synthesis of Zn<sub><i>x</i></sub>Cd<sub>1â€“<i>x</i></sub>S@ZnO Coreâ€“Shell Nanorods with Enhanced Photocatalytic Activity. Langmuir, 2012, 28, 10558-10564. | 3.5 | 83 |
| 40 | Investigation of hematite nanorodâ€“nanoflake morphological transformation and the application of ultrathin nanoflakes for electrochemical devices. Nano Energy, 2015, 12, 169-177. | 16.0 | 83 |
| 41 | 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. | 5.3 | 82 |
| 42 | MnO<sub>2</sub>nanomaterials for flexible supercapacitors: performance enhancement via intrinsic and extrinsic modification. Nanoscale Horizons, 2016, 1, 109-124. | 8.0 | 82 |
| 43 | Monodisperse CeO2/CdS heterostructured spheres: one-pot synthesis and enhanced photocatalytic hydrogen activity. RSC Advances, 2011, 1, 1207. | 3.6 | 80 |
| 44 | Fe<sub>3</sub>O<sub>4</sub>/reduced graphene oxide with enhanced electrochemical performance towards lithium storage. Journal of Materials Chemistry A, 2014, 2, 7214-7220. | 10.3 | 79 |
| 45 | Controllable synthesis of hierarchical ZnO nanodisks for highly photocatalytic activity. CrystEngComm, 2012, 14, 1850. | 2.6 | 75 |
| 46 | Hydrogen production from solar driven glucose oxidation over Ni(OH)2 functionalized electroreduced-TiO2 nanowire arrays. Green Chemistry, 2013, 15, 2434. | 9.0 | 72 |
| 47 | NiO decorated Mo:BiVO4 photoanode with enhanced visible-light photoelectrochemical activity. International Journal of Hydrogen Energy, 2014, 39, 4820-4827. | 7.1 | 72 |
| 48 | Synergistic Interfaceâ€Assisted Electrodeâ€“Electrolyte Coupling Toward Advanced Charge Storage. Advanced Materials, 2020, 32, e2005344. | 21.0 | 64 |
| 49 | Hierarchical CeO2 nanospheres as highly-efficient adsorbents for dye removal. New Journal of Chemistry, 2013, 37, 585. | 2.8 | 62 |
| 50 | Vertically aligned In2O3 nanorods on FTO substrates for photoelectrochemical applications. Journal of Materials Chemistry, 2011, 21, 14685. | 6.7 | 59 |
| 51 | Photohole Induced Corrosion of Titanium Dioxide: Mechanism and Solutions. Nano Letters, 2015, 15, 7051-7057. | 9.1 | 57 |
| 52 | Oxygenâ€Deficient Homoâ€Interface toward Exciting Boost of Pseudocapacitance. Advanced Functional Materials, 2020, 30, 1909546. | 14.9 | 54 |
| 53 | Porous Pr(OH)<sub>3</sub> Nanostructures as High-Efficiency Adsorbents for Dye Removal. Langmuir, 2012, 28, 11078-11085. | 3.5 | 49 |
| 54 | Facile synthesis of CuO nanorods with abundant adsorbed oxygen concomitant with high surface oxidation states for CO oxidation. RSC Advances, 2012, 2, 11520. | 3.6 | 42 |

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|---|---|---|---|
| 55 | Gold nanoparticles inducing surface disorders of titanium dioxide photoanode for efficient water splitting. Nano Energy, 2014, 10, 313-321. | 16.0 | 42 |
| 56 | 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. | 7.8 | 42 |
| 57 | 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. | 10.3 | 41 |
| 58 | Boosting Energy Storage via Confining Soluble Redox Species onto Solidâ€“Liquid Interface. Advanced Energy Materials, 2021, 11, 2003599. | 19.5 | 35 |
| 59 | Large-area manganese oxide nanorod arrays as efficient electrocatalyst for oxygen evolution reaction. International Journal of Hydrogen Energy, 2012, 37, 13350-13354. | 7.1 | 28 |
| 60 | Preparation and Magnetic Properties of Polycrystalline Eu<sub>2</sub>O<sub>3</sub>Microwires. Journal of the Electrochemical Society, 2012, 159, D204-D207. | 2.9 | 27 |
| 61 | Acid Treatment Enables Suppression of Electronâ€“Hole Recombination in Hematite for Photoelectrochemical Water Splitting. Angewandte Chemie, 2016, 128, 3464-3468. | 2.0 | 27 |
| 62 | Facile preparation and photoelectrochemical properties of CdSe/TiO2 NTAs. Materials Research Bulletin, 2012, 47, 580-585. | 5.2 | 26 |
| 63 | 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. | 10.3 | 14 |
| 64 | Regulating the Ï€-Ï€ interaction with shortened electron tunneling distance for efficient charge storage. Energy Storage Materials, 2022, 48, 403-411. | 18.0 | 13 |
| 65 | Harnessing the Defects at Heteroâ€Interface of Transition Metal Compounds for Advanced Charge Storage: A Review. Small Structures, 2022, 3, . | 12.0 | 11 |
| 66 | Facile synthesis of Pr(OH)3 nanostructures and their application in water treatment. Materials Research Bulletin, 2012, 47, 1783-1786. | 5.2 | 9 |
| 67 | Two novel fan-shaped trinuclear Pt(ii) complexes act as G-quadruplex binders and telomerase inhibitors. Dalton Transactions, 2020, 49, 9322-9329. | 3.3 | 9 |
| 68 | Three-Dimensional Carbon-Supported MoS2 With Sulfur Defects as Oxygen Electrodes for Li-O2 Batteries. Frontiers in Energy Research, 2020, 8, . | 2.3 | 9 |
| 69 | Recent advances in coupling carbon-based electrodeâ€"Redox electrolyte system. Materials Research Bulletin, 2021, 139, 111249. | 5.2 | 9 |
| 70 | Novel Gramâ€Scale Synthesis of Carbon Nanoâ€Onions from Heavy Oil for Supercapacitors. Advanced Materials Interfaces, 2021, 8, 2101208. | 3.7 | 9 |
| 71 | 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. | 5.5 | 6 |
| 72 | Multiscale porous graphene oxide network with high packing density for asymmetric supercapacitors. Journal of Materials Research, 2018, 33, 1155-1166. | 2.6 | 4 |

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|---|---|---|---|
| 73 | Electrochemical preparation and photoluminescence of Y1.95Eu0.05O3 hierarchical nanosheets. Inorganic Chemistry Communication, 2011, 14, 1032-1035. | 3.9 | 3 |
| 74 | Coupling electrode-redox electrolyte within carbon nanotube arrays for supercapacitors with suppressed self-discharge. Sustainable Materials and Technologies, 2021, 28, e00284. | 3.3 | 3 |
| 75 | Functional Nanomaterials for Energy Conversion and Storage. Journal of Nanomaterials, 2016, 2016, 1-1. | 2.7 | 2 |
| 76 | 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. | 19.5 | 1 |
| 77 | Semiconductor Nanowires and Nanowire Heterostructures for Supercapacitors. , 2013, , . | | 0 |
| 78 | Manganese dioxide nanorod arrays on carbon fabric for flexible solid-state supercapacitors. , 2013, , . | | 0 |
| 79 | Editorial: Three-Dimensional Carbon Architectures for Energy Conversion and Storage. Frontiers in Energy Research, 2020, 8, . | 2.3 | 0 |