

# Guan Cao

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/579865/publications.pdf>

Version: 2024-02-01

50  
papers

7,523  
citations

109264

35  
h-index

197736

49  
g-index

53  
all docs

53  
docs citations

53  
times ranked

9269  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Rational Design of Metal-Organic Framework Derived Hollow NiCo <sub>2</sub> O <sub>4</sub> Arrays for Flexible Supercapacitor and Electrocatalysis. <i>Advanced Energy Materials</i> , 2017, 7, 1602391.                                   | 10.2 | 874       |
| 2  | A Flexible Quasi-Solid-State Nickel-Zinc Battery with High Energy and Power Densities Based on 3D Electrode Design. <i>Advanced Materials</i> , 2016, 28, 8732-8739.   | 11.1 | 479       |
| 3  | Ultrathin MoS <sub>2</sub> Nanosheets@Metal Organic Framework-Derived N-Doped Carbon Nanowall Arrays as Sodium Ion Battery Anode with Superior Cycling Life and Rate Capability. <i>Advanced Functional Materials</i> , 2017, 27, 1702116. | 7.8  | 447       |
| 4  | Iron Oxide-Decorated Carbon for Supercapacitor Anodes with Ultrahigh Energy Density and Outstanding Cycling Stability. <i>ACS Nano</i> , 2015, 9, 5198-5207.   | 7.3  | 441       |
| 5  | Hollow Co <sub>3</sub> O <sub>4</sub> Nanosphere Embedded in Carbon Arrays for Stable and Flexible Solid-State Zinc-Air Batteries. <i>Advanced Materials</i> , 2017, 29, 1704117.  | 11.1 | 407       |
| 6  | Single Co Atoms Anchored in Porous N-Doped Carbon for Efficient Zinc-Air Battery Cathodes. <i>ACS Catalysis</i> , 2018, 8, 8961-8969.  | 5.5  | 364       |
| 7  | Metal Phosphides and Phosphates-based Electrodes for Electrochemical Supercapacitors. <i>Small</i> , 2017, 13, 1701530.  | 5.2  | 318       |
| 8  | Cactus-Like NiCoP/NiCo(OH) 3D Architecture with Tunable Composition for High-Performance Electrochemical Capacitors. <i>Advanced Functional Materials</i> , 2018, 28, 1800036.   | 7.8  | 274       |
| 9  | High-Performance Flexible Solid-State Ni/Fe Battery Consisting of Metal Oxides Coated Carbon Cloth/Carbon Nanofiber Electrodes. <i>Advanced Energy Materials</i> , 2016, 6, 1601034.   | 10.2 | 262       |
| 10 | Metal-organic framework derived hollow CoS <sub>2</sub> nanotube arrays: an efficient bifunctional electrocatalyst for overall water splitting. <i>Nanoscale Horizons</i> , 2017, 2, 342-348.  | 4.1  | 247       |
| 11 | Cobalt oxide and N-doped carbon nanosheets derived from a single two-dimensional metal-organic framework precursor and their application in flexible asymmetric supercapacitors. <i>Nanoscale Horizons</i> , 2017, 2, 99-105.              | 4.1  | 227       |
| 12 | Rational Design of Self-Supported Ni <sub>3</sub> S <sub>2</sub> Nanosheets Array for Advanced Asymmetric Supercapacitor with a Superior Energy Density. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 496-504.                 | 4.0  | 216       |
| 13 | Surface-Charge-Mediated Formation of H <sub>2</sub> TiO <sub>2</sub> @Ni(OH) <sub>2</sub> Heterostructures for High-Performance Supercapacitors. <i>Advanced Materials</i> , 2017, 29, 1604164.  | 11.1 | 203       |
| 14 | (Ni,Co)Se <sub>2</sub> /NiCo-LDH Core/Shell Structural Electrode with the Cactus-Like (Ni,Co)Se <sub>2</sub> Core for Asymmetric Supercapacitors. <i>Small</i> , 2019, 15, e1803895.   | 5.2  | 203       |
| 15 | Controllable MnCo <sub>2</sub> S <sub>4</sub> nanostructures for high performance hybrid supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 7494-7506.  | 5.2  | 198       |
| 16 | 3D-Printed MOF-Derived Hierarchically Porous Frameworks for Practical High-Energy Density Li-O <sub>2</sub> Batteries. <i>Advanced Functional Materials</i> , 2019, 29, 1806658.   | 7.8  | 197       |
| 17 | Integrated Hierarchical Carbon Flake Arrays with Hollow P-Doped CoSe <sub>2</sub> Nanoclusters as an Advanced Bifunctional Catalyst for Zn-Air Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1804846.                        | 7.8  | 192       |
| 18 | Ni-Doped Cobalt-Cobalt Nitride Heterostructure Arrays for High-Power Supercapacitors. <i>ACS Energy Letters</i> , 2018, 3, 2462-2469.  | 8.8  | 182       |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Rational Construction of Hollow Core-Branch $\text{CoSe}_2$ Nanoarrays for High-Performance Asymmetric Supercapacitor and Efficient Oxygen Evolution. <i>Small</i> , 2018, 14, 1700979.   | 5.2 | 172       |
| 20 | Flexible Asymmetric Supercapacitor Based on Structure-Optimized $\text{Mn}_3\text{O}_4$ /Reduced Graphene Oxide Nanohybrid Paper with High Energy and Power Density. <i>Advanced Functional Materials</i> , 2015, 25, 7291-7299.                      | 7.8 | 146       |
| 21 | Energy-Saving Synthesis of MOF-Derived Hierarchical and Hollow $\text{Co}(\text{VO}_3)_2\text{-Co}(\text{OH})_2$ Composite Leaf Arrays for Supercapacitor Electrode Materials. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 18440-18444. | 4.0 | 107       |
| 22 | Conformally deposited NiO on a hierarchical carbon support for high-power and durable asymmetric supercapacitors. <i>Journal of Materials Chemistry A</i> , 2015, 3, 23283-23288.   | 5.2 | 103       |
| 23 | Mitochondrial support of persistent presynaptic vesicle mobilization with age-dependent synaptic growth after LTP. <i>ELife</i> , 2016, 5, .  | 2.8 | 99        |
| 24 | Hybrid $\text{Fe}_2\text{O}_3$ Nanoparticle Clusters/rGO Paper as an Effective Negative Electrode for Flexible Supercapacitors. <i>Chemistry of Materials</i> , 2016, 28, 7296-7303.  | 3.2 | 95        |
| 25 | Atomic layer deposition of $\text{Co}_3\text{O}_4$ on carbon nanotubes/carbon cloth for high-capacitance and ultrastable supercapacitor electrode. <i>Nanotechnology</i> , 2015, 26, 094001.  | 1.3 | 84        |
| 26 | Ultrafine Molybdenum Carbide Nanocrystals Confined in Carbon Foams via a Colloid-Confinement Route for Efficient Hydrogen Production. <i>Small Methods</i> , 2018, 2, 1700396.  | 4.6 | 83        |
| 27 | 2D Metal-Organic Frameworks Derived Nanocarbon Arrays for Substrate Enhancement in Flexible Supercapacitors. <i>Small</i> , 2018, 14, e1702641.   | 5.2 | 80        |
| 28 | Metal-organic framework-derived integrated nanoarrays for overall water splitting. <i>Journal of Materials Chemistry A</i> , 2018, 6, 9009-9018.  | 5.2 | 74        |
| 29 | Nanoflakes of Ni-Co LDH and $\text{Bi}_2\text{O}_3$ Assembled in 3D Carbon Fiber Network for High-Performance Aqueous Rechargeable Ni/Bi Battery. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 26008-26015.                               | 4.0 | 71        |
| 30 | 3D $\text{TiO}_2$ @ $\text{Ni}(\text{OH})_2$ Core-shell Arrays with Tunable Nanostructure for Hybrid Supercapacitor Application. <i>Scientific Reports</i> , 2015, 5, 13940.  | 1.6 | 68        |
| 31 | MOF-Derived Vertically Aligned Mesoporous $\text{Co}_3\text{O}_4$ Nanowires for Ultrahigh Capacity Lithium-Ion Batteries Anodes. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800222.   | 1.9 | 58        |
| 32 | A novel hollowed $\text{CoO-in-CoSnO}_3$ nanostructure with enhanced lithium storage capabilities. <i>Nanoscale</i> , 2014, 6, 13824-13830.   | 2.8 | 52        |
| 33 | Pt decorated 3D vertical graphene nanosheet arrays for efficient methanol oxidation and hydrogen evolution reactions. <i>Journal of Materials Chemistry A</i> , 2017, 5, 22004-22011.   | 5.2 | 49        |
| 34 | LTP enhances synaptogenesis in the developing hippocampus. <i>Hippocampus</i> , 2016, 26, 560-576.  | 0.9 | 43        |
| 35 | Developmental regulation of the late phase of long-term potentiation (L-LTP) and metaplasticity in hippocampal area CA1 of the rat. <i>Journal of Neurophysiology</i> , 2012, 107, 902-912.   | 0.9 | 42        |
| 36 | Microwave assisted hydrothermal synthesis of nanocrystal $\text{Ni}(\text{OH})_2$ for supercapacitor applications. <i>CrystEngComm</i> , 2016, 18, 3256-3264.   | 1.3 | 42        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 37 | Open hollow Co@Pt clusters embedded in carbon nanoflake arrays for highly efficient alkaline water splitting. <i>Journal of Materials Chemistry A</i> , 2018, 6, 20214-20223.                                 | 5.2  | 42        |
| 38 | 3D hierarchical SnO <sub>2</sub> @Ni(OH) <sub>2</sub> core-shell nanowire arrays on carbon cloth for energy storage application. <i>Journal of Materials Chemistry A</i> , 2015, 3, 9538-9542.                | 5.2  | 33        |
| 39 | Shifting patterns of polyribosome accumulation at synapses over the course of hippocampal long-term potentiation. <i>Hippocampus</i> , 2018, 28, 416-430.   | 0.9  | 30        |
| 40 | Augmenting saturated LTP by broadly spaced episodes of theta-burst stimulation in hippocampal area CA1 of adult rats and mice. <i>Journal of Neurophysiology</i> , 2014, 112, 1916-1924.                      | 0.9  | 29        |
| 41 | Confined Fe <sub>2</sub> O <sub>3</sub> Nanoparticles on Graphite Foam as High-Rate and Stable Lithium-ion Battery Anode. <i>Particle and Particle Systems Characterization</i> , 2016, 33, 487-492.          | 1.2  | 29        |
| 42 | Vanadium metal-organic framework-derived multifunctional fibers for asymmetric supercapacitor, piezoresistive sensor, and electrochemical water splitting. <i>SmartMat</i> , 2022, 3, 608-618.                | 6.4  | 29        |
| 43 | The Atomic Circus: Small Electron Beams Spotlight Advanced Materials Down to the Atomic Scale. <i>Advanced Materials</i> , 2018, 30, e1802402.  | 11.1 | 27        |
| 44 | Structural plasticity of dendritic secretory compartments during LTP-induced synaptogenesis. <i>ELife</i> , 2019, 8, .  | 2.8  | 25        |
| 45 | Space-confinement and chemisorption co-involved in encapsulation of sulfur for lithium-sulfur batteries with exceptional cycling stability. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24602-24611.   | 5.2  | 24        |
| 46 | Atomic-layer-deposition alumina induced carbon on porous Ni <sub>x</sub> Co <sub>1-x</sub> O nanonets for enhanced pseudocapacitive and Li-ion storage performance. <i>Nanotechnology</i> , 2015, 26, 014001. | 1.3  | 21        |
| 47 | Phospho-oxynitride Layer Protected Cobalt Phosphonitride Nanowire Arrays for High-Rate and Stable Supercapacitors. <i>ACS Applied Energy Materials</i> , 2019, 2, 616-626.                                    | 2.5  | 16        |
| 48 | Developmental onset of enduring long-term potentiation in mouse hippocampus. <i>Hippocampus</i> , 2020, 30, 1298-1312.  | 0.9  | 8         |
| 49 | Ultrastructure of light-activated axons following optogenetic stimulation to produce late-phase long-term potentiation. <i>PLoS ONE</i> , 2020, 15, e0226797.   | 1.1  | 4         |
| 50 | Cover Image, Volume 28, Issue 6. <i>Hippocampus</i> , 2018, 28, C1-C1.  | 0.9  | 0         |