# Bin Wu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6296652/publications.pdf

Version: 2024-02-01

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|---|---|---|---|
| 67<br>papers | 1,963<br>citations | 257450<br>24<br>h-index | 254184<br>43<br>g-index |
| 68<br>all docs | 68<br>docs citations | 68<br>times ranked | 2996<br>citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Equiangular Hexagonâ€Shapeâ€Controlled Synthesis of Graphene on Copper Surface. Advanced Materials, 2011, 23, 3522-3525. | 21.0 | 173 |
| 2 | Self-organized graphene crystal patterns. NPG Asia Materials, 2013, 5, e36-e36. | 7.9 | 153 |
| 3 | Efficient Ion Sieving in Covalent Organic Framework Membranes with Subâ€2â€Nanometer Channels. Advanced Materials, 2021, 33, e2104404. | 21.0 | 131 |
| 4 | Synthesis of large-area, few-layer graphene on iron foil by chemical vapor deposition. Nano Research, 2011, 4, 1208-1214. | 10.4 | 120 |
| 5 | Growth and Etching of Monolayer Hexagonal Boron Nitride. Advanced Materials, 2015, 27, 4858-4864. | 21.0 | 93 |
| 6 | Highly Ion-Permselective Porous Organic Cage Membranes with Hierarchical Channels. Journal of the American Chemical Society, 2022, 144, 10220-10229. | 13.7 | 67 |
| 7 | Governing Rule for Dynamic Formation of Grain Boundaries in Grown Graphene. ACS Nano, 2015, 9, 5792-5798. | 14.6 | 66 |
| 8 | Dielectric Engineering of a Boron Nitride/Hafnium Oxide Heterostructure for Highâ€Performance 2D Field Effect Transistors. Advanced Materials, 2016, 28, 2062-2069. | 21.0 | 65 |
| 9 | Engineering Leaf-Like UiO-66-SO3H Membranes for Selective Transport of Cations. Nano-Micro Letters, 2020, 12, 51. | 27.0 | 64 |
| 10 | Growth and Grain Boundaries in 2D Materials. ACS Nano, 2020, 14, 9320-9346. | 14.6 | 62 |
| 11 | Highly Organized Epitaxy of Dirac Semimetallic PtTe<sub>2</sub> Crystals with Extrahigh Conductivity and Visible Surface Plasmons at Edges. ACS Nano, 2018, 12, 9405-9411. | 14.6 | 54 |
| 12 | A simple and green preparation of PVA-based cation exchange hybrid membranes for alkali recovery. Journal of Membrane Science, 2013, 433, 10-16. | 8.2 | 51 |
| 13 | Solidâ€“solid interface growth of conductive metalâ€“organic framework nanowire arrays and their supercapacitor application. Materials Chemistry Frontiers, 2020, 4, 243-251. | 5.9 | 48 |
| 14 | Selfâ€Aligned Singleâ€Crystal Graphene Grains. Advanced Functional Materials, 2014, 24, 1664-1670. | 14.9 | 47 |
| 15 | Graphene: learning from carbon nanotubes. Journal of Materials Chemistry, 2011, 21, 919-929. | 6.7 | 43 |
| 16 | Cross-linked anion exchange membranes with hydrophobic side-chains for anion separation. Journal of Membrane Science, 2019, 581, 150-157. | 8.2 | 39 |
| 17 | Water-assisted growth of large-sized single crystal hexagonal boron nitride grains. Materials Chemistry Frontiers, 2017, 1, 1836-1840. | 5.9 | 34 |
| 18 | Stitching Graphene Sheets with Graphitic Carbon Nitride: Constructing a Highly Thermally Conductive rGO/g-C<sub>3</sub>N<sub>4</sub> Film with Excellent Heating Capability. ACS Applied Materials & Interfaces, 2021, 13, 6699-6709. | 8.0 | 32 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Tunable Planar Focusing Based on Hyperbolic Phonon Polaritons in Î±â€MoO<sub>3</sub>. Advanced Materials, 2022, 34, e2105590. | 21.0 | 32 |
| 20 | Controlling Fundamental Fluctuations for Reproducible Growth of Large Single-Crystal Graphene. ACS Nano, 2018, 12, 1778-1784. | 14.6 | 31 |
| 21 | Highly photoluminescent and temperature-sensitive P,ÂN, B-co-doped carbon quantum dots and their highly sensitive recognition for curcumin. RSC Advances, 2019, 9, 8340-8349. | 3.6 | 31 |
| 22 | Layerâ€byâ€Layer Assembled gâ€C<sub>3</sub>N<sub>4</sub> Nanosheets/Cellulose Nanofibers Oriented Membraneâ€Filler Leading to Enhanced Thermal Conductivity. Advanced Materials Interfaces, 2019, 6, 1801406. | 3.7 | 31 |
| 23 | Synthesis and morphology transformation of single-crystal graphene domains based on activated carbon dioxide by chemical vapor deposition. Journal of Materials Chemistry C, 2013, 1, 2990. | 5.5 | 30 |
| 24 | Epitaxial Growth of hâ€BN on Templates of Various Dimensionalities in hâ€BNâ€“Graphene Material Systems. Advanced Materials, 2019, 31, e1805582. | 21.0 | 28 |
| 25 | Enhanced through-plane thermal conductivity in Polymer nanocomposites by constructing graphene-supported BN nanotubes. Journal of Materials Chemistry C, 2020, 8, 9569-9575. | 5.5 | 27 |
| 26 | A Generalized Method for Evaluating the Metallic-to-Semiconducting Ratio of Separated Single-Walled Carbon Nanotubes by UVâ^'visâ^'NIR Characterization. Journal of Physical Chemistry C, 2010, 114, 12095-12098. | 3.1 | 24 |
| 27 | Enhanced thermal conductivity of nanocomposites with MOF-derived encapsulated magnetic oriented carbon nanotube-grafted graphene polyhedra. RSC Advances, 2020, 10, 3357-3365. | 3.6 | 22 |
| 28 | A double fluorescent nanoprobe based on phosphorus/nitrogen co-doped carbon dots for detecting dichromate ions and dopamine. RSC Advances, 2018, 8, 31793-31802. | 3.6 | 21 |
| 29 | Preparation and properties of polyvinyl alcohol (PVA) / mesoporous silica supported phosphotungstic acid (MS-HPW) hybrid membranes for alkali recovery. Journal of Membrane Science, 2019, 592, 117388. | 8.2 | 21 |
| 30 | Incorporating Ag Nanowires into Graphene Nanosheets for Enhanced Thermal Conductivity: Implications for Thermal Management. ACS Applied Nano Materials, 2020, 3, 6061-6070. | 5.0 | 21 |
| 31 | Interface crosslinked mPEG-b-PAGE-b-PCL triblock copolymer micelles with high stability for anticancer drug delivery. Colloids and Surfaces B: Biointerfaces, 2020, 189, 110830. | 5.0 | 20 |
| 32 | Studying the adsorption mechanisms of nanoplastics on covalent organic frameworks via molecular dynamics simulations. Journal of Hazardous Materials, 2022, 421, 126796. | 12.4 | 19 |
| 33 | Production of graphene nanospheres by annealing of graphene oxide in solution. Nano Research, 2011, 4, 705-711. | 10.4 | 17 |
| 34 | Ultrahigh density modulation of aligned single-walled carbon nanotube arrays. Nano Research, 2011, 4, 931-937. | 10.4 | 17 |
| 35 | Ultrafast Growth of Thin Hexagonal and Pyramidal Molybdenum Nitride Crystals and Films. , 2019, 1, 383-388. | | 17 |
| 36 | Polypyrroleâ€Reinforced N,Sâ€Doping Graphene Foam for Efficient Solar Purification of Wastewater. Solar Rrl, 2021, 5, 2100210. | 5.8 | 17 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Rational design of high-performance thermal interface materials based on gold-nanocap-modified vertically aligned graphene architecture. Composites Communications, 2021, 24, 100621. | 6.3 | 16 |
| 38 | Bottomâ€Upâ€Etchingâ€Mediated Synthesis of Largeâ€Scale Pure Monolayer Graphene on Cyclicâ€Polishingâ€Annealed Cu(111). Advanced Materials, 2022, 34, e2108608. | 21.0 | 16 |
| 39 | Theoretical Study of Chemical Vapor Deposition Synthesis of Graphene and Beyond: Challenges and Perspectives. Journal of Physical Chemistry Letters, 2021, 12, 7942-7963. | 4.6 | 15 |
| 40 | Nano-Subsidence-Assisted Precise Integration of Patterned Two-Dimensional Materials for High-Performance Photodetector Arrays. ACS Nano, 2019, 13, 2654-2662. | 14.6 | 14 |
| 41 | Evaluation of metallic and semiconducting single-walled carbon nanotube characteristics. Nanoscale, 2011, 3, 2074. | 5.6 | 13 |
| 42 | Low temperature growth of clean single layer hexagonal boron nitride flakes and film for graphene-based field-effect transistors. Science China Materials, 2019, 62, 1218-1225. | 6.3 | 13 |
| 43 | Construction of Oriented Interconnected BNNS Skeleton by Selfâ€Growing CNTs Leading High Thermal Conductivity. Advanced Materials Interfaces, 2021, 8, 2001910. | 3.7 | 11 |
| 44 | Interface cisplatin-crosslinked doxorubicin-loaded triblock copolymer micelles for synergistic cancer therapy. Colloids and Surfaces B: Biointerfaces, 2020, 196, 111334. | 5.0 | 10 |
| 45 | Gravity driven ice-templated oriental arrangement of functional carbon fibers for high in-plane thermal conductivity. Composites Part A: Applied Science and Manufacturing, 2021, 150, 106623. | 7.6 | 9 |
| 46 | Regulation of Polyvinyl Alcohol/Sulfonated Nano-TiO2 Hybrid Membranes Interface Promotes Diffusion Dialysis. Polymers, 2021, 13, 14. | 4.5 | 9 |
| 47 | Engineering of Chemical Vapor Deposition Graphene Layers: Growth, Characterization, and Properties. Advanced Functional Materials, 2022, 32, . | 14.9 | 8 |
| 48 | A dual non-covalent bonding constructed continuous interfacial structure for reducing interfacial thermal resistance. Journal of Materials Chemistry A, 2022, 10, 13858-13867. | 10.3 | 8 |
| 49 | Enhanced thermal conductivity with ultralow filler loading via constructing branch-type heat transfer network. Composites Communications, 2022, 30, 101060. | 6.3 | 7 |
| 50 | Enhanced Thermal Conductivity via In Situ Constructed CNT Aerogel Structure in Composites. Advanced Materials Interfaces, 2022, 9, . | 3.7 | 7 |
| 51 | Effect of Chain Configuration on Thermal Conductivity of Polyethyleneâ€"A Molecular Dynamic Simulation Study. Chinese Journal of Polymer Science (English Edition), 2020, 38, 1418-1425. | 3.8 | 6 |
| 52 | Composite Cationic Exchange Membranes Prepared from Polyvinyl Alcohol (PVA) and Boronic Acid Copolymers for Alkaline Diffusion Dialysis. Materials, 2018, 11, 1354. | 2.9 | 5 |
| 53 | Graphene: Twoâ€Stage Metalâ€Catalystâ€Free Growth of Highâ€Quality Polycrystalline Graphene Films on Silicon Nitride Substrates (Adv. Mater. 7/2013). Advanced Materials, 2013, 25, 938-938. | 21.0 | 4 |
| 54 | Preparation of Polyvinyl Alcohol (PVA)-Based Composite Membranes Using Carboxyl-Type Boronic Acid Copolymers for Alkaline Diffusion Dialysis. Polymers, 2020, 12, 2360. | 4.5 | 4 |

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|---|---|---|---|
| 55 | A highly stable aliphatic backbone from visible light-induced RAFT polymerization for anion exchange membranes. Polymer Chemistry, 2021, 12, 5574-5582. | 3.9 | 4 |
| 56 | Fieldâ€Effect Transistors: Monolayer Hexagonal Boron Nitride Films with Large Domain Size and Clean Interface for Enhancing the Mobility of Grapheneâ€Based Fieldâ€Effect Transistors (Adv. Mater. 10/2014). Advanced Materials, 2014, 26, 1474-1474. | 21.0 | 3 |
| 57 | Interfacial Modulation of Graphene by Polythiophene with Controlled Molecular Weight to Enhance Thermal Conductivity. Membranes, 2021, 11, 895. | 3.0 | 3 |
| 58 | Growth and Etching Kinetics: Growth and Etching of Monolayer Hexagonal Boron Nitride (Adv.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62 | 21.0 | 2 |
| 59 | Airâ€Stable Symmetric Ambipolar Fieldâ€Effect Transistors Based on Reduced Graphene Oxideâ€OTS Selfâ€Assembled Monolayer Heterostructure. ChemNanoMat, 2019, 5, 472-478. | 2.8 | 2 |
| 60 | Negatively Charged MOF-Based Composite Anion Exchange Membrane with High Cation Selectivity and Permeability. Membranes, 2022, 12, 601. | 3.0 | 2 |
| 61 | Multilayer Graphene-Coated Atomic Force Microscopy Tips for Molecular Junctions (Adv. Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock | 21.0 | 1 |
| 62 | Graphene: Near-Equilibrium Chemical Vapor Deposition of High-Quality Single-Crystal Graphene Directly on Various Dielectric Substrates (Adv. Mater. 9/2014). Advanced Materials, 2014, 26, 1471-1471. | 21.0 | 1 |
| 63 | 2D Materials: Epitaxial Growth of hâ€BN on Templates of Various Dimensionalities in hâ€BNâ€“Graphene Material Systems (Adv. Mater. 12/2019). Advanced Materials, 2019, 31, 1970088. | 21.0 | 1 |
| 64 | Graphene Sheets: Gramâ€Scale Synthesis of Graphene Sheets by a Catalytic Arcâ€Discharge Method (Small) Tj ETQq0 0 0 rgBT /Overloc | 10.0 | 0 |
| 65 | Nanoscale Materials: A General Approach for Fast Detection of Charge Carrier Type and Conductivity Difference in Nanoscale Materials (Adv. Mater. 48/2013). Advanced Materials, 2013, 25, 6916-6916. | 21.0 | 0 |
| 66 | Vapor-solid interfacial reaction and polymerization for wafer-scale uniform and ultrathin two-dimensional organic films. Science China Materials, 0, , 1. | 6.3 | 0 |
| 67 | Bottomâ€Upâ€Etchingâ€Mediated Synthesis of Largeâ€Scale Pure Monolayer Graphene on Cyclicâ€Polishingâ€Annealed Cu(111) (Adv. Mater. 8/2022). Advanced Materials, 2022, 34, . | 21.0 | 0 |