

Shenxiang Zhang

List of Publications by Year in descending order

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Version: 2024-02-01

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papers

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citations

172386
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49
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49
docs citations

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times ranked

5761
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Superhydrophobic and Superoleophilic PVDF Membranes for Effective Separation of Water-in-Oil Emulsions with High Flux. <i>Advanced Materials</i> , 2013, 25, 2071-2076. | 11.1 | 1,015 |
| 2 | Nanowire-Haired Inorganic Membranes with Superhydrophilicity and Underwater Ultralow Adhesive Superoleophobicity for High-Efficiency Oil/Water Separation. <i>Advanced Materials</i> , 2013, 25, 4192-4198. | 11.1 | 784 |
| 3 | A Robust Polyionized Hydrogel with an Unprecedented Underwater Anti-Crude-Oil Adhesion Property. <i>Advanced Materials</i> , 2016, 28, 5307-5314. | 11.1 | 346 |
| 4 | Interfacial Design of Mixed Matrix Membranes for Improved Gas Separation Performance. <i>Advanced Materials</i> , 2016, 28, 3399-3405. | 11.1 | 337 |
| 5 | Cupric Phosphate Nanosheets-Wrapped Inorganic Membranes with Superhydrophilic and Outstanding Anticrude Oil-Fouling Property for Oil/Water Separation. <i>ACS Nano</i> , 2018, 12, 795-803. | 7.3 | 317 |
| 6 | Ultrafast permeation of water through protein-based membranes. <i>Nature Nanotechnology</i> , 2009, 4, 353-357. | 15.6 | 312 |
| 7 | Ultrathin Polyamide Nanofiltration Membrane Fabricated on Brush-Painted Single-Walled Carbon Nanotube Network Support for Ion Sieving. <i>ACS Nano</i> , 2019, 13, 5278-5290. | 7.3 | 268 |
| 8 | SWCNT-intercalated GO ultrathin films for ultrafast separation of molecules. <i>Journal of Materials Chemistry A</i> , 2015, 3, 6649-6654. | 5.2 | 223 |
| 9 | Tröger's Base-Based Microporous Polyimide Membranes for High-Performance Gas Separation. <i>ACS Macro Letters</i> , 2014, 3, 597-601. | 2.3 | 170 |
| 10 | An ultrathin bilayer membrane with asymmetric wettability for pressure responsive oil/water emulsion separation. <i>Journal of Materials Chemistry A</i> , 2015, 3, 23477-23482. | 5.2 | 146 |
| 11 | Superwetting polymer-decorated SWCNT composite ultrathin films for ultrafast separation of oil-in-water nanoemulsions. <i>Journal of Materials Chemistry A</i> , 2015, 3, 2895-2902. | 5.2 | 140 |
| 12 | Na ⁺ -gated water-conducting nanochannels for boosting CO ₂ conversion to liquid fuels. <i>Science</i> , 2020, 367, 667-671. | 6.0 | 136 |
| 13 | Microporous Polyimides with Rationally Designed Chain Structure Achieving High Performance for Gas Separation. <i>Macromolecules</i> , 2014, 47, 7477-7483. | 2.2 | 131 |
| 14 | Polymers of intrinsic microporosity/metal-organic framework hybrid membranes with improved interfacial interaction for high-performance CO ₂ separation. <i>Journal of Materials Chemistry A</i> , 2017, 5, 10968-10977. | 5.2 | 127 |
| 15 | Tröger's base-based copolymers with intrinsic microporosity for CO ₂ separation and effect of Tröger's base on separation performance. <i>Polymer Chemistry</i> , 2014, 5, 2793-2800. | 1.9 | 106 |
| 16 | Multifunctional Bio-Nanocomposite Coatings for Perishable Fruits. <i>Advanced Materials</i> , 2020, 32, e1908291. | 11.1 | 97 |
| 17 | Hydrogel-embedded tight ultrafiltration membrane with superior anti-dye-fouling property for low-pressure driven molecule separation. <i>Journal of Materials Chemistry A</i> , 2018, 6, 2927-2934. | 5.2 | 80 |
| 18 | Porous superstructures constructed from ultrafine FeP nanoparticles for highly active and exceptionally stable hydrogen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 6387-6392. | 5.2 | 79 |

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|----|--|-----|-----------|
| 19 | MOF Nanosheet-Based Mixed Matrix Membranes with Metal-Organic Coordination Interfacial Interaction for Gas Separation. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 49101-49110. | 4.0 | 78 |
| 20 | Carbon Molecular Sieve Membranes Derived from Tröger's Base-Based Microporous Polyimide for Gas Separation. <i>ChemSusChem</i> , 2018, 11, 916-923. | 3.6 | 74 |
| 21 | Microsphere-Fiber Interpenetrated Superhydrophobic PVDF Microporous Membranes with Improved Waterproof and Breathable Performance. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 28210-28218. | 4.0 | 65 |
| 22 | Metal-Organic Framework Composite Photothermal Membrane for Removal of High-Concentration Volatile Organic Compounds from Water via Molecular Sieving. <i>ACS Nano</i> , 2022, 16, 8329-8337. | 7.3 | 58 |
| 23 | Constructing Strong Interfacial Interactions under Mild Conditions in MOF-Incorporated Mixed Matrix Membranes for Gas Separation. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 3166-3174. | 4.0 | 48 |
| 24 | Rh nanoparticles supported on ultrathin carbon nanosheets for high-performance oxygen reduction reaction and catalytic hydrogenation. <i>Nanoscale</i> , 2017, 9, 1834-1839. | 2.8 | 47 |
| 25 | Mixed matrix membranes with highly dispersed MOF nanoparticles for improved gas separation. <i>Separation and Purification Technology</i> , 2021, 277, 119449. | 3.9 | 47 |
| 26 | Ultrafast Ion Sieving from Honeycomb-like Polyamide Membranes Formed Using Porous Protein Assemblies. <i>Nano Letters</i> , 2020, 20, 5821-5829. | 4.5 | 46 |
| 27 | Ultralarge Single-Layer Porous Protein Nanosheet for Precise Nanosize Separation. <i>Nano Letters</i> , 2018, 18, 6563-6569. | 4.5 | 44 |
| 28 | Nanoporous film-mediated growth of ultrathin and continuous metal-organic framework membranes for high-performance hydrogen separation. <i>Journal of Materials Chemistry A</i> , 2017, 5, 1962-1966. | 5.2 | 39 |
| 29 | Effects on Carbon Molecular Sieve Membrane Properties for a Precursor Polyimide with Simultaneous Flatness and Contortion in the Repeat Unit. <i>ChemSusChem</i> , 2020, 13, 5531-5538. | 3.6 | 34 |
| 30 | Microporous polymer adsorptive membranes with high processing capacity for molecular separation. <i>Nature Communications</i> , 2022, 13, . | 5.8 | 30 |
| 31 | Adamantane-grafted polymer of intrinsic microporosity with finely tuned interchain spacing for improved CO ₂ separation performance. <i>Separation and Purification Technology</i> , 2020, 233, 116008. | 3.9 | 27 |
| 32 | Two-Dimensional Microporous Material-Based Mixed Matrix Membranes for Gas Separation. <i>Chemistry - an Asian Journal</i> , 2020, 15, 2303-2315. | 1.7 | 24 |
| 33 | Metal ion cross-linked nanoporous polymeric membranes with improved organic solvent resistance for molecular separation. <i>Journal of Membrane Science</i> , 2021, 621, 119002. | 4.1 | 24 |
| 34 | Synergistic Design of Enhanced H ₂ O Interaction and Decarboxylation Cross-Linking of Polyimide Membranes for Natural Gas Separation. <i>Macromolecules</i> , 2022, 55, 2970-2982. | 2.2 | 24 |
| 35 | Thin-film composite nanofiltration membrane with unprecedented stability in strong acid for highly selective dye/NaCl separation. <i>Journal of Membrane Science</i> , 2022, 645, 120189. | 4.1 | 23 |
| 36 | Mineralized growth of Janus membrane with asymmetric wetting property for fast separation of a trace of blood. <i>Journal of Materials Chemistry B</i> , 2017, 5, 4876-4882. | 2.9 | 22 |

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|----|---|------|-----------|
| 37 | A microporous polymer ultrathin membrane for the highly efficient removal of dyes from acidic saline solutions. <i>Journal of Membrane Science</i> , 2020, 603, 118027. | 4.1 | 19 |
| 38 | In-situ generation of polymer molecular sieves in polymer membranes for highly selective gas separation. <i>Journal of Membrane Science</i> , 2021, 630, 119302. | 4.1 | 17 |
| 39 | Negative Charge Confined Amine Carriers within the Nanowire Network for Stable and Efficient Membrane Carbon Capture. <i>Advanced Functional Materials</i> , 2020, 30, 2002804. | 7.8 | 14 |
| 40 | The high-yield direct synthesis of dimethyl ether from CO ₂ and H ₂ in a dry reaction environment. <i>Journal of Materials Chemistry A</i> , 2021, 9, 2678-2682. | 5.2 | 14 |
| 41 | Thin film composite structured Janus membrane for fast gravity-driven separation of a trace of blood. <i>Journal of Membrane Science</i> , 2021, 620, 118853. | 4.1 | 14 |
| 42 | Thermally Cross-Linked Amidoxime-Functionalized Polymers of Intrinsic Microporosity Membranes for Highly Selective Hydrogen Separation. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 9426-9435. | 3.2 | 14 |
| 43 | Superhydrophilic Sub-1-nm Porous Membrane with Electroneutral Surface for Nonselective Transport of Small Organic Molecules. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 38778-38787. | 4.0 | 8 |
| 44 | Polymer of intrinsic microporosity-based macroporous membrane with high thermal stability as a Li-ion battery separator. <i>RSC Advances</i> , 2019, 9, 21539-21543. | 1.7 | 7 |
| 45 | Micrometer-sized MOF particles incorporated mixed-matrix membranes driven by H ₂ -H ₂ interfacial interactions for improved gas separation. <i>Separation and Purification Technology</i> , 2022, , 121258. | 3.9 | 7 |
| 46 | Bio-Inspired Nanocomposite Coatings: Multifunctional Bio-Inspired Nanocomposite Coatings for Perishable Fruits (Adv.) <i>Tj ETQq0,0,0 rgBT₃Overlock</i> | 11.1 | 3 |
| 47 | Ultrathin Microporous Metal-Organic Network Membranes for Molecular Separation. <i>Journal of Materials Chemistry A</i> , 0, , . | 5.2 | 3 |
| 48 | Nanowire Oriented On-Surface Growth of Chiral Cystine Crystalline Nanosheets. <i>Langmuir</i> , 2015, 31, 8795-8801. | 1.6 | 1 |