

Dapeng Cao

List of Publications by Year in descending order

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306
papers

23,292
citations

9234

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g-index

314
all docs

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docs citations

314
times ranked

23572
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Targeted Synthesis of a Porous Aromatic Framework with High Stability and Exceptionally High Surface Area. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 9457-9460. | 7.2 | 1,272 |
| 2 | A universal principle for a rational design of single-atom electrocatalysts. <i>Nature Catalysis</i> , 2018, 1, 339-348. | 16.1 | 1,214 |
| 3 | ZIF-derived in situ nitrogen-doped porous carbons as efficient metal-free electrocatalysts for oxygen reduction reaction. <i>Energy and Environmental Science</i> , 2014, 7, 442-450. | 15.6 | 719 |
| 4 | Recent Progress in MOF-Derived, Heteroatom-Doped Porous Carbons as Highly Efficient Electrocatalysts for Oxygen Reduction Reaction in Fuel Cells. <i>Advanced Functional Materials</i> , 2018, 28, 1704537. | 7.8 | 552 |
| 5 | Nitrogen-doped graphene nanosheets as anode materials for lithium ion batteries: a first-principles study. <i>Journal of Materials Chemistry</i> , 2012, 22, 8911. | 6.7 | 517 |
| 6 | Unveiling the high-activity origin of single-atom iron catalysts for oxygen reduction reaction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 6626-6631. | 3.3 | 500 |
| 7 | Highly Efficient Electrocatalysts for Oxygen Reduction Based on 2D Covalent Organic Polymers Complexed with Non-precious Metals. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 2433-2437. | 7.2 | 417 |
| 8 | A facile and versatile method for preparation of colored TiO ₂ with enhanced solar-driven photocatalytic activity. <i>Nanoscale</i> , 2014, 6, 10216-10223. | 2.8 | 382 |
| 9 | Flexible polydimethylsiloxane/multi-walled carbon nanotubes membranous metacomposites with negative permittivity. <i>Polymer</i> , 2017, 125, 50-57. | 1.8 | 379 |
| 10 | Superior electromagnetic interference shielding 3D graphene nanoplatelets/reduced graphene oxide foam/epoxy nanocomposites with high thermal conductivity. <i>Journal of Materials Chemistry C</i> , 2019, 7, 2725-2733. | 2.7 | 342 |
| 11 | Porous covalent-organic materials: synthesis, clean energy application and design. <i>Journal of Materials Chemistry A</i> , 2013, 1, 2691-2718. | 5.2 | 329 |
| 12 | An amino group functionalized metal-organic framework as a luminescent probe for highly selective sensing of Fe ³⁺ ions. <i>Journal of Materials Chemistry A</i> , 2014, 2, 7662. | 5.2 | 312 |
| 13 | Single-atom cobalt electrocatalysts for foldable solid-state Zn-air battery. <i>Nano Energy</i> , 2018, 50, 691-698. | 8.2 | 303 |
| 14 | Nanoparticle Dispersion and Aggregation in Polymer Nanocomposites: Insights from Molecular Dynamics Simulation. <i>Langmuir</i> , 2011, 27, 7926-7933. | 1.6 | 295 |
| 15 | Nitrogen-Doped Holey Graphitic Carbon from 2D Covalent Organic Polymers for Oxygen Reduction. <i>Advanced Materials</i> , 2014, 26, 3315-3320. | 11.1 | 292 |
| 16 | MXenes for polymer matrix electromagnetic interference shielding composites: A review. <i>Composites Communications</i> , 2021, 24, 100653. | 3.3 | 291 |
| 17 | Vertical CoP Nanoarray Wrapped by N-Doped Carbon for Hydrogen Evolution Reaction in Both Acidic and Alkaline Conditions. <i>Advanced Energy Materials</i> , 2019, 9, 1803970. | 10.2 | 284 |
| 18 | Heavy metal ion removal of wastewater by zeolite-imidazolate frameworks. <i>Separation and Purification Technology</i> , 2018, 194, 462-469. | 3.9 | 277 |

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|----|---|------|-----------|
| 19 | Zeolitic imidazolate framework-derived nitrogen-doped porous carbons as high performance supercapacitor electrode materials. <i>Carbon</i> , 2015, 85, 51-59. | 5.4 | 275 |
| 20 | Zeolitic imidazolate framework-8 as a luminescent material for the sensing of metal ions and small molecules. <i>Journal of Materials Chemistry</i> , 2011, 21, 6649. | 6.7 | 255 |
| 21 | Metal-Organic Frameworks with Incorporated Carbon Nanotubes: Improving Carbon Dioxide and Methane Storage Capacities by Lithium Doping. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 491-494. | 7.2 | 255 |
| 22 | Lithium-Doped 3D Covalent Organic Frameworks: High-Capacity Hydrogen Storage Materials. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 4730-4733. | 7.2 | 244 |
| 23 | Selective adsorption of carbon dioxide by carbonized porous aromatic framework (PAF). <i>Energy and Environmental Science</i> , 2012, 5, 8370. | 15.6 | 234 |
| 24 | Controllable etching of MoS ₂ basal planes for enhanced hydrogen evolution through the formation of active edge sites. <i>Nano Energy</i> , 2018, 49, 634-643. | 8.2 | 220 |
| 25 | Synthesis of Luminescent Covalent-Organic Polymers for Detecting Nitroaromatic Explosives and Small Organic Molecules. <i>Macromolecular Rapid Communications</i> , 2012, 33, 1184-1190. | 2.0 | 213 |
| 26 | Polymer-based EMI shielding composites with 3D conductive networks: A mini-review. <i>SusMat</i> , 2021, 1, 413-431. | 7.8 | 212 |
| 27 | Doping of Alkali, Alkaline-Earth, and Transition Metals in Covalent-Organic Frameworks for Enhancing CO ₂ Capture by First-Principles Calculations and Molecular Simulations. <i>ACS Nano</i> , 2010, 4, 4225-4237. | 7.3 | 206 |
| 28 | Single-Atom Ru Doping Induced Phase Transition of MoS ₂ and S Vacancy for Hydrogen Evolution Reaction. <i>Small Methods</i> , 2019, 3, 1900653. | 4.6 | 206 |
| 29 | Cu,N-codoped Hierarchical Porous Carbons as Electrocatalysts for Oxygen Reduction Reaction. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 21431-21439. | 4.0 | 205 |
| 30 | Systematic Tuning and Multifunctionalization of Covalent Organic Polymers for Enhanced Carbon Capture. <i>Journal of the American Chemical Society</i> , 2015, 137, 13301-13307. | 6.6 | 202 |
| 31 | Molecular Dynamics Study on Nanoparticle Diffusion in Polymer Melts: A Test of the Stokes-Einstein Law. <i>Journal of Physical Chemistry C</i> , 2008, 112, 6653-6661. | 1.5 | 195 |
| 32 | Well-defined two dimensional covalent organic polymers: rational design, controlled syntheses, and potential applications. <i>Polymer Chemistry</i> , 2015, 6, 1896-1911. | 1.9 | 189 |
| 33 | Biomass-derived FeNi alloy and nitrogen-codoped porous carbons as highly efficient oxygen reduction and evolution bifunctional electrocatalysts for rechargeable Zn-air battery. <i>Energy Storage Materials</i> , 2018, 12, 277-283. | 9.5 | 176 |
| 34 | ZIF-derived porous carbon: a promising supercapacitor electrode material. <i>Journal of Materials Chemistry A</i> , 2014, 2, 12873. | 5.2 | 171 |
| 35 | A Rigid Nested Metal-Organic Framework Featuring a Thermoresponsive Gating Effect Dominated by Counterions. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 15027-15030. | 7.2 | 166 |
| 36 | Optimization of Single-Walled Carbon Nanotube Arrays for Methane Storage at Room Temperature. <i>Journal of Physical Chemistry B</i> , 2003, 107, 13286-13292. | 1.2 | 155 |

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|----|---|------|-----------|
| 37 | Amino-Functionalized Luminescent Metal-Organic Framework Test Paper for Rapid and Selective Sensing of SO ₂ Gas and Its Derivatives by Luminescence Turn-On Effect. <i>Analytical Chemistry</i> , 2018, 90, 3608-3614. | 3.2 | 146 |
| 38 | CNT@Cu ₃ (BTC) ₂ and Metal-Organic Frameworks for Separation of CO ₂ /CH ₄ Mixture. <i>Journal of Physical Chemistry C</i> , 2011, 115, 19864-19871. | 1.5 | 144 |
| 39 | Covalent-organic polymers for carbon dioxide capture. <i>Journal of Materials Chemistry</i> , 2012, 22, 22663. | 6.7 | 143 |
| 40 | ZIF-derived nitrogen-doped porous carbons as highly efficient adsorbents for removal of organic compounds from wastewater. <i>Chemical Engineering Journal</i> , 2017, 323, 502-511. | 6.6 | 140 |
| 41 | Porous organic polymers as a platform for sensing applications. <i>Chemical Society Reviews</i> , 2022, 51, 2031-2080. | 18.7 | 140 |
| 42 | Multiscale simulation and modelling of adsorptive processes for energy gas storage and carbon dioxide capture in porous coordination frameworks. <i>Energy and Environmental Science</i> , 2010, 3, 1469. | 15.6 | 138 |
| 43 | Improved Classical United-Atom Force Field for Imidazolium-Based Ionic Liquids: Tetrafluoroborate, Hexafluorophosphate, Methylsulfate, Trifluoromethylsulfonate, Acetate, Trifluoroacetate, and Bis(trifluoromethylsulfonyl)amide. <i>Journal of Physical Chemistry B</i> , 2011, 115, 10027-10040. | 1.2 | 138 |
| 44 | Co,N-codoped nanotube/graphene 1D/2D heterostructure for efficient oxygen reduction and hydrogen evolution reactions. <i>Journal of Materials Chemistry A</i> , 2018, 6, 3926-3932. | 5.2 | 136 |
| 45 | Highly sensitive and selective detection of 2,4,6-trinitrophenol using covalent-organic polymer luminescent probes. <i>Journal of Materials Chemistry A</i> , 2015, 3, 92-96. | 5.2 | 132 |
| 46 | Constructing interconnected spherical hollow conductive networks in silver platelets/reduced graphene oxide foam/epoxy nanocomposites for superior electromagnetic interference shielding effectiveness. <i>Nanoscale</i> , 2019, 11, 22590-22598. | 2.8 | 130 |
| 47 | Molecular Sizes and Antibacterial Performance Relationships of Flexible Ionic Liquid Derivatives. <i>Journal of the American Chemical Society</i> , 2020, 142, 20257-20269. | 6.6 | 128 |
| 48 | One-pot melamine derived nitrogen doped magnetic carbon nanoadsorbents with enhanced chromium removal. <i>Carbon</i> , 2016, 109, 640-649. | 5.4 | 125 |
| 49 | Metal-organic framework as luminescence turn-on sensor for selective detection of metal ions: Absorbance caused enhancement mechanism. <i>Sensors and Actuators B: Chemical</i> , 2018, 256, 839-845. | 4.0 | 116 |
| 50 | Adsorption and Diffusion of Shale Gas Reservoirs in Modeled Clay Minerals at Different Geological Depths. <i>Energy & Fuels</i> , 2014, 28, 7467-7473. | 2.5 | 113 |
| 51 | Silicon Nanotube as a Promising Candidate for Hydrogen Storage: From the First Principle Calculations to Grand Canonical Monte Carlo Simulations. <i>Journal of Physical Chemistry C</i> , 2008, 112, 5598-5604. | 1.5 | 104 |
| 52 | Color tunable porous organic polymer luminescent probes for selective sensing of metal ions and nitroaromatic explosives. <i>Journal of Materials Chemistry C</i> , 2015, 3, 8490-8494. | 2.7 | 103 |
| 53 | Nitrogen-doped graphitic carbons with encapsulated CoNi bimetallic nanoparticles as bifunctional electrocatalysts for rechargeable Zn-Air batteries. <i>Carbon</i> , 2019, 144, 8-14. | 5.4 | 101 |
| 54 | High Uptakes of Methane in Li-Doped 3D Covalent Organic Frameworks. <i>Langmuir</i> , 2010, 26, 220-226. | 1.6 | 99 |

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|----|--|-----|-----------|
| 55 | High-Capacity Hydrogen Storage in Porous Aromatic Frameworks with Diamond-like Structure. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 978-981. | 2.1 | 98 |
| 56 | Polymer-nanoparticle interfacial behavior revisited: A molecular dynamics study. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 13058. | 1.3 | 96 |
| 57 | Adsorption of CO ₂ , CH ₄ , CO ₂ /N ₂ and CO ₂ /CH ₄ in novel activated carbon beads: Preparation, measurements and simulation. <i>AIChE Journal</i> , 2011, 57, 3042-3051. | 1.8 | 96 |
| 58 | Preparation and characterization of zinc sulfide nanoparticles under high-gravity environment. <i>Materials Research Bulletin</i> , 2004, 39, 185-194. | 2.7 | 95 |
| 59 | Postsynthetic Lithium Modification of Covalent-Organic Polymers for Enhancing Hydrogen and Carbon Dioxide Storage. <i>Journal of Physical Chemistry C</i> , 2012, 116, 5974-5980. | 1.5 | 95 |
| 60 | Covalent organic polymer supported palladium catalysts for CO oxidation. <i>Chemical Communications</i> , 2013, 49, 5633. | 2.2 | 95 |
| 61 | Molecular dynamics simulation for insight into microscopic mechanism of polymer reinforcement. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 518-529. | 1.3 | 94 |
| 62 | Metal (Pd, Pt)-decorated carbon nanotubes for CO and NO sensing. <i>Sensors and Actuators B: Chemical</i> , 2011, 159, 171-177. | 4.0 | 87 |
| 63 | Nanoparticle hardness controls the internalization pathway for drug delivery. <i>Nanoscale</i> , 2015, 7, 2758-2769. | 2.8 | 86 |
| 64 | A Novel Zr-MOF as Fluorescence Turn-On Probe for Real-Time Detecting H ₂ S Gas and Fingerprint Identification. <i>Small</i> , 2018, 14, e1703822. | 5.2 | 86 |
| 65 | Local Structure Evolution and its Connection to Thermodynamic and Transport Properties of 1-Butyl-3-methylimidazolium Tetrafluoroborate and Water Mixtures by Molecular Dynamics Simulations. <i>Journal of Physical Chemistry B</i> , 2012, 116, 3249-3263. | 1.2 | 85 |
| 66 | Molecular simulation of displacement of shale gas by carbon dioxide at different geological depths. <i>Chemical Engineering Science</i> , 2016, 156, 121-127. | 1.9 | 85 |
| 67 | Nitrogen and Fluorine-Codoped Porous Carbons as Efficient Metal-Free Electrocatalysts for Oxygen Reduction Reaction in Fuel Cells. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 32859-32867. | 4.0 | 83 |
| 68 | Facile preparation of high-capacity hydrogen storage metal-organic frameworks: A combination of microwave-assisted solvothermal synthesis and supercritical activation. <i>Chemical Engineering Science</i> , 2010, 65, 3140-3146. | 1.9 | 81 |
| 69 | Porous covalent organic polymers as luminescent probes for highly selective sensing of Fe ³⁺ and chloroform: Functional group effects. <i>Sensors and Actuators B: Chemical</i> , 2016, 226, 273-278. | 4.0 | 80 |
| 70 | A Three-Dimensional sp ² Carbon-Conjugated Covalent Organic Framework. <i>Journal of the American Chemical Society</i> , 2021, 143, 15562-15566. | 6.6 | 80 |
| 71 | Computer simulations for the adsorption and separation of CO ₂ /CH ₄ /H ₂ /N ₂ gases by UMCM-1 and UMCM-2 metal organic frameworks. <i>Journal of Materials Chemistry</i> , 2011, 21, 11259. | 6.7 | 79 |
| 72 | Active Site Identification and Evaluation Criteria of In Situ Grown CoTe and NiTe Nanoarrays for Hydrogen Evolution and Oxygen Evolution Reactions. <i>Small Methods</i> , 2019, 3, 1900113. | 4.6 | 78 |

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|----|---|-----|-----------|
| 73 | Computational screening of porous carbons, zeolites, and metal organic frameworks for desulfurization and decarburization of biogas, natural gas, and flue gas. <i>AIChE Journal</i> , 2013, 59, 2928-2942. | 1.8 | 77 |
| 74 | Density functional theory for semiflexible and cyclic polyatomic fluids. <i>Journal of Chemical Physics</i> , 2004, 121, 4210-4220. | 1.2 | 76 |
| 75 | Flame-Retardant Polypropylene/Multiwall Carbon Nanotube Nanocomposites: Effects of Surface Functionalization and Surfactant Molecular Weight. <i>Macromolecular Chemistry and Physics</i> , 2014, 215, 327-340. | 1.1 | 75 |
| 76 | Hydrogen Adsorption Storage on Single-Walled Carbon Nanotube Arrays by a Combination of Classical Potential and Density Functional Theory. <i>Journal of Physical Chemistry B</i> , 2003, 107, 4942-4950. | 1.2 | 73 |
| 77 | Self-Diffusion of Methane in Single-Walled Carbon Nanotubes at Sub- and Supercritical Conditions. <i>Langmuir</i> , 2004, 20, 3759-3765. | 1.6 | 73 |
| 78 | Functional Group Modification of Metal-Organic Frameworks for CO ₂ Capture. <i>Journal of Physical Chemistry C</i> , 2012, 116, 10573-10579. | 1.5 | 73 |
| 79 | Significantly enhanced energy density of magnetite/polypyrrole nanocomposite capacitors at high rates by low magnetic fields. <i>Advanced Composites and Hybrid Materials</i> , 2018, 1, 127-134. | 9.9 | 73 |
| 80 | Phosphorous-Nitrogen-Codoped Carbon Materials Derived from Metal-Organic Frameworks as Efficient Electrocatalysts for Oxygen Reduction Reactions. <i>European Journal of Inorganic Chemistry</i> , 2016, 2016, 2100-2105. | 1.0 | 70 |
| 81 | Paraffin/polyethylene/graphite composite phase change materials with enhanced thermal conductivity and leakage-proof. <i>Advanced Composites and Hybrid Materials</i> , 2021, 4, 543-551. | 9.9 | 69 |
| 82 | Design of the Alkali-Metal-Doped WO ₃ as a Near-Infrared Shielding Material for Smart Window. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 17981-17988. | 1.8 | 68 |
| 83 | Understanding the Mechanism of Photocatalysis Enhancements in the Graphene-like Semiconductor Sheet/TiO ₂ Composites. <i>Journal of Physical Chemistry C</i> , 2014, 118, 5954-5960. | 1.5 | 65 |
| 84 | Lithium doping on metal-organic frameworks for enhancing H ₂ Storage. <i>International Journal of Hydrogen Energy</i> , 2012, 37, 946-950. | 3.8 | 64 |
| 85 | Molecular Dynamics Simulation of Diffusion of Shale Oils in Montmorillonite. <i>Journal of Physical Chemistry C</i> , 2016, 120, 8986-8991. | 1.5 | 64 |
| 86 | Facile preparation of biomass-derived bifunctional electrocatalysts for oxygen reduction and evolution reactions. <i>International Journal of Hydrogen Energy</i> , 2018, 43, 8611-8622. | 3.8 | 64 |
| 87 | Time-Temperature and Time-Concentration Superposition of Nanofilled Elastomers: A Molecular Dynamics Study. <i>Macromolecules</i> , 2009, 42, 2831-2842. | 2.2 | 63 |
| 88 | Modeling the selectivity of activated carbons for efficient separation of hydrogen and carbon dioxide. <i>Carbon</i> , 2005, 43, 1364-1370. | 5.4 | 62 |
| 89 | Carbon Dioxide Capture by PAFs and an Efficient Strategy To Fast Screen Porous Materials for Gas Separation. <i>Journal of Physical Chemistry C</i> , 2013, 117, 8353-8364. | 1.5 | 62 |
| 90 | Kinetic Charging Inversion in Ionic Liquid Electric Double Layers. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 2195-2200. | 2.1 | 62 |

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|-----|---|-----|-----------|
| 91 | Hydrogen Production via Efficient Formic Acid Decomposition: Engineering the Surface Structure of Pd-Based Alloy Catalysts by Design. <i>ACS Catalysis</i> , 2019, 9, 781-790. | 5.5 | 62 |
| 92 | Biomass-derived nitrogen-doped porous carbons (NPC) and NPC/ polyaniline composites as high performance supercapacitor materials. <i>Engineered Science</i> , 2018, , . | 1.2 | 62 |
| 93 | Density-functional theory and Monte Carlo simulation for the surface structure and correlation functions of freely jointed Lennard-Jones polymeric fluids. <i>Journal of Chemical Physics</i> , 2005, 122, 174708. | 1.2 | 61 |
| 94 | Surface Forces between Telechelic Brushes Revisited: The Origin of a Weak Attraction. <i>Langmuir</i> , 2006, 22, 2712-2718. | 1.6 | 60 |
| 95 | Static, rheological and mechanical properties of polymer nanocomposites studied by computer modeling and simulation. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 11365. | 1.3 | 60 |
| 96 | Poly(vinylidene fluoride) derived fluorine-doped magnetic carbon nanoadsorbents for enhanced chromium removal. <i>Carbon</i> , 2017, 115, 503-514. | 5.4 | 60 |
| 97 | Improving Energy Conversion Efficiency of Dye-Sensitized Solar Cells by Modifying TiO ₂ Photoanodes with Nitrogen-Reduced Graphene Oxide. <i>ACS Sustainable Chemistry and Engineering</i> , 2014, 2, 1234-1240. | 3.2 | 59 |
| 98 | A Fully Conjugated 3D Covalent Organic Framework Exhibiting Bandlike Transport with Ultrahigh Electron Mobility. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 9321-9325. | 7.2 | 59 |
| 99 | Microstructure of Block Copolymers near Selective Surfaces: Theoretical Predictions and Configurational-Bias Monte Carlo Simulation. <i>Macromolecules</i> , 2005, 38, 971-978. | 2.2 | 58 |
| 100 | Two-dimensional graphitic C ₃ N ₅ materials: promising metal-free catalysts and CO ₂ adsorbents. <i>Journal of Materials Chemistry A</i> , 2018, 6, 7168-7174. | 5.2 | 58 |
| 101 | Capture of Trace Sulfur Gases from Binary Mixtures by Single-Walled Carbon Nanotube Arrays: A Molecular Simulation Study. <i>Environmental Science & Technology</i> , 2011, 45, 4832-4838. | 4.6 | 57 |
| 102 | Effect of Li Doping on Diffusion and Separation of Hydrogen and Methane in Covalent Organic Frameworks. <i>Journal of Physical Chemistry C</i> , 2012, 116, 12591-12598. | 1.5 | 57 |
| 103 | Highly selective detection of picric acid from multicomponent mixtures of nitro explosives by using COP luminescent probe. <i>Sensors and Actuators B: Chemical</i> , 2017, 243, 753-760. | 4.0 | 56 |
| 104 | Nitrogen-doped graphene as an excellent candidate for selective gas sensing. <i>Science China Chemistry</i> , 2014, 57, 911-917. | 4.2 | 55 |
| 105 | Regioselective Functionalization of Stable BN-Modified Luminescent Tetraperhenes for High-Resolution Fingerprint Imaging. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 10132-10137. | 7.2 | 55 |
| 106 | Computer simulation for storage of methane and capture of carbon dioxide in carbon nanoscrolls by expansion of interlayer spacing. <i>Carbon</i> , 2010, 48, 3760-3768. | 5.4 | 54 |
| 107 | Revisiting the Dispersion Mechanism of Grafted Nanoparticles in Polymer Matrix: A Detailed Molecular Dynamics Simulation. <i>Langmuir</i> , 2011, 27, 15213-15222. | 1.6 | 54 |
| 108 | Determination of pore size distribution and adsorption of methane and CCl ₄ on activated carbon by molecular simulation. <i>Carbon</i> , 2002, 40, 2359-2365. | 5.4 | 52 |

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|-----|--|-----|-----------|
| 109 | Hydrogen Storage in Mesoporous Coordination Frameworks: Experiment and Molecular Simulation. <i>Journal of Physical Chemistry C</i> , 2009, 113, 15106-15109. | 1.5 | 52 |
| 110 | Synthesis of Cu@Pd core-shell nanowires with enhanced activity and stability for formic acid oxidation. <i>Electrochimica Acta</i> , 2014, 143, 44-48. | 2.6 | 52 |
| 111 | Probing the Structural Transition Kinetics and Charge Compensation of the $P2\text{-Na}_{0.78}\text{Al}_{0.05}\text{Ni}_{0.33}\text{Mn}_{0.60}\text{O}_2$ Cathode for Sodium Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 24122-24131. | 4.0 | 51 |
| 112 | Oriented construction Cu ₃ P and Ni ₂ P heterojunction to boost overall water splitting. <i>Chemical Engineering Journal</i> , 2022, 448, 137706. | 6.6 | 51 |
| 113 | Revisiting density functionals for the primitive model of electric double layers. <i>Journal of Chemical Physics</i> , 2014, 140, 044714. | 1.2 | 50 |
| 114 | Li-Doped and Nondoped Covalent Organic Borosilicate Framework for Hydrogen Storage. <i>Journal of Physical Chemistry C</i> , 2010, 114, 3108-3114. | 1.5 | 49 |
| 115 | Absorption competition quenching mechanism of porous covalent organic polymer as luminescent sensor for selective sensing Fe^{3+} . <i>ChemistrySelect</i> , 2017, 2, 1041-1047. | 0.7 | 49 |
| 116 | Toughening of polypropylene-ethylene copolymer with nanosized CaCO ₃ and styrene-butadiene-styrene. <i>Journal of Applied Polymer Science</i> , 2004, 94, 796-802. | 1.3 | 47 |
| 117 | Molecular Simulation of Novel Carbonaceous Materials for Hydrogen Storage. <i>Nano Letters</i> , 2004, 4, 1489-1492. | 4.5 | 47 |
| 118 | The Role of Shape Complementarity in the Protein-Protein Interactions. <i>Scientific Reports</i> , 2013, 3, 3271. | 1.6 | 47 |
| 119 | Nitrogen-doped porous carbons with ultrahigh specific surface area as bifunctional materials for dye removal of wastewater and supercapacitors. <i>Applied Surface Science</i> , 2018, 456, 184-194. | 3.1 | 47 |
| 120 | Polyaniline-coated Ru/Ni(OH) ₂ nanosheets for hydrogen evolution reaction over a wide pH range. <i>Journal of Catalysis</i> , 2019, 375, 249-256. | 3.1 | 47 |
| 121 | Unlocking the potential of P3 structure for practical Sodium-ion batteries by fabricating zero strain framework for Na ⁺ intercalation. <i>Energy Storage Materials</i> , 2021, 37, 354-362. | 9.5 | 47 |
| 122 | Ultra-small Ru nanoparticles embedded on Fe@Ni(OH) ₂ nanosheets for efficient water splitting at a large current density with long-term stability of 680 hours. <i>Journal of Materials Chemistry A</i> , 2022, 10, 4817-4824. | 5.2 | 46 |
| 123 | Li ₂ Si ₆ O ₆ Fullerene Composite: A Promising Hydrogen Storage Medium. <i>ACS Nano</i> , 2009, 3, 3294-3300. | 7.3 | 45 |
| 124 | Time-dependent density functional theory for ion diffusion in electrochemical systems. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 284102. | 0.7 | 45 |
| 125 | Effect of Tail Architecture on Self-Assembly of Amphiphiles for Polymeric Micelles. <i>Langmuir</i> , 2009, 25, 2749-2756. | 1.6 | 44 |
| 126 | Adsorption and separation of CH ₄ /CO ₂ /N ₂ /H ₂ /CO mixtures in hexagonally ordered carbon nanopipes CMK-5. <i>Chemical Engineering Science</i> , 2011, 66, 2266-2276. | 1.9 | 44 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 127 | Screening donor groups of organic dyes for dye-sensitized solar cells. RSC Advances, 2015, 5, 22892-22898. | 1.7 | 44 |
| 128 | Porous organic polymer nanotubes as luminescent probe for highly selective and sensitive detection of Fe ³⁺ . Science China Chemistry, 2017, 60, 1090-1097. | 4.2 | 44 |
| 129 | Dual active site tandem catalysis of metal hydroxyl oxides and single atoms for boosting oxygen evolution reaction. Applied Catalysis B: Environmental, 2021, 297, 120451. | 10.8 | 44 |
| 130 | Designing a Thermo-switchable Channel for Nanofluidic Controllable Transportation. ACS Nano, 2011, 5, 1102-1108. | 7.3 | 43 |
| 131 | SiH/TiO ₂ and GeH/TiO ₂ Heterojunctions: Promising TiO ₂ -based Photocatalysts under Visible Light. Scientific Reports, 2014, 4, 4810. | 1.6 | 43 |
| 132 | Atomically dispersed Fe-Cu dual-site catalysts synergistically boosting oxygen reduction for hydrogen fuel cells. Chemical Engineering Journal, 2022, 446, 137112. | 6.6 | 43 |
| 133 | Density functional theory for adsorption of colloids on the polymer-tethered surfaces: Effect of polymer chain architecture. Journal of Chemical Physics, 2009, 130, 164901. | 1.2 | 42 |
| 134 | Layering, condensation, and evaporation of short chains in narrow slit pores. Journal of Chemical Physics, 2005, 122, 224701. | 1.2 | 41 |
| 135 | Selective adsorption of olefin/paraffin on diamond-like frameworks: diamondyne and PAF-302. Journal of Materials Chemistry A, 2013, 1, 9433. | 5.2 | 41 |
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