

# Yan Jiao

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

113  
papers

24,934  
citations

59  
h-index

128  
g-index

128  
ext. papers

29,692  
ext. citations

13.3  
avg, IF

7.67  
L-index

| #   | Paper  | IF   | Citations |
|-----|--|------|-----------|
| 113 | Stabilizing Cu Ions by Solid Solutions to Promote CO Electroreduction to Methane.. <i>Journal of the American Chemical Society</i> , <b>2022</b> ,   | 16.4 | 31        |
| 112 | Promoting ethylene production over a wide potential window on Cu crystallites induced and stabilized via current shock and charge delocalization. <i>Nature Communications</i> , <b>2021</b> , 12, 6823                      | 17.4 | 9         |
| 111 | Local Environment Determined Reactant Adsorption Configuration for Enhanced Electrocatalytic Acetone Hydrogenation to Propane. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> ,                              | 16.4 | 4         |
| 110 | Catalytic Oxidation of KS via Atomic Co and Pyridinic N Synergy in Potassium-Sulfur Batteries. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 16902-16907  | 16.4 | 11        |
| 109 | Three-Dimensional Carbon Electrocatalysts for CO <sub>2</sub> or CO Reduction. <i>ACS Catalysis</i> , <b>2021</b> , 11, 533-541  | 13.1 | 14        |
| 108 | Self-Propelled and Electrobraking Synergetic Liquid Manipulator toward Microsampling and Bioanalysis. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 14741-14751  | 9.5  | 8         |
| 107 | Short-Range Ordered Iridium Single Atoms Integrated into Cobalt Oxide Spinel Structure for Highly Efficient Electrocatalytic Water Oxidation. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 5201-5211 | 16.4 | 98        |
| 106 | Stability of Engineered Ferritin Nanovaccines Investigated by Combined Molecular Simulation and Experiments. <i>Journal of Physical Chemistry B</i> , <b>2021</b> , 125, 3830-3842   | 3.4  | 1         |
| 105 | Molecular Scalpel to Chemically Cleave Metal-Organic Frameworks for Induced Phase Transition. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 6681-6690   | 16.4 | 26        |
| 104 | An Oxygenophilic Atomic Dispersed Fe <sub>2</sub> N <sub>2</sub> C Catalyst for Lean-Oxygen Seawater Batteries. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2100683   | 21.8 | 9         |
| 103 | Tailoring Acidic Oxygen Reduction Selectivity on Single-Atom Catalysts via Modification of First and Second Coordination Spheres. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 7819-7827             | 16.4 | 126       |
| 102 | Theoretical considerations on activity of the electrochemical CO <sub>2</sub> reduction on metal single-atom catalysts with asymmetrical active sites. <i>Catalysis Today</i> , <b>2021</b> ,                                | 5.3  | 3         |
| 101 | Geometric Modulation of Local CO Flux in Ag@Cu O Nanoreactors for Steering the CO RR Pathway toward High-Efficacy Methane Production. <i>Advanced Materials</i> , <b>2021</b> , 33, e2101741                                 | 24   | 20        |
| 100 | The Controllable Reconstruction of Bi-MOFs for Electrochemical CO <sub>2</sub> Reduction through Electrolyte and Potential Mediation. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 18326-18332                              | 3.6  | 1         |
| 99  | CO <sub>2</sub> reduction by single copper atom supported on g-C <sub>3</sub> N <sub>4</sub> with asymmetrical active sites. <i>Applied Surface Science</i> , <b>2021</b> , 540, 148293                                      | 6.7  | 15        |
| 98  | Highly Selective Two-Electron Electrocatalytic CO <sub>2</sub> Reduction on Single-Atom Cu Catalysts. <i>Small Structures</i> , <b>2021</b> , 2, 2000058   | 8.7  | 44        |
| 97  | Anomalous C-C Coupling on Under-Coordinated Cu (111): A Case Study of Cu Nanopyramids for CO Reduction Reaction by Molecular Modelling. <i>ChemSusChem</i> , <b>2021</b> , 14, 671-678                                       | 8.3  | 4         |

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| 96 | Role of oxygen-bound reaction intermediates in selective electrochemical CO <sub>2</sub> reduction. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 3912-3930  | 35.4 | 27  |
| 95 | Spatial-confinement induced electroreduction of CO and CO to diols on densely-arrayed Cu nanopyramids. <i>Chemical Science</i> , <b>2021</b> , 12, 8079-8087   | 9.4  | 7   |
| 94 | The Controllable Reconstruction of Bi-MOFs for Electrochemical CO Reduction through Electrolyte and Potential Mediation. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 18178-18184          | 16.4 | 35  |
| 93 | Selective Catalysis Remedies Polysulfide Shuttling in Lithium-Sulfur Batteries. <i>Advanced Materials</i> , <b>2021</b> , 33, e2101006   | 24   | 55  |
| 92 | From mouse to mouse-ear cress: Nanomaterials as vehicles in plant biotechnology. <i>Exploration</i> , <b>2021</b> , 1, 9-20  |      | 13  |
| 91 | Studying the Conversion Mechanism to Broaden Cathode Options in Aqueous Zinc-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 25114-25121                                       | 16.4 | 17  |
| 90 | Reversible electrochemical oxidation of sulfur in ionic liquid for high-voltage Al-S batteries. <i>Nature Communications</i> , <b>2021</b> , 12, 5714  | 17.4 | 13  |
| 89 | Enhanced chemical trapping and catalytic conversion of polysulfides by diatomite/MXene hybrid interlayer for stable Li-S batteries. <i>Journal of Energy Chemistry</i> , <b>2021</b> , 62, 590-598                 | 12   | 13  |
| 88 | Key to C production: selective C-C coupling for electrochemical CO reduction on copper alloy surfaces. <i>Chemical Communications</i> , <b>2021</b> , 57, 9526-9529  | 5.8  | 1   |
| 87 | Directing the selectivity of CO <sub>2</sub> electroreduction to target C <sub>2</sub> products via non-metal doping on Cu surfaces. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 6345-6351          | 13   | 12  |
| 86 | A MoN electrocatalyst for efficient NaS electrodeposition in room-temperature sodium-sulfur batteries. <i>Nature Communications</i> , <b>2021</b> , 12, 7195   | 17.4 | 9   |
| 85 | Strain effect on the catalytic activities of B- and B/N-doped black phosphorene for electrochemical conversion of CO to valuable chemicals. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 11986-11995 | 13   | 12  |
| 84 | Coordination Tunes Selectivity: Two-Electron Oxygen Reduction on High-Loading Molybdenum Single-Atom Catalysts. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 9171-9176                     | 16.4 | 206 |
| 83 | Coordination Tunes Selectivity: Two-Electron Oxygen Reduction on High-Loading Molybdenum Single-Atom Catalysts. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 9256-9261  | 3.6  | 59  |
| 82 | Electron-State Confinement of Polysulfides for Highly Stable Sodium-Sulfur Batteries. <i>Advanced Materials</i> , <b>2020</b> , 32, e1907557   | 24   | 87  |
| 81 | Selectivity roadmap for electrochemical CO <sub>2</sub> reduction on copper-based alloy catalysts. <i>Nano Energy</i> , <b>2020</b> , 71, 104601   | 17.1 | 65  |
| 80 | Hydrogenated dual-shell sodium titanate cubes for sodium-ion batteries with optimized ion transportation. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 15829-15833                                   | 13   | 7   |
| 79 | Two dimensional electrocatalyst engineering via heteroatom doping for electrocatalytic nitrogen reduction. <i>Chemical Communications</i> , <b>2020</b> , 56, 14154-14162  | 5.8  | 9   |

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|----|---|------|-----|
| 78 | Isolated Boron Sites for Electroreduction of Dinitrogen to Ammonia. <i>ACS Catalysis</i> , <b>2020</b> , 10, 1847-1854  | 13.1 | 82  |
| 77 | Revealing Principles for Design of Lean-Electrolyte Lithium Metal Anode via In Situ Spectroscopy. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 2012-2022  | 16.4 | 84  |
| 76 | Topotactically Transformed Polygonal Mesopores on Ternary Layered Double Hydroxides Exposing Under-Coordinated Metal Centers for Accelerated Water Dissociation. <i>Advanced Materials</i> , <b>2020</b> , 32, e2006784 | 24   | 67  |
| 75 | Strain engineering of selective chemical adsorption on monolayer black phosphorous. <i>Applied Surface Science</i> , <b>2020</b> , 503, 144033  | 6.7  | 12  |
| 74 | Targeted Synergy between Adjacent Co Atoms on Graphene Oxide as an Efficient New Electrocatalyst for LiCO <sub>2</sub> Batteries. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1904206                      | 15.6 | 49  |
| 73 | Selectivity Control for Electrochemical CO <sub>2</sub> Reduction by Charge Redistribution on the Surface of Copper Alloys. <i>ACS Catalysis</i> , <b>2019</b> , 9, 9411-9417   | 13.1 | 106 |
| 72 | A computational study on Pt and Ru dimers supported on graphene for the hydrogen evolution reaction: new insight into the alkaline mechanism. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 3648-3654      | 13   | 86  |
| 71 | Impact of Interfacial Electron Transfer on Electrochemical CO Reduction on Graphitic Carbon Nitride/Doped Graphene. <i>Small</i> , <b>2019</b> , 15, e1804224   | 11   | 56  |
| 70 | Negative Charging of Transition-Metal Phosphides via Strong Electronic Coupling for Destabilization of Alkaline Water. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 11922-11926  | 3.6  | 12  |
| 69 | Contemporaneous oxidation state manipulation to accelerate intermediate desorption for overall water electrolysis. <i>Chemical Communications</i> , <b>2019</b> , 55, 8313-8316   | 5.8  | 7   |
| 68 | Non-metal Single-Iodine-Atom Electrocatalysts for the Hydrogen Evolution Reaction. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 12380-12385  | 3.6  | 19  |
| 67 | Non-metal Single-Iodine-Atom Electrocatalysts for the Hydrogen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 12252-12257   | 16.4 | 127 |
| 66 | Building Up a Picture of the Electrocatalytic Nitrogen Reduction Activity of Transition Metal Single-Atom Catalysts. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 9664-9672                     | 16.4 | 390 |
| 65 | Negative Charging of Transition-Metal Phosphides via Strong Electronic Coupling for Destabilization of Alkaline Water. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 11796-11800                 | 16.4 | 101 |
| 64 | Understanding the Roadmap for Electrochemical Reduction of CO to Multi-Carbon Oxygenates and Hydrocarbons on Copper-Based Catalysts. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 7646-7659     | 16.4 | 371 |
| 63 | Interfacial nickel nitride/sulfide as a bifunctional electrode for highly efficient overall water/seawater electrolysis. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 8117-8121                           | 13   | 86  |
| 62 | Syngas production from electrocatalytic CO <sub>2</sub> reduction with high energetic efficiency and current density. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 7675-7682                              | 13   | 47  |
| 61 | Heteroatom-Doped Transition Metal Electrocatalysts for Hydrogen Evolution Reaction. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 805-810  | 20.1 | 188 |

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|----|---|------|------|
| 60 | Intermediate Modulation on Noble Metal Hybridized to 2D Metal-Organic Framework for Accelerated Water Electrocatalysis. <i>CheM</i> , <b>2019</b> , 5, 2429-2441  | 16.2 | 95   |
| 59 | The Ampoule Method: A Pathway towards Controllable Synthesis of Electrocatalysts for Water Electrolysis. <i>Chemistry - A European Journal</i> , <b>2019</b> , 26, 3898                                 | 4.8  | 5    |
| 58 | Electronic and Structural Engineering of Carbon-Based Metal-Free Electrocatalysts for Water Splitting. <i>Advanced Materials</i> , <b>2019</b> , 31, e1803625   | 24   | 163  |
| 57 | Die Wasserstoffentwicklungsreaktion in alkalischer Lösung: Von der Theorie und Einkristallmodellen zu praktischen Elektrokatalysatoren. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 7690-7702         | 3.6  | 64   |
| 56 | Strain Effect in Bimetallic Electrocatalysts in the Hydrogen Evolution Reaction. <i>ACS Energy Letters</i> , <b>2018</b> , 3, 1198-1204   | 20.1 | 124  |
| 55 | NiO as a Bifunctional Promoter for RuO toward Superior Overall Water Splitting. <i>Small</i> , <b>2018</b> , 14, e1704073   | 147  |      |
| 54 | Emerging Two-Dimensional Nanomaterials for Electrocatalysis. <i>Chemical Reviews</i> , <b>2018</b> , 118, 6337-6408   | 68.1 | 1057 |
| 53 | Metal-doped graphitic carbon nitride (g-C <sub>3</sub> N <sub>4</sub> ) as selective NO <sub>2</sub> sensors: A first-principles study. <i>Applied Surface Science</i> , <b>2018</b> , 455, 1116-1122   | 6.7  | 48   |
| 52 | The Hydrogen Evolution Reaction in Alkaline Solution: From Theory, Single Crystal Models, to Practical Electrocatalysts. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 7568-7579 | 16.4 | 659  |
| 51 | Titelbild: 2D MoN-VN Heterostructure To Regulate Polysulfides for Highly Efficient Lithium-Sulfur Batteries (Angew. Chem. 51/2018). <i>Angewandte Chemie</i> , <b>2018</b> , 130, 16809-16809           | 3.6  | 0    |
| 50 | Single-Crystal Nitrogen-Rich Two-Dimensional MoN Nanosheets for Efficient and Stable Seawater Splitting. <i>ACS Nano</i> , <b>2018</b> , 12, 12761-12769  | 16.7 | 171  |
| 49 | Constructing tunable dual active sites on two-dimensional C <sub>3</sub> N <sub>4</sub> @MoN hybrid for electrocatalytic hydrogen evolution. <i>Nano Energy</i> , <b>2018</b> , 53, 690-697             | 17.1 | 126  |
| 48 | 2D MoN-VN Heterostructure To Regulate Polysulfides for Highly Efficient Lithium-Sulfur Batteries. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 16945-16949   | 3.6  | 10   |
| 47 | 2D MoN-VN Heterostructure To Regulate Polysulfides for Highly Efficient Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 16703-16707                      | 16.4 | 224  |
| 46 | Polydopamine-inspired nanomaterials for energy conversion and storage. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 21827-21846   | 13   | 74   |
| 45 | Charge State Manipulation of Cobalt Selenide Catalyst for Overall Seawater Electrolysis. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1801926  | 21.8 | 140  |
| 44 | Surface and Interface Engineering in Copper-Based Bimetallic Materials for Selective CO <sub>2</sub> Electroreduction. <i>CheM</i> , <b>2018</b> , 4, 1809-1831   | 16.2 | 372  |
| 43 | Molecule-Level g-CN Coordinated Transition Metals as a New Class of Electrocatalysts for Oxygen Electrode Reactions. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 3336-3339     | 16.4 | 816  |

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| 42 | Polydopamine-Inspired, Dual Heteroatom-Doped Carbon Nanotubes for Highly Efficient Overall Water Splitting. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1602068   | 21.8 | 256  |
| 41 | Activating cobalt(II) oxide nanorods for efficient electrocatalysis by strain engineering. <i>Nature Communications</i> , <b>2017</b> , 8, 1509   | 17.4 | 276  |
| 40 | Molecular Scaffolding Strategy with Synergistic Active Centers To Facilitate Electrocatalytic CO Reduction to Hydrocarbon/Alcohol. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 18093-18100     | 16.4 | 341  |
| 39 | Versatile two-dimensional stanene-based membrane for hydrogen purification. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 5577-5583   | 6.7  | 13   |
| 38 | High Electrocatalytic Hydrogen Evolution Activity of an Anomalous Ruthenium Catalyst. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 16174-16181  | 16.4 | 586  |
| 37 | Activity origin and catalyst design principles for electrocatalytic hydrogen evolution on heteroatom-doped graphene. <i>Nature Energy</i> , <b>2016</b> , 1,  | 62.3 | 703  |
| 36 | Engineering surface atomic structure of single-crystal cobalt (II) oxide nanorods for superior electrocatalysis. <i>Nature Communications</i> , <b>2016</b> , 7, 12876  | 17.4 | 471  |
| 35 | Single Atom (Pd/Pt) Supported on Graphitic Carbon Nitride as an Efficient Photocatalyst for Visible-Light Reduction of Carbon Dioxide. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 6292-7      | 16.4 | 735  |
| 34 | Modelling CO <sub>2</sub> adsorption and separation on experimentally-realized B <sub>40</sub> fullerene. <i>Computational Materials Science</i> , <b>2015</b> , 108, 38-41   | 3.2  | 33   |
| 33 | H <sub>2</sub> purification by functionalized graphdiyne: Role of nitrogen doping. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 6767-6771   | 13   | 56   |
| 32 | Metal-free graphitic carbon nitride as mechano-catalyst for hydrogen evolution reaction. <i>Journal of Catalysis</i> , <b>2015</b> , 332, 149-155   | 7.3  | 106  |
| 31 | Carbon nanodot decorated graphitic carbon nitride: new insights into the enhanced photocatalytic water splitting from ab initio studies. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 31140-4         | 3.6  | 90   |
| 30 | Advancing the electrochemistry of the hydrogen-evolution reaction through combining experiment and theory. <i>Angewandte Chemie - International Edition</i> , <b>2015</b> , 54, 52-65                                   | 16.4 | 1282 |
| 29 | Engineering of Carbon-Based Electrocatalysts for Emerging Energy Conversion: From Fundamentality to Functionality. <i>Advanced Materials</i> , <b>2015</b> , 27, 5372-8   | 24   | 216  |
| 28 | Calculations of helium separation via uniform pores of stanene-based membranes. <i>Beilstein Journal of Nanotechnology</i> , <b>2015</b> , 6, 2470-6  | 3    | 9    |
| 27 | Charge Mediated Semiconducting-to-Metallic Phase Transition in Molybdenum Disulfide Monolayer and Hydrogen Evolution Reaction in New 1T' Phase. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 13124-13128 | 3.8  | 248  |
| 26 | Elektrochemie der Wasserstoffentwicklungsreaktion: Optimierung durch Korrelation von Experiment und Theorie. <i>Angewandte Chemie</i> , <b>2015</b> , 127, 52-66  | 3.6  | 137  |
| 25 | Design of electrocatalysts for oxygen- and hydrogen-involving energy conversion reactions. <i>Chemical Society Reviews</i> , <b>2015</b> , 44, 2060-86  | 58.5 | 3275 |

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| 24 | Origin of the electrocatalytic oxygen reduction activity of graphene-based catalysts: a roadmap to achieve the best performance. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 4394-403                               | 16.4 | 794  |
| 23 | Hydrogen evolution by a metal-free electrocatalyst. <i>Nature Communications</i> , <b>2014</b> , 5, 3783   | 17.4 | 1572 |
| 22 | Toward design of synergistically active carbon-based catalysts for electrocatalytic hydrogen evolution. <i>ACS Nano</i> , <b>2014</b> , 8, 5290-6  | 16.7 | 802  |
| 21 | Electrocatalytically switchable CO <sub>2</sub> capture: first principle computational exploration of carbon nanotubes with pyridinic nitrogen. <i>ChemSusChem</i> , <b>2014</b> , 7, 317  | 8.3  | 1    |
| 20 | Electrocatalytically switchable CO <sub>2</sub> capture: first principle computational exploration of carbon nanotubes with pyridinic nitrogen. <i>ChemSusChem</i> , <b>2014</b> , 7, 435-41   | 8.3  | 55   |
| 19 | Modelling carbon membranes for gas and isotope separation. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 4832-43  | 3.6  | 84   |
| 18 | Porous Graphene and Nanomeshes <b>2013</b> , 129-151   |      | 1    |
| 17 | Two-Step Boron and Nitrogen Doping in Graphene for Enhanced Synergistic Catalysis. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 3192-3198   | 3.6  | 332  |
| 16 | Factors influencing the deposition of hydroxyapatite coating onto hollow glass microspheres. <i>Materials Science and Engineering C</i> , <b>2013</b> , 33, 2744-51  | 8.3  | 9    |
| 15 | Two-step boron and nitrogen doping in graphene for enhanced synergistic catalysis. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 3110-6   | 16.4 | 776  |
| 14 | Sulfur and Nitrogen Dual-Doped Mesoporous Graphene Electrocatalyst for Oxygen Reduction with Synergistically Enhanced Performance. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 11664-11668   | 3.6  | 234  |
| 13 | Räktitelbild: Sulfur and Nitrogen Dual-Doped Mesoporous Graphene Electrocatalyst for Oxygen Reduction with Synergistically Enhanced Performance (Angew. Chem. 46/2012). <i>Angewandte Chemie</i> , <b>2012</b> , 124, 11808-11808            | 3.6  | 6    |
| 12 | Sulfur and nitrogen dual-doped mesoporous graphene electrocatalyst for oxygen reduction with synergistically enhanced performance. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 11496-500                            | 16.4 | 1726 |
| 11 | Nanostructured metal-free electrochemical catalysts for highly efficient oxygen reduction. <i>Small</i> , <b>2012</b> , 8, 3550-66   | 11   | 518  |
| 10 | Hybrid graphene and graphitic carbon nitride nanocomposite: gap opening, electron-hole puddle, interfacial charge transfer, and enhanced visible light response. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 4393-7 | 16.4 | 490  |
| 9  | Asymmetrically Decorated, Doped Porous Graphene As an Effective Membrane for Hydrogen Isotope Separation. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 6672-6676  | 3.8  | 69   |
| 8  | Graphdiyne: a versatile nanomaterial for electronics and hydrogen purification. <i>Chemical Communications</i> , <b>2011</b> , 47, 11843-5   | 5.8  | 289  |
| 7  | A density functional theory study on CO <sub>2</sub> capture and activation by graphene-like boron nitride with boron vacancy. <i>Catalysis Today</i> , <b>2011</b> , 175, 271-275   | 5.3  | 74   |

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| 6 | Nanoporous graphitic-C <sub>3</sub> N <sub>4</sub> @carbon metal-free electrocatalysts for highly efficient oxygen reduction. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 20116-9 | 16.4 | 869 |
| 5 | Adsorption of Carbon Dioxide and Nitrogen on Single-Layer Aluminum Nitride Nanostructures Studied by Density Functional Theory. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 7846-7849      | 3.8  | 46  |
| 4 | A density functional theory study of CO <sub>2</sub> and N <sub>2</sub> adsorption on aluminium nitride single walled nanotubes. <i>Journal of Materials Chemistry</i> , <b>2010</b> , 20, 10426           |      | 54  |
| 3 | C <sub>3</sub> production from CO <sub>2</sub> reduction by concerted *CO trimerization on a single-atom alloy catalyst. <i>Journal of Materials Chemistry A</i> ,   | 13   | 4   |
| 2 | Studying conversion mechanism to broaden cathode options in aqueous Zn-ion batteries. <i>Angewandte Chemie</i> ,   | 3.6  | 12  |
| 1 | Directional and Adaptive Oil Self-Transport on a Multi-Bioinspired Grooved Conical Spine. <i>Advanced Functional Materials</i> ,2201035  | 15.6 | 5   |