# Cheng-Hua Sun

List of Publications by Year
in descending order



| 293 | 23,866 | 12322 69 | 8384 147 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 301 | 301 | 301 | 23380 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Anatase TiO2 single crystals with a large percentage of reactive facets. Nature, 2008, 453, 638-641. | 13.7 | 3,753 |
| 2 | Unique Electronic Structure Induced High Photoreactivity of Sulfur-Doped Graphitic C<sub>3</sub>N<sub>4</sub>. Journal of the American Chemical Society, 2010, 132, 11642-11648. | 6.6 | 1,856 |
| 3 | Solvothermal Synthesis and Photoreactivity of Anatase TiO<sub>2</sub> Nanosheets with Dominant {001} Facets. Journal of the American Chemical Society, 2009, 131, 4078-4083. | 6.6 | 1,237 |
| 4 | Electro-synthesis of ammonia from nitrogen at ambient temperature and pressure in ionic liquids. Energy and Environmental Science, 2017, 10, 2516-2520. | 15.6 | 497 |
| 5 | Single-Boron Catalysts for Nitrogen Reduction Reaction. Journal of the American Chemical Society, 2019, 141, 2884-2888. | 6.6 | 497 |
| 6 | Synergistic Effects of B/N Doping on the Visibleâ€Light Photocatalytic Activity of Mesoporous TiO<sub>2</sub>. Angewandte Chemie - International Edition, 2008, 47, 4516-4520. | 7.2 | 484 |
| 7 | Stable Hierarchical Bimetalâ€“Organic Nanostructures as HighPerformance Electrocatalysts for the Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2019, 58, 4227-4231. | 7.2 | 430 |
| 8 | Nanosized anatase TiO2 single crystals for enhanced photocatalytic activity. Chemical Communications, 2010, 46, 755-757. | 2.2 | 403 |
| 9 | Promising prospects for 2D d<sup>2</sup>â€“d<sup>4</sup>M<sub>3</sub>C<sub>2</sub>transition metal carbides (MXenes) in N<sub>2</sub>capture and conversion into ammonia. Energy and Environmental Science, 2016, 9, 2545-2549. | 15.6 | 395 |
| 10 | Understanding of Electrochemical Mechanisms for CO<sub>2</sub> Capture and Conversion into Hydrocarbon Fuels in Transition-Metal Carbides (MXenes). ACS Nano, 2017, 11, 10825-10833. | 7.3 | 359 |
| 11 | Potassiumâ€Ionâ€Assisted Regeneration of Active Cyano Groups in Carbon Nitride Nanoribbons: Visibleâ€Lightâ€Driven Photocatalytic Nitrogen Reduction. Angewandte Chemie - International Edition, 2019, 58, 16644-16650. | 7.2 | 356 |
| 12 | Surfactantâ€Assisted Phaseâ€Selective Synthesis of New Cobalt MOFs and Their Efficient Electrocatalytic Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2017, 56, 13001-13005. | 7.2 | 334 |
| 13 | Band-to-Band Visible-Light Photon Excitation and Photoactivity Induced by Homogeneous Nitrogen Doping in Layered Titanates. Chemistry of Materials, 2009, 21, 1266-1274. | 3.2 | 284 |
| 14 | Efficient metal ion sieving in rectifying subnanochannels enabled by metalâ€“organic frameworks. Nature Materials, 2020, 19, 767-774. | 13.3 | 275 |
| 15 | Simultaneously Tuning Charge Separation and Oxygen Reduction Pathway on Graphitic Carbon Nitride by Polyethylenimine for Boosted Photocatalytic Hydrogen Peroxide Production. ACS Catalysis, 2020, 10, 3697-3706. | 5.5 | 275 |
| 16 | Synthesis and Electromagnetic, Microwave Absorbing Properties of Coreâ€“Shell Fe<sub>3</sub>O<sub>4</sub>â€“Poly(3, 4-ethylenedioxythiophene) Microspheres. ACS Applied Materials & Interfaces, 2011, 3, 3839-3845. | 4.0 | 265 |
| 17 | Carbon for the oxygen reduction reaction: a defect mechanism. Journal of Materials Chemistry A, 2015, 3, 11736-11739. | 5.2 | 261 |
| 18 | Titania-water interactions: a review of theoretical studies. Journal of Materials Chemistry, 2010, 20, 10319. | 6.7 | 255 |

| # | Article | IF | Citations |
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| 19 | Conversion of dinitrogen to ammonia on Ru atoms supported on boron sheets: a DFT study. Journal of Materials Chemistry A, 2019, 7, 4771-4776. | 5.2 | 251 |
| 20 | Promoting Oxygen Evolution Reactions through Introduction of Oxygen Vacancies to Benchmark NiFeâ€“OOH Catalysts. ACS Energy Letters, 2018, 3, 1515-1520. | 8.8 | 249 |
| 21 | Higher charge/discharge rates of lithium-ions across engineered TiO2 surfaces leads to enhanced battery performance. Chemical Communications, 2010, 46, 6129. | 2.2 | 216 |
| 22 | Three-dimensional porous graphene-like sheets synthesized from biocarbon via low-temperature graphitization for a supercapacitor. Green Chemistry, 2018, 20, 694-700. | 4.6 | 202 |
| 23 | Lithium Storage on Graphdiyne Predicted by DFT Calculations. Journal of Physical Chemistry C, 2012, 116, 26222-26226. | 1.5 | 198 |
| 24 | Ultra-thin anatase TiO<sub>2</sub>nanosheets dominated with {001} facets: thickness-controlled synthesis, growth mechanism and water-splitting properties. CrystEngComm, 2011, 13, 1378-1383. | 1.3 | 189 |
| 25 | Feasibility of N<sub>2</sub> Binding and Reduction to Ammonia on Feâ€Deposited MoS<sub>2</sub> 2D Sheets: A DFT Study. Chemistry - A European Journal, 2017, 23, 8275-8279. | 1.7 | 173 |
| 26 | Hydrogenation Synthesis of Blue TiO<sub>2</sub> for High-Performance Lithium-Ion Batteries. Journal of Physical Chemistry C, 2014, 118, 8824-8830. | 1.5 | 167 |
| 27 | Combination of nanosizing and interfacial effect: Future perspective for designing Mg-based nanomaterials for hydrogen storage. Renewable and Sustainable Energy Reviews, 2015, 44, 289-303. | 8.2 | 164 |
| 28 | Computational Study of MoN<sub>2</sub>Monolayer as Electrochemical Catalysts for Nitrogen Reduction. Journal of Physical Chemistry C, 2017, 121, 27563-27568. | 1.5 | 164 |
| 29 | Flexible Carbon-Fiber/Semimetal Bi Nanosheet Arrays as Separable and Recyclable Plasmonic Photocatalysts and Photoelectrocatalysts. ACS Applied Materials & Interfaces, 2020, 12, 24845-24854. | 4.0 | 161 |
| 30 | Hydrothermal Stability of {001} Faceted Anatase TiO<sub>2</sub>. Chemistry of Materials, 2011, 23, 3486-3494. | 3.2 | 157 |
| 31 | Lithiumâ€Catalyzed Dehydrogenation of Ammonia Borane within Mesoporous Carbon Framework for Chemical Hydrogen Storage. Advanced Functional Materials, 2009, 19, 265-271. | 7.8 | 156 |
| 32 | An Aluminumâ€“Sulfur Battery with a Fast Kinetic Response. Angewandte Chemie - International Edition, 2018, 57, 1898-1902. | 7.2 | 154 |
| 33 | Rational Design of Hydroxylâ€Rich Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene Quantum Dots for Highâ€Performance Electrochemical N<sub>2</sub> Reduction. Advanced Energy Materials, 2020, 10, 2000797. | 10.2 | 153 |
| 34 | Confined Feâ€“Cu Clusters as Subâ€Nanometer Reactors for Efficiently Regulating the Electrochemical Nitrogen Reduction Reaction. Advanced Materials, 2020, 32, e2004382. | 11.1 | 152 |
| 35 | Graphene oxide: An emerging electromaterial for energy storage and conversion. Journal of Energy Chemistry, 2021, 55, 323-344. | 7.1 | 146 |
| 36 | Fabrication of three-dimensional ZnO/TiO2 heteroarchitectures via a solution process. Journal of Materials Chemistry, 2008, 18, 3909. | 6.7 | 145 |

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| 37 | Research progress and materials selection guidelines on mixed conducting perovskite-type ceramic membranes for oxygen production. RSC Advances, 2011, 1, 1661. | 1.7 | 143 |
| 38 | Hierarchical Structures of Singleâ€Crystalline Anatase TiO<sub>2</sub> Nanosheets Dominated by {001} Facets. Chemistry - A European Journal, 2011, 17, 1423-1427. | 1.7 | 143 |
| 39 | Activation of Photocatalytic Water Oxidation on N-Doped ZnO Bundle-like Nanoparticles under Visible Light. Journal of Physical Chemistry C, 2013, 117, 4937-4942. | 1.5 | 143 |
| 40 | Nâ€Doped CsTaWO<sub>6</sub> as a New Photocatalyst for Hydrogen Production from Water Splitting Under Solar Irradiation. Advanced Functional Materials, 2011, 21, 126-132. | 7.8 | 135 |
| 41 | Subâ€2 nm Thiophosphate Nanosheets with Heteroatom Doping for Enhanced Oxygen Electrocatalysis. Advanced Functional Materials, 2021, 31, 2100618. | 7.8 | 133 |
| 42 | Iodine doped anatase TiO2 photocatalyst with ultra-long visible light response: correlation between geometric/electronic structures and mechanisms. Journal of Materials Chemistry, 2009, 19, 2822. | 6.7 | 127 |
| 43 | A DFT study of planar vs. corrugated graphene-like carbon nitride (g-C<sub>3</sub>N<sub>4</sub>) and its role in the catalytic performance of CO<sub>2</sub> conversion. Physical Chemistry Chemical Physics, 2016, 18, 18507-18514. | 1.3 | 125 |
| 44 | Novel 1D carbon nanotubes uniformly wrapped nanoscale MgH2 for efficient hydrogen storage cycling performances with extreme high gravimetric and volumetric capacities. Nano Energy, 2019, 61, 540-549. | 8.2 | 124 |
| 45 | Amorphous Boron Carbide on Titanium Dioxide Nanobelt Arrays for Highâ€Efficiency Electrocatalytic NO Reduction to NH<sub>3</sub>. Angewandte Chemie - International Edition, 2022, 61, . | 7.2 | 121 |
| 46 | Long lifetime photoluminescence in N, S co-doped carbon quantum dots from an ionic liquid and their applications in ultrasensitive detection of pesticides. Carbon, 2016, 104, 33-39. | 5.4 | 117 |
| 47 | Importance of Oxygen in the Metal-Free Catalytic Growth of Single-Walled Carbon Nanotubes from SiO<sub>x</sub> by a Vaporâ^'Solidâ^'Solid Mechanism. Journal of the American Chemical Society, 2011, 133, 197-199. | 6.6 | 116 |
| 48 | Efficient Promotion of Anatase TiO2 Photocatalysis via Bifunctional Surface-Terminating Tiâ^'Oâ^'Bâ^'N Structures. Journal of Physical Chemistry C, 2009, 113, 12317-12324. | 1.5 | 115 |
| 49 | Sulfur doped anatase TiO2 single crystals with a high percentage of {0 0 1} facets. Journal of Colloid and Interface Science, 2010, 349, 477-483. | 5.0 | 112 |
| 50 | A Ta-TaS2 monolith catalyst with robust and metallic interface for superior hydrogen evolution. Nature Communications, 2021, 12, 6051. | 5.8 | 112 |
| 51 | Real-Time Observation of Reconstruction Dynamics on TiO<sub>2</sub>(001) Surface under Oxygen via an Environmental Transmission Electron Microscope. Nano Letters, 2016, 16, 132-137. | 4.5 | 109 |
| 52 | Proposing the prospects of Ti<sub>3</sub>CN transition metal carbides (MXenes) as anodes of Li-ion batteries: a DFT study. Physical Chemistry Chemical Physics, 2016, 18, 32937-32943. | 1.3 | 105 |
| 53 | AlN nanoparticle-reinforced nanocrystalline Al matrix composites: Fabrication and mechanical properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 505, 151-156. | 2.6 | 103 |
| 54 | Nitrogen-doped titania nanosheets towards visible light response. Chemical Communications, 2009, , 1383. | 2.2 | 95 |

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| 55 | Hydrogen Incorporation and Storage in Well-Defined Nanocrystals of Anatase Titanium Dioxide. Journal of Physical Chemistry C, 2011, 115, 25590-25594. | 1.5 | 93 |
| 56 | Two-dimensional g-C3N4/TiO2 nanocomposites as vertical Z-scheme heterojunction for improved photocatalytic water disinfection. Catalysis Today, 2019, 335, 243-251. | 2.2 | 93 |
| 57 | Theoretical Evaluation of Possible 2D Boron Monolayer in N<sub>2</sub> Electrochemical Conversion into Ammonia. Journal of Physical Chemistry C, 2018, 122, 25268-25273. | 1.5 | 91 |
| 58 | A synergistic effect between S-scheme heterojunction and Noble-metal free cocatalyst to promote the hydrogen evolution of ZnO/CdS/MoS2 photocatalyst. Chemical Engineering Journal, 2021, 424, 130368. | 6.6 | 90 |
| 59 | Enhanced sorption of trivalent antimony by chitosan-loaded biochar in aqueous solutions: Characterization, performance and mechanisms. Journal of Hazardous Materials, 2022, 425, 127971. | 6.5 | 89 |
| 60 | Photocatalytic Hydrogen Production from Water Using N-Doped Ba<sub>5</sub>Ta<sub>4</sub>O<sub>15</sub> under Solar Irradiation. Journal of Physical Chemistry C, 2011, 115, 15674-15678. | 1.5 | 88 |
| 61 | Functional anion concept: effect of fluorine anion on hydrogen storage of sodium alanate. Physical Chemistry Chemical Physics, 2007, 9, 1499-1502. | 1.3 | 83 |
| 62 | Inâ€...Situ Observation of Hydrogenâ€Induced Surface Faceting for Palladiumâ€“Copper Nanocrystals at Atmospheric Pressure. Angewandte Chemie - International Edition, 2016, 55, 12427-12430. | 7.2 | 81 |
| 63 | Destabilization of Mgâ€“H bonding through nano-interfacial confinement by unsaturated carbon for hydrogen desorption from MgH2. Physical Chemistry Chemical Physics, 2013, 15, 5814. | 1.3 | 80 |
| 64 | Theoretical Investigation of Single and Double Transition Metals Anchored on Graphyne Monolayer for Nitrogen Reduction Reaction. Journal of Physical Chemistry C, 2020, 124, 15295-15301. | 1.5 | 79 |
| 65 | Tuning the Hydrogen Evolution Performance of Metallic 2D Tantalum Disulfide by Interfacial Engineering. ACS Nano, 2019, 13, 11874-11881. | 7.3 | 77 |
| 66 | Growth Velocity and Direct Length-Sorted Growth of Short Single-Walled Carbon Nanotubes by a Metal-Catalyst-Free Chemical Vapor Deposition Process. ACS Nano, 2009, 3, 3421-3430. | 7.3 | 76 |
| 67 | The examination of graphene oxide for rechargeable lithium storage as a novel cathode material. Journal of Materials Chemistry A, 2013, 1, 3607. | 5.2 | 73 |
| 68 | Preparation of self-supporting hierarchical nanostructured anatase/rutile composite TiO2 film. Chemical Communications, 2008, , 3293. | 2.2 | 72 |
| 69 | Oxygen vacancies for promoting the electrochemical nitrogen reduction reaction. Journal of Materials Chemistry A, 2021, 9, 6694-6709. | 5.2 | 71 |
| 70 | Sulfated Carbon Quantum Dots as Efficient Visibleâ€Light Switchable Acid Catalysts for Roomâ€Temperature Ringâ€Opening Reactions. Angewandte Chemie - International Edition, 2015, 54, 8420-8424. | 7.2 | 68 |
| 71 | Design strategies of two-dimensional metalâ€“organic frameworks toward efficient electrocatalysts for N<sub>2</sub> reduction: cooperativity of transition metals and organic linkers. Nanoscale, 2021, 13, 19247-19254. | 2.8 | 67 |
| 72 | Preparation of new sulfur-doped and sulfur/nitrogen co-doped CsTaWO6 photocatalysts for hydrogen production from water under visible light. Journal of Materials Chemistry, 2011, 21, 8871. | 6.7 | 66 |

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| 73 | Metallic Ni nanocatalyst in situ formed from a metalâ€“organic-framework by mechanochemical reaction for hydrogen storage in magnesium. Journal of Materials Chemistry A, 2015, 3, 8294-8299. | 5.2 | 65 |
| 74 | An oxalate cathode for lithium ion batteries with combined cationic and polyanionic redox. Nature Communications, 2019, 10, 3483. | 5.8 | 65 |
| 75 | Electronic Coupling and Catalytic Effect on H2 Evolution of MoS2/Graphene Nanocatalyst. Scientific Reports, 2014, 4, 6256. | 1.6 | 64 |
| 76 | Two-Dimensional Boron Sheets as Metal-Free Catalysts for Hydrogen Evolution Reaction. Journal of Physical Chemistry C, 2018, 122, 19051-19055. | 1.5 | 63 |
| 77 | Computational Design of Single-Molybdenum Catalysts for the Nitrogen Reduction Reaction. Journal of Physical Chemistry C, 2019, 123, 2347-2352. | 1.5 | 63 |
| 78 | Double transition metal atoms anchored on Graphdiyne as promising catalyst for electrochemical nitrogen reduction reaction. Journal of Materials Science and Technology, 2021, 77, 244-251. | 5.6 | 63 |
| 79 | Van der Waals interactions between two parallel infinitely long single-walled nanotubes. Chemical Physics Letters, 2005, 403, 343-346. | 1.2 | 62 |
| 80 | In situ polymerization and characterization of grafted poly (3,4-ethylenedioxythiophene)/multiwalled carbon nanotubes composite with high electrochemical performances. Electrochimica Acta, 2013, 87, 394-400. | 2.6 | 61 |
| 81 | Nitrogen doping in ion-exchangeable layered tantalate towards visible-light induced water oxidation. Chemical Communications, 2011, 47, 6293. | 2.2 | 59 |
| 82 | Blue hydrogenated lithium titanate as a high-rate anode material for lithium-ion batteries. Journal of Materials Chemistry A, 2014, 2, 6353. | 5.2 | 58 |
| 83 | Surfactantâ€Assisted Phaseâ€Selective Synthesis of New Cobalt MOFs and Their Efficient Electrocatalytic Hydrogen Evolution Reaction. Angewandte Chemie, 2017, 129, 13181-13185. | 1.6 | 58 |
| 84 | Nitrogenase-Inspired Atomically Dispersed Feâ€“Sâ€“C Linkages for Improved Electrochemical Reduction of Dinitrogen to Ammonia. ACS Catalysis, 2022, 12, 1443-1451. | 5.5 | 58 |
| 85 | Capacity-controllable Li-rich cathode materials for lithium-ion batteries. Nano Energy, 2014, 6, 92-102. | 8.2 | 53 |
| 86 | Ultraselective Monovalent Metal Ion Conduction in a Three-Dimensional Sub-1 nm Nanofluidic Device Constructed by Metalâ€“Organic Frameworks. ACS Nano, 2021, 15, 1240-1249. | 7.3 | 52 |
| 87 | Strong Interaction between Gold and Anatase TiO<sub>2</sub>(001) Predicted by First Principle Studies. Journal of Physical Chemistry C, 2012, 116, 3524-3531. | 1.5 | 50 |
| 88 | Exploration of iron borides as electrochemical catalysts for the nitrogen reduction reaction. Journal of Materials Chemistry A, 2019, 7, 21507-21513. | 5.2 | 49 |
| 89 | Transition-metal-doped Fe2O3 nanoparticles for oxygen evolution reaction. Progress in Natural Science: Materials International, 2018, 28, 430-436. | 1.8 | 48 |
| 90 | Axial Youngâ€™s modulus prediction of single-walled carbon nanotube arrays with diameters from nanometer to meter scales. Applied Physics Letters, 2005, 87, 193101. | 1.5 | 47 |

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| 91 | Field Emission and Cathodoluminescence of ZnS Hexagonal Pyramids of Zinc Blende Structured Single Crystals. Advanced Functional Materials, 2009, 19, 484-490. | 7.8 | 47 |
| 92 | An in situ assembled WO<sub>3</sub>â€“TiO<sub>2</sub> vertical heterojunction for enhanced Z-scheme photocatalytic activity. Nanoscale, 2020, 12, 8775-8784. | 2.8 | 47 |
| 93 | Lattice Distortion Oriented Angular Self-Assembly of Monolayer Titania Sheets. Journal of the American Chemical Society, 2011, 133, 695-697. | 6.6 | 46 |
| 94 | Step-wise controlled growth of metal@TiO<sub>2</sub>coreâ€“shells with plasmonic hot spots and their photocatalytic properties. Journal of Materials Chemistry A, 2014, 2, 12776. | 5.2 | 45 |
| 95 | An NIR-sensitive layered supramolecular nanovehicle for combined dual-modal imaging and synergistic therapy. Nanoscale, 2017, 9, 10367-10374. | 2.8 | 45 |
| 96 | Constructing a Metallic/Semiconducting TaB<sub>2</sub>/Ta<sub>2</sub>O<sub>5</sub> Core/Shell Heterostructure for Photocatalytic Hydrogen Evolution. Advanced Energy Materials, 2014, 4, 1400057. | 10.2 | 44 |
| 97 | Atomic-Scale Observation of Vaporâ€“Solid Nanowire Growth via Oscillatory Mass Transport. ACS Nano, 2016, 10, 763-769. | 7.3 | 43 |
| 98 | An Aluminumâ€“Sulfur Battery with a Fast Kinetic Response. Angewandte Chemie, 2018, 130, 1916-1920. | 1.6 | 43 |
| 99 | Titania polymorphs derived from crystalline titanium diboride. CrystEngComm, 2009, 11, 2677. | 1.3 | 42 |
| 100 | Electropolymerized poly(3,4-ethylenedioxythiophene):poly(styrene sulfonate) (PEDOT:PSS) film on ITO glass and its application in photovoltaic device. Solar Energy Materials and Solar Cells, 2010, 94, 390-394. | 3.0 | 42 |
| 101 | Self-Assembly and Cathodoluminescence of Microbelts from Cu-Doped Boron Nitride Nanotubes. ACS Nano, 2008, 2, 1523-1532. | 7.3 | 41 |
| 102 | Enhanced catalytic effect of TiO2@rGO synthesized by one-pot ethylene glycol-assisted solvothermal method for MgH2. Journal of Alloys and Compounds, 2021, 881, 160644. | 2.8 | 41 |
| 103 | 4-tert-Butyl Pyridine Bond Site and Band Bending on TiO<sub>2</sub>(110). Journal of Physical Chemistry C, 2010, 114, 2315-2320. | 1.5 | 40 |
| 104 | In Situ STEM Determination of the Atomic Structure and Reconstruction Mechanism of the TiO<sub>2</sub> (001) (1 Ã— 4) Surface. Chemistry of Materials, 2017, 29, 3189-3194. | 3.2 | 40 |
| 105 | Lowâ€Valence Metal Single Atoms on Graphdiyne Promotes Electrochemical Nitrogen Reduction via Mâ€toâ€N<sub>2</sub> Ï€â€Backdonation. Advanced Functional Materials, 2022, 32, . | 7.8 | 38 |
| 106 | New Insight into the Interaction between Propylene Carbonate-Based Electrolytes and Graphite Anode Material for Lithium Ion Batteries. Journal of Physical Chemistry C, 2007, 111, 4740-4748. | 1.5 | 37 |
| 107 | A formation mechanism of oxygen vacancies in a MnO2 monolayer: a DFT + U study. Physical Chemistry Chemical Physics, 2011, 13, 11325. | 1.3 | 37 |
| 108 | Efficient Visible Light Driven Ammonia Synthesis on Sandwich Structured C3N4/MoS2/Mn3O4 catalyst. Applied Catalysis B: Environmental, 2021, 281, 119476. | 10.8 | 37 |

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| 109 | Synthesis and microwave absorbing properties of poly(3,4â€ethylenedioxythiophene) (PEDOT) microspheres. Polymers for Advanced Technologies, 2011, 22, 532-537. | 1.6 | 36 |
| 110 | Enhanced hydrogen desorption properties of magnesium hydride by coupling non-metal doping and nano-confinement. Applied Physics Letters, 2015, 107, . | 1.5 | 36 |
| 111 | Stable Hierarchical Bimetalâ€“Organic Nanostructures as HighPerformance Electrocatalysts for the Oxygen Evolution Reaction. Angewandte Chemie, 2019, 131, 4271-4275. | 1.6 | 36 |
| 112 | The Role of Atomic Vacancy on Water Dissociation over Titanium Dioxide Nanosheet: A Density Functional Theory Study. Journal of Physical Chemistry C, 2012, 116, 2477-2482. | 1.5 | 35 |
| 113 | One-pot scalable synthesis of all-inorganic perovskite nanocrystals with tunable morphology, composition and photoluminescence. CrystEngComm, 2017, 19, 7041-7049. | 1.3 | 35 |
| 114 | In situ synthesis of PtPd bimetallic nanocatalysts supported on graphene nanosheets for methanol oxidation using triblock copolymer as reducer and stabilizer. Journal of Electroanalytical Chemistry, 2016, 783, 132-139. | 1.9 | 34 |
| 115 | Confinement of carbon dots localizing to the ultrathin layered double hydroxides toward simultaneous triple-mode bioimaging and photothermal therapy. Talanta, 2018, 184, 50-57. | 2.9 | 34 |
| 116 | Computational Investigation of MgH<sub>2</sub>/Graphene Heterojunctions for Hydrogen Storage. Journal of Physical Chemistry C, 2021, 125, 2357-2363. | 1.5 | 33 |
| 117 | Synergistic effects of heteroatom-decorated MXene catalysts for CO reduction reactions. Nanoscale, 2020, 12, 15880-15887. | 2.8 | 32 |
| 118 | Controlled fabrication of highly conductive three-dimensional flowerlike poly (3,4-ethylenedioxythiophene) nanostructures. Journal of Materials Chemistry, 2011, 21, 7123. | 6.7 | 31 |
| 119 | A new crystal: layer-structured rhombohedral In3Se4. CrystEngComm, 2014, 16, 393-398. | 1.3 | 31 |
| 120 | A Terbiumâ€Organic Framework Material for Highly Sensitive Sensing of Fe<sup>3+</sup> in Aqueous and Biological Systems: Experimental Studies and Theoretical Analysis. ChemistrySelect, 2016, 1, 3555-3561. | 0.7 | 31 |
| 121 | Nanoscale Behavior and Manipulation of the Phase Transition in Singleâ€Crystal Cu<sub>2</sub>Se. Advanced Materials, 2019, 31, e1804919. | 11.1 | 31 |
| 122 | Insights into the efficient charge separation over Nb2O5/2D-C3N4 heterostructure for exceptional visible-light driven H2 evolution. Journal of Energy Chemistry, 2022, 65, 548-555. | 7.1 | 31 |
| 123 | Microwave absorbing properties of Fe<sub>3</sub>O<sub>4</sub>â€“poly(3, 4â€ethylenedioxythiophene) hybrids in lowâ€frequency band. Polymers for Advanced Technologies, 2014, 25, 83-88. | 1.6 | 30 |
| 124 | Purification of Multiwalled Carbon Nanotubes by Annealing and Extraction Based on the Difference in van der Waals Potential. Journal of Physical Chemistry B, 2006, 110, 9477-9481. | 1.2 | 29 |
| 125 | A facile process to produce highly conductive poly(3,4-ethylenedioxythiophene) films for ITO-free flexible OLED devices. Journal of Materials Chemistry C, 2014, 2, 916-924. | 2.7 | 29 |
| 126 | Free-standing ternary PtPdRu nanocatalysts with enhanced activity and durability for methanol electrooxidation. Electrochimica Acta, 2016, 222, 1094-1102. | 2.6 | 29 |

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| 127 | Bandgap narrowing of titanium oxide nanosheets: homogeneous doping of molecular iodine for improved photoreactivity. Journal of Materials Chemistry, 2011, 21, 14672. | 6.7 | 28 |
| 128 | Effects of the Particle Size of BaTiO3 Fillers on Fabrication and Dielectric Properties of BaTiO3/Polymer/Al Films for Capacitor Energy-Storage Application. Materials, 2019, 12, 439. | 1.3 | 28 |
| 129 | Electrocatalytic Nitrogen Reduction by Transition Metal Single-Atom Catalysts on Polymeric Carbon Nitride. Journal of Physical Chemistry C, 2021, 125, 13880-13888. | 1.5 | 28 |
| 130 | Single-Iron Supported on Defective Graphene as Efficient Catalysts for Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2020, 124, 13283-13290. | 1.5 | 28 |
| 131 | Simple approach to estimating the van der Waals interaction between carbon nanotubes. Physical Review B, 2006, 73, . | 1.1 | 27 |
| 132 | The role of V2O5 on the dehydrogenation and hydrogenation in magnesium hydride: An ab initio study. Applied Physics Letters, 2008, 92, . | 1.5 | 27 |
| 133 | Impact of H-termination on the nitrogen reduction reaction of molybdenum carbide as an electrochemical catalyst. Physical Chemistry Chemical Physics, 2018, 20, 23338-23343. | 1.3 | 27 |
| 134 | Hydrogen-Rich 2D Halide Perovskite Scintillators for Fast Neutron Radiography. Journal of the American Chemical Society, 2021, 143, 21302-21311. | 6.6 | 27 |
| 135 | Understanding the Influence of Lattice Composition on the Photocatalytic Activity of Defectâ€Pyrochloreâ€Structured Semiconductor Mixed Oxides. Advanced Functional Materials, 2015, 25, 905-912. | 7.8 | 26 |
| 136 | Potassiumâ€Ionâ€Assisted Regeneration of Active Cyano Groups in Carbon Nitride Nanoribbons: Visibleâ€Lightâ€Driven Photocatalytic Nitrogen Reduction. Angewandte Chemie, 2019, 131, 16797-16803. | 1.6 | 26 |
| 137 | Inhomogeneous charge transfer within monolayer zinc phthalocyanine absorbed on TiO2(110). Journal of Chemical Physics, 2012, 136, 154703. | 1.2 | 25 |
| 138 | Ti0.89Si0.11O2 single crystals bound by high-index {201} facets showing enhanced visible-light photocatalytic hydrogen evolution. Chemical Communications, 2013, 49, 2016. | 2.2 | 25 |
| 139 | Origin of the Visible Light Absorption of Boron/Nitrogen Co-doped Anatase TiO<sub>2</sub>. Journal of Physical Chemistry C, 2013, 117, 26454-26459. | 1.5 | 25 |
| 140 | Ni-induced stepwise capacity increase in Ni-poor Li-rich cathode materials for high performance lithium ion batteries. Nano Research, 2015, 8, 808-820. | 5.8 | 25 |
| 141 | Vertically-heterostructured TiO2-Ag-rGO ternary nanocomposite constructed with {001} facetted TiO2 nanosheets for enhanced Pt-free hydrogen production. International Journal of Hydrogen Energy, 2018, 43, 1508-1515. | 3.8 | 25 |
| 142 | In Operando Identification of In Situ Formed Metalloid Zinc<sup>Î´+</sup> Active Sites for Highly Efficient Electrocatalyzed Carbon Dioxide Reduction. Angewandte Chemie - International Edition, 2022, 61, . | 7.2 | 25 |
| 143 | AlN nanowires for Al-based composites with high strength and low thermal expansion. Journal of Materials Research, 2007, 22, 2711-2718. | 1.2 | 24 |
| 144 | Oxygen vacancy induced structural variations of exfoliated monolayerMnO2sheets. Physical Review B, 2010, 81, . | 1.1 | 24 |

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