

Xiao Zhang

List of Publications by Year in descending order

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163
papers

19,878
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19608

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docs citations

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times ranked

24613
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Recent Advances in Ultrathin Two-Dimensional Nanomaterials. <i>Chemical Reviews</i> , 2017, 117, 6225-6331. | 23.0 | 3,940 |
| 2 | Ultrathin 2D Metal-Organic Framework Nanosheets. <i>Advanced Materials</i> , 2015, 27, 7372-7378. | 11.1 | 943 |
| 3 | Black Phosphorus Quantum Dots. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 3653-3657. | 7.2 | 594 |
| 4 | Synthesis of Two-Dimensional CoS _{1.097} /Nitrogen-Doped Carbon Nanocomposites Using Metal-Organic Framework Nanosheets as Precursors for Supercapacitor Application. <i>Journal of the American Chemical Society</i> , 2016, 138, 6924-6927. | 6.6 | 591 |
| 5 | A High-Rate and Stable Quasi-Solid-State Zinc-Ion Battery with Novel 2D Layered Zinc Orthovanadate Array. <i>Advanced Materials</i> , 2018, 30, e1803181. | 11.1 | 571 |
| 6 | Solution-Processed Two-Dimensional MoS ₂ Nanosheets: Preparation, Hybridization, and Applications. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 8816-8838. | 7.2 | 557 |
| 7 | Biorefining of softwoods using ethanol organosolv pulping: Preliminary evaluation of process streams for manufacture of fuel-grade ethanol and co-products. <i>Biotechnology and Bioengineering</i> , 2005, 90, 473-481. | 1.7 | 493 |
| 8 | Unique low-molecular-weight lignin with high purity extracted from wood by deep eutectic solvents (DES): a source of lignin for valorization. <i>Green Chemistry</i> , 2016, 18, 5133-5141. | 4.6 | 457 |
| 9 | Solution-Processed Two-Dimensional Metal Dichalcogenide-Based Nanomaterials for Energy Storage and Conversion. <i>Advanced Materials</i> , 2016, 28, 6167-6196. | 11.1 | 438 |
| 10 | Phase engineering of nanomaterials. <i>Nature Reviews Chemistry</i> , 2020, 4, 243-256. | 13.8 | 438 |
| 11 | Three-Dimensional Architectures Constructed from Transition-Metal Dichalcogenide Nanomaterials for Electrochemical Energy Storage and Conversion. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 626-646. | 7.2 | 398 |
| 12 | Growth of Au Nanoparticles on 2D Metalloporphyrinic Metal-Organic Framework Nanosheets Used as Biomimetic Catalysts for Cascade Reactions. <i>Advanced Materials</i> , 2017, 29, 1700102. | 11.1 | 384 |
| 13 | Catalytic Oxidation of Biorefinery Lignin to Value-Added Chemicals to Support Sustainable Biofuel Production. <i>ChemSusChem</i> , 2015, 8, 24-51. | 3.6 | 378 |
| 14 | In Situ Grown Epitaxial Heterojunction Exhibits High-Performance Electrocatalytic Water Splitting. <i>Advanced Materials</i> , 2018, 30, e1705516. | 11.1 | 375 |
| 15 | All Metal Nitrides Solid-State Asymmetric Supercapacitors. <i>Advanced Materials</i> , 2015, 27, 4566-4571. | 11.1 | 371 |
| 16 | Preparation of High-Percentage 1T-Phase Transition Metal Dichalcogenide Nanodots for Electrochemical Hydrogen Evolution. <i>Advanced Materials</i> , 2018, 30, 1705509. | 11.1 | 341 |
| 17 | One-Pot Synthesis of Highly Anisotropic Five-Fold-Twinned PtCu Nanoframes Used as a Bifunctional Electrocatalyst for Oxygen Reduction and Methanol Oxidation. <i>Advanced Materials</i> , 2016, 28, 8712-8717. | 11.1 | 336 |
| 18 | Novel structured transition metal dichalcogenide nanosheets. <i>Chemical Society Reviews</i> , 2018, 47, 3301-3338. | 18.7 | 303 |

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|----|---|------|-----------|
| 19 | Effects of Sugar Inhibition on Cellulases and Î ² -Glucosidase During Enzymatic Hydrolysis of Softwood Substrates. <i>Applied Biochemistry and Biotechnology</i> , 2004, 115, 1115-1126. | 1.4 | 291 |
| 20 | Lithiation-induced amorphization of Pd ₃ P ₂ S ₈ for highly efficient hydrogen evolution. <i>Nature Catalysis</i> , 2018, 1, 460-468. | 16.1 | 247 |
| 21 | Crystal phase-based epitaxial growth of hybrid noble metal nanostructures on 4H/fcc Au nanowires. <i>Nature Chemistry</i> , 2018, 10, 456-461. | 6.6 | 220 |
| 22 | An improved X-ray diffraction method for cellulose crystallinity measurement. <i>Carbohydrate Polymers</i> , 2015, 123, 476-481. | 5.1 | 205 |
| 23 | Surfaceâ€Chargeâ€Mediated Formation of Hâ€TiO ₂ @Ni(OH) ₂ Heterostructures for Highâ€Performance Supercapacitors. <i>Advanced Materials</i> , 2017, 29, 1604164. | 11.1 | 203 |
| 24 | A Facile and Universal Topâ€Down Method for Preparation of Monodisperse Transitionâ€Metal Dichalcogenide Nanodots. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 5425-5428. | 7.2 | 185 |
| 25 | Two-dimensional transition metal dichalcogenide nanomaterials for biosensing applications. <i>Materials Chemistry Frontiers</i> , 2017, 1, 24-36. | 3.2 | 173 |
| 26 | Recent advances in oxidative valorization of lignin. <i>Catalysis Today</i> , 2018, 302, 50-60. | 2.2 | 155 |
| 27 | Peroxidase-like activity of MoS ₂ nanoflakes with different modifications and their application for H ₂ O ₂ and glucose detection. <i>Journal of Materials Chemistry B</i> , 2018, 6, 487-498. | 2.9 | 130 |
| 28 | Routes to Potential Bioproducts from Lignocellulosic Biomass Lignin and Hemicelluloses. <i>Bioenergy Research</i> , 2011, 4, 246-257. | 2.2 | 129 |
| 29 | Facile Extraction of Wheat Straw by Deep Eutectic Solvent (DES) to Produce Lignin Nanoparticles. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 10248-10256. | 3.2 | 127 |
| 30 | Preparation of Singleâ€Layer MoS ₂ /Se ₂ (1â€x) and Mo _x W _{1â€x} S ₂ Nanosheets with Highâ€Concentration Metallic 1T Phase. <i>Small</i> , 2016, 12, 1866-1874. | 5.2 | 126 |
| 31 | Confined Synthesis of 2D Nanostructured Materials toward Electrocatalysis. <i>Advanced Energy Materials</i> , 2020, 10, 1900486. | 10.2 | 123 |
| 32 | Selective Conversion of Biorefinery Lignin into Dicarboxylic Acids. <i>ChemSusChem</i> , 2014, 7, 412-415. | 3.6 | 120 |
| 33 | An advanced understanding of the specific effects of xylan and surface lignin contents on enzymatic hydrolysis of lignocellulosic biomass. <i>Bioresource Technology</i> , 2013, 132, 137-145. | 4.8 | 115 |
| 34 | Phase-Selective Epitaxial Growth of Heterophase Nanostructures on Unconventional 2H-Pd Nanoparticles. <i>Journal of the American Chemical Society</i> , 2020, 142, 18971-18980. | 6.6 | 111 |
| 35 | Mussel-inspired one-pot synthesis of transition metal and nitrogen co-doped carbon (M/Nâ€C) as efficient oxygen catalysts for Zn-air batteries. <i>Nanoscale</i> , 2016, 8, 5067-5075. | 2.8 | 109 |
| 36 | High consistency enzymatic hydrolysis of hardwood substrates. <i>Bioresource Technology</i> , 2009, 100, 5890-5897. | 4.8 | 107 |

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|----|---|------|-----------|
| 37 | The Alcohol-to-Jet Conversion Pathway for Drop-In Biofuels: Techno-Economic Evaluation. <i>ChemSusChem</i> , 2018, 11, 3728-3741. | 3.6 | 107 |
| 38 | Self-branched β -MnO ₂ / γ -MnO ₂ heterojunction nanowires with enhanced pseudocapacitance. <i>Materials Horizons</i> , 2017, 4, 415-422. | 6.4 | 105 |
| 39 | Iron Doped CuSn(OH) ₆ Microspheres as a Peroxidase-Mimicking Artificial Enzyme for H ₂ O ₂ Colorimetric Detection. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 14383-14393. | 3.2 | 103 |
| 40 | In Situ Synthesis of Metal Sulfide Nanoparticles Based on 2D Metal-Organic Framework Nanosheets. <i>Small</i> , 2016, 12, 4669-4674. | 5.2 | 101 |
| 41 | Boosting the lithium storage performance of MoS ₂ with graphene quantum dots. <i>Journal of Materials Chemistry A</i> , 2016, 4, 4783-4789. | 5.2 | 100 |
| 42 | Selective Epitaxial Growth of Oriented Hierarchical Metal-Organic Framework Heterostructures. <i>Journal of the American Chemical Society</i> , 2020, 142, 8953-8961. | 6.6 | 100 |
| 43 | Synthesis of Palladium-Based Crystalline@Amorphous Core-Shell Nanoplates for Highly Efficient Ethanol Oxidation. <i>Advanced Materials</i> , 2020, 32, e2000482. | 11.1 | 98 |
| 44 | In Situ Growth of NiFe Alloy Nanoparticles Embedded into N-Doped Bamboo-like Carbon Nanotubes as a Bifunctional Electrocatalyst for Zn-Air Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 26178-26187. | 4.0 | 94 |
| 45 | FePt nanoparticles-decorated graphene oxide nanosheets as enhanced peroxidase mimics for sensitive response to H ₂ O ₂ . <i>Materials Science and Engineering C</i> , 2018, 90, 610-620. | 3.8 | 93 |
| 46 | Ultralong life lithium-ion battery anode with superior high-rate capability and excellent cyclic stability from mesoporous Fe ₂ O ₃ @TiO ₂ core-shell nanorods. <i>Journal of Materials Chemistry A</i> , 2014, 2, 3912. | 5.2 | 91 |
| 47 | Potential of Nanocrystalline Cellulose-Fibrin Nanocomposites for Artificial Vascular Graft Applications. <i>Biomacromolecules</i> , 2013, 14, 1063-1071. | 2.6 | 90 |
| 48 | Co ₃ O ₄ @PPD Core-Shell Nanoparticle-Based Composite as an Efficient Electrocatalyst for Oxygen Reduction Reaction. <i>Small</i> , 2016, 12, 2580-2587. | 5.2 | 86 |
| 49 | Intramolecular Hydrogen Bonding-Based Topology Regulation of Two-Dimensional Covalent Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2020, 142, 13162-13169. | 6.6 | 85 |
| 50 | A colorimetric sensor of H ₂ O ₂ based on Co ₃ O ₄ @montmorillonite nanocomposites with peroxidase activity. <i>New Journal of Chemistry</i> , 2018, 42, 1501-1509. | 1.4 | 79 |
| 51 | Alkaline hydrogen peroxide pretreatment of softwood: Hemicellulose degradation pathways. <i>Bioresource Technology</i> , 2013, 150, 321-327. | 4.8 | 75 |
| 52 | A cyanine-modified upconversion nanoprobe for NIR-excited imaging of endogenous hydrogen peroxide signaling in vivo. <i>Biomaterials</i> , 2015, 54, 34-43. | 5.7 | 75 |
| 53 | Si Doped CoO Nanorods as Peroxidase Mimics for Colorimetric Sensing of Reduced Glutathione. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 13989-13998. | 3.2 | 75 |
| 54 | Engineering a High-Energy-Density and Long Lifespan Aqueous Zinc Battery via Ammonium Vanadium Bronze. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 20796-20803. | 4.0 | 75 |

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|----|--|------|-----------|
| 55 | FeNi Cubic Cage@N-Doped Carbon Coupled with N-Doped Graphene toward Efficient Electrochemical Water Oxidation. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 8266-8273. | 3.2 | 68 |
| 56 | Preparation of Cobalt Sulfide Nanoparticle-Decorated Nitrogen and Sulfur Co-Doped Reduced Graphene Oxide Aerogel Used as a Highly Efficient Electrocatalyst for Oxygen Reduction Reaction. <i>Small</i> , 2016, 12, 5920-5926. | 5.2 | 65 |
| 57 | Recent Progress in the Preparation, Assembly, Transformation, and Applications of Layer-Structured Nanodisks beyond Graphene. <i>Advanced Materials</i> , 2017, 29, 1701704. | 11.1 | 65 |
| 58 | Synthesis of well-dispersed Fe ₃ O ₄ nanoparticles loaded on montmorillonite and sensitive colorimetric detection of H ₂ O ₂ based on its peroxidase-like activity. <i>New Journal of Chemistry</i> , 2018, 42, 9578-9587. | 1.4 | 65 |
| 59 | Synthesis of Pd ₃ Sn and PdCuSn Nanorods with L1 ₂ Phase for Highly Efficient Electrocatalytic Ethanol Oxidation. <i>Advanced Materials</i> , 2022, 34, e2106115. | 11.1 | 65 |
| 60 | Highly Sensitive and Selective Aptamer-Based Fluorescence Detection of a Malarial Biomarker Using Single-Layer MoS ₂ Nanosheets. <i>ACS Sensors</i> , 2016, 1, 1315-1321. | 4.0 | 64 |
| 61 | Recent progress on single-atom catalysts for CO ₂ electroreduction. <i>Materials Today</i> , 2021, 48, 95-114. | 8.3 | 63 |
| 62 | Sol-gel synthesis of mesoporous Co ₃ O ₄ octahedra toward high-performance anodes for lithium-ion batteries. <i>Electrochimica Acta</i> , 2014, 129, 410-415. | 2.6 | 62 |
| 63 | Enzymatic Oxidation of Lignin: Challenges and Barriers Toward Practical Applications. <i>ChemCatChem</i> , 2020, 12, 401-425. | 1.8 | 62 |
| 64 | CoFeP hollow cube as advanced electrocatalyst for water oxidation. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 604-611. | 3.0 | 61 |
| 65 | Preparation of Ultrathin Two-Dimensional Ti _x Ta _{1-x} S _y O _z Nanosheets as Highly Efficient Photothermal Agents. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 7842-7846. | 7.2 | 59 |
| 66 | Efficient bifunctional vanadium-doped Ni ₃ S ₂ nanorod array for overall water splitting. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 443-450. | 3.0 | 54 |
| 67 | Strong Charge Transfer at 2H-1T Phase Boundary of MoS ₂ for Superb High-Performance Energy Storage. <i>Small</i> , 2019, 15, e1900131. | 5.2 | 53 |
| 68 | L sungsprozessierte MoS ₂ -Nanoplttchen: Herstellung, Hybridisierung und Anwendungen. <i>Angewandte Chemie</i> , 2016, 128, 8960-8984. | 1.6 | 52 |
| 69 | Topochemical transformation of Co(<i>scp</i>) coordination polymers to Co ₃ O ₄ nanoplates for high-performance lithium storage. <i>Journal of Materials Chemistry A</i> , 2015, 3, 2251-2257. | 5.2 | 49 |
| 70 | Organic-Dye-Modified Upconversion Nanoparticle as a Multichannel Probe To Detect Cu ²⁺ in Living Cells. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 1028-1032. | 4.0 | 49 |
| 71 | Catalytic partial oxidation (CPOX) of natural gas and renewable hydrocarbons/oxygenated hydrocarbons A review. <i>Catalysis Today</i> , 2019, 338, 18-30. | 2.2 | 48 |
| 72 | Weavable, High-Performance, Solid-State Supercapacitors Based on Hybrid Fibers Made of Sandwiched Structure of MWCNT/rGO/MWCNT. <i>Advanced Electronic Materials</i> , 2016, 2, 1600102. | 2.6 | 47 |

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|----|---|-----|-----------|
| 73 | Porphyrin functionalized Co(OH) ₂ /GO nanocomposites as an excellent peroxidase mimic for colorimetric biosensing. <i>Analyst</i> , 2019, 144, 5284-5291. | 1.7 | 45 |
| 74 | Construction of sandwiched graphene paper@Fe ₃ O ₄ nanorod array@graphene for large and fast lithium storage with an extended lifespan. <i>Journal of Materials Chemistry A</i> , 2015, 3, 19384-19392. | 5.2 | 44 |
| 75 | Synthesis of 4H/fcc-Au@Metal Sulfide Core-Shell Nanoribbons. <i>Journal of the American Chemical Society</i> , 2015, 137, 10910-10913. | 6.6 | 44 |
| 76 | Synthesis of MoX ₂ (X = Se or S) monolayers with high-concentration 1T phase on 4H/fcc-Au nanorods for hydrogen evolution. <i>Nano Research</i> , 2019, 12, 1301-1305. | 5.8 | 44 |
| 77 | Strategic assessment of sustainable aviation fuel production technologies: Yield improvement and cost reduction opportunities. <i>Biomass and Bioenergy</i> , 2021, 145, 105942. | 2.9 | 44 |
| 78 | Cleavage of ethers and demethylation of lignin in acidic concentrated lithium bromide (ACLB) solution. <i>Green Chemistry</i> , 2020, 22, 7989-8001. | 4.6 | 43 |
| 79 | Partial depolymerization of enzymolysis lignin via mild hydrogenolysis over Raney Nickel. <i>Bioresource Technology</i> , 2014, 155, 422-426. | 4.8 | 42 |
| 80 | Peracetic Acid Depolymerization of Biorefinery Lignin for Production of Selective Monomeric Phenolic Compounds. <i>Chemistry - A European Journal</i> , 2016, 22, 10884-10891. | 1.7 | 42 |
| 81 | Alkaline hydrogen peroxide (AHP) pretreatment of softwood: Enhanced enzymatic hydrolysability at low peroxide loadings. <i>Biomass and Bioenergy</i> , 2017, 96, 96-102. | 2.9 | 42 |
| 82 | Specific effects of fiber size and fiber swelling on biomass substrate surface area and enzymatic digestibility. <i>Bioresource Technology</i> , 2013, 144, 232-239. | 4.8 | 40 |
| 83 | Electrodepositing Pd on NiFe layered double hydroxide for improved water electrolysis. <i>Materials Chemistry Frontiers</i> , 2019, 3, 842-850. | 3.2 | 40 |
| 84 | Deep Eutectic Solvent Extraction of High-Purity Lignin from a Corn Stover Hydrolysate. <i>ChemSusChem</i> , 2020, 13, 4678-4690. | 3.6 | 39 |
| 85 | Flexible foams of graphene entrapped SnO ₂ @Co ₃ O ₄ nanocubes with remarkably large and fast lithium storage. <i>Journal of Materials Chemistry A</i> , 2016, 4, 16101-16107. | 5.2 | 38 |
| 86 | Lignin Depolymerization to Dicarboxylic Acids with Sodium Percarbonate. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 6253-6260. | 3.2 | 38 |
| 87 | Ultra-thin metal-organic framework nanoribbons. <i>National Science Review</i> , 2020, 7, 46-52. | 4.6 | 38 |
| 88 | Dreidimensionale Architekturen aus Übergangsmetall-Dichalkogenid-Nanomaterialien zur elektrochemischen Energiespeicherung und -umwandlung. <i>Angewandte Chemie</i> , 2018, 130, 634-655. | 1.6 | 37 |
| 89 | Enhanced hydrogen evolution of MoS ₂ /RGO: vanadium, nitrogen dopants triggered new active sites and expanded interlayer. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 2092-2099. | 3.0 | 36 |
| 90 | Electrochemical sandwich-type thrombin aptasensor based on dual signal amplification strategy of silver nanowires and hollow Au@CeO ₂ . <i>Biosensors and Bioelectronics</i> , 2020, 150, 111846. | 5.3 | 36 |

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|-----|---|-----|-----------|
| 91 | Cobalt and nickel bimetallic sulfide nanoparticles immobilized on montmorillonite demonstrating peroxidase-like activity for H ₂ O ₂ detection. <i>New Journal of Chemistry</i> , 2018, 42, 18749-18758. | 1.4 | 34 |
| 92 | Metal-Free 2(3),9(10),16(17),23(24)-Octamethoxyphthalocyanine-Modified Uniform CoSn(OH) ₆ Nanocubes: Enhanced Peroxidase-like Activity, Catalytic Mechanism, and Fast Colorimetric Sensing for Cholesterol. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 9404-9414. | 3.2 | 34 |
| 93 | Investigation of Thermally Induced Cellular Ablation and Heat Response Triggered by Planar MoS ₂ -Based Nanocomposite. <i>Bioconjugate Chemistry</i> , 2017, 28, 1059-1067. | 1.8 | 33 |
| 94 | VS ₄ -Decorated Carbon Nanotubes for Lithium Storage with Pseudocapacitance Contribution. <i>ChemSusChem</i> , 2020, 13, 1637-1644. | 3.6 | 32 |
| 95 | Highly stable and tunable peptoid/hemin enzymatic mimetics with natural peroxidase-like activities. <i>Nature Communications</i> , 2022, 13, . | 5.8 | 32 |
| 96 | Evaluation of pretreatment effect on lignin extraction from wheat straw by deep eutectic solvent. <i>Bioresource Technology</i> , 2022, 344, 126174. | 4.8 | 31 |
| 97 | Rapid colorimetric determination of dopamine based on the inhibition of the peroxidase mimicking activity of platinum loaded CoSn(OH) ₆ nanocubes. <i>Mikrochimica Acta</i> , 2019, 186, 755. | 2.5 | 29 |
| 98 | PtFe/nitrogen-doped graphene for high-performance electrooxidation of formic acid with composition sensitive electrocatalytic activity. <i>RSC Advances</i> , 2015, 5, 60237-60245. | 1.7 | 28 |
| 99 | 5,10,15,20-Tetrakis(4-carboxylphenyl)porphyrin modified nickel-cobalt layer double hydroxide nanosheets as enhanced photoelectrocatalysts for methanol oxidation under visible-light. <i>Journal of Colloid and Interface Science</i> , 2020, 561, 881-889. | 5.0 | 28 |
| 100 | Flower-like CeO ₂ /CoO Heterojunctioned Nanocomposites with Enhanced Peroxidase-Mimicking Activity for Cysteine Sensing. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 17540-17550. | 3.2 | 28 |
| 101 | Facile fabrication of a NiO/Ag ₃ PO ₄ Z-scheme photocatalyst with enhanced visible-light-driven photocatalytic activity. <i>New Journal of Chemistry</i> , 2020, 44, 12806-12814. | 1.4 | 27 |
| 102 | Techno-economic analysis of catalytic hydrothermolysis pathway for jet fuel production. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 151, 111516. | 8.2 | 27 |
| 103 | Recent advances in biomedical applications of 2D nanomaterials with peroxidase-like properties. <i>Advanced Drug Delivery Reviews</i> , 2022, 185, 114269. | 6.6 | 27 |
| 104 | Impact of alg3 gene deletion on growth, development, pigment production, protein secretion, and functions of recombinant <i>Trichoderma reesei</i> cellobiohydrolases in <i>Aspergillus niger</i> . <i>Fungal Genetics and Biology</i> , 2013, 61, 120-132. | 0.9 | 25 |
| 105 | Strong ultralight foams based on nanocrystalline cellulose for high-performance insulation. <i>Carbohydrate Polymers</i> , 2019, 218, 103-111. | 5.1 | 25 |
| 106 | A Novel and Formaldehyde-Free Preparation Method for Lignin Amine and Its Enhancement for Soy Protein Adhesive. <i>Journal of Polymers and the Environment</i> , 2017, 25, 599-605. | 2.4 | 24 |
| 107 | Hierarchical Ni(OH) ₂ /MnO ₂ Array as Supercapacitor Electrode with High Capacity. <i>Advanced Materials Interfaces</i> , 2019, 6, 1801470. | 1.9 | 23 |
| 108 | Ni ₃ [Fe(CN) ₆] ₂ nanocubes boost the catalytic activity of Pt for electrochemical hydrogen evolution. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 1683-1689. | 3.0 | 23 |

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|-----|--|-----|-----------|
| 109 | The Effects of Noncellulosic Compounds on the Nanoscale Interaction Forces Measured between Carbohydrate-Binding Module and Lignocellulosic Biomass. <i>Biomacromolecules</i> , 2016, 17, 1705-1715. | 2.6 | 21 |
| 110 | Evaluation of physical structural features on influencing enzymatic hydrolysis efficiency of micronized wood. <i>RSC Advances</i> , 2016, 6, 103026-103034. | 1.7 | 21 |
| 111 | Synthesis of WO_x ($x=2.7, 2.9$; X=S, Se) Heterostructures for Highly Efficient Green Quantum Dot Light-Emitting Diodes. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 10486-10490. | 7.2 | 21 |
| 112 | N,N-dicarboxymethyl Perylene-diimide modified CeCoO ₃ : Enhanced peroxidase activity, synergetic catalytic mechanism and glutathione colorimetric sensing. <i>Talanta</i> , 2020, 218, 121142. | 2.9 | 21 |
| 113 | Sacrificial template formation of CoMoO ₄ hollow nanostructures constructed by ultrathin nanosheets for robust lithium storage. <i>RSC Advances</i> , 2016, 6, 51710-51715. | 1.7 | 20 |
| 114 | Hydroquinone colorimetric sensing based on platinum deposited on CdS nanorods as peroxidase mimics. <i>Mikrochimica Acta</i> , 2020, 187, 587. | 2.5 | 20 |
| 115 | Depolymerization and Demethylation of Kraft Lignin in Molten Salt Hydrate and Applications as an Antioxidant and Metal Ion Scavenger. <i>Journal of Agricultural and Food Chemistry</i> , 2021, 69, 13568-13577. | 2.4 | 20 |
| 116 | Investigating commercial cellulase performances toward specific biomass recalcitrance factors using reference substrates. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 4409-4420. | 1.7 | 19 |
| 117 | Self-assembled 3D Co ₃ O ₄ -graphene frameworks with high lithium storage performance. <i>Ionics</i> , 2014, 20, 1635-1639. | 1.2 | 19 |
| 118 | New Insights Toward Quantitative Relationships between Lignin Reactivity to Monomers and Their Structural Characteristics. <i>ChemSusChem</i> , 2018, 11, 2146-2155. | 3.6 | 19 |
| 119 | Dilute Acid Pretreatment of Douglas Fir Forest Residues: Pretreatment Yield, Hemicellulose Degradation, and Enzymatic Hydrolysability. <i>Bioenergy Research</i> , 2015, 8, 42-52. | 2.2 | 18 |
| 120 | Enhanced peroxidase-like activity of MMT-supported cuprous oxide nanocomposites toward rapid colorimetric estimation of H ₂ O ₂ . <i>Applied Organometallic Chemistry</i> , 2019, 33, e4716. | 1.7 | 18 |
| 121 | Rapid colorimetric sensing of ascorbic acid based on the excellent peroxidase-like activity of Pt deposited on ZnCo ₂ O ₄ spheres. <i>New Journal of Chemistry</i> , 2020, 44, 12002-12008. | 1.4 | 18 |
| 122 | Pulp mill integration with alcohol-to-jet conversion technology. <i>Fuel Processing Technology</i> , 2020, 201, 106338. | 3.7 | 18 |
| 123 | A MnO _x enhanced atomically dispersed iron-nitrogen-carbon catalyst for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2022, 10, 5981-5989. | 5.2 | 18 |
| 124 | Deep Eutectic Solvent Assisted Facile Synthesis of Lignin-Based Cryogel. <i>Macromolecules</i> , 2019, 52, 227-235. | 2.2 | 17 |
| 125 | A simple electrochemical method for conversion of Pt wires to Pt concave icosahedra and nanocubes on carbon paper for electrocatalytic hydrogen evolution. <i>Science China Materials</i> , 2019, 62, 115-121. | 3.5 | 16 |
| 126 | Size-Dependent Phase Transformation of Noble Metal Nanomaterials. <i>Small</i> , 2019, 15, e1903253. | 5.2 | 16 |

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|-----|---|-----|-----------|
| 127 | Controllable growth of Au nanostructures onto MoS ₂ nanosheets for dual-modal imaging and photothermal radiation combined therapy. <i>Nanoscale</i> , 2019, 11, 22788-22795. | 2.8 | 16 |
| 128 | Effects of cutting orientation in poplar wood biomass size reduction on enzymatic hydrolysis sugar yield. <i>Bioresource Technology</i> , 2015, 194, 407-410. | 4.8 | 15 |
| 129 | Evaluation of dry corn ethanol bio-refinery concepts for the production of sustainable aviation fuel. <i>Biomass and Bioenergy</i> , 2021, 146, 105937. | 2.9 | 15 |
| 130 | Structural studies of Myceliophthora Thermophila Laccase in the presence of deep eutectic solvents. <i>Enzyme and Microbial Technology</i> , 2021, 150, 109890. | 1.6 | 15 |
| 131 | Direct Catalytic Conversion of Ethanol to C ₅₊ Ketones: Role of Pd-Zn Alloy on Catalytic Activity and Stability. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 14550-14557. | 7.2 | 14 |
| 132 | General Synthesis of Ordered Mesoporous Carbonaceous Hybrid Nanostructures with Molecularly Dispersed Polyoxometallates. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 15556-15562. | 7.2 | 13 |
| 133 | Evaluation of bio-refinery alternatives to produce sustainable aviation fuels in a sugarcane mill. <i>Fuel</i> , 2022, 321, 123992. | 3.4 | 13 |
| 134 | Deep Eutectic Solvent-Extracted Lignin as an Efficient Additive for Entirely Biobased Polylactic Acid Composites. <i>ACS Applied Polymer Materials</i> , 2022, 4, 5861-5871. | 2.0 | 13 |
| 135 | Heterogeneity and Specificity of Nanoscale Adhesion Forces Measured between Self-Assembled Monolayers and Lignocellulosic Substrates: A Chemical Force Microscopy Study. <i>Langmuir</i> , 2015, 31, 10233-10245. | 1.6 | 11 |
| 136 | Mesoporous CoFe ₂ O ₄ octahedra with high-capacity and long-life lithium storage properties. <i>RSC Advances</i> , 2016, 6, 18-22. | 1.7 | 11 |
| 137 | Preparation of Ultrathin Two-Dimensional Ti-Ta _{1-x} S _x O _z Nanosheets as Highly Efficient Photothermal Agents. <i>Angewandte Chemie</i> , 2017, 129, 7950-7954. | 1.6 | 11 |
| 138 | FePt nanoalloys on N-doped graphene paper as integrated electrode towards efficient formic acid electrooxidation. <i>Journal of Applied Electrochemistry</i> , 2018, 48, 95-103. | 1.5 | 11 |
| 139 | Ruthenium doped Ni ₂ P nanosheet arrays for active hydrogen evolution in neutral and alkaline water. <i>Sustainable Energy and Fuels</i> , 2020, 4, 1883-1890. | 2.5 | 11 |
| 140 | Role of peracetic acid on the disruption of lignin packing structure and its consequence on lignin depolymerisation. <i>Green Chemistry</i> , 2021, 23, 8468-8479. | 4.6 | 11 |
| 141 | Relating Dicarboxylic Acid Yield to Residual Lignin Structural Features. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 11695-11705. | 3.2 | 10 |
| 142 | Perylene diimide-modified magnetic Fe ₂ O ₃ /CeO ₂ nanoparticles as peroxidase mimics for highly sensitive colorimetric detection of Vitamin C. <i>Applied Organometallic Chemistry</i> , 2019, 33, e4884. | 1.7 | 10 |
| 143 | Organic-Inorganic Composite Nanorods as an Excellent Mimicking Peroxidases for Colorimetric Detection and Evaluation of Antioxidant. <i>ACS Applied Bio Materials</i> , 2020, 3, 2499-2506. | 2.3 | 10 |
| 144 | Cerium and nitrogen doped CoP nanorod arrays for hydrogen evolution in all pH conditions. <i>Sustainable Energy and Fuels</i> , 2019, 3, 3344-3351. | 2.5 | 9 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 145 | Porphyrin-Modified Cobalt Sulfide as a Developed Noble Metal-free Photoelectrocatalyst toward Methanol Oxidation under Visible Light. <i>Journal of Physical Chemistry C</i> , 2020, 124, 26678-26687. | 1.5 | 8 |
| 146 | Effects of the Surface Morphology and Conformations of Lignocellulosic Biomass Biopolymers on Their Nanoscale Interactions with Hydrophobic Self-Assembled Monolayers. <i>Langmuir</i> , 2017, 33, 6857-6868. | 1.6 | 7 |
| 147 | Synthesis of WO_3-xW_x ($x=2.7, 2.9$; $X=S, Se$) Heterostructures for Highly Efficient Green Quantum Dot Light-Emitting Diodes. <i>Angewandte Chemie</i> , 2017, 129, 10622-10626. | 1.6 | 7 |
| 148 | Uncovering the active sites and demonstrating stable catalyst for the cost-effective conversion of ethanol to 1-butanol. <i>Green Chemistry</i> , 2021, 23, 8030-8039. | 4.6 | 7 |
| 149 | Production of Sustainable Aviation Fuels in Petroleum Refineries: Evaluation of New Bio-Refinery Concepts. <i>Frontiers in Energy Research</i> , 2021, 9, . | 1.2 | 6 |
| 150 | Efficient hydrogen evolution by reconstruction of $NiMoO_4$ "CoO via Mo recombination. <i>Inorganic Chemistry Frontiers</i> , 0, . | 3.0 | 6 |
| 151 | One-pot synthesis of ferromagnetic $Fe_{2.25}W_{0.75}O_4$ nanoparticles as a magnetically recyclable photocatalyst. <i>Journal of Nanoparticle Research</i> , 2012, 14, 1. | 0.8 | 5 |
| 152 | Chapter 6. Oxidative Valorization of Lignin. <i>RSC Energy and Environment Series</i> , 2018, , 128-158. | 0.2 | 5 |
| 153 | Modify Existing Pulp and Paper Mills for Biorefinery Operations. <i>ACS Symposium Series</i> , 2011, , 395-408. | 0.5 | 4 |
| 154 | Hierarchical $NiCo_2 \times Fe_xO_4/Ni_2CoS_4$ nanoarray-decorated carbon textile anode with enhanced stability and capacitance. <i>Journal of Materials Science</i> , 2019, 54, 4905-4916. | 1.7 | 4 |
| 155 | A Multi-Level Analysis Approach to Measuring Variations in Biomass Recalcitrance of Douglas Fir Tree Samples. <i>Bioenergy Research</i> , 2014, 7, 1411-1420. | 2.2 | 3 |
| 156 | The Alcohol-to-Jet Conversion Pathway for Drop-In Biofuels: Techno-Economic Evaluation. <i>ChemSusChem</i> , 2018, 11, 3692-3692. | 3.6 | 2 |
| 157 | Doping-induced phase transition enables better electrocatalysts. <i>Science China Materials</i> , 2018, 61, 1623-1624. | 3.5 | 2 |
| 158 | Exonuclease III-Regulated Target Cyclic Amplification-Based Single Nucleotide Polymorphism Detection Using Ultrathin Ternary Chalcogenide Nanosheets. <i>Frontiers in Chemistry</i> , 2019, 7, 844. | 1.8 | 2 |
| 159 | Direct Catalytic Conversion of Ethanol to C_{5+} Ketones: Role of Pd-Zn Alloy on Catalytic Activity and Stability (<i>Angew. Chem.</i> 34/2020). <i>Angewandte Chemie</i> , 2020, 132, 14802-14802. | 1.6 | 1 |
| 160 | Dataset for Techno-Economic Analysis of Catalytic Hydrothermolysis Pathway for Jet Fuel Production. <i>Data in Brief</i> , 2021, 39, 107514. | 0.5 | 1 |
| 161 | Genetic Parameters of Factors Affecting the Biomass Recalcitrance of Douglas Fir Trees. <i>Bioenergy Research</i> , 2016, 9, 731-739. | 2.2 | 0 |
| 162 | Direct Catalytic Conversion of Ethanol to C_{5+} Ketones: Role of Pd-Zn Alloy on Catalytic Activity and Stability. <i>Angewandte Chemie</i> , 2020, 132, 14658-14665. | 1.6 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 163 | General Synthesis of Ordered Mesoporous Carbonaceous Hybrid Nanostructures with Molecularly Dispersed Polyoxometallates. <i>Angewandte Chemie</i> , 2021, 133, 15684-15690. | 1.6 | 0 |