

Huolin L Xin

List of Publications by Year in descending order

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311
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times ranked

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| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Multicolor Photonic Pigments for Rotation-Asymmetric Mechanochromic Devices. <i>Advanced Materials</i> , 2022, 34, e2107398. | 21.0 | 27 |
| 2 | Collective Plasmon Coupling in Gold Nanoparticle Clusters for Highly Efficient Photothermal Therapy. <i>ACS Nano</i> , 2022, 16, 910-920. | 14.6 | 65 |
| 3 | Modulating the Electronic Structure of Nickel Sulfide Electrocatalysts by Chlorine Doping toward Highly Efficient Alkaline Hydrogen Evolution. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 6869-6875. | 8.0 | 25 |
| 4 | Altering Ligand Fields in Single-Atom Sites through Second-Shell Anion Modulation Boosts the Oxygen Reduction Reaction. <i>Journal of the American Chemical Society</i> , 2022, 144, 2197-2207. | 13.7 | 183 |
| 5 | Multicolor Photonic Pigments for Rotation-Asymmetric Mechanochromic Devices (<i>Adv. Mater.</i> 4/2022). <i>Advanced Materials</i> , 2022, 34, . | 21.0 | 1 |
| 6 | Highly Selective Oxygen Reduction to Hydrogen Peroxide on a Carbon-Supported Single-Atom Pd Electrocatalyst. <i>ACS Catalysis</i> , 2022, 12, 4156-4164. | 11.2 | 44 |
| 7 | Accelerated Degradation in a Quasi-Single-Crystalline Layered Oxide Cathode for Lithium-Ion Batteries Caused by Residual Grain Boundaries. <i>Nano Letters</i> , 2022, 22, 3818-3824. | 9.1 | 31 |
| 8 | Promoting the water dissociation of nickel sulfide electrocatalyst through introducing cationic vacancies for accelerated hydrogen evolution kinetics in alkaline media. <i>Journal of Catalysis</i> , 2022, 410, 112-120. | 6.2 | 14 |
| 9 | A single-atom library for guided monometallic and concentration-complex multimetallic designs. <i>Nature Materials</i> , 2022, 21, 681-688. | 27.5 | 145 |
| 10 | An electrochemically stable homogeneous glassy electrolyte formed at room temperature for all-solid-state sodium batteries. <i>Nature Communications</i> , 2022, 13, . | 12.8 | 62 |
| 11 | Metal-Confined Synthesis of ZnS ₂ Monolayer Catalysts for Dinitrogen Electroreduction. <i>ACS Catalysis</i> , 2022, 12, 6809-6815. | 11.2 | 6 |
| 12 | Design of Ru-Ni diatomic sites for efficient alkaline hydrogen oxidation. <i>Science Advances</i> , 2022, 8, . | 10.3 | 89 |
| 13 | Ultrafast Preparation of Nonequilibrium FeNi Spinels by Magnetic Induction Heating for Unprecedented Oxygen Evolution Electrocatalysis. <i>Research</i> , 2022, 2022, . | 5.7 | 7 |
| 14 | Characterization of the structure and chemistry of the solid-electrolyte interface by cryo-EM leads to high-performance solid-state Li-metal batteries. <i>Nature Nanotechnology</i> , 2022, 17, 768-776. | 31.5 | 75 |
| 15 | X-Ray Induced Chemical Reaction Revealed by In Situ X-Ray Diffraction and Scanning X-Ray Microscopy in 15 nm Resolution. <i>Journal of Electrochemical Energy Conversion and Storage</i> , 2022, 19, . | 2.1 | 0 |
| 16 | Structure evolution of PtCu nanoframes from disordered to ordered for the oxygen reduction reaction. <i>Applied Catalysis B: Environmental</i> , 2021, 282, 119617. | 20.2 | 80 |
| 17 | Surface engineering of PdFe ordered intermetallics for efficient oxygen reduction electrocatalysis. <i>Chemical Engineering Journal</i> , 2021, 408, 127297. | 12.7 | 27 |
| 18 | Modulating Single-Atom Palladium Sites with Copper for Enhanced Ambient Ammonia Electrosynthesis. <i>Angewandte Chemie</i> , 2021, 133, 349-354. | 2.0 | 44 |

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|----|--|------|-----------|
| 19 | Polarization-Modulated Multidirectional Photothermal Actuators. <i>Advanced Materials</i> , 2021, 33, e2006367. | 21.0 | 35 |
| 20 | Rhombohedral Ordered Intermetallic Nanocatalyst Boosts the Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2021, 11, 184-192. | 11.2 | 51 |
| 21 | Modulating Single-Atom Palladium Sites with Copper for Enhanced Ambient Ammonia Electrosynthesis. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 345-350. | 13.8 | 150 |
| 22 | Microscopy and Microanalysis 2020 Virtual. <i>Microscopy Today</i> , 2021, 29, 12-14. | 0.3 | 0 |
| 23 | TEMLImageNet training library and AtomSegNet deep-learning models for high-precision atom segmentation, localization, denoising, and deblurring of atomic-resolution images. <i>Scientific Reports</i> , 2021, 11, 5386. | 3.3 | 55 |
| 24 | Activating Edge-Mo of 2H-MoS ₂ via Coordination with Pyridinic N=C for pH-Universal Hydrogen Evolution Electrocatalysis. <i>ACS Catalysis</i> , 2021, 11, 4486-4497. | 11.2 | 74 |
| 25 | Electrolyte Regulating toward Stabilization of Cobalt-Free Ultrahigh-Nickel Layered Oxide Cathode in Lithium-Ion Batteries. <i>ACS Energy Letters</i> , 2021, 6, 1324-1332. | 17.4 | 53 |
| 26 | Hierarchical nickel valence gradient stabilizes high-nickel content layered cathode materials. <i>Nature Communications</i> , 2021, 12, 2350. | 12.8 | 59 |
| 27 | Polymorph Evolution Mechanisms and Regulation Strategies of Lithium Metal Anode under Multiphysical Fields. <i>Chemical Reviews</i> , 2021, 121, 5986-6056. | 47.7 | 165 |
| 28 | Atomic-Scale Observation of O1 Faulted Phase-Induced Deactivation of LiNiO ₂ at High Voltage. <i>Nano Letters</i> , 2021, 21, 3657-3663. | 9.1 | 43 |
| 29 | One-Pot Synthesis of B/P-Codoped Co-Mo Dual-Nanowafers as Electrocatalysts for Overall Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 20024-20033. | 8.0 | 52 |
| 30 | Constructing FeN ₄ /graphitic nitrogen atomic interface for high-efficiency electrochemical CO ₂ reduction over a broad potential window. <i>Chem</i> , 2021, 7, 1297-1307. | 11.7 | 133 |
| 31 | (Invited) Electro-Chemo-Mechanical Degradation of LiNiO ₂ -Derived High-Ni-Content Cathode Materials. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 74-74. | 0.0 | 0 |
| 32 | Modification of the Coordination Environment of Active Sites on MoC for High-Efficiency CH ₄ Production. <i>Advanced Energy Materials</i> , 2021, 11, 2100044. | 19.5 | 21 |
| 33 | Ultrahigh-Rate and Long-Life Zinc-Metal Anodes Enabled by Self-Accelerated Cation Migration. <i>Advanced Energy Materials</i> , 2021, 11, 2100982. | 19.5 | 131 |
| 34 | Resolving atomic-scale phase transformation and oxygen loss mechanism in ultrahigh-nickel layered cathodes for cobalt-free lithium-ion batteries. <i>Matter</i> , 2021, 4, 2013-2026. | 10.0 | 69 |
| 35 | Super-compression of large electron microscopy time series by deep compressive sensing learning. <i>Patterns</i> , 2021, 2, 100292. | 5.9 | 18 |
| 36 | TEMLImageNet, AtomSegNet and TomoFillNet, open-source libraries and models that enable defect localization in 2D and 3D atomic resolution images. <i>Microscopy and Microanalysis</i> , 2021, 27, 1456-1457. | 0.4 | 1 |

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|----|---|------|-----------|
| 37 | Synergic grain boundary segregation and precipitation in W- and W-Mo-containing high-entropy borides. <i>Journal of the European Ceramic Society</i> , 2021, 41, 5380-5387. | 5.7 | 23 |
| 38 | Bulk high-entropy hexaborides. <i>Journal of the European Ceramic Society</i> , 2021, 41, 5775-5781. | 5.7 | 22 |
| 39 | In-situ TEM revisiting $\text{NH}_4\text{V}_4\text{O}_{10}$ to unveil the unknown sodium storage mechanism as an anode material. <i>Nano Energy</i> , 2021, 87, 106182. | 16.0 | 10 |
| 40 | Atomically Isolated Rh Sites within Highly Branched Rh_2Sb Nanostructures Enhance Bifunctional Hydrogen Electrocatalysis. <i>Advanced Materials</i> , 2021, 33, e2105049. | 21.0 | 48 |
| 41 | On the synthesis of bi-magnetic manganese ferrite-based core-shell nanoparticles. <i>Nanoscale Advances</i> , 2021, 3, 1612-1623. | 4.6 | 11 |
| 42 | Local Modulation of Single-Atomic Mn Sites for Enhanced Ambient Ammonia Electrosynthesis. <i>ACS Catalysis</i> , 2021, 11, 509-516. | 11.2 | 93 |
| 43 | 3D atomic imaging of low-coordinated active sites in solid-state dealloyed hierarchical nanoporous gold. <i>Journal of Materials Chemistry A</i> , 2021, 9, 25513-25521. | 10.3 | 3 |
| 44 | Self-Limitations of Heat Release in Coupled Core-Shell Spinel Ferrite Nanoparticles: Frequency, Time, and Temperature Dependencies. <i>Nanomaterials</i> , 2021, 11, 2848. | 4.1 | 5 |
| 45 | Probing Activities of Individual Catalytic Nanoflakes by Tunneling Mode of Scanning Electrochemical Microscopy. <i>Journal of Physical Chemistry C</i> , 2021, 125, 25525-25532. | 3.1 | 7 |
| 46 | Chemomechanically Stable Ultrahigh-Ni Single-Crystalline Cathodes with Improved Oxygen Retention and Delayed Phase Degradations. <i>Nano Letters</i> , 2021, 21, 9797-9804. | 9.1 | 38 |
| 47 | Hydrophobic Molecule Monolayer Brush-Tethered Zinc Anodes for Aqueous Zinc Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 60092-60098. | 8.0 | 18 |
| 48 | Ultrafine SmMn_2O_5 - $\dot{\text{r}}$ electrocatalysts with modest oxygen deficiency for highly-efficient pH-neutral magnesium-air batteries. <i>Journal of Power Sources</i> , 2020, 449, 227482. | 7.8 | 24 |
| 49 | Three-Dimensional Atomic Structure of Grain Boundaries Resolved by Atomic-Resolution Electron Tomography. <i>Matter</i> , 2020, 3, 1999-2011. | 10.0 | 34 |
| 50 | Atomic Modulation Engineering of Hexagon-Shaped CeO_2 Nanocrystals by <i>In Situ</i> Sculpturing of an Electron Beam. <i>Journal of Physical Chemistry C</i> , 2020, 124, 17006-17014. | 3.1 | 3 |
| 51 | Trifunctional Single-Atomic Ru Sites Enable Efficient Overall Water Splitting and Oxygen Reduction in Acidic Media. <i>Small</i> , 2020, 16, e2002888. | 10.0 | 120 |
| 52 | Tailoring the Antipoisoning Performance of Pd for Formic Acid Electrooxidation via an Ordered PdBi Intermetallic. <i>ACS Catalysis</i> , 2020, 10, 9977-9985. | 11.2 | 75 |
| 53 | Combining structurally ordered intermetallics with N-doped carbon confinement for efficient and anti-poisoning electrocatalysis. <i>Applied Catalysis B: Environmental</i> , 2020, 279, 119370. | 20.2 | 55 |
| 54 | A disordered rock salt anode for fast-charging lithium-ion batteries. <i>Nature</i> , 2020, 585, 63-67. | 27.8 | 326 |

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|----|---|------|-----------|
| 55 | Composition-tunable Antiperovskite $\text{CuIn}_2\text{NNi}_3$ as Superior Electrocatalysts for the Hydrogen Evolution Reaction. <i>Angewandte Chemie</i> , 2020, 132, 17641-17646. | 2.0 | 7 |
| 56 | High-Performance Nitrogen-Doped Intermetallic PtNi Catalyst for the Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2020, 10, 10637-10645. | 11.2 | 98 |
| 57 | Diatomite-derived Hierarchical Porous Crystalline-Amorphous Network for High-Performance and Sustainable Si Anodes. <i>Advanced Functional Materials</i> , 2020, 30, 2005956. | 14.9 | 36 |
| 58 | The sensitive surface chemistry of Co-free, Ni-rich layered oxides: identifying experimental conditions that influence characterization results. <i>Journal of Materials Chemistry A</i> , 2020, 8, 17487-17497. | 10.3 | 41 |
| 59 | Modulation of Single-Atom Metal Sites for Enhanced Ambient Ammonia Electrosynthesis. <i>Microscopy and Microanalysis</i> , 2020, 26, 2794-2796. | 0.4 | 1 |
| 60 | 0.7-Å Resolution Electron Tomography Enabled by Deep-Learning-Aided Information Recovery. <i>Advanced Intelligent Systems</i> , 2020, 2, 2000152. | 6.1 | 22 |
| 61 | Self-Optimized Ligand Effect in $\text{Li}_2\text{-PtPdFe}$ Intermetallic for Efficient and Stable Alkaline Hydrogen Oxidation Reaction. <i>ACS Catalysis</i> , 2020, 10, 15207-15216. | 11.2 | 64 |
| 62 | AtomSegNet and TomoFillNet—Two Deep Learning Open-Source Apps for Superresolution Processing of Atomic Resolution Images and Missing-wedge Information inpainting in Electron Tomograms. <i>Microscopy and Microanalysis</i> , 2020, 26, 926-926. | 0.4 | 1 |
| 63 | Atomic-configuration Modulation of Active Sites on Electrocatalysts. <i>Microscopy and Microanalysis</i> , 2020, 26, 3014-3014. | 0.4 | 0 |
| 64 | Enhancing surface oxygen retention through theory-guided doping selection in LiNiO_2 for next-generation lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 23293-23303. | 10.3 | 44 |
| 65 | Electronic structure and oxophilicity optimization of mono-layer Pt for efficient electrocatalysis. <i>Nano Energy</i> , 2020, 74, 104877. | 16.0 | 39 |
| 66 | Sulphur modulated Ni ₃ FeN supported on N/S co-doped graphene boosts rechargeable/flexible Zn-air battery performance. <i>Applied Catalysis B: Environmental</i> , 2020, 274, 119086. | 20.2 | 73 |
| 67 | Three-Dimensional Patterning of Nanoparticles by Molecular Stamping. <i>ACS Nano</i> , 2020, 14, 6823-6833. | 14.6 | 42 |
| 68 | Valence-programmable nanoparticle architectures. <i>Nature Communications</i> , 2020, 11, 2279. | 12.8 | 37 |
| 69 | Coupled hard-soft spinel ferrite-based core-shell nanoarchitectures: magnetic properties and heating abilities. <i>Nanoscale Advances</i> , 2020, 2, 3191-3201. | 4.6 | 32 |
| 70 | Creating compressive stress at the NiOOH/NiO interface for water oxidation. <i>Journal of Materials Chemistry A</i> , 2020, 8, 10747-10754. | 10.3 | 47 |
| 71 | Stable and Efficient Single-Atom Zn Catalyst for CO_2 Reduction to CH_4 . <i>Journal of the American Chemical Society</i> , 2020, 142, 12563-12567. | 13.7 | 358 |
| 72 | Highly active N-doped carbon encapsulated Pd-Fe intermetallic nanoparticles for the oxygen reduction reaction. <i>Nano Research</i> , 2020, 13, 2365-2370. | 10.4 | 44 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 73 | Composition-Tunable Antiperovskite Cu ₂ In _{1-x} Ni _{3x} as Superior Electrocatalysts for the Hydrogen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 17488-17493. | 13.8 | 39 |
| 74 | Ligand-Assisted Solid-State Transformation of Nanoparticles. <i>Chemistry of Materials</i> , 2020, 32, 3271-3277. | 6.7 | 13 |
| 75 | FeMo sub-nanoclusters/single atoms for neutral ammonia electrosynthesis. <i>Nano Energy</i> , 2020, 77, 105078. | 16.0 | 56 |
| 76 | Ordered three-dimensional nanomaterials using DNA-prescribed and valence-controlled material voxels. <i>Nature Materials</i> , 2020, 19, 789-796. | 27.5 | 172 |
| 77 | Promoting H ₂ O ₂ production via 2-electron oxygen reduction by coordinating partially oxidized Pd with defect carbon. <i>Nature Communications</i> , 2020, 11, 2178. | 12.8 | 209 |
| 78 | Nanoscale x-ray and electron tomography. <i>MRS Bulletin</i> , 2020, 45, 264-271. | 3.5 | 12 |
| 79 | Optimizing electron density of nickel sulfide electrocatalysts through sulfur vacancy engineering for alkaline hydrogen evolution. <i>Journal of Materials Chemistry A</i> , 2020, 8, 18207-18214. | 10.3 | 31 |
| 80 | Artificial Intelligence Enabled Information Inpainting and Artifact Removal for Electron Tomography. <i>Microscopy and Microanalysis</i> , 2020, 26, 664-665. | 0.4 | 2 |
| 81 | In Situ Visualization of Structural Evolution and Fissure Breathing in (De)lithiated H ₂ V ₃ O ₈ Nanorods. <i>ACS Energy Letters</i> , 2019, 4, 2081-2090. | 17.4 | 19 |
| 82 | Diagnostic Study of Lithium-Rich Cathode Materials at Primary and Sub-Primary Particle Level by Using Chemical-Sensitive STEM Tomography, Aberration-Corrected Imaging and EELS. <i>Microscopy and Microanalysis</i> , 2019, 25, 2056-2057. | 0.4 | 0 |
| 83 | Scalable synthesis of dispersible iron carbide (Fe ₃ C) nanoparticles by "nanocasting". <i>Journal of Materials Chemistry A</i> , 2019, 7, 19506-19512. | 10.3 | 19 |
| 84 | Supercluster-Coupled Crystal Growth in Metallic Glass Forming Liquids. <i>Microscopy and Microanalysis</i> , 2019, 25, 1410-1411. | 0.4 | 0 |
| 85 | Fluorine-Anion-Modulated Electron Structure of Nickel Sulfide Nanosheet Arrays for Alkaline Hydrogen Evolution. <i>ACS Energy Letters</i> , 2019, 4, 2905-2912. | 17.4 | 159 |
| 86 | High-Angular Splitting Electron Vortex Beams Generated by Topological Defects. <i>Microscopy and Microanalysis</i> , 2019, 25, 88-89. | 0.4 | 3 |
| 87 | In-Situ Observation of Concurrent Oxidation and Mechanical Deformation in Al and Zr. <i>Microscopy and Microanalysis</i> , 2019, 25, 1912-1913. | 0.4 | 0 |
| 88 | A joint deep learning model to recover information and reduce artifacts in missing-wedge sinograms for electron tomography and beyond. <i>Scientific Reports</i> , 2019, 9, 12803. | 3.3 | 51 |
| 89 | Ultrasensitive Detection of Dopamine with Carbon Nanopipets. <i>Analytical Chemistry</i> , 2019, 91, 12935-12941. | 6.5 | 33 |
| 90 | Targeted Surface Doping with Reversible Local Environment Improves Oxygen Stability at the Electrochemical Interfaces of Nickel-Rich Cathode Materials. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 37885-37891. | 8.0 | 33 |

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|-----|--|------|-----------|
| 91 | Direct high-resolution mapping of electrocatalytic activity of semi-two-dimensional catalysts with single-edge sensitivity. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 11618-11623. | 7.1 | 65 |
| 92 | Elucidating the Limit of Li Insertion into the Spinel $\text{Li}_4\text{Ti}_5\text{O}_{12}$. , 2019, 1, 96-102. | | 45 |
| 93 | Atomic-level tunnel engineering of todorokite MnO_2 for precise evaluation of lithium storage mechanisms by in situ transmission electron microscopy. Nano Energy, 2019, 63, 103840. | 16.0 | 17 |
| 94 | Structural Degradation of Layered Cathode Materials in Lithium-Ion Batteries Induced by Ball Milling. Journal of the Electrochemical Society, 2019, 166, A1964-A1971. | 2.9 | 28 |
| 95 | Conversion of CO_2 on a highly active and stable $\text{Cu}/\text{FeO}_x/\text{CeO}_2$ catalyst: tuning catalytic performance by oxide-oxide interactions. Catalysis Science and Technology, 2019, 9, 3735-3742. | 4.1 | 28 |
| 96 | Organic Heterojunctions Formed by Interfacing Two Single Crystals from a Mixed Solution. Journal of the American Chemical Society, 2019, 141, 10007-10015. | 13.7 | 31 |
| 97 | In Situ Visualization of Interfacial Sodium Transport and Electrochemistry between Few-Layer Phosphorene. Small Methods, 2019, 3, 1900061. | 8.6 | 15 |
| 98 | Quantification of Charge Transfer at the Interfaces of Oxide Thin Films. Journal of Physical Chemistry A, 2019, 123, 4632-4637. | 2.5 | 5 |
| 99 | Rational synthesis and electrochemical performance of LiVOPO_4 polymorphs. Journal of Materials Chemistry A, 2019, 7, 8423-8432. | 10.3 | 20 |
| 100 | In situ visualization of sodium transport and conversion reactions of FeS_2 nanotubes made by morphology engineering. Nano Energy, 2019, 60, 424-431. | 16.0 | 41 |
| 101 | Anomalous metal segregation in lithium-rich material provides design rules for stable cathode in lithium-ion battery. Nature Communications, 2019, 10, 1650. | 12.8 | 60 |
| 102 | One-Nanometer-Thick Pt_3Ni Bimetallic Alloy Nanowires Advanced Oxygen Reduction Reaction: Integrating Multiple Advantages into One Catalyst. ACS Catalysis, 2019, 9, 4488-4494. | 11.2 | 126 |
| 103 | Atomistic Defect Makes a Phase Plate for the Generation and High-Angular Splitting of Electron Vortex Beams. ACS Nano, 2019, 13, 3964-3970. | 14.6 | 3 |
| 104 | Supercluster-coupled crystal growth in metallic glass forming liquids. Nature Communications, 2019, 10, 915. | 12.8 | 30 |
| 105 | Highly Active and Stable Carbon Nanosheets Supported Iron Oxide for Fischer-Tropsch to Olefins Synthesis. ChemCatChem, 2019, 11, 1625-1632. | 3.7 | 8 |
| 106 | Unusual strain effect of a Pt-based L1_0 face-centered tetragonal core in core/shell nanoparticles for the oxygen reduction reaction. Physical Chemistry Chemical Physics, 2019, 21, 6477-6484. | 2.8 | 22 |
| 107 | TEM-Assisted Fabrication of Sub-10 nm Scanning Electrochemical Microscopy Tips. Analytical Chemistry, 2019, 91, 15355-15359. | 6.5 | 16 |
| 108 | Optimizing PtFe intermetallics for oxygen reduction reaction: from DFT screening to <i>in situ</i> XAFS characterization. Nanoscale, 2019, 11, 20301-20306. | 5.6 | 33 |

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|-----|--|------|-----------|
| 109 | Dopant Distribution in Co-Free High-Energy Layered Cathode Materials. <i>Chemistry of Materials</i> , 2019, 31, 9769-9776. | 6.7 | 110 |
| 110 | Amorphization activated ruthenium-tellurium nanorods for efficient water splitting. <i>Nature Communications</i> , 2019, 10, 5692. | 12.8 | 312 |
| 111 | Electronic Tuning of Metal Nanoparticles for Highly Efficient Photocatalytic Hydrogen Peroxide Production. <i>ACS Catalysis</i> , 2019, 9, 626-631. | 11.2 | 84 |
| 112 | Memristor crossbar arrays with 6-nm half-pitch and 2-nm critical dimension. <i>Nature Nanotechnology</i> , 2019, 14, 35-39. | 31.5 | 381 |
| 113 | Innertiteltitelbild: Atomically Dispersed Molybdenum Catalysts for Efficient Ambient Nitrogen Fixation (<i>Angew. Chem.</i> 8/2019). <i>Angewandte Chemie</i> , 2019, 131, 2547-2547. | 2.0 | 7 |
| 114 | Pt-Ni Seed-Core-Frame Hierarchical Nanostructures and Their Conversion to Nanoframes for Enhanced Methanol Electro-Oxidation. <i>Catalysts</i> , 2019, 9, 39. | 3.5 | 8 |
| 115 | Bimetallic synergy in cobalt-palladium nanocatalysts for CO oxidation. <i>Nature Catalysis</i> , 2019, 2, 78-85. | 34.4 | 195 |
| 116 | Atomically Dispersed Molybdenum Catalysts for Efficient Ambient Nitrogen Fixation. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 2321-2325. | 13.8 | 543 |
| 117 | Atomically Dispersed Molybdenum Catalysts for Efficient Ambient Nitrogen Fixation. <i>Angewandte Chemie</i> , 2019, 131, 2343-2347. | 2.0 | 95 |
| 118 | Regioselective surface encoding of nanoparticles for programmable self-assembly. <i>Nature Materials</i> , 2019, 18, 169-174. | 27.5 | 153 |
| 119 | (Invited) Evolution of Redox Couples in Li- and Mn-Rich Cathode Materials and Mitigation of Voltage Fade by Reducing Oxygen Release. <i>ECS Meeting Abstracts</i> , 2019, , . | 0.0 | 0 |
| 120 | Recent Advances of Structurally Ordered Intermetallic Nanoparticles for Electrocatalysis. <i>ACS Catalysis</i> , 2018, 8, 3237-3256. | 11.2 | 245 |
| 121 | Anomalous Conductivity Tailored by Domain-Boundary Transport in Crystalline Bismuth Vanadate Photoanodes. <i>Chemistry of Materials</i> , 2018, 30, 1677-1685. | 6.7 | 35 |
| 122 | Liquid-Like, Self-Healing Aluminum Oxide during Deformation at Room Temperature. <i>Nano Letters</i> , 2018, 18, 2492-2497. | 9.1 | 91 |
| 123 | Effects of crystal phase and composition on structurally ordered Pt-Co-Ni/C ternary intermetallic electrocatalysts for the formic acid oxidation reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 5848-5855. | 10.3 | 66 |
| 124 | Oxygen Release Induced Chemomechanical Breakdown of Layered Cathode Materials. <i>Nano Letters</i> , 2018, 18, 3241-3249. | 9.1 | 237 |
| 125 | Sub-nm ruthenium cluster as an efficient and robust catalyst for decomposition and synthesis of ammonia: Break the size shackles. <i>Nano Research</i> , 2018, 11, 4774-4785. | 10.4 | 49 |
| 126 | Growth of Nanoparticles with Desired Catalytic Functions by Controlled Doping-Segregation of Metal in Oxide. <i>Chemistry of Materials</i> , 2018, 30, 1585-1592. | 6.7 | 11 |

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|-----|---|------|-----------|
| 127 | Coupled s-p-d Exchange in Facet-Controlled Pd ₃ Pb Tripods Enhances Oxygen Reduction Catalysis. <i>CheM</i> , 2018, 4, 359-371. | 11.7 | 100 |
| 128 | Correction to Porous Structured Ni-Fe-P Nanocubes Derived from a Prussian Blue Analogue as an Electrocatalyst for Efficient Overall Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 3152-3152. | 8.0 | 3 |
| 129 | From a ZIF-8 polyhedron to three-dimensional nitrogen doped hierarchical porous carbon: an efficient electrocatalyst for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 10731-10739. | 10.3 | 111 |
| 130 | Depth-Dependent Redox Behavior of LiNi _{0.6} Mn _{0.2} Co _{0.2} O ₂ . <i>Journal of the Electrochemical Society</i> , 2018, 165, A696-A704. | 2.9 | 123 |
| 131 | Heteroatom (P, B, or S) incorporated NiFe-based nanocubes as efficient electrocatalysts for the oxygen evolution reaction. <i>Journal of Materials Chemistry A</i> , 2018, 6, 7062-7069. | 10.3 | 98 |
| 132 | Dendritic Core-Frame and Frame Multimetallic Rhombic Dodecahedra: A Comparison Study of Composition and Structure Effects on Electrocatalysis of Methanol Oxidation. <i>ChemNanoMat</i> , 2018, 4, 76-87. | 2.8 | 11 |
| 133 | Theory-driven design of high-valence metal sites for water oxidation confirmed using in situ soft X-ray absorption. <i>Nature Chemistry</i> , 2018, 10, 149-154. | 13.6 | 476 |
| 134 | Deep Learning Based Atom Segmentation and Noise and Missing-Wedge Reduction for Electron Tomography. <i>Microscopy and Microanalysis</i> , 2018, 24, 504-505. | 0.4 | 7 |
| 135 | Deciphering the Cathode-Electrolyte Interfacial Chemistry in Sodium Layered Cathode Materials. <i>Advanced Energy Materials</i> , 2018, 8, 1801975. | 19.5 | 111 |
| 136 | Tailoring Surface Opening of Hollow Nanocubes and Their Application as Nanocargo Carriers. <i>ACS Central Science</i> , 2018, 4, 1742-1750. | 11.3 | 13 |
| 137 | Garnet Electrolyte Surface Degradation and Recovery. <i>ACS Applied Energy Materials</i> , 2018, 1, 7244-7252. | 5.1 | 81 |
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