

Sooyeon Hwang

List of Publications by Year in descending order

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136
papers

14,922
citations

26610

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18633

119
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140
all docs

140
docs citations

140
times ranked

13636
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Multi-principal elemental intermetallic nanoparticles synthesized via a disorder-to-order transition. <i>Science Advances</i> , 2022, 8, eabm4322. | 4.7 | 49 |
| 2 | Atomically dispersed single Ni site catalysts for high-efficiency CO ₂ electroreduction at industrial-level current densities. <i>Energy and Environmental Science</i> , 2022, 15, 2108-2119. | 15.6 | 99 |
| 3 | Passive Oxide Film Growth Observed On the Atomic Scale. <i>Advanced Materials Interfaces</i> , 2022, 9, . | 1.9 | 4 |
| 4 | High-Platinum-Content Catalysts on Atomically Dispersed and Nitrogen Coordinated Single Manganese Site Carbons for Heavy-Duty Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2022, 169, 034510. | 1.3 | 10 |
| 5 | Composition-dependent ordering transformations in Pt-Fe nanoalloys. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2117899119. | 3.3 | 10 |
| 6 | Rapid Atomic Ordering Transformation toward Intermetallic Nanoparticles. <i>Nano Letters</i> , 2022, 22, 255-262. | 4.5 | 12 |
| 7 | Electrochemical CO ₂ Reduction Reaction over Cu Nanoparticles with Tunable Activity and Selectivity Mediated by Functional Groups in Polymeric Binder. <i>Jacs Au</i> , 2022, 2, 214-222. | 3.6 | 29 |
| 8 | Molybdenum Carbide Electrocatalyst In Situ Embedded in Porous Nitrogen-Rich Carbon Nanotubes Promotes Rapid Kinetics in Sodium-Sulfur Batteries. <i>Advanced Materials</i> , 2022, 34, e2106572. | 11.1 | 33 |
| 9 | Atomically Dispersed Dual-Metal Site Catalysts for Enhanced CO ₂ Reduction: Mechanistic Insight into Active Site Structures. <i>Angewandte Chemie - International Edition</i> , 2022, 61, . | 7.2 | 83 |
| 10 | Atomically Dispersed Dual-Metal Site Catalysts for Enhanced CO ₂ Reduction: Mechanistic Insight into Active Site Structures. <i>Angewandte Chemie</i> , 2022, 134, . | 1.6 | 6 |
| 11 | Depth-Dependent Understanding of Cathode Electrolyte Interphase (CEI) on the Layered Li-Ion Cathodes Operated at Extreme High Temperature. <i>Chemistry of Materials</i> , 2022, 34, 4587-4601. | 3.2 | 17 |
| 12 | Unraveling Thermodynamic and Kinetic Contributions to the Stability of Doped Nanocrystalline Alloys using Nanometallic Multilayers. <i>Advanced Materials</i> , 2022, 34, e2200354. | 11.1 | 2 |
| 13 | Porosity Development at Li-Rich Layered Cathodes in All-Solid-State Battery during <i>In Situ</i> Delithiation. <i>Nano Letters</i> , 2022, 22, 4905-4911. | 4.5 | 10 |
| 14 | Engineering Atomically Dispersed FeN ₄ Active Sites for CO ₂ Electroreduction. <i>Angewandte Chemie</i> , 2021, 133, 1035-1045. | 1.6 | 39 |
| 15 | Engineering Atomically Dispersed FeN ₄ Active Sites for CO ₂ Electroreduction. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 1022-1032. | 7.2 | 121 |
| 16 | On the irreversible sodiation of tin disulfide. <i>Nano Energy</i> , 2021, 79, 105458. | 8.2 | 14 |
| 17 | High-Entropy Metal Sulfide Nanoparticles Promise High-Performance Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2021, 11, 2002887. | 10.2 | 226 |
| 18 | Oxygen evolution reaction over catalytic single-site Co in a well-defined brookite TiO ₂ nanorod surface. <i>Nature Catalysis</i> , 2021, 4, 36-45. | 16.1 | 189 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Atomically dispersed single iron sites for promoting Pt and Pt ₃ Co fuel cell catalysts: performance and durability improvements. <i>Energy and Environmental Science</i> , 2021, 14, 4948-4960. | 15.6 | 168 |
| 20 | Non-equilibrium insertion of lithium ions into graphite. <i>Journal of Materials Chemistry A</i> , 2021, 9, 12080-12086. | 5.2 | 15 |
| 21 | Surfactant Removal for Colloidal Nanocrystal Catalysts Mediated by N-Heterocyclic Carbenes. <i>Journal of the American Chemical Society</i> , 2021, 143, 2644-2648. | 6.6 | 25 |
| 22 | Real Time Observation of Lithium Insertion into Pre-Cycled Conversion-Type Materials. <i>Nanomaterials</i> , 2021, 11, 728. | 1.9 | 3 |
| 23 | Promoting Atomically Dispersed MnN ₄ Sites <i>via</i> Sulfur Doping for Oxygen Reduction: Unveiling Intrinsic Activity and Degradation in Fuel Cells. <i>ACS Nano</i> , 2021, 15, 6886-6899. | 7.3 | 119 |
| 24 | Origin of anomalous high-rate Na-ion electrochemistry in layered bismuth telluride anodes. <i>Matter</i> , 2021, 4, 1335-1351. | 5.0 | 26 |
| 25 | Layered-rocksalt intergrown cathode for high-capacity zero-strain battery operation. <i>Nature Communications</i> , 2021, 12, 2348. | 5.8 | 43 |
| 26 | Asymmetric Reaction Pathways of Conversion-Type Electrodes for Lithium-Ion Batteries. <i>Chemistry of Materials</i> , 2021, 33, 3515-3523. | 3.2 | 5 |
| 27 | Deciphering Interfacial Chemical and Electrochemical Reactions of Sulfide-Based All-Solid-State Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2100210. | 10.2 | 63 |
| 28 | Compressive Strain Reduces the Hydrogen Evolution and Oxidation Reaction Activity of Platinum in Alkaline Solution. <i>ACS Catalysis</i> , 2021, 11, 8165-8173. | 5.5 | 37 |
| 29 | Experimental Verification of Ir 5d Orbital States and Atomic Structures in Highly Active Amorphous Iridium Oxide Catalysts. <i>ACS Catalysis</i> , 2021, 11, 10084-10094. | 5.5 | 4 |
| 30 | Microscopic relaxation channels in materials for superconducting qubits. <i>Communications Materials</i> , 2021, 2, . | 2.9 | 31 |
| 31 | Mixed Cationic and Anionic Redox in Ni and Co Free Chalcogen-Based Cathode Chemistry for Li-Ion Batteries. <i>Journal of the American Chemical Society</i> , 2021, 143, 15732-15744. | 6.6 | 19 |
| 32 | Colloidal synthesis and charge carrier dynamics of Cs ₄ Cd _{1-x} Cu _x Sb ₂ Cl ₁₂ (0 ≤ x ≤ 1) layered double perovskite nanocrystals. <i>Matter</i> , 2021, 4, 2936-2952. | 5.0 | 20 |
| 33 | High-performance ammonia oxidation catalysts for anion-exchange membrane direct ammonia fuel cells. <i>Energy and Environmental Science</i> , 2021, 14, 1449-1460. | 15.6 | 100 |
| 34 | Emergent flat band electronic structure in a VSe ₂ /Bi ₂ Se ₃ heterostructure. <i>Communications Materials</i> , 2021, 2, . | 2.9 | 15 |
| 35 | Selenium infiltrated hierarchical hollow carbon spheres display rapid kinetics and extended cycling as lithium metal battery (LMB) cathodes. <i>Journal of Materials Chemistry A</i> , 2021, 9, 18582-18593. | 5.2 | 5 |
| 36 | Investigation of the NO reduction by CO reaction over oxidized and reduced NiO _x /CeO ₂ catalysts. <i>Catalysis Science and Technology</i> , 2021, 11, 7850-7865. | 2.1 | 13 |

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|----|---|------|-----------|
| 37 | Atomic Structure Evolution of Pt-Co Binary Catalysts: Single Metal Sites versus Intermetallic Nanocrystals. <i>Advanced Materials</i> , 2021, 33, e2106371. | 11.1 | 62 |
| 38 | Chalcogen-Based Anion Redox Cathode Chemistry for Li-Ion Batteries. <i>ECS Meeting Abstracts</i> , 2021, MA2021-02, 1912-1912. | 0.0 | 0 |
| 39 | Layered-Rocksalt Intergrown Cathode for High-Capacity Zero-Strain Battery Operation. <i>ECS Meeting Abstracts</i> , 2021, MA2021-02, 193-193. | 0.0 | 0 |
| 40 | Immobilization of Capping Arene-Cobalt(II) Complexes on Ordered Mesoporous Carbon for Electrocatalytic Water Oxidation. <i>ACS Catalysis</i> , 2021, 11, 15068-15082. | 5.5 | 8 |
| 41 | Isotopic effect on electrochemical CO ₂ reduction activity and selectivity in H ₂ O- and D ₂ O-based electrolytes over palladium. <i>Chemical Communications</i> , 2020, 56, 106-108. | 2.2 | 17 |
| 42 | Using <i>in situ</i> and operando methods to characterize phase changes in charged lithium nickel cobalt aluminum oxide cathode materials. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 113002. | 1.3 | 12 |
| 43 | Boosting CO ₂ reduction on Fe-N-C with sulfur incorporation: Synergistic electronic and structural engineering. <i>Nano Energy</i> , 2020, 68, 104384. | 8.2 | 106 |
| 44 | Electrochemical Conversion of CO ₂ to Syngas with Controllable CO/H ₂ Ratios over Co and Ni Single-Atom Catalysts. <i>Angewandte Chemie</i> , 2020, 132, 3057-3061. | 1.6 | 22 |
| 45 | Site-Specific Sodiation Mechanisms of Selenium in Microporous Carbon Host. <i>Nano Letters</i> , 2020, 20, 918-928. | 4.5 | 30 |
| 46 | Electrochemical Conversion of CO ₂ to Syngas with Controllable CO/H ₂ Ratios over Co and Ni Single-Atom Catalysts. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 3033-3037. | 7.2 | 203 |
| 47 | In Situ Transmission Electron Microscopy on Energy-Related Catalysis. <i>Advanced Energy Materials</i> , 2020, 10, 1902105. | 10.2 | 78 |
| 48 | Enabling Facile Anionic Kinetics through Cationic Redox Mediator in Li-Rich Layered Cathodes. <i>ACS Energy Letters</i> , 2020, 5, 3535-3543. | 8.8 | 21 |
| 49 | Synthesis of luminescent core/shell In ₂ -Zn ₃ P ₂ /ZnS quantum dots. <i>Nanoscale</i> , 2020, 12, 20952-20964. | 2.8 | 2 |
| 50 | Single Cobalt Sites Dispersed in Hierarchically Porous Nanofiber Networks for Durable and High-Power PGM-Free Cathodes in Fuel Cells. <i>Advanced Materials</i> , 2020, 32, e2003577. | 11.1 | 262 |
| 51 | Direct Observation of Defect-Aided Structural Evolution in a Nickel-Rich Layered Cathode. <i>Angewandte Chemie</i> , 2020, 132, 22276-22283. | 1.6 | 15 |
| 52 | Stabilizing and understanding the interface between nickel-rich cathode and PEO-based electrolyte by lithium niobium oxide coating for high-performance all-solid-state batteries. <i>Nano Energy</i> , 2020, 78, 105107. | 8.2 | 88 |
| 53 | Direct Observation of Defect-Aided Structural Evolution in a Nickel-Rich Layered Cathode. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 22092-22099. | 7.2 | 75 |
| 54 | Single-Iron Site Catalysts with Self-Assembled Dual-size Architecture and Hierarchical Porosity for Proton-Exchange Membrane Fuel Cells. <i>Applied Catalysis B: Environmental</i> , 2020, 279, 119400. | 10.8 | 94 |

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|----|---|------|-----------|
| 55 | Deciphering Dynamic Structural and Mechanistic Complexity in Cu/CeO ₂ /ZSM-5 Catalysts for the Reverse Water-Gas Shift Reaction. <i>ACS Catalysis</i> , 2020, 10, 10216-10228. | 5.5 | 39 |
| 56 | Multimodal Analysis of Reaction Pathways of Cathode Materials for Lithium Ion Batteries. <i>Microscopy and Microanalysis</i> , 2020, 26, 906-908. | 0.2 | 0 |
| 57 | Synthesis and Characterization of Anion-Exchange Membranes Using Semicrystalline Triblock Copolymers in Ordered and Disordered States. <i>Macromolecules</i> , 2020, 53, 8548-8561. | 2.2 | 9 |
| 58 | Direct Identification of Mixed-Metal Centers in Metal-Organic Frameworks: Cu ₃ (BTC) ₂ Transmetalated with Rh ²⁺ Ions. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 8138-8144. | 2.1 | 16 |
| 59 | Capture and Decomposition of the Nerve Agent Simulant, DMCP, Using the Zeolitic Imidazolate Framework (ZIF-8). <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 58326-58338. | 4.0 | 22 |
| 60 | Tuning the Anode-Electrolyte Interface Chemistry for Garnet-Based Solid-State Li Metal Batteries. <i>Advanced Materials</i> , 2020, 32, e2000030. | 11.1 | 156 |
| 61 | A Highly Efficient All-Solid-State Lithium/Electrolyte Interface Induced by an Energetic Reaction. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 14003-14008. | 7.2 | 70 |
| 62 | A Highly Efficient All-Solid-State Lithium/Electrolyte Interface Induced by an Energetic Reaction. <i>Angewandte Chemie</i> , 2020, 132, 14107-14112. | 1.6 | 4 |
| 63 | Hierarchical Polyelemental Nanoparticles as Bifunctional Catalysts for Oxygen Evolution and Reduction Reactions. <i>Advanced Energy Materials</i> , 2020, 10, 2001119. | 10.2 | 39 |
| 64 | Single crystal cathodes enabling high-performance all-solid-state lithium-ion batteries. <i>Energy Storage Materials</i> , 2020, 30, 98-103. | 9.5 | 109 |
| 65 | Lead-Free Cs ₄ CuSb ₂ Cl ₁₂ Layered Double Perovskite Nanocrystals. <i>Journal of the American Chemical Society</i> , 2020, 142, 11927-11936. | 6.6 | 131 |
| 66 | AgPd nanoparticles for electrocatalytic CO ₂ reduction: bimetallic composition-dependent ligand and ensemble effects. <i>Nanoscale</i> , 2020, 12, 14068-14075. | 2.8 | 36 |
| 67 | Unveiling the critical role of interfacial ionic conductivity in all-solid-state lithium batteries. <i>Nano Energy</i> , 2020, 72, 104686. | 8.2 | 56 |
| 68 | Supported and coordinated single metal site electrocatalysts. <i>Materials Today</i> , 2020, 37, 93-111. | 8.3 | 71 |
| 69 | Revealing Reaction Pathways of Collective Substituted Iron Fluoride Electrode for Lithium Ion Batteries. <i>ACS Nano</i> , 2020, 14, 10276-10283. | 7.3 | 14 |
| 70 | Accelerating CO ₂ Electroreduction to CO Over Pd Single-Atom Catalyst. <i>Advanced Functional Materials</i> , 2020, 30, 2000407. | 7.8 | 173 |
| 71 | Overcoming immiscibility toward bimetallic catalyst library. <i>Science Advances</i> , 2020, 6, eaaz6844. | 4.7 | 105 |
| 72 | Electrolyte design for LiF-rich solid-electrolyte interfaces to enable high-performance micro-sized alloy anodes for batteries. <i>Nature Energy</i> , 2020, 5, 386-397. | 19.8 | 621 |

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|----|---|------|-----------|
| 73 | Transition Metal Nitrides as Promising Catalyst Supports for Tuning CO/H ₂ Syngas Production from Electrochemical CO ₂ Reduction. <i>Angewandte Chemie</i> , 2020, 132, 11441-11444. | 1.6 | 11 |
| 74 | Transition Metal Nitrides as Promising Catalyst Supports for Tuning CO/H ₂ Syngas Production from Electrochemical CO ₂ Reduction. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 11345-11348. | 7.2 | 100 |
| 75 | Innentitelbild: Electrochemical Conversion of CO ₂ to Syngas with Controllable CO/H ₂ Ratios over Co and Ni Single-Atom Catalysts (<i>Angew. Chem.</i> 8/2020). <i>Angewandte Chemie</i> , 2020, 132, 2938-2938. | 1.6 | 0 |
| 76 | Using In-Situ Methods to Characterize Phase Changes in Charged Lithium Nickel Cobalt Aluminum Oxide Cathode Materials. <i>Microscopy and Microanalysis</i> , 2019, 25, 2030-2031. | 0.2 | 2 |
| 77 | <i>In Situ</i> Electron Microscopy Investigation of Sodiation of Titanium Disulfide Nanoflakes. <i>ACS Nano</i> , 2019, 13, 9421-9430. | 7.3 | 30 |
| 78 | 3D porous graphitic nanocarbon for enhancing the performance and durability of Pt catalysts: a balance between graphitization and hierarchical porosity. <i>Energy and Environmental Science</i> , 2019, 12, 2830-2841. | 15.6 | 219 |
| 79 | Expanded lithiation of titanium disulfide: Reaction kinetics of multi-step conversion reaction. <i>Nano Energy</i> , 2019, 63, 103882. | 8.2 | 21 |
| 80 | Unraveling the Voltage Decay Phenomenon in Li-Rich Layered Oxide Cathode of No Oxygen Activity. <i>Advanced Energy Materials</i> , 2019, 9, 1902258. | 10.2 | 51 |
| 81 | PdMo bimetallic for oxygen reduction catalysis. <i>Nature</i> , 2019, 574, 81-85. | 13.7 | 935 |
| 82 | Highly active atomically dispersed CoN ₄ fuel cell cathode catalysts derived from surfactant-assisted MOFs: carbon-shell confinement strategy. <i>Energy and Environmental Science</i> , 2019, 12, 250-260. | 15.6 | 691 |
| 83 | Phase evolution of conversion-type electrode for lithium ion batteries. <i>Nature Communications</i> , 2019, 10, 2224. | 5.8 | 99 |
| 84 | Large-diameter and heteroatom-doped graphene nanotubes decorated with transition metals as carbon hosts for lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 13389-13399. | 5.2 | 27 |
| 85 | Atomic Arrangement Engineering of Metallic Nanocrystals for Energy-Conversion Electrocatalysis. <i>Joule</i> , 2019, 3, 956-991. | 11.7 | 197 |
| 86 | Atomically Dispersed Iron Cathode Catalysts Derived from Binary Ligand-Based Zeolitic Imidazolate Frameworks with Enhanced Stability for PEM Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2019, 166, F3116-F3122. | 1.3 | 31 |
| 87 | Mn- and N-doped carbon as promising catalysts for oxygen reduction reaction: Theoretical prediction and experimental validation. <i>Applied Catalysis B: Environmental</i> , 2019, 243, 195-203. | 10.8 | 170 |
| 88 | Elucidating anionic oxygen activity in lithium-rich layered oxides. <i>Nature Communications</i> , 2018, 9, 947. | 5.8 | 241 |
| 89 | Nanoceria-Supported Single-Atom Platinum Catalysts for Direct Methane Conversion. <i>ACS Catalysis</i> , 2018, 8, 4044-4048. | 5.5 | 214 |
| 90 | Multistep Lithiation of Tin Sulfide: An Investigation Using <i>In Situ</i> Electron Microscopy. <i>ACS Nano</i> , 2018, 12, 3638-3645. | 7.3 | 50 |

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|-----|---|------|-----------|
| 91 | Interpenetrating Triphase Cobalt-Based Nanocomposites as Efficient Bifunctional Oxygen Electrocatalysts for Long-Lasting Rechargeable Zn-Air Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1702900. | 10.2 | 242 |
| 92 | Isolated Ni single atoms in graphene nanosheets for high-performance CO ₂ reduction. <i>Energy and Environmental Science</i> , 2018, 11, 893-903. | 15.6 | 811 |
| 93 | Coupled s-p-d Exchange in Facet-Controlled Pd ₃ Pb Tripods Enhances Oxygen Reduction Catalysis. <i>CheM</i> , 2018, 4, 359-371. | 5.8 | 100 |
| 94 | Nitrogen-Coordinated Single Cobalt Atom Catalysts for Oxygen Reduction in Proton Exchange Membrane Fuel Cells. <i>Advanced Materials</i> , 2018, 30, 1706758. | 11.1 | 788 |
| 95 | Panoramic Visualization of Lithiation of Copper Sulfide by In Situ STEM. <i>Microscopy and Microanalysis</i> , 2018, 24, 1498-1499. | 0.2 | 1 |
| 96 | In-situ Investigation of Multi-Step Lithiation of Tin Sulfide. <i>Microscopy and Microanalysis</i> , 2018, 24, 1864-1865. | 0.2 | 0 |
| 97 | Atomically dispersed manganese catalysts for oxygen reduction in proton-exchange membrane fuel cells. <i>Nature Catalysis</i> , 2018, 1, 935-945. | 16.1 | 1,075 |
| 98 | Pt alloy nanoparticles decorated on large-size nitrogen-doped graphene tubes for highly stable oxygen-reduction catalysts. <i>Nanoscale</i> , 2018, 10, 17318-17326. | 2.8 | 45 |
| 99 | Reversible Flat to Rippling Phase Transition in Fe Containing Layered Battery Electrode Materials. <i>Advanced Functional Materials</i> , 2018, 28, 1803896. | 7.8 | 18 |
| 100 | Ordered Pt ₃ Co Intermetallic Nanoparticles Derived from Metal-Organic Frameworks for Oxygen Reduction. <i>Nano Letters</i> , 2018, 18, 4163-4171. | 4.5 | 304 |
| 101 | Zn-air Batteries: Interpenetrating Triphase Cobalt-Based Nanocomposites as Efficient Bifunctional Oxygen Electrocatalysts for Long-Lasting Rechargeable Zn-Air Batteries (<i>Adv. Energy Mater.</i> 15/2018). <i>Advanced Energy Materials</i> , 2018, 8, 1870068. | 10.2 | 13 |
| 102 | High energy-density and reversibility of iron fluoride cathode enabled via an intercalation-extrusion reaction. <i>Nature Communications</i> , 2018, 9, 2324. | 5.8 | 136 |
| 103 | Avoiding Fracture in a Conversion Battery Material through Reaction with Larger Ions. <i>Joule</i> , 2018, 2, 1783-1799. | 11.7 | 65 |
| 104 | Reversible Flat to Rippling Phase Transition in Fe Containing Layered Battery Electrode Materials. <i>Advanced Functional Materials</i> , 2018, 28, . | 7.8 | 0 |
| 105 | Investigating the Kinetic Effect on Structural Evolution of Li _x Ni _{0.8} Co _{0.15} Al _{0.05} O ₂ Cathode Materials during the Initial Charge/Discharge. <i>Chemistry of Materials</i> , 2017, 29, 2708-2716. | 3.2 | 39 |
| 106 | Investigation of Thermal Stability of P ₂ Na _x CoO ₂ Cathode Materials for Sodium Ion Batteries Using Real-Time Electron Microscopy. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 18883-18888. | 4.0 | 48 |
| 107 | Strain Coupling of Conversion-type Fe ₃ O ₄ Thin Films for Lithium Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 7813-7816. | 7.2 | 59 |
| 108 | Strain Coupling of Conversion-type Fe ₃ O ₄ Thin Films for Lithium Ion Batteries. <i>Angewandte Chemie</i> , 2017, 129, 7921-7924. | 1.6 | 2 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 109 | Hardâ€“Soft Composite Carbon as a Longâ€“Cycling and Highâ€“Rate Anode for Potassiumâ€“Ion Batteries. <i>Advanced Functional Materials</i> , 2017, 27, 1700324. | 7.8 | 471 |
| 110 | Effects of proton irradiation on structural and electrochemical charge storage properties of TiO ₂ nanotube electrodes for lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 11815-11824. | 5.2 | 45 |
| 111 | Effect of Carbon and Binder on High Sulfur Loading Electrode for Li-S Battery Technology. <i>Electrochimica Acta</i> , 2017, 235, 399-408. | 2.6 | 32 |
| 112 | Quaternary FeCoNiMn-Based Nanocarbon Electrocatalysts for Bifunctional Oxygen Reduction and Evolution: Promotional Role of Mn Doping in Stabilizing Carbon. <i>ACS Catalysis</i> , 2017, 7, 8386-8393. | 5.5 | 131 |
| 113 | Single Atomic Iron Catalysts for Oxygen Reduction in Acidic Media: Particle Size Control and Thermal Activation. <i>Journal of the American Chemical Society</i> , 2017, 139, 14143-14149. | 6.6 | 1,215 |
| 114 | 3D polymer hydrogel for high-performance atomic iron-rich catalysts for oxygen reduction in acidic media. <i>Applied Catalysis B: Environmental</i> , 2017, 219, 629-639. | 10.8 | 111 |
| 115 | Kinetically-Driven Phase Transformation during Lithiation in Copper Sulfide Nanoflakes. <i>Nano Letters</i> , 2017, 17, 5726-5733. | 4.5 | 67 |
| 116 | Structural Evolution of Li _x Ni _y Mn _z Co _{1-y-z} O ₂ Cathode Materials during High-Rate Charge and Discharge. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 5758-5763. | 2.1 | 27 |
| 117 | Morphology Control of Carbon-Free Spinel NiCo ₂ O ₄ Catalysts for Enhanced Bifunctional Oxygen Reduction and Evolution in Alkaline Media. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 44567-44578. | 4.0 | 161 |
| 118 | Determination of the mechanism and extent of surface degradation in Ni-based cathode materials after repeated electrochemical cycling. <i>APL Materials</i> , 2016, 4, . | 2.2 | 24 |
| 119 | Tuning the Activity of Oxygen in LiNi _{0.8} Co _{0.15} Al _{0.05} O ₂ Battery Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 27762-27771. | 4.0 | 58 |
| 120 | Kinetic Phase Evolution of Spinel Cobalt Oxide during Lithiation. <i>ACS Nano</i> , 2016, 10, 9577-9585. | 7.3 | 54 |
| 121 | Degradation of Co ₃ O ₄ anode in rechargeable lithium-ion battery: a semi-empirical approach to the effect of conducting material content. <i>Journal of Solid State Electrochemistry</i> , 2016, 20, 345-352. | 1.2 | 6 |
| 122 | Using Real-Time Electron Microscopy To Explore the Effects of Transition-Metal Composition on the Local Thermal Stability in Charged Li _x Ni _y Mn _z Co _{1-y-z} O ₂ Cathode Materials. <i>Chemistry of Materials</i> , 2015, 27, 3927-3935. | 3.2 | 103 |
| 123 | Investigating the Reversibility of Structural Modifications of Li _x Ni _y Mn _z Co _{1-y-z} O ₂ Cathode Materials during Initial Charge/Discharge, at Multiple Length Scales. <i>Chemistry of Materials</i> , 2015, 27, 6044-6052. | 3.2 | 80 |
| 124 | Microstructural Characteristics of Tin Oxide-Based Thin Films on (0001) Al₂O₃ Substrates: Effects of Substrate Temperature and RF Power During Co-Sputtering. <i>Journal of Nanoscience and Nanotechnology</i> , 2014, 14, 8908-8914. | 0.9 | 4 |
| 125 | Understanding local degradation of cycled Ni-rich cathode materials at high operating temperature for Li-ion batteries. <i>Applied Physics Letters</i> , 2014, 105, . | 1.5 | 37 |
| 126 | Investigation of Changes in the Surface Structure of Li _x Ni _{0.8} Co _{0.15} Al _{0.05} O ₂ Cathode Materials Induced by the Initial Charge. <i>Chemistry of Materials</i> , 2014, 26, 1084-1092. | 3.2 | 308 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 127 | Investigating Local Degradation and Thermal Stability of Charged Nickel-Based Cathode Materials through Real-Time Electron Microscopy. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 15140-15147. | 4.0 | 90 |
| 128 | Correlating Structural Changes and Gas Evolution during the Thermal Decomposition of Charged $\text{Li}_{1-x}\text{Ni}_{0.8}\text{Co}_{0.15}\text{Al}_{0.05}\text{O}_2$ Cathode Materials. <i>Chemistry of Materials</i> , 2013, 25, 337-351. | 3.2 | 317 |
| 129 | p-Channel Oxide Thin Film Transistors Using Solution-Processed Copper Oxide. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 2417-2421. | 4.0 | 112 |
| 130 | Effects of Al Concentration on Microstructural Characteristics and Electrical Properties of Al-Doped ZnO Thin Films on Si Substrates by Atomic Layer Deposition. <i>Journal of Nanoscience and Nanotechnology</i> , 2012, 12, 5598-5603. | 0.9 | 6 |
| 131 | Irregular Electrical Conduction Types in Tin Oxide Thin Films Induced by Nanoscale Phase Separation. <i>Journal of the American Ceramic Society</i> , 2012, 95, 324-327. | 1.9 | 38 |
| 132 | A Facile Method for Morphological Control of MgZnO Nanostructures on GaAs Substrates and Their Optical Properties. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 7327-7330. | 0.9 | 3 |
| 133 | Effect of annealing temperature on the electrical performances of solution-processed InGaZnO thin film transistors. <i>Thin Solid Films</i> , 2011, 519, 5146-5149. | 0.8 | 115 |
| 134 | Role of the crystallinity of ZnO films in the electrical properties of bottom-gate thin film transistors. <i>Thin Solid Films</i> , 2011, 519, 6801-6805. | 0.8 | 15 |
| 135 | Influence of active layer thickness and annealing in zinc oxide TFT grown by atomic layer deposition. <i>Surface and Interface Analysis</i> , 2010, 42, 955-958. | 0.8 | 19 |
| 136 | Manipulating Interfacial Dissolutionâ€“Redeposition Dynamics to Resynthesize Electrode Surface Chemistry. <i>ACS Energy Letters</i> , 0, , 2588-2594. | 8.8 | 1 |