

Hong Li

List of Publications by Year in descending order

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Version: 2024-02-01

91
papers

15,788
citations

101543

36
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51608

86
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92
all docs

92
docs citations

92
times ranked

21248
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | From Bulk to Monolayer MoS ₂ : Evolution of Raman Scattering. <i>Advanced Functional Materials</i> , 2012, 22, 1385-1390. | 14.9 | 3,354 |
| 2 | Single-Layer MoS ₂ Phototransistors. <i>ACS Nano</i> , 2012, 6, 74-80. | 14.6 | 3,103 |
| 3 | Activating and optimizing MoS ₂ basal planes for hydrogen evolution through the formation of strained sulphur vacancies. <i>Nature Materials</i> , 2016, 15, 48-53. | 27.5 | 2,021 |
| 4 | Fabrication of Single- and Multilayer MoS ₂ Film-Based Field-Effect Transistors for Sensing NO at Room Temperature. <i>Small</i> , 2012, 8, 63-67. | 10.0 | 1,346 |
| 5 | Electrochemical generation of sulfur vacancies in the basal plane of MoS ₂ for hydrogen evolution. <i>Nature Communications</i> , 2017, 8, 15113. | 12.8 | 555 |
| 6 | Enhancing Electrocatalytic Water Splitting by Strain Engineering. <i>Advanced Materials</i> , 2019, 31, e1807001. | 21.0 | 470 |
| 7 | Carbon Nanomaterials for Next-Generation Interconnects and Passives: Physics, Status, and Prospects. <i>IEEE Transactions on Electron Devices</i> , 2009, 56, 1799-1821. | 3.0 | 390 |
| 8 | Optoelectronic crystal of artificial atoms in strain-textured molybdenum disulphide. <i>Nature Communications</i> , 2015, 6, 7381. | 12.8 | 331 |
| 9 | Optical Identification of Single- and Few-Layer MoS ₂ Sheets. <i>Small</i> , 2012, 8, 682-686. | 10.0 | 290 |
| 10 | Kinetic Study of Hydrogen Evolution Reaction over Strained MoS ₂ with Sulfur Vacancies Using Scanning Electrochemical Microscopy. <i>Journal of the American Chemical Society</i> , 2016, 138, 5123-5129. | 13.7 | 244 |
| 11 | Layer Thinning and Etching of Mechanically Exfoliated MoS ₂ Nanosheets by Thermal Annealing in Air. <i>Small</i> , 2013, 9, 3314-3319. | 10.0 | 229 |
| 12 | Mixed Low-Dimensional Nanomaterial: 2D Ultranarrow MoS ₂ Inorganic Nanoribbons Encapsulated in Quasi-1D Carbon Nanotubes. <i>Journal of the American Chemical Society</i> , 2010, 132, 13840-13847. | 13.7 | 218 |
| 13 | Fabrication of Graphene Nanomesh by Using an Anodic Aluminum Oxide Membrane as a Template. <i>Advanced Materials</i> , 2012, 24, 4138-4142. | 21.0 | 183 |
| 14 | Enhancing Catalytic CO Oxidation over Co ₃ O ₄ Nanowires by Substituting Co ²⁺ with Cu ²⁺ . <i>ACS Catalysis</i> , 2015, 5, 4485-4491. | 11.2 | 183 |
| 15 | Catalytic Polysulfide Conversion and Physicochemical Confinement for Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 1904010. | 19.5 | 165 |
| 16 | Spin-Orbit Splitting in Single-Layer MoS_2 Revealed by Triply Resonant Raman Scattering. <i>Physical Review Letters</i> , 2013, 111, 126801. | 7.8 | 137 |
| 17 | Postchemistry of Organic Particles: When TTF Microparticles Meet TCNQ Microstructures in Aqueous Solution. <i>Journal of the American Chemical Society</i> , 2010, 132, 6926-6928. | 13.7 | 125 |
| 18 | One-Step Hydrothermal Deposition of Ni:FeOOH onto Photoanodes for Enhanced Water Oxidation. <i>ACS Energy Letters</i> , 2016, 1, 624-632. | 17.4 | 122 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Rapid Flame Synthesis of Atomically Thin MoO ₃ down to Monolayer Thickness for Effective Hole Doping of WSe ₂ . Nano Letters, 2017, 17, 3854-3861. | 9.1 | 120 |
| 20 | A binder-free CNT network-MoS ₂ composite as a high performance anode material in lithium ion batteries. Chemical Communications, 2014, 50, 3338-3340. | 4.1 | 111 |
| 21 | All-solid-state flexible zinc-air battery with polyacrylamide alkaline gel electrolyte. Journal of Power Sources, 2020, 450, 227653. | 7.8 | 108 |
| 22 | Raw biomass electroreforming coupled to green hydrogen generation. Nature Communications, 2021, 12, 2008. | 12.8 | 104 |
| 23 | Layered MoS ₂ Hollow Spheres for Highly Efficient Photothermal Therapy of Rabbit Liver Orthotopic Transplantation Tumors. Small, 2016, 12, 2046-2055. | 10.0 | 101 |
| 24 | Chemical Reaction Between Ag Nanoparticles and TCNQ Microparticles in Aqueous Solution. Small, 2011, 7, 1242-1246. | 10.0 | 92 |
| 25 | A systematic study of the atmospheric pressure growth of large-area hexagonal crystalline boron nitride film. Journal of Materials Chemistry C, 2014, 2, 1650. | 5.5 | 72 |
| 26 | Rambutan-like hollow carbon spheres decorated with vacancy-rich nickel oxide for energy conversion and storage. , 2020, 2, 122-130. | | 68 |
| 27 | High-Performance Ultrathin BiVO ₄ Photoanode on Textured Polydimethylsiloxane Substrates for Solar Water Splitting. ACS Energy Letters, 2016, 1, 68-75. | 17.4 | 66 |
| 28 | Design and synthesis of two-dimensional covalent organic frameworks with four-arm cores: prediction of remarkable ambipolar charge-transport properties. Materials Horizons, 2019, 6, 1868-1876. | 12.2 | 62 |
| 29 | Stabilizing Silicon Photocathodes by Solution-Deposited Ni-Fe Layered Double Hydroxide for Efficient Hydrogen Evolution in Alkaline Media. ACS Energy Letters, 2017, 2, 1939-1946. | 17.4 | 61 |
| 30 | Ambipolar to Unipolar Conversion in Graphene Field-Effect Transistors. ACS Nano, 2011, 5, 3198-3203. | 14.6 | 60 |
| 31 | Photocatalytic Degradation of Plastic Waste: A Mini Review. Micromachines, 2021, 12, 907. | 2.9 | 55 |
| 32 | Cold plasma treatment of catalytic materials: a review. Journal Physics D: Applied Physics, 2021, 54, 333001. | 2.8 | 50 |
| 33 | Switchable Surface Coating for Bifunctional Passive Radiative Cooling and Solar Heating. Advanced Functional Materials, 2022, 32, . | 14.9 | 47 |
| 34 | Core-shell CNT-Ni-Si nanowires as a high performance anode material for lithium ion batteries. Carbon, 2013, 63, 54-60. | 10.3 | 41 |
| 35 | Solar-Driven Alkaline Water Electrolysis with Multifunctional Catalysts. Advanced Functional Materials, 2020, 30, 2002138. | 14.9 | 41 |
| 36 | Beyond imaging: Applications of atomic force microscopy for the study of Lithium-ion batteries. Ultramicroscopy, 2019, 204, 34-48. | 1.9 | 39 |

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|----|--|------|-----------|
| 37 | Manganese dioxides for oxygen electrocatalysis in energy conversion and storage systems over full pH range. <i>Journal of Power Sources</i> , 2021, 494, 229779. | 7.8 | 37 |
| 38 | Functionalized MXene Enabled Sustainable Water Harvesting and Desalination. <i>Advanced Sustainable Systems</i> , 2020, 4, 2000102. | 5.3 | 36 |
| 39 | Unique Carbon-Nanotube Field-Effect Transistors with Asymmetric Source and Drain Contacts. <i>Nano Letters</i> , 2008, 8, 64-68. | 9.1 | 33 |
| 40 | Solar-driven hydrogen generation coupled with urea electrolysis by an oxygen vacancy-rich catalyst. <i>Chemical Engineering Journal</i> , 2021, 414, 128753. | 12.7 | 32 |
| 41 | Pseudo-magnetic field-induced slow carrier dynamics in periodically strained graphene. <i>Nature Communications</i> , 2021, 12, 5087. | 12.8 | 31 |
| 42 | Carbon nanotube bumps for the flip chip packaging system. <i>Nanoscale Research Letters</i> , 2012, 7, 105. | 5.7 | 29 |
| 43 | Family-Dependent Rectification Characteristics in Ultra-Short Graphene Nanoribbon p-n Junctions. <i>Journal of Physical Chemistry C</i> , 2011, 115, 8547-8554. | 3.1 | 28 |
| 44 | Interface covalent bonding endowing high-sulfur-loading paper cathode with robustness for energy-dense, compact and foldable lithium-sulfur batteries. <i>Chemical Engineering Journal</i> , 2021, 412, 128562. | 12.7 | 27 |
| 45 | Rational design of stable sulfur vacancies in molybdenum disulfide for hydrogen evolution. <i>Journal of Catalysis</i> , 2020, 382, 320-328. | 6.2 | 26 |
| 46 | Complementary Logic Gate Arrays Based on Carbon Nanotube Network Transistors. <i>Small</i> , 2013, 9, 813-819. | 10.0 | 25 |
| 47 | Compressive Strain in Core-Shell Au-Pd Nanoparticles Introduced by Lateral Confinement of Deformation Twinning to Enhance the Oxidation Reduction Reaction Performance. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 46902-46911. | 8.0 | 25 |
| 48 | Unraveling the degradation mechanism for the hydrogen storage property of Fe nanocatalyst-modified MgH ₂ . <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 3874-3884. | 6.0 | 24 |
| 49 | Carbon-nanotube-based single-electron/hole transistors. <i>Applied Physics Letters</i> , 2006, 88, 013508. | 3.3 | 23 |
| 50 | Ultrastable molybdenum disulfide-based electrocatalyst for hydrogen evolution in acidic media. <i>Journal of Power Sources</i> , 2020, 456, 227998. | 7.8 | 23 |
| 51 | Morphology controlling of silver by plasma engineering for electrocatalytic carbon dioxide reduction. <i>Journal of Power Sources</i> , 2020, 453, 227846. | 7.8 | 22 |
| 52 | Mechanistic Investigation of Electrostatic Field-Enhanced Water Evaporation. <i>Advanced Science</i> , 2021, 8, e2100875. | 11.2 | 21 |
| 53 | Porous silver microrods by plasma vulcanization activation for enhanced electrocatalytic carbon dioxide reduction. <i>Journal of Colloid and Interface Science</i> , 2022, 606, 793-799. | 9.4 | 21 |
| 54 | Photovoltaic-powered supercapacitors for driving overall water splitting: A dual-modulated 3D architecture. , 2022, 4, 1262-1273. | | 21 |

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|----|---|------|-----------|
| 55 | Influence of Triton X-100 on the characteristics of carbon nanotube field-effect transistors. <i>Nanotechnology</i> , 2006, 17, 668-673. | 2.6 | 20 |
| 56 | Vertical Silver@Silver Chloride Core-Shell Nanowire Array for Carbon Dioxide Electroreduction. <i>ACS Applied Energy Materials</i> , 2019, 2, 6163-6169. | 5.1 | 20 |
| 57 | Rapid fabrication of complex nanostructures using room-temperature ultrasonic nanoimprinting. <i>Nature Communications</i> , 2021, 12, 3146. | 12.8 | 20 |
| 58 | One-dimensional metal-organic nanowires-derived catalyst of carbon nanobamboos with encapsulated cobalt nanoparticles for oxygen reduction. <i>Journal of Catalysis</i> , 2021, 394, 366-375. | 6.2 | 19 |
| 59 | Sub-ambient radiative cooling under tropical climate using highly reflective polymeric coating. <i>Solar Energy Materials and Solar Cells</i> , 2022, 240, 111723. | 6.2 | 18 |
| 60 | Physical device modeling of carbon nanotube/GaAs photovoltaic cells. <i>Applied Physics Letters</i> , 2010, 96, 043501. | 3.3 | 17 |
| 61 | Nanoscale Contacts between Carbon Nanotubes and Metallic Pads. <i>ACS Nano</i> , 2009, 3, 4117-4121. | 14.6 | 13 |
| 62 | Novel C fibers@MoS ₂ nanoplates core-shell composite for efficient solar-driven photocatalytic degradation of Cr(VI) and RhB. <i>Journal of Alloys and Compounds</i> , 2018, 753, 378-387. | 5.5 | 12 |
| 63 | Current instability of carbon nanotube field effect transistors. <i>Nanotechnology</i> , 2007, 18, 424035. | 2.6 | 11 |
| 64 | Surface group-modified MXene nano-flake doping of monolayer tungsten disulfides. <i>Nanoscale Advances</i> , 2019, 1, 4783-4789. | 4.6 | 11 |
| 65 | Impact of the CNT growth process on gold metallization dedicated to RF interconnect applications. <i>International Journal of Microwave and Wireless Technologies</i> , 2010, 2, 463-469. | 1.9 | 10 |
| 66 | Negative rectification and negative differential resistance in nanoscale single-walled carbon nanotube p-n junctions. <i>Theoretical Chemistry Accounts</i> , 2011, 130, 353-359. | 1.4 | 10 |
| 67 | Two-Dimensional Palladium Phosphoronitride for Oxygen Reduction. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 12156-12167. | 8.0 | 10 |
| 68 | Global and local charge trapping in carbon nanotube field-effect transistors. <i>Nanotechnology</i> , 2008, 19, 175203. | 2.6 | 9 |
| 69 | Improving oxygen vacancies by cobalt doping in MoO ₂ nanorods for efficient electrocatalytic hydrogen evolution reaction. <i>Nano Select</i> , 2021, 2, 2148-2158. | 3.7 | 9 |
| 70 | Identifying the mechanisms of p-to-n conversion in unipolar graphene field-effect transistors. <i>Nanotechnology</i> , 2013, 24, 195202. | 2.6 | 8 |
| 71 | Tunable ambipolar Coulomb blockade characteristics in carbon nanotubes-gated carbon nanotube field-effect transistors. <i>Applied Physics Letters</i> , 2009, 94, 022101. | 3.3 | 7 |
| 72 | Self-Aligned Sub-10-nm Nanogap Electrode Array for Large-Scale Integration. <i>Small</i> , 2011, 7, 2195-2200. | 10.0 | 7 |

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|----|--|-----|-----------|
| 73 | Molybdenum disulfide catalyzed tungsten oxide for on-chip acetone sensing. Applied Physics Letters, 2016, 109, 133103. | 3.3 | 7 |
| 74 | In Situ Growth and Activation of Ag/Ag ₂ S Nanowire Clusters by H ₂ S Plasma Treatment for Promoted Electrocatalytic CO ₂ Reduction. Advanced Sustainable Systems, 2021, 5, 2100256. | 5.3 | 7 |
| 75 | Electroreforming of Biomass for Value-Added Products. Micromachines, 2021, 12, 1405. | 2.9 | 7 |
| 76 | Interpretation of Coulomb oscillations in carbon-nanotube-based field-effect transistors. Physical Review B, 2006, 73, . | 3.2 | 6 |
| 77 | Development of a CMOS-Compatible Carbon Nanotube Array Transfer Method. Micromachines, 2021, 12, 95. | 2.9 | 6 |
| 78 | The criteria to achieving sub-ambient radiative cooling and its limits in tropical daytime. Building and Environment, 2022, 221, 109281. | 6.9 | 6 |
| 79 | Two-dimensional palladium diselenide for the oxygen reduction reaction. Materials Chemistry Frontiers, 2021, 5, 4970-4980. | 5.9 | 5 |
| 80 | Charge-Trapping Effects Caused by Ammonia in Carbon Nanotubes. Journal of Nanoscience and Nanotechnology, 2007, 7, 335-338. | 0.9 | 4 |
| 81 | Synthesis and Characterization of Highly Twisted and Bulky Tetraoctyloxybiphenyl-Containing Polyfluorene Copolymers: Toward Efficient Blue Polymer Light Emitting Diodes. Journal of Nanoscience and Nanotechnology, 2007, 7, 3810-3814. | 0.9 | 3 |
| 82 | Theoretical study of the performance for short channel carbon nanotube transistors with asymmetric contacts. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 6940-6943. | 2.1 | 3 |
| 83 | Carbon nanotube field-effect transistors functionalized with self-assembly gold nanocrystals. Nanotechnology, 2010, 21, 095202. | 2.6 | 3 |
| 84 | Fabrication and characterization of carbon nanotube intermolecular p-n junctions. Solid-State Electronics, 2012, 77, 46-50. | 1.4 | 3 |
| 85 | CHARGE STORAGE IN CARBON NANOTUBE FIELD-EFFECT TRANSISTORS. International Journal of Nanoscience, 2006, 05, 553-557. | 0.7 | 2 |
| 86 | Carbon Nanotube-Gated Carbon Nanotube Field-Effect Transistors. Nanoscience and Nanotechnology Letters, 2010, 2, 21-25. | 0.4 | 1 |
| 87 | Electrical transport in carbon nanotube intermolecular p-n junctions. , 2011, , . | | 1 |
| 88 | Carbon-nanotube-based RF components with multiple applications. , 2013, , . | | 1 |
| 89 | Low-Power Magnetron Sputtering Deposition of Antimonene Nanofilms for Water Splitting Reaction. Micromachines, 2022, 13, 489. | 2.9 | 1 |
| 90 | The influence of titanium nitride barrier layer on the properties of CNT bundles. , 2013, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|---|----|-----------|
| 91 | Study of carrier dynamics in strained graphene with giant pseudo-magnetic fields. , 2022, , . | | 0 |