# Le He

List of Publications by Year
in descending order



| 106 | 6,721 | 53794 45 | 62596 80 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 111 | 111 | 111 | 7953 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Promises of Main Group Metalâ€“Based Nanostructured Materials for Electrochemical CO<sub>2</sub> Reduction to Formate. Advanced Energy Materials, 2020, 10, 1902338. | 19.5 | 384 |
| 2 | Magnetic Assembly Route to Colloidal Responsive Photonic Nanostructures. Accounts of Chemical Research, 2012, 45, 1431-1440. | 15.6 | 327 |
| 3 | Magnetically Recoverable Coreâ€“Shell Nanocomposites with Enhanced Photocatalytic Activity. Chemistry - A European Journal, 2010, 16, 6243-6250. | 3.3 | 310 |
| 4 | Magnetochromatic Microspheres: Rotating Photonic Crystals. Journal of the American Chemical Society, 2009, 131, 15687-15694. | 13.7 | 246 |
| 5 | Rewritable Photonic Paper with Hygroscopic Salt Solution as Ink. Advanced Materials, 2009, 21, 4259-4264. | 21.0 | 232 |
| 6 | Greenhouse-inspired supra-photothermal CO2 catalysis. Nature Energy, 2021, 6, 807-814. | 39.5 | 198 |
| 7 | Magnetic field guided colloidal assembly. Materials Today, 2013, 16, 110-116. | 14.2 | 192 |
| 8 | Photocatalytic colour switching of redox dyes for ink-free light-printable rewritable paper. Nature Communications, 2014, 5, 5459. | 12.8 | 183 |
| 9 | Assembly of Magnetically Tunable Photonic Crystals in Nonpolar Solvents. Journal of the American Chemical Society, 2009, 131, 3484-3486. | 13.7 | 172 |
| 10 | Niobium and Titanium Carbides (MXenes) as Superior Photothermal Supports for CO<sub>2</sub> Photocatalysis. ACS Nano, 2021, 15, 5696-5705. | 14.6 | 164 |
| 11 | Ambient Electrosynthesis of Ammonia: Electrode Porosity and Composition Engineering. Angewandte Chemie - International Edition, 2018, 57, 12360-12364. | 13.8 | 160 |
| 12 | Thermoresponsive Assembly of Charged Gold Nanoparticles and Their Reversible Tuning of Plasmon Coupling. Angewandte Chemie - International Edition, 2012, 51, 6373-6377. | 13.8 | 151 |
| 13 | Photocatalytic Hydrogenation of Carbon Dioxide with High Selectivity to Methanol at Atmospheric Pressure. Joule, 2018, 2, 1369-1381. | 24.0 | 148 |
| 14 | Magnetically Responsive Photonic Nanochains. Angewandte Chemie - International Edition, 2011, 50, 3747-3750. | 13.8 | 145 |
| 15 | Magnetic Assembly and Fieldâ€Tuning of Ellipsoidalâ€Nanoparticleâ€Based Colloidal Photonic Crystals. Angewandte Chemie - International Edition, 2015, 54, 7077-7081. | 13.8 | 135 |
| 16 | Visible and Nearâ€Infrared Photothermal Catalyzed Hydrogenation of Gaseous CO<sub>2</sub> over Nanostructured Pd@Nb<sub>2</sub>O<sub>5</sub>. Advanced Science, 2016, 3, 1600189. | 11.2 | 133 |
| 17 | Magnetically Actuated Liquid Crystals. Nano Letters, 2014, 14, 3966-3971. | 9.1 | 125 |
| 18 | Spatial Separation of Charge Carriers in In<sub>2</sub>O<sub>3â€“x</sub>(OH)<sub>y</sub> Nanocrystal Superstructures for Enhanced Gas-Phase Photocatalytic Activity. ACS Nano, 2016, 10, 5578-5586. | 14.6 | 118 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Mesoporous TiO<sub>2</sub> Nanocrystal Clusters for Selective Enrichment of Phosphopeptides. Analytical Chemistry, 2010, 82, 7249-7258. | 6.5 | 114 |
| 20 | Cobalt Plasmonic Superstructures Enable Almost 100% Broadband Photon Efficient CO<sub>2</sub> Photocatalysis. Advanced Materials, 2020, 32, e2000014. | 21.0 | 109 |
| 21 | Magnetic Assembly of Nonmagnetic Particles into Photonic Crystal Structures. Nano Letters, 2010, 10, 4708-4714. | 9.1 | 100 |
| 22 | Magnetic Tuning of Plasmonic Excitation of Gold Nanorods. Journal of the American Chemical Society, 2013, 135, 15302-15305. | 13.7 | 98 |
| 23 | Channel-restricted meniscus self-assembly for uniformly aligned growth of single-crystal arrays of organic semiconductors. Materials Today, 2019, 24, 17-25. | 14.2 | 98 |
| 24 | Heterogeneous reduction of carbon dioxide by hydride-terminated silicon nanocrystals. Nature Communications, 2016, 7, 12553. | 12.8 | 93 |
| 25 | Tailoring Surface Frustrated Lewis Pairs of In<sub>2</sub>O<sub>3â˜'</sub><sub>x</sub>(OH)<sub>y</sub> for Gasâ€Phase Heterogeneous Photocatalytic Reduction of CO<sub>2</sub> by Isomorphous Substitution of In<sup>3+</sup> with Bi<sup>3+</sup>. Advanced Science, 2018, 5, 1700732. | 11.2 | 91 |
| 26 | Nanocrystalline TiO<sub>2</sub>-Catalyzed Photoreversible Color Switching. Nano Letters, 2014, 14, 1681-1686. | 9.1 | 90 |
| 27 | Carrier dynamics and the role of surface defects: Designing a photocatalyst for gas-phase CO <sub>2</sub> reduction. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E8011-E8020. | 7.1 | 89 |
| 28 | Epitaxial Growth of Shape-Controlled Bi<sub>2</sub>Te<sub>3</sub>â˜'Te Heterogeneous Nanostructures. Journal of the American Chemical Society, 2010, 132, 17316-17324. | 13.7 | 87 |
| 29 | Magnetically induced colloidal assembly into field-responsive photonic structures. Nanoscale, 2011, 3, 177-183. | 5.6 | 87 |
| 30 | Probing Nanoparticleâ˜'Protein Interaction by Capillary Electrophoresis. Analytical Chemistry, 2010, 82, 7460-7466. | 6.5 | 82 |
| 31 | The role of adsorption in photocatalytic degradation of ibuprofen under visible light irradiation by BiOBr microspheres. Chemical Engineering Journal, 2016, 297, 139-147. | 12.7 | 73 |
| 32 | Oxygen-producing catalase-based prodrug nanoparticles overcoming resistance in hypoxia-mediated chemo-photodynamic therapy. Acta Biomaterialia, 2020, 112, 234-249. | 8.3 | 69 |
| 33 | Experimentally unveiling the origin of tunable selectivity for CO2 hydrogenation over Ni-based catalysts. Applied Catalysis B: Environmental, 2021, 292, 120191. | 20.2 | 66 |
| 34 | Monitoring the Shape Evolution of Silver Nanoplates: A Marker Study. Angewandte Chemie - International Edition, 2012, 51, 552-555. | 13.8 | 63 |
| 35 | Magnetically rewritable photonic ink based on superparamagnetic nanochains. Journal of Materials Chemistry C, 2013, 1, 6151. | 5.5 | 58 |
| 36 | Enhancing photothermal CO2 catalysis by thermal insulating substrates. Rare Metals, 2020, 39, 881-886. | 7.1 | 57 |

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|---|---|---|---|
| 37 | Self-assembly of superparamagnetic magnetite particles into peapod-like structures and their application in optical modulation. Journal of Materials Chemistry, 2010, 20, 7965. | 6.7 | 55 |
| 38 | Realâ€Time Optofluidic Synthesis of Magnetochromatic Microspheres for Reversible Structural Color Patterning. Small, 2011, 7, 1163-1168. | 10.0 | 54 |
| 39 | Self-assembly and magnetically induced phase transition of three-dimensional colloidal photonic crystals. Nanoscale, 2012, 4, 4438. | 5.6 | 52 |
| 40 | Photonic Labyrinths: Two-Dimensional Dynamic Magnetic Assembly and in Situ Solidification. Nano Letters, 2013, 13, 1770-1775. | 9.1 | 52 |
| 41 | Effect of Precursor Selection on the Photocatalytic Performance of Indium Oxide Nanomaterials for Gas-Phase CO<sub>2</sub> Reduction. Chemistry of Materials, 2016, 28, 4160-4168. | 6.7 | 52 |
| 42 | Ultraminiaturized Stretchable Strain Sensors Based on Single Silicon Nanowires for Imperceptible Electronic Skins. Nano Letters, 2020, 20, 2478-2485. | 9.1 | 51 |
| 43 | Colloidal Crystallization and Structural Changes in Suspensions of Silica/Magnetite Coreâ€“Shell Nanoparticles. Langmuir, 2012, 28, 14777-14783. | 3.5 | 46 |
| 44 | Magnetic Assembly and Patterning of General Nanoscale Materials through Nonmagnetic Templates. Nano Letters, 2013, 13, 264-271. | 9.1 | 46 |
| 45 | Breath-Taking Patterns: Discontinuous Hydrophilic Regions for Photonic Crystal Beads Assembly and Patterns Revisualization. ACS Applied Materials & Interfaces, 2017, 9, 38117-38124. | 8.0 | 46 |
| 46 | Manipulating Graphene Mobility and Charge Neutral Point with Ligand-Bound Nanoparticles as Charge Reservoir. Nano Letters, 2010, 10, 4989-4993. | 9.1 | 45 |
| 47 | Assembly and Photonic Properties of Superparamagnetic Colloids in Complex Magnetic Fields. Langmuir, 2011, 27, 13444-13450. | 3.5 | 45 |
| 48 | Determination of Solvation Layer Thickness by a Magnetophotonic Approach. ACS Nano, 2012, 6, 4196-4202. | 14.6 | 44 |
| 49 | Porous hollow palladium nanoplatform for imaging-guided trimodal chemo-, photothermal-, and radiotherapy. Nano Research, 2018, 11, 2796-2808. | 10.4 | 41 |
| 50 | Tuning the Colloidal Crystal Structure of Magnetic Particles by External Field. Angewandte Chemie - International Edition, 2015, 54, 1803-1807. | 13.8 | 39 |
| 51 | Singleâ€Stimulusâ€Induced Modulation of Multiple Optical Properties. Advanced Materials, 2019, 31, e1900388. | 21.0 | 39 |
| 52 | Charge Stabilization of Superparamagnetic Colloids for Highâ€Performance Responsive Photonic Structures. Small, 2012, 8, 3795-3799. | 10.0 | 38 |
| 53 | Morphology-controlled In<sub>2</sub>O<sub>3</sub> nanostructures enhance the performance of photoelectrochemical water oxidation. Nanoscale, 2015, 7, 3683-3693. | 5.6 | 37 |
| 54 | CO<sub>2</sub> Footprint of Thermal Versus Photothermal CO<sub>2</sub> Catalysis. Small, 2021, 17, e2007025. | 10.0 | 35 |

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|---|---|---|---|
| 55 | Promoting Charge Separation in Semiconductor Nanocrystal Superstructures for Enhanced Photocatalytic Activity. Advanced Materials Interfaces, 2018, 5, 1701694. | 3.7 | 33 |
| 56 | Salt-templated growth of monodisperse hollow nanostructures. Journal of Materials Chemistry A, 2019, 7, 1404-1409. | 10.3 | 33 |
| 57 | Co<sub>9</sub>S<sub>8</sub> Nanoparticles for Hydrogen Evolution. ACS Applied Nano Materials, 2021, 4, 1776-1785. | 5.0 | 33 |
| 58 | Emerging applications of MXene materials in CO2 photocatalysis. FlatChem, 2021, 28, 100252. | 5.6 | 31 |
| 59 | Magnetically responsive photonic films with high tunability and stability. Nano Research, 2015, 8, 611-620. | 10.4 | 30 |
| 60 | Gram-scale synthesis of superparamagnetic Fe<sub>3</sub>O<sub>4</sub>nanocrystal clusters with long-term charge stability for highly stable magnetically responsive photonic crystals. Nanoscale, 2016, 8, 19036-19042. | 5.6 | 29 |
| 61 | Centimeter-Long Single-Crystalline Si Nanowires. Nano Letters, 2017, 17, 7323-7329. | 9.1 | 29 |
| 62 | Localâ€Curvatureâ€Controlled Nonâ€Epitaxial Growth of Hierarchical Nanostructures. Angewandte Chemie - International Edition, 2018, 57, 3772-3776. | 13.8 | 28 |
| 63 | Superparamagnetic nanocrystal clusters for enrichment of low-abundance peptides and proteins. Chemical Communications, 2010, 46, 6174. | 4.1 | 27 |
| 64 | Magnetochromatic Thinâ€Film Microplates. Advanced Materials, 2015, 27, 86-92. | 21.0 | 27 |
| 65 | Ruthenium Nanoparticles Supported on Mg(OH)<sub>2</sub> Microflowers as Catalysts for Photothermal Carbon Dioxide Hydrogenation. ACS Applied Nano Materials, 2020, 3, 3028-3033. | 5.0 | 25 |
| 66 | Stable Cu Catalysts Supported by Twoâ€dimensional SiO<sub>2</sub> with Strong Metalâ€“Support Interaction. Advanced Science, 2022, 9, e2104972. | 11.2 | 25 |
| 67 | Ru-Catalyzed Reverse Water Gas Shift Reaction with Near-Unity Selectivity and Superior Stability. , 2021, 3, 1652-1659. | | 24 |
| 68 | Solutionâ€“Liquidâ€“Solid Growth and Catalytic Applications of Silica Nanorod Arrays. Advanced Science, 2020, 7, 2000310. | 11.2 | 22 |
| 69 | Stabilization of Exposed Metal Nanocrystals in Highâ€Temperature Heterogeneous Catalysis. Advanced Materials, 2022, 34, e2108727. | 21.0 | 22 |
| 70 | A general and mild route to highly dispersible anisotropic magnetic colloids for sensing weak magnetic fields. Journal of Materials Chemistry C, 2018, 6, 5528-5535. | 5.5 | 21 |
| 71 | Allâ€Earthâ€Abundant Photothermal Silicon Platform for CO<sub>2</sub> Catalysis with Nearly 100% Sunlight Harvesting Ability. Solar Rrl, 2021, 5, 2000387. | 5.8 | 21 |
| 72 | A core-shell catalyst design boosts the performance of photothermal reverse water gas shift catalysis. Science China Materials, 2021, 64, 2212-2220. | 6.3 | 21 |

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|---|---|---|---|
| 73 | Improving Structural and Moisture Stability of P2-Layered Cathode Materials for Sodium-Ion Batteries. ACS Applied Energy Materials, 2022, 5, 1252-1261. | 5.1 | 21 |
| 74 | Heterostructure Engineering of a Reverse Water Gas Shift Photocatalyst. Advanced Science, 2019, 6, 1902170. | 11.2 | 20 |
| 75 | The diameter-dependent photoelectrochemical performance of silicon nanowires. Chemical Communications, 2016, 52, 1369-1372. | 4.1 | 19 |
| 76 | Localâ€Curvatureâ€Controlled Nonâ€Epitaxial Growth of Hierarchical Nanostructures. Angewandte Chemie, 2018, 130, 3834-3838. | 2.0 | 19 |
| 77 | Silica Nanocapsules with Unusual Shapes Accessed by Simultaneous Growth of the Template and Silica Nanostructure. Chemistry of Materials, 2020, 32, 575-581. | 6.7 | 18 |
| 78 | Formation of colloidal nanocrystal clusters of iron oxide by controlled ligand stripping. Chemical Communications, 2016, 52, 128-131. | 4.1 | 17 |
| 79 | A mechanistic study of silica-etching by hot water. Physical Chemistry Chemical Physics, 2018, 20, 1440-1446. | 2.8 | 17 |
| 80 | Exploration of Possible Binding Sites of Nanoparticles on Protein by Cross-Linking Chemistry Coupled with Mass Spectrometry. Analytical Chemistry, 2011, 83, 6929-6934. | 6.5 | 15 |
| 81 | Rugby-ball-like photonic crystal supraparticles with non-close-packed structures and multiple magneto-optical responses. Journal of Materials Chemistry C, 2019, 7, 15042-15048. | 5.5 | 15 |
| 82 | Radioiodinated tyrosine based carbon dots with efficient renal clearance for single photon emission computed tomography of tumor. Nano Research, 2019, 12, 3037-3043. | 10.4 | 14 |
| 83 | Lithographic compartmentalization of emulsion droplet templates for microparticles with multiple nanostructured compartments. Chemical Communications, 2012, 48, 6091. | 4.1 | 12 |
| 84 | One-step growth of large-area silicon nanowire fabrics for high-performance multifunctional wearable sensors. Nano Research, 2019, 12, 2723-2728. | 10.4 | 11 |
| 85 | Cobaltâ€Sputtered Anodic Aluminum Oxide Membrane for Efficient Photothermal CO<sub>2</sub> Hydrogenation. ChemNanoMat, 2021, 7, 1008-1012. | 2.8 | 11 |
| 86 | Fully Alloying AuAg Nanorods in a Photothermal Nano-Oven: Superior Plasmonic Property and Enhanced Chemical Stability. ACS Omega, 2018, 3, 18623-18629. | 3.5 | 10 |
| 87 | Dye colour switching by hydride-terminated silicon particles and its application as an oxygen indicator. Journal of Materials Chemistry C, 2016, 4, 4577-4583. | 5.5 | 9 |
| 88 | A general and facile approach to disperse hydrophobic nanocrystals in water with enhanced long-term stability. Journal of Materials Chemistry C, 2017, 5, 3065-3071. | 5.5 | 9 |
| 89 | Photonic nanostructures of nanodiscs with multiple magneto-optical properties. Journal of Materials Chemistry C, 2020, 8, 16067-16072. | 5.5 | 9 |
| 90 | Dispersing hydrophilic nanoparticles in nonaqueous solvents with superior long-term stability. RSC Advances, 2017, 7, 25535-25541. | 3.6 | 8 |

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| 91 | Oxygen Microbubble Generator Enabled by Tunable Catalytic Microtubes. Chemistry - an Asian Journal, 2019, 14, 2431-2434. | 3.3 | 8 |
| 92 | Magnetic assembly and manipulation of Janus photonic crystal supraparticles from a colloidal mixture of spheres and ellipsoids. Journal of Materials Chemistry C, 2021, 9, 11788-11793. | 5.5 | 8 |
| 93 | Superparamagnetic Magnetite Nanoparticle Superstructures for Optical Modulation/Chopping. Journal of Physical Chemistry C, 2010, 114, 17868-17873. | 3.1 | 7 |
| 94 | A Step-by-Step Strategy for Controlled Preparations of Complex Heterostructured Colloids. Chemistry of Materials, 2019, 31, 9513-9521. | 6.7 | 7 |
| 95 | Wafer-Scale Fabrication of Silicon Nanocones via Controlling Catalyst Evolution in All-Wet Metal-Assisted Chemical Etching. ACS Omega, 2022, 7, 2234-2243. | 3.5 | 7 |
| 96 | Magnetic field control of fluorescent polymer nanorods. Nanotechnology, 2011, 22, 455704. | 2.6 | 6 |
| 97 | Magnetic Assembly and Fieldâ€Tuning of Ellipsoidalâ€Nanoparticleâ€Based Colloidal Photonic Crystals. Angewandte Chemie, 2015, 127, 7183-7187. | 2.0 | 5 |
| 98 | Design of magnetic nanoparticles with high magnetic separation efficiencies and durability for Cu<sup>2+</sup> adsorption. Nanotechnology, 2020, 31, 085710. | 2.6 | 5 |
| 99 | Anomalous effect of the aging degree on the ionic permeability of silica shells. RSC Advances, 2018, 8, 38499-38505. | 3.6 | 4 |
| 100 | Magnetically responsive photonic nanostructures: making color using magnets. , 2011, , . | | 2 |
| 101 | Magnetochromatic Microspheres: Real-Time Optofluidic Synthesis of Magnetochromatic Microspheres for Reversible Structural Color Patterning (Small 9/2011). Small, 2011, 7, 1142-1142. | 10.0 | 1 |
| 102 | Editorial: Recent Advances in Responsive Optical Nanomaterials. Frontiers in Chemistry, 2021, 9, 760187. | 3.6 | 1 |
| 103 | Shear-induced alignment of low-aspect-ratio nanorods for modulations of multiple optical properties. Journal of Materials Chemistry C, 2022, 10, 9478-9483. | 5.5 | 1 |
| 104 | MAGNETICALLY TUNABLE COLLOIDAL PHOTONIC CRYSTALS. , 2011, , 1-35. | | 0 |
| 105 | RÃ¼cktitelbild: Magnetically Responsive Photonic Nanochains (Angew. Chem. 16/2011). Angewandte Chemie, 2011, 123, 3900-3900. | 2.0 | 0 |
| 106 | Back Cover: Magnetically Responsive Photonic Nanochains (Angew. Chem. Int. Ed. 16/2011). Angewandte Chemie - International Edition, 2011, 50, 3816-3816. | 13.8 | 0 |