

Liangbing Wang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7618629/publications.pdf>

Version: 2024-02-01

44
papers

5,365
citations

172457

29
h-index

289244

40
g-index

45
all docs

45
docs citations

45
times ranked

6778
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Defect-rich and ultrathin N doped carbon nanosheets as advanced trifunctional metal-free electrocatalysts for the ORR, OER and HER. <i>Energy and Environmental Science</i> , 2019, 12, 322-333. | 30.8 | 1,078 |
| 2 | Li ⁺ intercalated V ₂ O ₅ ·nH ₂ O with enlarged layer spacing and fast ion diffusion as an aqueous zinc-ion battery cathode. <i>Energy and Environmental Science</i> , 2018, 11, 3157-3162. | 30.8 | 785 |
| 3 | Synergetic interaction between neighbouring platinum monomers in CO ₂ hydrogenation. <i>Nature Nanotechnology</i> , 2018, 13, 411-417. | 31.5 | 584 |
| 4 | High-Entropy Alloys as a Platform for Catalysis: Progress, Challenges, and Opportunities. <i>ACS Catalysis</i> , 2020, 10, 11280-11306. | 11.2 | 308 |
| 5 | Atomic-level insights in optimizing reaction paths for hydroformylation reaction over Rh/CoO single-atom catalyst. <i>Nature Communications</i> , 2016, 7, 14036. | 12.8 | 281 |
| 6 | Mechanistic Insights of Zn ²⁺ Storage in Sodium Vanadates. <i>Advanced Energy Materials</i> , 2018, 8, 1801819. | 19.5 | 225 |
| 7 | Incorporating nitrogen atoms into cobalt nanosheets as a strategy to boost catalytic activity toward CO ₂ hydrogenation. <i>Nature Energy</i> , 2017, 2, 869-876. | 39.5 | 179 |
| 8 | Supported Rhodium Catalysts for Ammonia-Borane Hydrolysis: Dependence of the Catalytic Activity on the Highest Occupied State of the Single Rhodium Atoms. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 4712-4718. | 13.8 | 173 |
| 9 | Pt ₃ Co Octapods as Superior Catalysts of CO ₂ Hydrogenation. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 9548-9552. | 13.8 | 162 |
| 10 | Copper-Based Plasmonic Catalysis: Recent Advances and Future Perspectives. <i>Advanced Materials</i> , 2021, 33, e2008145. | 21.0 | 131 |
| 11 | Pt Single Atoms Embedded in the Surface of Ni Nanocrystals as Highly Active Catalysts for Selective Hydrogenation of Nitro Compounds. <i>Nano Letters</i> , 2018, 18, 3785-3791. | 9.1 | 127 |
| 12 | Photocatalytic Conversion of Methane: Recent Advancements and Prospects. <i>Angewandte Chemie - International Edition</i> , 2022, 61, . | 13.8 | 111 |
| 13 | Aerobic Oxidation of Cyclohexane on Catalysts Based on Twinned and Single-Crystal Au ₇₅ Pd ₂₅ Bimetallic Nanocrystals. <i>Nano Letters</i> , 2015, 15, 2875-2880. | 9.1 | 92 |
| 14 | Integration of Quantum Confinement and Alloy Effect to Modulate Electronic Properties of RhW Nanocrystals for Improved Catalytic Performance toward CO ₂ Hydrogenation. <i>Nano Letters</i> , 2017, 17, 788-793. | 9.1 | 91 |
| 15 | Operando Oxygen Vacancies for Enhanced Activity and Stability toward Nitrogen Photofixation. <i>Advanced Energy Materials</i> , 2019, 9, 1902319. | 19.5 | 88 |
| 16 | Near-infrared light-driven photofixation of nitrogen over Ti ₃ C ₂ T _x /TiO ₂ hybrid structures with superior activity and stability. <i>Applied Catalysis B: Environmental</i> , 2020, 273, 119072. | 20.2 | 86 |
| 17 | Sulfur vacancy engineering of MoS ₂ via phosphorus incorporation for improved electrocatalytic N ₂ reduction to NH ₃ . <i>Applied Catalysis B: Environmental</i> , 2022, 300, 120733. | 20.2 | 85 |
| 18 | Modulating oxygen coverage of Ti ₃ C ₂ T _x MXenes to boost catalytic activity for HCOOH dehydrogenation. <i>Nature Communications</i> , 2020, 11, 4251. | 12.8 | 81 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Integration of Photothermal Effect and Heat Insulation to Efficiently Reduce Reaction Temperature of CO ₂ Hydrogenation. <i>Small</i> , 2017, 13, 1602583. | 10.0 | 77 |
| 20 | Ratio-Controlled Synthesis of CuNi Octahedra and Nanocubes with Enhanced Catalytic Activity. <i>Journal of the American Chemical Society</i> , 2015, 137, 14027-14030. | 13.7 | 75 |
| 21 | Cu-based nanocrystals on ZnO for uranium photoreduction: Plasmon-assisted activity and entropy-driven stability. <i>Applied Catalysis B: Environmental</i> , 2021, 288, 119978. | 20.2 | 59 |
| 22 | Fe Single-Atom Catalyst for Visible-Light-Driven Photofixation of Nitrogen Sensitized by Triphenylphosphine and Sodium Iodide. <i>ACS Catalysis</i> , 2020, 10, 5502-5510. | 11.2 | 51 |
| 23 | Anchoring Pt Single Atoms on Te Nanowires for Plasmon-Enhanced Dehydrogenation of Formic Acid at Room Temperature. <i>Advanced Science</i> , 2019, 6, 1900006. | 11.2 | 49 |
| 24 | Photocatalytic Conversion of Methane: Recent Advancements and Prospects. <i>Angewandte Chemie</i> , 2022, 134, e202108069. | 2.0 | 46 |
| 25 | Enhanced uranium photoreduction on Ti ₃ C ₂ T _x MXene by modulation of surface functional groups and deposition of plasmonic metal nanoparticles. <i>Journal of Hazardous Materials</i> , 2022, 426, 127823. | 12.4 | 38 |
| 26 | Large-scale and facile synthesis of a porous high-entropy alloy CrMnFeCoNi as an efficient catalyst. <i>Journal of Materials Chemistry A</i> , 2020, 8, 18318-18326. | 10.3 | 37 |
| 27 | Atomic-level insights in tuning defective structures for nitrogen photofixation over amorphous SmOCl nanosheets. <i>Nano Energy</i> , 2019, 65, 104003. | 16.0 | 36 |
| 28 | Porous CuFe for Plasmon-Assisted N ₂ Photofixation. <i>ACS Energy Letters</i> , 2020, 5, 2444-2451. | 17.4 | 35 |
| 29 | Atomic-level insights into the activation of nitrogen via hydrogen-bond interaction toward nitrogen photofixation. <i>CheM</i> , 2021, 7, 2118-2136. | 11.7 | 33 |
| 30 | Encapsulating Ag nanoparticles into ZIF-8 as an efficient strategy to boost uranium photoreduction without sacrificial agents. <i>Journal of Materials Chemistry A</i> , 2021, 9, 9809-9814. | 10.3 | 30 |
| 31 | Supported Rhodium Catalysts for Ammonia-Borane Hydrolysis: Dependence of the Catalytic Activity on the Highest Occupied State of the Single Rhodium Atoms. <i>Angewandte Chemie</i> , 2017, 129, 4790-4796. | 2.0 | 27 |
| 32 | Au atoms doped in Ti ₃ C ₂ T _x MXene: Benefiting recovery of oxygen vacancies towards photocatalytic aerobic oxidation. <i>Nano Research</i> , 2022, 15, 2862-2869. | 10.4 | 25 |
| 33 | Copper-Stabilized P ₂ -Type Layered Manganese Oxide Cathodes for High-Performance Sodium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 58665-58673. | 8.0 | 24 |
| 34 | Pt ₃ Co Octapods as Superior Catalysts of CO ₂ Hydrogenation. <i>Angewandte Chemie</i> , 2016, 128, 9700-9704. | 2.0 | 20 |
| 35 | In ₂ O ₃ Nanocrystals for CO ₂ Fixation: Atomic-Level Insight into the Role of Grain Boundaries. <i>IScience</i> , 2019, 16, 390-398. | 4.1 | 14 |
| 36 | Direct conversion of methane to methanol on boron nitride-supported copper single atoms. <i>Nanoscale</i> , 2022, 14, 5447-5453. | 5.6 | 8 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Photocatalysis: Operando Oxygen Vacancies for Enhanced Activity and Stability toward Nitrogen Photofixation (Adv. Energy Mater. 43/2019). Advanced Energy Materials, 2019, 9, 1970170. | 19.5 | 6 |
| 38 | Conversion of Methane to Methanol on Cobalt-Embedded Graphene: A Theoretical Perspective. Catalysis Letters, 0, , 1. | 2.6 | 5 |
| 39 | Innentitelbild: Pt ₃ Co Octapods as Superior Catalysts of CO ₂ Hydrogenation (Angew. Chem. 33/2016). Angewandte Chemie, 2016, 128, 9594-9594. | 2.0 | 1 |
| 40 | An enzyme-mimicking inorganic catalyst for effective nitrogen photofixation. Chem Catalysis, 2021, 1, 22-24. | 6.1 | 1 |
| 41 | Large-scale synthesis of metal nanosheets as highly active catalysts: Combining accumulative roll-bonding and etching process. Frontiers of Materials Science, 2021, 15, 456-464. | 2.2 | 1 |
| 42 | Frontispiz: Supported Rhodium Catalysts for Ammonia-Borane Hydrolysis: Dependence of the Catalytic Activity on the Highest Occupied State of the Single Rhodium Atoms. Angewandte Chemie, 2017, 129, . | 2.0 | 0 |
| 43 | Frontispiece: Supported Rhodium Catalysts for Ammonia-Borane Hydrolysis: Dependence of the Catalytic Activity on the Highest Occupied State of the Single Rhodium Atoms. Angewandte Chemie - International Edition, 2017, 56, . | 13.8 | 0 |
| 44 | Regulation of Active Oxygen Species by Grain Boundaries to Optimize Reaction Paths toward Aerobic Oxidations. Energy and Environmental Materials, 2021, 4, 444-450. | 12.8 | 0 |