# Jiong Lu

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/4162939/publications.pdf

Version: 2024-02-01

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|---|---|---|---|
| 106 papers | 9,409 citations | 41258 49 h-index | 38300 95 g-index |
| 115 all docs | 115 docs citations | 115 times ranked | 14572 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | One-Pot Synthesis of Fluorescent Carbon Nanoribbons, Nanoparticles, and Graphene by the Exfoliation of Graphite in Ionic Liquids. ACS Nano, 2009, 3, 2367-2375. | 7.3 | 1,093 |
| 2 | Transforming C60 molecules into graphene quantum dots. Nature Nanotechnology, 2011, 6, 247-252. | 15.6 | 587 |
| 3 | Probing the catalytic activity of porous graphene oxide and the origin of this behaviour. Nature Communications, 2012, 3, 1298. | 5.8 | 538 |
| 4 | Electrochemical Delamination of CVD-Grown Graphene Film: Toward the Recyclable Use of Copper Catalyst. ACS Nano, 2011, 5, 9927-9933. | 7.3 | 529 |
| 5 | A Grapheneâ€Supported Singleâ€Atom FeN<sub>5</sub> Catalytic Site for Efficient Electrochemical CO<sub>2</sub> Reduction. Angewandte Chemie - International Edition, 2019, 58, 14871-14876. | 7.2 | 410 |
| 6 | Fluorinated Graphene for Promoting Neuroâ€Induction of Stem Cells. Advanced Materials, 2012, 24, 4285-4290. | 11.1 | 315 |
| 7 | Molecularly thin two-dimensional hybrid perovskites with tunable optoelectronic properties due to reversible surface relaxation. Nature Materials, 2018, 17, 908-914. | 13.3 | 295 |
| 8 | Scalable two-step annealing method for preparing ultra-high-density single-atom catalyst libraries. Nature Nanotechnology, 2022, 17, 174-181. | 15.6 | 279 |
| 9 | Chemically Exfoliated VSe<sub>2</sub> Monolayers with Roomâ€Temperature Ferromagnetism. Advanced Materials, 2019, 31, e1903779. | 11.1 | 251 |
| 10 | Design of Local Atomic Environments in Singleâ€Atom Electrocatalysts for Renewable Energy Conversions. Advanced Materials, 2021, 33, e2003075. | 11.1 | 187 |
| 11 | Atomically precise bottom-up synthesis of Ï€-extended [5]triangulene. Science Advances, 2019, 5, eaav7717. | 4.7 | 159 |
| 12 | Transforming moirÃ© blisters into geometric graphene nano-bubbles. Nature Communications, 2012, 3, 823. | 5.8 | 157 |
| 13 | Recent advances in Fe (or Co)/N/C electrocatalysts for the oxygen reduction reaction in polymer electrolyte membrane fuel cells. Journal of Materials Chemistry A, 2017, 5, 18933-18950. | 5.2 | 146 |
| 14 | Atomic engineering of high-density isolated Co atoms on graphene with proximal-atom controlled reaction selectivity. Nature Communications, 2018, 9, 3197. | 5.8 | 146 |
| 15 | Gate-Tunable Giant Stark Effect in Few-Layer Black Phosphorus. Nano Letters, 2017, 17, 1970-1977. | 4.5 | 144 |
| 16 | Orderâ€“disorder transition in a two-dimensional boronâ€“carbonâ€“nitride alloy. Nature Communications, 2013, 4, 2681. | 5.8 | 138 |
| 17 | Probing the Role of Interlayer Coupling and Coulomb Interactions on Electronic Structure in Few-Layer MoSe<sub>2</sub> Nanostructures. Nano Letters, 2015, 15, 2594-2599. | 4.5 | 136 |
| 18 | Ultrafast Electrochemical Expansion of Black Phosphorus toward High-Yield Synthesis of Few-Layer Phosphorene. Chemistry of Materials, 2018, 30, 2742-2749. | 3.2 | 132 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Room temperature ferromagnetism in partially hydrogenated epitaxial graphene. Applied Physics Letters, 2011, 98, . | 1.5 | 126 |
| 20 | Engineering Local and Global Structures of Single Co Atoms for a Superior Oxygen Reduction Reaction. ACS Catalysis, 2020, 10, 5862-5870. | 5.5 | 126 |
| 21 | Plasmon dispersion on epitaxial graphene studied using high-resolution electron energy-loss spectroscopy. Physical Review B, 2009, 80, . | 1.1 | 118 |
| 22 | Tailoring sample-wide pseudo-magnetic fields on a grapheneâ€“black phosphorus heterostructure. Nature Nanotechnology, 2018, 13, 828-834. | 15.6 | 113 |
| 23 | Atomically-precise dopant-controlled single cluster catalysis for electrochemical nitrogen reduction. Nature Communications, 2020, 11, 4389. | 5.8 | 110 |
| 24 | Toward High Throughput Interconvertible Graphane-to-Graphene Growth and Patterning. ACS Nano, 2010, 4, 6146-6152. | 7.3 | 109 |
| 25 | Single-Atom Electrocatalysts for Lithium Sulfur Batteries: Progress, Opportunities, and Challenges. , 2020, 2, 1450-1463. | | 108 |
| 26 | A Grapheneâ€Supported Singleâ€Atom FeN<sub>5</sub> Catalytic Site for Efficient Electrochemical CO<sub>2</sub> Reduction. Angewandte Chemie, 2019, 131, 15013-15018. | 1.6 | 107 |
| 27 | Printable two-dimensional superconducting monolayers. Nature Materials, 2021, 20, 181-187. | 13.3 | 102 |
| 28 | On-surface synthesis of graphene nanostructures with Ï€-magnetism. Chemical Society Reviews, 2021, 50, 3238-3262. | 18.7 | 102 |
| 29 | Defects controlled hole doping and multivalley transport in SnSe single crystals. Nature Communications, 2018, 9, 47. | 5.8 | 95 |
| 30 | Engineering the Coordination Environment of Single Cobalt Atoms for Efficient Oxygen Reduction and Hydrogen Evolution Reactions. ACS Catalysis, 2021, 11, 4498-4509. | 5.5 | 94 |
| 31 | Tuning the Spin Density of Cobalt Single-Atom Catalysts for Efficient Oxygen Evolution. ACS Nano, 2021, 15, 7105-7113. | 7.3 | 90 |
| 32 | Step Flow Versus Mosaic Film Growth in Hexagonal Boron Nitride. Journal of the American Chemical Society, 2013, 135, 2368-2373. | 6.6 | 89 |
| 33 | Lattice Relaxation at the Interface of Two-Dimensional Crystals: Graphene and Hexagonal Boron-Nitride. Nano Letters, 2014, 14, 5133-5139. | 4.5 | 89 |
| 34 | Ordered clustering of single atomic Te vacancies in atomically thin PtTe2 promotes hydrogen evolution catalysis. Nature Communications, 2021, 12, 2351. | 5.8 | 83 |
| 35 | Tuning charge and correlation effects for a single molecule on a graphene device. Nature Communications, 2016, 7, 13553. | 5.8 | 82 |
| 36 | Giant gate-tunable bandgap renormalization and excitonic effects in a 2D semiconductor. Science Advances, 2019, 5, eaaw2347. | 4.7 | 80 |

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|---|---|---|---|
| 37 | Multimaterial 3D-printing of graphene/Li0.35Zn0.3Fe2.35O4 and graphene/carbonyl iron composites with superior microwave absorption properties and adjustable bandwidth. Carbon, 2020, 167, 62-74. | 5.4 | 78 |
| 38 | Quasiâ€Monolayer Black Phosphorus with High Mobility and Air Stability. Advanced Materials, 2018, 30, 1704619. | 11.1 | 76 |
| 39 | Digital light processing 3D printing of graphene/carbonyl iron/polymethyl methacrylate nanocomposites for efficient microwave absorption. Composites Part B: Engineering, 2019, 179, 107533. | 5.9 | 73 |
| 40 | Periodic Grain Boundaries Formed by Thermal Reconstruction of Polycrystalline Graphene Film. Journal of the American Chemical Society, 2014, 136, 12041-12046. | 6.6 | 63 |
| 41 | Grapheneâ€Oxideâ€Catalyzed Direct CHâ^'CHâ€Type Crossâ€Coupling: The Intrinsic Catalytic Activities of Zigzag Edges. Angewandte Chemie - International Edition, 2018, 57, 10848-10853. | 7.2 | 63 |
| 42 | Giant Emission Enhancement of Solidâ€State Gold Nanoclusters by Surface Engineering. Angewandte Chemie - International Edition, 2020, 59, 8270-8276. | 7.2 | 63 |
| 43 | Highâ€Yield Electrochemical Production of Largeâ€Sized and Thinly Layered NiPS<sub>3</sub> Flakes for Overall Water Splitting. Small, 2019, 15, e1902427. | 5.2 | 62 |
| 44 | Nanoscale Control of Rewriteable Doping Patterns in Pristine Graphene/Boron Nitride Heterostructures. Nano Letters, 2016, 16, 1620-1625. | 4.5 | 60 |
| 45 | Bottom-up growth of homogeneous MoirÃ© superlattices in bismuth oxychloride spiral nanosheets. Nature Communications, 2019, 10, 4472. | 5.8 | 59 |
| 46 | On-Surface Synthesis and Characterization of [7]Triangulene Quantum Ring. Nano Letters, 2021, 21, 861-867. | 4.5 | 59 |
| 47 | Oscillating edge states in one-dimensional MoS2 nanowires. Nature Communications, 2016, 7, 12904. | 5.8 | 57 |
| 48 | Zeroâ€Valent Palladium Singleâ€Atoms Catalysts Confined in Black Phosphorus for Efficient Semiâ€Hydrogenation. Advanced Materials, 2021, 33, e2008471. | 11.1 | 55 |
| 49 | Using the Graphene MoirÃ© Pattern for the Trapping of C<sub>60</sub> and Homoepitaxy of Graphene. ACS Nano, 2012, 6, 944-950. | 7.3 | 54 |
| 50 | Triangulenes: From Precursor Design to Onâ€Surface Synthesis and Characterization. Angewandte Chemie - International Edition, 2020, 59, 7658-7668. | 7.2 | 53 |
| 51 | Synthesis of Monolayer Blue Phosphorus Enabled by Silicon Intercalation. ACS Nano, 2020, 14, 3687-3695. | 7.3 | 52 |
| 52 | Properties of Strained Structures and Topological Defects in Graphene. ACS Nano, 2013, 7, 8350-8357. | 7.3 | 49 |
| 53 | From All-Triazine C<sub>3</sub>N<sub>3</sub> Framework to Nitrogen-Doped Carbon Nanotubes: Efficient and Durable Trifunctional Electrocatalysts. ACS Applied Nano Materials, 2019, 2, 7969-7977. | 2.4 | 49 |
| 54 | Roomâ€Temperature Ice Growth on Graphite Seeded by Nanoâ€Graphene Oxide. Angewandte Chemie - International Edition, 2013, 52, 8708-8712. | 7.2 | 46 |

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|---|---|---|---|
| 55 | Molecular Self-Assembly in a Poorly Screened Environment: F<sub>4</sub>TCNQ on Graphene/BN. ACS Nano, 2015, 9, 12168-12173. | 7.3 | 45 |
| 56 | Ultrahigh-yield on-surface synthesis and assembly of circumcoronene into a chiral electronic Kagome-honeycomb lattice. Science Advances, 2021, 7, . | 4.7 | 43 |
| 57 | Twisted-Angle-Dependent Optical Behaviors of Intralayer Excitons and Trions in WS<sub>2</sub>/WSe<sub>2</sub> Heterostructure. ACS Photonics, 2019, 6, 3082-3091. | 3.2 | 41 |
| 58 | Janus electrochemical exfoliation of two-dimensional materials. Journal of Materials Chemistry A, 2019, 7, 25691-25711. | 5.2 | 41 |
| 59 | Imaging and Tuning Molecular Levels at the Surface of a Gated Graphene Device. ACS Nano, 2014, 8, 5395-5401. | 7.3 | 39 |
| 60 | Strainâ€Induced Isomerization in Oneâ€Dimensional Metalâ€“Organic Chains. Angewandte Chemie - International Edition, 2019, 58, 18591-18597. | 7.2 | 37 |
| 61 | Resolving the Spatial Structures of Bound Hole States in Black Phosphorus. Nano Letters, 2017, 17, 6935-6940. | 4.5 | 33 |
| 62 | Supramolecular Structure of Self-Assembled Monolayers of Ferrocenyl Terminated n-Alkanethiolates on Gold Surfaces. Langmuir, 2014, 30, 13447-13455. | 1.6 | 30 |
| 63 | Machine Vision Automated Chiral Molecule Detection and Classification in Molecular Imaging. Journal of the American Chemical Society, 2021, 143, 10177-10188. | 6.6 | 30 |
| 64 | Visualizing atomic structure and magnetism of 2D magnetic insulators via tunneling through graphene. Nature Communications, 2021, 12, 70. | 5.8 | 29 |
| 65 | Substoichiometric Molybdenum Sulfide Phases with Catalytically Active Basal Planes. Journal of the American Chemical Society, 2016, 138, 14121-14128. | 6.6 | 28 |
| 66 | Reversible Oxidation of Blue Phosphorus Monolayer on Au(111). Nano Letters, 2019, 19, 5340-5346. | 4.5 | 27 |
| 67 | Semimetal or Semiconductor: The Nature of High Intrinsic Electrical Conductivity in TiS<sub>2</sub>. Journal of Physical Chemistry Letters, 2019, 10, 6996-7001. | 2.1 | 27 |
| 68 | High yield electrochemical exfoliation synthesis of tin selenide quantum dots for high-performance lithium-ion batteries. Journal of Materials Chemistry A, 2019, 7, 23958-23963. | 5.2 | 26 |
| 69 | Imprinting Ferromagnetism and Superconductivity in Single Atomic Layers of Molecular Superlattices. Advanced Materials, 2020, 32, e1907645. | 11.1 | 25 |
| 70 | Frustrated supercritical collapse in tunable charge arrays on graphene. Nature Communications, 2019, 10, 477. | 5.8 | 23 |
| 71 | Electrochemically Exfoliated Platinum Dichalcogenide Atomic Layers for High-Performance Air-Stable Infrared Photodetectors. ACS Applied Materials & Interfaces, 2021, 13, 8518-8527. | 4.0 | 23 |
| 72 | A focus review on 3D printing of wearable energy storage devices. , 2022, 4, 1242-1261. | | 23 |

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|---|---|---|---|
| 73 | Ionic liquid-functionalized carbon nanoparticles-modified cathode for efficiency enhancement in polymer solar cells. Applied Physics Letters, 2009, 95, 133305. | 1.5 | 19 |
| 74 | Strainâ€Induced Isomerization in Oneâ€Dimensional Metalâ€“Organic Chains. Angewandte Chemie, 2019, 131, 18764-18770. | 1.6 | 19 |
| 75 | Chemical design and synthesis of superior single-atom electrocatalysts via in situ polymerization. Journal of Materials Chemistry A, 2020, 8, 17683-17690. | 5.2 | 19 |
| 76 | Triangulenes: From Precursor Design to Onâ€Surface Synthesis and Characterization. Angewandte Chemie, 2020, 132, 7730-7740. | 1.6 | 18 |
| 77 | Electrically controlled dielectric band gap engineering in a two-dimensional semiconductor. Physical Review B, 2020, 101, . | 1.1 | 17 |
| 78 | Towards high efficiency solution processable inverted bulk heterojunction polymer solar cells using modified indium tin oxide cathode. Organic Electronics, 2010, 11, 1942-1946. | 1.4 | 15 |
| 79 | Giant Emission Enhancement of Solidâ€State Gold Nanoclusters by Surface Engineering. Angewandte Chemie, 2020, 132, 8347-8353. | 1.6 | 15 |
| 80 | Real-Space Imaging of a Single-Molecule Monoradical Reaction. Journal of the American Chemical Society, 2020, 142, 13550-13557. | 6.6 | 14 |
| 81 | Atomically Precise Single Metal Oxide Cluster Catalyst with Oxygenâ€Controlled Activity. Advanced Functional Materials, 2022, 32, . | 7.8 | 13 |
| 82 | Degradation Chemistry and Kinetic Stabilization of Magnetic CrI<sub>3</sub>. Journal of the American Chemical Society, 2022, 144, 5295-5303. | 6.6 | 13 |
| 83 | A molecular shift register made using tunable charge patterns in one-dimensional molecular arrays on graphene. Nature Electronics, 2020, 3, 598-603. | 13.1 | 12 |
| 84 | Visualizing designer quantum states in stable macrocycle quantum corrals. Nature Communications, 2021, 12, 5895. | 5.8 | 12 |
| 85 | Grapheneâ€Oxideâ€Catalyzed Direct CHâ^'CHâ€Type Crossâ€Coupling: The Intrinsic Catalytic Activities of Zigzag Edges. Angewandte Chemie, 2018, 130, 11014-11019. | 1.6 | 11 |
| 86 | Electrostatically Tunable Nearâ€Infrared Plasmonic Resonances in Solutionâ€Processed Atomically Thin NbSe<sub>2</sub>. Advanced Materials, 2021, 33, e2101950. | 11.1 | 11 |
| 87 | Growing Suspended Graphene on C<sub>60</sub> Molecules. Small, 2012, 8, 3728-3732. | 5.2 | 10 |
| 88 | Learning motifs and their hierarchies in atomic resolution microscopy. Science Advances, 2022, 8, eabk1005. | 4.7 | 10 |
| 89 | Studying Edge Defects of Hexagonal Boron Nitride Using High-Resolution Electron Energy Loss Spectroscopy. Journal of Physical Chemistry Letters, 2015, 6, 4189-4193. | 2.1 | 9 |
| 90 | Manifold dynamic non-covalent interactions for steering molecular assembly and cyclization. Chemical Science, 2021, 12, 11659-11667. | 3.7 | 9 |

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|---|---|---|---|
| 91 | High resolution electron energy loss spectroscopy study of Zinc phthalocyanine and tetrafluoro tetracyanoquinodimethane on Au (111). Chemical Physics Letters, 2009, 468, 28-31. | 1.2 | 7 |
| 92 | Substrate induced strain for on-surface transformation and synthesis. Nanoscale, 2020, 12, 7500-7508. | 2.8 | 7 |
| 93 | Sub-Angstrom Imaging of Nondegenerate KekulÃ© Structures in a Two-Dimensional Halogen-Bonded Supramolecular Network. Journal of Physical Chemistry C, 2022, 126, 4241-4247. | 1.5 | 5 |
| 94 | Sub-angstrom noninvasive imaging of atomic arrangement in 2D hybrid perovskites. Science Advances, 2022, 8, eabj0395. | 4.7 | 5 |
| 95 | Electronic Self-Passivation of Single Vacancy in Black Phosphorus via Ionization. Physical Review Letters, 2022, 128, 176801. | 2.9 | 4 |
| 96 | Effects and thermal stability of hydrogen microwave plasma treatment on tetrahedral amorphous carbon films by in situ ultraviolet photoelectron spectroscopy. Journal of Applied Physics, 2009, 106, 024901. | 1.1 | 3 |
| 97 | Tissue Engineering: Fluorinated Graphene for Promoting Neuroâ€Induction of Stem Cells (Adv. Mater.) Tj ETQq1 1 0.784314 rgBT /Over | 11.1 | 3 |
| 98 | Singleâ€Molecule Chemical Reactions Tracked at the Atomicâ€Bond Level. Angewandte Chemie - International Edition, 2013, 52, 13521-13523. | 7.2 | 3 |
| 99 | Tailoring long-range superlattice chirality in molecular self-assemblies via weak fluorine-mediated interactions. Physical Chemistry Chemical Physics, 2021, 23, 21489-21495. | 1.3 | 2 |
| 100 | Two-Dimensional Conjugated Covalent Organic Framework Films via Oxidative Câ€“C Coupling Reactions at a Liquidâ€“Liquid Interface. Organic Materials, 2021, 03, 060-066. | 1.0 | 2 |
| 101 | Catalytically active atomically thin cuprate with periodic Cu single sites. National Science Review, 2023, 10, . | 4.6 | 2 |
| 102 | Designing Energy Materials via Atomic-resolution Microscopy and Spectroscopy. Microscopy and Microanalysis, 2019, 25, 1998-1999. | 0.2 | 1 |
| 103 | Graphene: Growing Suspended Graphene on C<sub>60</sub> Molecules (Small 24/2012). Small, 2012, 8, 3727-3727. | 5.2 | 0 |
| 104 | InnenrÃ¼cktitelbild: Room-Temperature Ice Growth on Graphite Seeded by Nano-Graphene Oxide (Angew.) Tj ETQq0 0 0 rgBT /Overlock | 1.6 | 0 |
| 105 | Frontispiz: Graphene-Oxide-Catalyzed Direct CHâ€“CH-Type Cross-Coupling: The Intrinsic Catalytic Activities of Zigzag Edges. Angewandte Chemie, 2018, 130, . | 1.6 | 0 |
| 106 | Energy Spotlight. ACS Energy Letters, 2022, 7, 2401-2402. | 8.8 | 0 |