

Jiong Lu

List of Publications by Year in descending order

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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	Catalytically active atomically thin cuprate with periodic Cu single sites. National Science Review, 2023, 10, .	4.6	2
2	Scalable two-step annealing method for preparing ultra-high-density single-atom catalyst libraries. Nature Nanotechnology, 2022, 17, 174-181.	15.6	279
3	Sub-Angstrom Imaging of Nondegenerate Kekulé Structures in a Two-Dimensional Halogen-Bonded Supramolecular Network. Journal of Physical Chemistry C, 2022, 126, 4241-4247.	1.5	5
4	Atomically Precise Single Metal Oxide Cluster Catalyst with Oxygen-Controlled Activity. Advanced Functional Materials, 2022, 32, .	7.8	13
5	Degradation Chemistry and Kinetic Stabilization of Magnetic Cr ₃ . Journal of the American Chemical Society, 2022, 144, 5295-5303.	6.6	13
6	Learning motifs and their hierarchies in atomic resolution microscopy. Science Advances, 2022, 8, eabk1005.	4.7	10
7	Sub-angstrom noninvasive imaging of atomic arrangement in 2D hybrid perovskites. Science Advances, 2022, 8, eabj0395.	4.7	5
8	Electronic Self-Passivation of Single Vacancy in Black Phosphorus via Ionization. Physical Review Letters, 2022, 128, 176801.	2.9	4
9	A focus review on 3D printing of wearable energy storage devices. , 2022, 4, 1242-1261.		23
10	Energy Spotlight. ACS Energy Letters, 2022, 7, 2401-2402.	8.8	0
11	Design of Local Atomic Environments in Single-Atom Electrocatalysts for Renewable Energy Conversions. Advanced Materials, 2021, 33, e2003075.	11.1	187
12	On-Surface Synthesis and Characterization of [7]Triangulene Quantum Ring. Nano Letters, 2021, 21, 861-867.	4.5	59
13	Printable two-dimensional superconducting monolayers. Nature Materials, 2021, 20, 181-187.	13.3	102
14	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
15	Ultrahigh-yield on-surface synthesis and assembly of circumcoronene into a chiral electronic Kagome-honeycomb lattice. Science Advances, 2021, 7, .	4.7	43
16	On-surface synthesis of graphene nanostructures with Ĩ-magnetism. Chemical Society Reviews, 2021, 50, 3238-3262.	18.7	102
17	Manifold dynamic non-covalent interactions for steering molecular assembly and cyclization. Chemical Science, 2021, 12, 11659-11667.	3.7	9
18	Two-Dimensional Conjugated Covalent Organic Framework Films via Oxidative C=C Coupling Reactions at a Liquid-Liquid Interface. Organic Materials, 2021, 03, 060-066.	1.0	2

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19	Visualizing atomic structure and magnetism of 2D magnetic insulators via tunneling through graphene. <i>Nature Communications</i> , 2021, 12, 70.	5.8	29
20	Electrochemically Exfoliated Platinum Dichalcogenide Atomic Layers for High-Performance Air-Stable Infrared Photodetectors. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 8518-8527.	4.0	23
21	Engineering the Coordination Environment of Single Cobalt Atoms for Efficient Oxygen Reduction and Hydrogen Evolution Reactions. <i>ACS Catalysis</i> , 2021, 11, 4498-4509.	5.5	94
22	Tuning the Spin Density of Cobalt Single-Atom Catalysts for Efficient Oxygen Evolution. <i>ACS Nano</i> , 2021, 15, 7105-7113.	7.3	90
23	Ordered clustering of single atomic Te vacancies in atomically thin PtTe ₂ promotes hydrogen evolution catalysis. <i>Nature Communications</i> , 2021, 12, 2351.	5.8	83
24	Electrostatically Tunable Near-Infrared Plasmonic Resonances in Solution-Processed Atomically Thin NbSe ₂ . <i>Advanced Materials</i> , 2021, 33, e2101950.	11.1	11
25	Machine Vision Automated Chiral Molecule Detection and Classification in Molecular Imaging. <i>Journal of the American Chemical Society</i> , 2021, 143, 10177-10188.	6.6	30
26	Zero-Valent Palladium Single-Atom Catalysts Confined in Black Phosphorus for Efficient Semi-Hydrogenation. <i>Advanced Materials</i> , 2021, 33, e2008471.	11.1	55
27	Visualizing designer quantum states in stable macrocycle quantum corrals. <i>Nature Communications</i> , 2021, 12, 5895.	5.8	12
28	Triangulenes: From Precursor Design to On-Surface Synthesis and Characterization. <i>Angewandte Chemie</i> , 2020, 132, 7730-7740.	1.6	18
29	Triangulenes: From Precursor Design to On-Surface Synthesis and Characterization. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 7658-7668.	7.2	53
30	Single-Atom Electrocatalysts for Lithium Sulfur Batteries: Progress, Opportunities, and Challenges. , 2020, 2, 1450-1463.		108
31	Chemical design and synthesis of superior single-atom electrocatalysts <i>via in situ</i> polymerization. <i>Journal of Materials Chemistry A</i> , 2020, 8, 17683-17690.	5.2	19
32	Atomically-precise dopant-controlled single cluster catalysis for electrochemical nitrogen reduction. <i>Nature Communications</i> , 2020, 11, 4389.	5.8	110
33	Imprinting Ferromagnetism and Superconductivity in Single Atomic Layers of Molecular Superlattices. <i>Advanced Materials</i> , 2020, 32, e1907645.	11.1	25
34	Multimaterial 3D-printing of graphene/Li _{0.35} Zn _{0.3} Fe _{2.35} O ₄ and graphene/carbonyl iron composites with superior microwave absorption properties and adjustable bandwidth. <i>Carbon</i> , 2020, 167, 62-74.	5.4	78
35	Substrate induced strain for on-surface transformation and synthesis. <i>Nanoscale</i> , 2020, 12, 7500-7508.	2.8	7
36	Electrically controlled dielectric band gap engineering in a two-dimensional semiconductor. <i>Physical Review B</i> , 2020, 101, .	1.1	17

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37	Engineering Local and Global Structures of Single Co Atoms for a Superior Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2020, 10, 5862-5870.	5.5	126
38	Synthesis of Monolayer Blue Phosphorus Enabled by Silicon Intercalation. <i>ACS Nano</i> , 2020, 14, 3687-3695.	7.3	52
39	Real-Space Imaging of a Single-Molecule Monoradical Reaction. <i>Journal of the American Chemical Society</i> , 2020, 142, 13550-13557.	6.6	14
40	Giant Emission Enhancement of Solid-State Gold Nanoclusters by Surface Engineering. <i>Angewandte Chemie</i> , 2020, 132, 8347-8353.	1.6	15
41	Giant Emission Enhancement of Solid-State Gold Nanoclusters by Surface Engineering. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 8270-8276.	7.2	63
42	A molecular shift register made using tunable charge patterns in one-dimensional molecular arrays on graphene. <i>Nature Electronics</i> , 2020, 3, 598-603.	13.1	12
43	Designing Energy Materials via Atomic-resolution Microscopy and Spectroscopy. <i>Microscopy and Microanalysis</i> , 2019, 25, 1998-1999.	0.2	1
44	Chemically Exfoliated VSe ₂ Monolayers with Room-Temperature Ferromagnetism. <i>Advanced Materials</i> , 2019, 31, e1903779.	11.1	251
45	Giant gate-tunable bandgap renormalization and excitonic effects in a 2D semiconductor. <i>Science Advances</i> , 2019, 5, eaaw2347.	4.7	80
46	Reversible Oxidation of Blue Phosphorus Monolayer on Au(111). <i>Nano Letters</i> , 2019, 19, 5340-5346.	4.5	27
47	Atomically precise bottom-up synthesis of π -extended [5]triangulene. <i>Science Advances</i> , 2019, 5, eaav7717.	4.7	159
48	A Graphene-Supported Single-Atom FeN ₅ Catalytic Site for Efficient Electrochemical CO ₂ Reduction. <i>Angewandte Chemie</i> , 2019, 131, 15013-15018.	1.6	107
49	A Graphene-Supported Single-Atom FeN ₅ Catalytic Site for Efficient Electrochemical CO ₂ Reduction. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 14871-14876.	7.2	410
50	High yield electrochemical exfoliation synthesis of tin selenide quantum dots for high-performance lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 23958-23963.	5.2	26
51	Digital light processing 3D printing of graphene/carbonyl iron/polymethyl methacrylate nanocomposites for efficient microwave absorption. <i>Composites Part B: Engineering</i> , 2019, 179, 107533.	5.9	73
52	Twisted-Angle-Dependent Optical Behaviors of Intralayer Excitons and Trions in WS ₂ /WSe ₂ Heterostructure. <i>ACS Photonics</i> , 2019, 6, 3082-3091.	3.2	41
53	From All-Triazine C ₃ N ₃ Framework to Nitrogen-Doped Carbon Nanotubes: Efficient and Durable Trifunctional Electrocatalysts. <i>ACS Applied Nano Materials</i> , 2019, 2, 7969-7977.	2.4	49
54	Strain-Induced Isomerization in One-Dimensional Metal-Organic Chains. <i>Angewandte Chemie</i> , 2019, 131, 18764-18770.	1.6	19

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55	Strain-Induced Isomerization in One-Dimensional Metal-Organic Chains. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 18591-18597.	7.2	37
56	Semimetal or Semiconductor: The Nature of High Intrinsic Electrical Conductivity in TiS_2 . <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 6996-7001.	2.1	27
57	Bottom-up growth of homogeneous Moiré superlattices in bismuth oxychloride spiral nanosheets. <i>Nature Communications</i> , 2019, 10, 4472.	5.8	59
58	Frustrated supercritical collapse in tunable charge arrays on graphene. <i>Nature Communications</i> , 2019, 10, 477.	5.8	23
59	High-Yield Electrochemical Production of Large-Sized and Thinly Layered NiPS_3 Flakes for Overall Water Splitting. <i>Small</i> , 2019, 15, e1902427.	5.2	62
60	Janus electrochemical exfoliation of two-dimensional materials. <i>Journal of Materials Chemistry A</i> , 2019, 7, 25691-25711.	5.2	41
61	Ultrafast Electrochemical Expansion of Black Phosphorus toward High-Yield Synthesis of Few-Layer Phosphorene. <i>Chemistry of Materials</i> , 2018, 30, 2742-2749.	3.2	132
62	Quasi-Monolayer Black Phosphorus with High Mobility and Air Stability. <i>Advanced Materials</i> , 2018, 30, 1704619.	11.1	76
63	Defects controlled hole doping and multivalley transport in SnSe single crystals. <i>Nature Communications</i> , 2018, 9, 47.	5.8	95
64	Frontispiz: Graphene-Oxide-Catalyzed Direct $\text{CH}^{\sim}\text{CH}$ -Type Cross-Coupling: The Intrinsic Catalytic Activities of Zigzag Edges. <i>Angewandte Chemie</i> , 2018, 130, .	1.6	0
65	Molecularly thin two-dimensional hybrid perovskites with tunable optoelectronic properties due to reversible surface relaxation. <i>Nature Materials</i> , 2018, 17, 908-914.	13.3	295
66	Tailoring sample-wide pseudo-magnetic fields on a graphene-black phosphorus heterostructure. <i>Nature Nanotechnology</i> , 2018, 13, 828-834.	15.6	113
67	Graphene-Oxide-Catalyzed Direct $\text{CH}^{\sim}\text{CH}$ -Type Cross-Coupling: The Intrinsic Catalytic Activities of Zigzag Edges. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 10848-10853.	7.2	63
68	Atomic engineering of high-density isolated Co atoms on graphene with proximal-atom controlled reaction selectivity. <i>Nature Communications</i> , 2018, 9, 3197.	5.8	146
69	Graphene-Oxide-Catalyzed Direct $\text{CH}^{\sim}\text{CH}$ -Type Cross-Coupling: The Intrinsic Catalytic Activities of Zigzag Edges. <i>Angewandte Chemie</i> , 2018, 130, 11014-11019.	1.6	11
70	Gate-Tunable Giant Stark Effect in Few-Layer Black Phosphorus. <i>Nano Letters</i> , 2017, 17, 1970-1977.	4.5	144
71	Resolving the Spatial Structures of Bound Hole States in Black Phosphorus. <i>Nano Letters</i> , 2017, 17, 6935-6940.	4.5	33
72	Recent advances in Fe (or Co)/N/C electrocatalysts for the oxygen reduction reaction in polymer electrolyte membrane fuel cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 18933-18950.	5.2	146

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73	Substoichiometric Molybdenum Sulfide Phases with Catalytically Active Basal Planes. <i>Journal of the American Chemical Society</i> , 2016, 138, 14121-14128.	6.6	28
74	Tuning charge and correlation effects for a single molecule on a graphene device. <i>Nature Communications</i> , 2016, 7, 13553.	5.8	82
75	Oscillating edge states in one-dimensional MoS ₂ nanowires. <i>Nature Communications</i> , 2016, 7, 12904.	5.8	57
76	Nanoscale Control of Rewriteable Doping Patterns in Pristine Graphene/Boron Nitride Heterostructures. <i>Nano Letters</i> , 2016, 16, 1620-1625.	4.5	60
77	Probing the Role of Interlayer Coupling and Coulomb Interactions on Electronic Structure in Few-Layer MoSe ₂ Nanostructures. <i>Nano Letters</i> , 2015, 15, 2594-2599.	4.5	136
78	Molecular Self-Assembly in a Poorly Screened Environment: F ₄ TCNQ on Graphene/BN. <i>ACS Nano</i> , 2015, 9, 12168-12173.	7.3	45
79	Studying Edge Defects of Hexagonal Boron Nitride Using High-Resolution Electron Energy Loss Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 4189-4193.	2.1	9
80	Supramolecular Structure of Self-Assembled Monolayers of Ferrocenyl Terminated <i>n</i> -Alkanethiolates on Gold Surfaces. <i>Langmuir</i> , 2014, 30, 13447-13455.	1.6	30
81	Periodic Grain Boundaries Formed by Thermal Reconstruction of Polycrystalline Graphene Film. <i>Journal of the American Chemical Society</i> , 2014, 136, 12041-12046.	6.6	63
82	Lattice Relaxation at the Interface of Two-Dimensional Crystals: Graphene and Hexagonal Boron-Nitride. <i>Nano Letters</i> , 2014, 14, 5133-5139.	4.5	89
83	Imaging and Tuning Molecular Levels at the Surface of a Gated Graphene Device. <i>ACS Nano</i> , 2014, 8, 5395-5401.	7.3	39
84	Step Flow Versus Mosaic Film Growth in Hexagonal Boron Nitride. <i>Journal of the American Chemical Society</i> , 2013, 135, 2368-2373.	6.6	89
85	Single-Molecule Chemical Reactions Tracked at the Atomic-Bond Level. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 13521-13523.	7.2	3
86	Properties of Strained Structures and Topological Defects in Graphene. <i>ACS Nano</i> , 2013, 7, 8350-8357.	7.3	49
87	Order-disorder transition in a two-dimensional boron-carbon nitride alloy. <i>Nature Communications</i> , 2013, 4, 2681.	5.8	138
88	Room-Temperature Ice Growth on Graphite Seeded by Nano-Graphene Oxide. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 8708-8712.	7.2	46
89	Innenrötikelbild: Room-Temperature Ice Growth on Graphite Seeded by Nano-Graphene Oxide (Angew.) Tj ETQq1.1 0.784314 rgB	1.6	0
90	Probing the catalytic activity of porous graphene oxide and the origin of this behaviour. <i>Nature Communications</i> , 2012, 3, 1298.	5.8	538

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91	Graphene: Growing Suspended Graphene on C ₆₀ Molecules (Small 24/2012). Small, 2012, 8, 3727-3727.	5.2	0
92	Tissue Engineering: Fluorinated Graphene for Promoting Neuroinduction of Stem Cells (Adv. Mater.) Tj ETQq0 0 QrgBT /Ovrlock 10 T	11.1	3
93	Growing Suspended Graphene on C ₆₀ Molecules. Small, 2012, 8, 3728-3732.	5.2	10
94	Transforming moiré blisters into geometric graphene nano-bubbles. Nature Communications, 2012, 3, 823.	5.8	157
95	Fluorinated Graphene for Promoting Neuroinduction of Stem Cells. Advanced Materials, 2012, 24, 4285-4290.	11.1	315
96	Using the Graphene Moiré Pattern for the Trapping of C ₆₀ and Homoepitaxy of Graphene. ACS Nano, 2012, 6, 944-950.	7.3	54
97	Electrochemical Delamination of CVD-Grown Graphene Film: Toward the Recyclable Use of Copper Catalyst. ACS Nano, 2011, 5, 9927-9933.	7.3	529
98	Room temperature ferromagnetism in partially hydrogenated epitaxial graphene. Applied Physics Letters, 2011, 98, .	1.5	126
99	Transforming C60 molecules into graphene quantum dots. Nature Nanotechnology, 2011, 6, 247-252.	15.6	587
100	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
101	Toward High Throughput Interconvertible Graphane-to-Graphene Growth and Patterning. ACS Nano, 2010, 4, 6146-6152.	7.3	109
102	Ionic liquid-functionalized carbon nanoparticles-modified cathode for efficiency enhancement in polymer solar cells. Applied Physics Letters, 2009, 95, 133305.	1.5	19
103	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
104	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
105	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
106	Plasmon dispersion on epitaxial graphene studied using high-resolution electron energy-loss spectroscopy. Physical Review B, 2009, 80, .	1.1	118