Haiping Lin

List of Publications by Year
in descending order

103 papers	4,930 citations	87888 38 h-index	98798 67 g-index
104 all docs	104 docs citations	104 times ranked	6234 citing authors

#	Article	IF	Citations
1	On-Surface Synthesis of Rylene-Type Graphene Nanoribbons. Journal of the American Chemical Society, 2015, 137, 4022-4025.	13.7	278
2	A rhodium/silicon co-electrocatalyst design concept to surpass platinum hydrogen evolution activity at high overpotentials. Nature Communications, 2016, 7, 12272.	12.8	272
3	Janus Structures of Transition Metal Dichalcogenides as the Heterojunction Photocatalysts for Water Splitting. Journal of Physical Chemistry C, 2018, 122, 3123-3129.	3.1	246
4	Regulating the Local Charge Distribution of Ni Active Sites for the Urea Oxidation Reaction. Angewandte Chemie - International Edition, 2021, 60, 10577-10582.	13.8	221
5	A Latticeâ€Oxygenâ€Involved Reaction Pathway to Boost Urea Oxidation. Angewandte Chemie - International Edition, 2019, 58, 16820-16825.	13.8	201
6	Hydrochromic CsPbBr₃ Nanocrystals for Antiâ€Counterfeiting. Angewandte Chemie - International Edition, 2020, 59, 14527-14532.	13.8	190
7	Enhanced Catalytic Conversion of Polysulfides Using Bimetallic Co₇Fe₃ for High-Performance Lithiumâ€“Sulfur Batteries. ACS Nano, 2020, 14, 11558-11569.	14.6	158
8	Real-Space Imaging of the Atomic Structure of Organicâ€“Inorganic Perovskite. Journal of the American Chemical Society, 2015, 137, 16049-16054.	13.7	155
9	High-efficiency direct methane conversion to oxygenates on a cerium dioxide nanowires supported rhodium single-atom catalyst. Nature Communications, 2020, 11, 954.	12.8	152
10	Iridium metallene oxide for acidic oxygen evolution catalysis. Nature Communications, 2021, 12, 6007.	12.8	137
11	Atomistic Origins of Surface Defects in CH₃NH₃PbBr₃ Perovskite and Their Electronic Structures. ACS Nano, 2017, 11, 2060-2065.	14.6	123
12	Surface-Controlled Mono/Diselective ortho Câ€“H Bond Activation. Journal of the American Chemical Society, 2016, 138, 2809-2814.	13.7	120
13	Highly Curved Nanostructureâ€Coated Co, Nâ€Doped Carbon Materials for Oxygen Electrocatalysis. Angewandte Chemie - International Edition, 2021, 60, 12759-12764.	13.8	120
14	Cobaltâ€“Nitrogenâ€Doped Helical Carbonaceous Nanotubes as a Class of Efficient Electrocatalysts for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2018, 57, 13187-13191.	13.8	112
15	Approaching the Volcano Top: Iridium/Silicon Nanocomposites as Efficient Electrocatalysts for the Hydrogen Evolution Reaction. ACS Nano, 2019, 13, 2786-2794.	14.6	106
16	Synthesis of Surface Covalent Organic Frameworks via Dimerization and Cyclotrimerization of Acetyls. Journal of the American Chemical Society, 2015, 137, 4904-4907.	13.7	98
17	Heptazine-based graphitic carbon nitride as an effective hydrogen purification membrane. RSC Advances, 2016, 6, 52377-52383.	3.6	76
18	Stable and metallic borophene nanoribbons from first-principles calculations. Journal of Materials Chemistry C, 2016, 4, 6380-6385.	5.5	75

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19	Highly Efficient Oxygen Evolution by a Thermocatalytic Process Cascaded Electrocatalysis Over Sulfurâ€Treated Feâ€Based Metalâ€“Organicâ€Frameworks. Advanced Energy Materials, 2020, 10, 2000184.	19.5	75
20	Single Vanadium Atoms Anchored on Graphitic Carbon Nitride as a High-Performance Catalyst for Non-oxidative Propane Dehydrogenation. ACS Nano, 2020, 14, 5772-5779.	14.6	73
21	Structures, mobility and electronic properties of point defects in arsenene, antimonene and an antimony arsenide alloy. Journal of Materials Chemistry C, 2017, 5, 4159-4166.	5.5	72
22	The Synergy between Metal Facet and Oxide Support Facet for Enhanced Catalytic Performance: The Case of Pdâ€“TiO₂. Nano Letters, 2016, 16, 5298-5302.	9.1	69
23	The Largest Supertetrahedral Oxychalcogenide Nanocluster and Its Unique Assembly. Journal of the American Chemical Society, 2018, 140, 11189-11192.	13.7	64
24	Regulating the Local Charge Distribution of Ni Active Sites for the Urea Oxidation Reaction. Angewandte Chemie, 2021, 133, 10671-10676.	2.0	61
25	Two-Dimensional Palladiumâ€“Copper Alloy Nanodendrites for Highly Stable and Selective Electrochemical Formate Production. Nano Letters, 2021, 21, 4092-4098.	9.1	59
26	A highly efficient alkaline HER Coâ€“Mo bimetallic carbide catalyst with an optimized Mo d-orbital electronic state. Journal of Materials Chemistry A, 2019, 7, 12434-12439.	10.3	58
27	MoS₂ supported single platinum atoms and their superior catalytic activity for CO oxidation: a density functional theory study. Journal of Materials Chemistry A, 2015, 3, 23113-23119.	10.3	56
28	Structural Variation in Surface-Supported Synthesis by Adjusting the Stoichiometric Ratio of the Reactants. ACS Nano, 2016, 10, 4228-4235.	14.6	55
29	Role of Lateral Alkyl Chains in Modulation of Molecular Structures on Metal Surfaces. Physical Review Letters, 2006, 96, 226101.	7.8	51
30	Cooperativity by Multi-Metals Confined in Supertetrahedral Sulfide Nanoclusters To Enhance Electrocatalytic Hydrogen Evolution. Chemistry of Materials, 2019, 31, 553-559.	6.7	48
31	Stability of two-dimensional PN monolayer sheets and their electronic properties. Physical Chemistry Chemical Physics, 2015, 17, 32009-32015.	2.8	47
32	Using the Nî€,N dipole as a theoretical indicator for estimating the electrocatalytic performance of active sites in the nitrogen reduction reaction: single transition metal atoms embedded in two dimensional phthalocyanine. Journal of Materials Chemistry A, 2020, 8, 3598-3605.	10.3	47
33	Selective Analysis of Molecular States by Functionalized Scanning Tunneling Microscopy Tips. Physical Review Letters, 2006, 96, 156102.	7.8	44
34	Cooperative molecular dynamics in surface reactions. Nature Chemistry, 2009, 1, 716-721.	13.6	42
35	Revealing the Correlation between Catalytic Selectivity and the Local Coordination Environment of Pt Single Atom. Nano Letters, 2020, 20, 6865-6872.	9.1	42
36	Self-assembly directed one-step synthesis of [4]radialene on Cu(100) surfaces. Nature Communications, 2018, 9, 3113.	12.8	41

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37	Os/Si nanocomposites as excellent hydrogen evolution electrocatalysts with thermodynamically more favorable hydrogen adsorption free energy than platinum. Nano Energy, 2017, 39, 284-290.	16.0	40
38	Intermediate States Directed Chiral Transfer on a Silver Surface. Journal of the American Chemical Society, 2019, 141, 168-174.	13.7	40
39	B₄₀fullerene as a highly sensitive molecular device for NH₃detection at low bias: a first-principles study. Nanotechnology, 2016, 27, 075501.	2.6	39
40	Propelling polysulfide redox conversion by d-band modulation for high sulfur loading and low temperature lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2021, 9, 18526-18536.	10.3	39
41	A Latticeâ€Oxygenâ€Involved Reaction Pathway to Boost Urea Oxidation. Angewandte Chemie, 2019, 131, 16976-16981.	2.0	38
42	A stepwise-designed Rh-Au-Si nanocomposite that surpasses Pt/C hydrogen evolution activity at high overpotentials. Nano Research, 2017, 10, 1749-1755.	10.4	37
43	Directed long-range molecular migration energized by surface reaction. Nature Chemistry, 2011, 3, 400-408.	13.6	36
44	Electronic modulation of oxygen evolution on metal doped NiFe layered double hydroxides. Journal of Colloid and Interface Science, 2021, 587, 385-392.	9.4	35
45	Electronic Modulation of Hierarchical Spongy Nanosheets toward Efficient and Stable Water Electrolysis. Small, 2021, 17, e2006881.	10.0	35
46	Concentrationâ€Controlled Reversible Phase Transitions in Selfâ€Assembled Monolayers on HOPG Surfaces. Small, 2015, 11, 2284-2290.	10.0	34
47	Determining Locations of Conduction Bands and Valence Bands of Semiconductor Nanoparticles Based on Their Band Gaps. ACS Omega, 2020, 5, 10297-10300.	3.5	30
48	Induce magnetism into silicene by embedding transition-metal atoms. Applied Physics Letters, 2015, 106, .	3.3	28
49	Rhâ€“Agâ€“Si ternary composites: highly active hydrogen evolution electrocatalysts over Ptâ€“Agâ€“Si. Journal of Materials Chemistry A, 2017, 5, 1623-1628.	10.3	28
50	Theoretical Investigation of On-Purpose Propane Dehydrogenation over the Two-Dimensional Ruâ€“Pc Framework. Journal of Physical Chemistry C, 2019, 123, 4969-4976.	3.1	28
51	Sintering-Resistant Pt on Ga₂O₃ Rods for Propane Dehydrogenation: The Morphology Matters. Industrial & Engineering Chemistry Research, 2018, 57, 13087-13093.	3.7	27
52	Interface Engineering of Silver-Based Heterostructures for CO₂ Reduction Reaction. ACS Applied Materials & Interfaces, 2020, 12, 56642-56649.	8.0	27
53	Catalytic Dealkylation of Ethers to Alcohols on Metal Surfaces. Angewandte Chemie - International Edition, 2016, 55, 9881-9885.	13.8	23
54	Revealing the Active Sites of Pd Nanocrystals for Propyne Semihydrogenation: From Theory to Experiment. ACS Catalysis, 2019, 9, 8471-8480.	11.2	22

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55	Simple Semiempirical Method for the Location Determination of HOMO and LUMO of Carbon Dots. Journal of Physical Chemistry C, 2021, 125, 7451-7457.	3.1	22
56	Self-reconstruction of a MOF-derived chromium-doped nickel disulfide in electrocatalytic water oxidation. Chemical Engineering Journal, 2022, 430, 133046.	12.7	22
57	Strong metalâ€“support interaction between palladium and gallium oxide within monodisperse nanoparticles: self-supported catalysts for propyne semi-hydrogenation. Journal of Catalysis, 2021, 395, 36-45.	6.2	21
58	From Theory to Experiment: Cascading of Thermocatalysis and Electrolysis in Oxygen Evolution Reactions. ACS Energy Letters, 2022, 7, 343-348.	17.4	21
59	Powerful synergy: efficient Ptâ€“Auâ€“Si nanocomposites as state-of-the-art catalysts for electrochemical hydrogen evolution. Journal of Materials Chemistry A, 2017, 5, 21903-21908.	10.3	19
60	Cobaltâ€“Nitrogenâ€Doped Helical Carbonaceous Nanotubes as a Class of Efficient Electrocatalysts for the Oxygen Reduction Reaction. Angewandte Chemie, 2018, 130, 13371-13375.	2.0	19
61	Deprotonation-Induced Phase Evolutions in Co-Assembled Molecular Structures. Langmuir, 2018, 34, 7852-7858.	3.5	19
62	Highly Curved Nanostructureâ€Coated Co, Nâ€Doped Carbon Materials for Oxygen Electrocatalysis. Angewandte Chemie, 2021, 133, 12869-12874.	2.0	19
63	Computational Search for Better Thermoelectric Performance in Nickel-Based Half-Heusler Compounds. ACS Omega, 2021, 6, 18269-18280.	3.5	19
64	Locally Induced Spin States on Graphene by Chemical Attachment of Boron Atoms. Nano Letters, 2018, 18, 5482-5487.	9.1	18
65	Hydroxyl-terminated carbon dots for efficient conversion of cyclohexane to adipic acid. Journal of Colloid and Interface Science, 2021, 591, 281-289.	9.4	18
66	Functionalization of metal oxides with thiocyanate groups: A general strategy for boosting oxygen evolution reaction in neutral media. Nano Energy, 2020, 76, 105079.	16.0	16
67	Direct observation of charge transfer between molecular heterojunctions based on inorganic semiconductor clusters. Chemical Science, 2020, 11, 4085-4096.	7.4	16
68	A density functional theory study of high-performance pre-lithiated MS2 (Mâ€‰=â€‰Mo, W, V) Monolayers as the Anode Material of Lithium Ion Batteries. Scientific Reports, 2020, 10, 6897.	3.3	16
69	Minimized external electric field on asymmetric monolayer maximizes charge separation for photocatalysis. Applied Catalysis B: Environmental, 2021, 295, 120266.	20.2	16
70	Acetylene adsorption on silicon (100)-(4Ã—2) revisited. Surface Science, 2011, 605, 1341-1346.	1.9	14
71	Switching the Spin on a Ni Trimer within a Metalâ€“Organic Motif by Controlling the On-Top Bromine Atom. ACS Nano, 2019, 13, 9936-9943.	14.6	14
72	Bond-Scission-Induced Structural Transformation from Cumulene to Diyne Moiety and Formation of Semiconducting Organometallic Polyyne. Journal of the American Chemical Society, 2020, 142, 8085-8089.	13.7	14

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73	First-principles modelling of scanning tunneling microscopy using non-equilibrium Greenâ€™s functions. Frontiers of Physics in China, 2010, 5, 369-379.	1.0	13
74	Spontaneous Breaking and Remaking of the RSâ€“Auâ€“SR Staple in Self-assembled Ethylthiolate/Au(111) Interface. Journal of Physical Chemistry C, 2018, 122, 19473-19480.	3.1	13
75	van der Waals corrected DFT study of high coverage benzene adsorptions on Si(100) surface and STM simulations. Surface Science, 2014, 621, 152-161.	1.9	11
76	Water Production Reaction on Rh(110). Journal of the American Chemical Society, 2005, 127, 11454-11459.	13.7	10
77	Catalytic Dealkylation of Ethers to Alcohols on Metal Surfaces. Angewandte Chemie, 2016, 128, 10035-10039.	2.0	9
78	Mechanistic investigations of the Au catalysed Câ€“H bond activations in on-surface synthesis. Physical Chemistry Chemical Physics, 2018, 20, 15901-15906.	2.8	9
79	Positioning growth of NPB crystalline nanowires on the PTCDA nanocrystal template. Nanoscale, 2018, 10, 10262-10267.	5.6	9
80	Molecular Modulation of a Molybdenumâ€“Selenium Cluster by Sulfur Substitution To Enhance the Hydrogen Evolution Reaction. Inorganic Chemistry, 2019, 58, 12415-12421.	4.0	9
81	Stabilizing Oxygen Vacancies in ZrO₂ by Ga₂O₃ Boosts the Direct Dehydrogenation of Light Alkanes. ACS Catalysis, 2021, 11, 10159-10169.	11.2	9
82	On-Surface Synthesis of Thiophene-Containing Large-Sized Organometallic Macrocycles on the Ag(111) Surface. Journal of Physical Chemistry C, 2021, 125, 11454-11461.	3.1	8
83	Constructing and Transferring Two-Dimensional Tessellation Kagome Lattices via Chemical Reactions on Cu(111) Surface. Journal of Physical Chemistry Letters, 2021, 12, 8151-8156.	4.6	8
84	Facile Charge-Displacement at Silicon Gives Spaced-out Reaction. Journal of the American Chemical Society, 2011, 133, 16560-16565.	13.7	7
85	Two-Dimensional van der Waals Supramolecular Frameworks from Co-Hosted Molecular Assembly and C₆₀ Dimerization. Journal of Physical Chemistry C, 2020, 124, 12589-12595.	3.1	7
86	The triggering of catalysis via structural engineering at atomic level: Direct propane dehydrogenation on Fe-N3P-C. Chinese Chemical Letters, 2023, 34, 107289.	9.0	6
87	In Situ Observation of Stepwise Câ€“H Bond Scission: Deciphering the Catalytic Selectivity of Ethylbenzene-to-Styrene Conversion on TiO₂. Journal of Physical Chemistry Letters, 2020, 11, 9850-9855.	4.6	5
88	A Fundamental Role of the Molecular Length in Forming Metalâ€“Organic Hybrids of Phenol Derivatives on Silver Surfaces. Journal of Physical Chemistry Letters, 2021, 12, 1869-1875.	4.6	5
89	Black phosphorus incorporated cobalt oxide: Biomimetic channels for electrocatalytic water oxidation. Chinese Journal of Catalysis, 2022, 43, 1123-1130.	14.0	5
90	Boosting electrocatalytic selectivity in carbon dioxide reduction: The fundamental role of dispersing gold nanoparticles on silicon nanowires. Chinese Chemical Letters, 2022, 33, 4380-4384.	9.0	5

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91	Highly crystalline core dominated the catalytic performance of carbon dot for cyclohexane to adipic acid reaction. Nano Research, 2022, 15, 7662-7669.	10.4	5
92	Probing Phase Evolutions of Au-Methyl-Propyl-Thiolate Self-Assembled Monolayers on Au(111) at the Molecular Level. Journal of Physical Chemistry B, 2018, 122, 6666-6672.	2.6	4
93	Complex supramolecular tessellations with on-surface self-synthesized C₆₀ tiles through van der Waals interaction. Nanoscale, 2022, 14, 1333-1339.	5.6	3
94	A mechanistic study of selective propane dehydrogenations on MoS2 supported single Fe atoms. Chinese Chemical Letters, 2023, 34, 107257.	9.0	3
95	Synthesis of the Two-Dimensional Robust Kagome Lattice on Au(111) via the Introduction of Fe Atoms. Journal of Physical Chemistry C, 2022, 126, 12009-12014.	3.1	3
96	Tailoring Alkane Uniaxial Self-Assembly via Polymer Modified Step Edges. Journal of Physical Chemistry C, 2019, 123, 28811-28815.	3.1	2
97	Insight into the Li- and Zn-Ion Synergistic Effect for Benzoquinone-Based Anodes in Aqueous Batteries. ACS Applied Energy Materials, 2020, 3, 8309-8316.	5.1	2
98	Theory of Scanning Tunneling Microscopy and Applications in Catalysis. , 0, , 97-118.		1
99	Structural Evolutions of the Self-Assembled N-Decyldecanamide on Au(111). Journal of Physical Chemistry C, 2018, 122, 22538-22543.	3.1	1
100	Orientation-Selective Growth of Single-Atomic-Layer Gold Nanosheets via van der Waals Interlocking and Octanethiolate-Confined Molecular Channels. Journal of Physical Chemistry C, 2019, 123, 25228-25235.	3.1	1
101	On-Surface Intramolecular Dehalogenation of Vicinal Dibromides for the Direct Formation of Câ€“C Double Bonds. Journal of Physical Chemistry C, 2019, 123, 30467-30472.	3.1	1
102	Growth, coalescence, and etching of two-dimensional overlayers on metals modulated by near-surface Ar nanobubbles. Nano Research, 0, , 1.	10.4	1
103	On-surface synthesis of 2D COFs via molecular assembly directed photocycloadditions: a first-principles investigation. Journal of Physics Condensed Matter, 2021, 33, 475201.	1.8	0