Sen Lin

List of Publications by Year
in descending order

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77	7,446	81743	69108
papers	citations	39 h-index	77 g-index

78	78	78	8806
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Overall water splitting by Pt/g-C₃N₄photocatalysts without using sacrificial agents. Chemical Science, 2016, 7, 3062-3066.	3.7	835
2	Coâ€Monomer Control of Carbon Nitride Semiconductors to Optimize Hydrogen Evolution with Visible Light. Angewandte Chemie - International Edition, 2012, 51, 3183-3187.	7.2	744
3	Carbon-doped BN nanosheets for metal-free photoredox catalysis. Nature Communications, 2015, 6, 7698.	5.8	609
4	Low-temperature carbon monoxide oxidation catalysed by regenerable atomically dispersed palladium on alumina. Nature Communications, 2014, 5, 4885.	5.8	498
5	Invisible Security Ink Based on Waterâ€Soluble Graphitic Carbon Nitride Quantum Dots. Angewandte Chemie - International Edition, 2016, 55, 2773-2777.	7.2	336
6	Molecular Engineering of Conjugated Polybenzothiadiazoles for Enhanced Hydrogen Production by Photosynthesis. Angewandte Chemie - International Edition, 2016, 55, 9202-9206.	7.2	326
7	First-Principles Investigations of Metal (Cu, Ag, Au, Pt, Rh, Pd, Fe, Co, and Ir) Doped Hexagonal Boron Nitride Nanosheets: Stability and Catalysis of CO Oxidation. Journal of Physical Chemistry C, 2013, 117, 17319-17326.	1.5	300
8	Thermally Stable and Regenerable Platinumâ€“Tin Clusters for Propane Dehydrogenation Prepared by Atom Trapping on Ceria. Angewandte Chemie - International Edition, 2017, 56, 8986-8991.	7.2	262
9	Stabilizing High Metal Loadings of Thermally Stable Platinum Single Atoms on an Industrial Catalyst Support. ACS Catalysis, 2019, 9, 3978-3990.	5.5	233
10	Design of Effective Catalysts for Selective Alkyne Hydrogenation by Doping of Ceria with a Single-Atom Promotor. Journal of the American Chemical Society, 2018, 140, 12964-12973.	6.6	204
11	Monolayer HNb₃O₈ for Selective Photocatalytic Oxidation of Benzylic Alcohols with Visible Light Response. Angewandte Chemie - International Edition, 2014, 53, 2951-2955.	7.2	201
12	Defect Engineering and Phase Junction Architecture of Wide-Bandgap ZnS for Conflicting Visible Light Activity in Photocatalytic H₂ Evolution. ACS Applied Materials & Interfaces, 2015, 7, 13915-13924.	4.0	193
13	Understanding the Activity of Coâ€N_{4â^’x}C_x in Atomic Metal Catalysts for Oxygen Reduction Catalysis. Angewandte Chemie - International Edition, 2020, 59, 6122-6127.	7.2	156
14	Versatile Synthesis of Hollow Metal Sulfides via Reverse Cation Exchange Reactions for Photocatalytic CO₂ Reduction. Angewandte Chemie - International Edition, 2021, 60, 25055-25062.	7.2	154
15	A computational investigation of CO oxidation on ruthenium-embedded hexagonal boron nitride nanosheet. Computational and Theoretical Chemistry, 2013, 1011, 5-10.	1.1	107
16	Correlating DFT Calculations with CO Oxidation Reactivity on Ga-Doped Pt/CeO₂ Single-Atom Catalysts. Journal of Physical Chemistry C, 2018, 122, 22460-22468.	1.5	91
17	Can metal-free silicon-doped hexagonal boron nitride nanosheets and nanotubes exhibit activity toward CO oxidation?. Physical Chemistry Chemical Physics, 2015, 17, 888-895.	1.3	88
18	Engineering catalyst supports to stabilize PdOx two-dimensional rafts for water-tolerant methane oxidation. Nature Catalysis, 2021, 4, 830-839.	16.1	86

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19	Mechanistic insight into the water photooxidation on pure and sulfur-doped g-C3N4 photocatalysts from DFT calculations with dispersion corrections. Journal of Molecular Catalysis A, 2015, 406, 137-144.	4.8	81
20	Phenyl-doped graphitic carbon nitride: photoluminescence mechanism and latent fingerprint imaging. Nanoscale, 2017, 9, 17737-17742.	2.8	77
21	Molecular Engineering of Conjugated Polybenzothiadiazoles for Enhanced Hydrogen Production by Photosynthesis. Angewandte Chemie, 2016, 128, 9348-9352.	1.6	70
22	Invisible Security Ink Based on Waterâ€Soluble Graphitic Carbon Nitride Quantum Dots. Angewandte Chemie, 2016, 128, 2823-2827.	1.6	69
23	A Pd/Monolayer Titanate Nanosheet with Surface Synergetic Effects for Precise Synthesis of Cyclohexanones. ACS Catalysis, 2017, 7, 8664-8674.	5.5	69
24	A novel phosphotungstic acid-supported single metal atom catalyst with high activity and selectivity for the synthesis of NH₃ from electrochemical N₂ reduction: a DFT prediction. Journal of Materials Chemistry A, 2019, 7, 19838-19845.	5.2	69
25	High-Efficiency Water Gas Shift Reaction Catalysis on Î±-MoC Promoted by Single-Atom Ir Species. ACS Catalysis, 2021, 11, 5942-5950.	5.5	65
26	Design of a High-Performance Electrocatalyst for N₂ Conversion to NH₃ by Trapping Single Metal Atoms on Stepped CeO₂. ACS Applied Materials & Interfaces, 2019, 11, 47525-47534.	4.0	64
27	Pathways of Methanol Steam Reforming on PdZn and Comparison with Cu. Journal of Physical Chemistry C, 2011, 115, 20583-20589.	1.5	60
28	Selective hydrogenation of 1,3-butadiene catalyzed by a single Pd atom anchored on graphene: the importance of dynamics. Chemical Science, 2018, 9, 5890-5896.	3.7	55
29	Identification of Active Sites on High-Performance Pt/Al₂O₃ Catalyst for Cryogenic CO Oxidation. ACS Catalysis, 2020, 10, 8815-8824.	5.5	54
30	Axial ligand effect on the stability of Feâ€“Nâ€“C electrocatalysts for acidic oxygen reduction reaction. Nano Energy, 2020, 78, 105128.	8.2	54
31	Defective Hexagonal Boron Nitride Nanosheet on Ni(111) and Cu(111): Stability, Electronic Structures, and Potential Applications. ACS Applied Materials & Interfaces, 2016, 8, 24238-24247.	4.0	51
32	Unraveling the Intermediate Reaction Complexes and Critical Role of Support-Derived Oxygen Atoms in CO Oxidation on Single-Atom Pt/CeO₂. ACS Catalysis, 2021, 11, 8701-8715.	5.5	51
33	Thermally Stable and Regenerable Platinumâ€“Tin Clusters for Propane Dehydrogenation Prepared by Atom Trapping on Ceria. Angewandte Chemie, 2017, 129, 9114-9119.	1.6	49
34	A Cu(111) supported h-BN nanosheet: a potential low-cost and high-performance catalyst for CO oxidation. Physical Chemistry Chemical Physics, 2015, 17, 22097-22105.	1.3	48
35	Metalized Carbon Nitrides for Efficient Catalytic Functionalization of CO₂. ACS Catalysis, 2022, 12, 1797-1808.	5.5	48
36	Single atom detachment from Cu clusters, and diffusion and trapping on CeO₂(111): implications in Ostwald ripening and atomic redispersion. Nanoscale, 2018, 10, 17893-17901.	2.8	47

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37	Understanding the Activity of Coâ€N_{4â^’x}C_x in Atomic Metal Catalysts for Oxygen Reduction Catalysis. Angewandte Chemie, 2020, 132, 6178-6183.	1.6	47
38	Revealing the importance of kinetics in N-coordinated dual-metal sites catalyzed oxygen reduction reaction. Journal of Catalysis, 2021, 396, 215-223.	3.1	47
39	Methanol conversion on borocarbonitride catalysts: Identification and quantification of active sites. Science Advances, 2020, 6, eaba5778.	4.7	45
40	On the mechanism of alkyne hydrogenation catalyzed by Ga-doped ceria. Journal of Catalysis, 2019, 375, 410-418.	3.1	43
41	Confined Catalysis in the g-C₃N₄/Pt(111) Interface: Feasible Molecule Intercalation, Tunable Moleculeâ€“Metal Interaction, and Enhanced Reaction Activity of CO Oxidation. ACS Applied Materials & Interfaces, 2017, 9, 33267-33273.	4.0	40
42	Bandgap Opening of Graphdiyne Monolayer via B, N-Codoping for Photocatalytic Overall Water Splitting: Design Strategy from DFT Studies. Journal of Physical Chemistry C, 2020, 124, 6624-6633.	1.5	39
43	Metalated carbon nitrides as base catalysts for efficient catalytic hydrolysis of carbonyl sulfide. Chemical Communications, 2019, 55, 11259-11262.	2.2	38
44	First-Principles Insights into Ammonia Decomposition Catalyzed by Ru Clusters Anchored on Carbon Nanotubes: Size Dependence and Interfacial Effects. Journal of Physical Chemistry C, 2018, 122, 9091-9100.	1.5	35
45	Phosphomolybdic acid supported single-metal-atom catalysis in CO oxidation: first-principles calculations. Physical Chemistry Chemical Physics, 2018, 20, 20661-20668.	1.3	34
46	Vertically aligned 2D carbon doped boron nitride nanofilms for photoelectrochemical water oxidation. Journal of Materials Chemistry A, 2020, 8, 13059-13064.	5.2	31
47	Perovskite-supported Pt single atoms for methane activation. Journal of Materials Chemistry A, 2020, 8, 4362-4368.	5.2	31
48	An unsaturated metal site-promoted approach to construct strongly coupled noble metal/HNb₃O₈ nanosheets for efficient thermo/photo-catalytic reduction. Nanoscale, 2017, 9, 14654-14663.	2.8	30
49	Synthesis of Nickelâ€Doped Ceria Catalysts for Selective Acetylene Hydrogenation. ChemCatChem, 2019, 11, 1526-1533.	1.8	30
50	Ruâ€“polyoxometalate as a single-atom electrocatalyst for N₂ reduction to NH₃ with high selectivity at applied voltage: a perspective from DFT studies. Physical Chemistry Chemical Physics, 2020, 22, 7234-7240.	1.3	30
51	Catalytic role of assembled Ce Lewis acid sites over ceria for electrocatalytic conversion of dinitrogen to ammonia. Journal of Energy Chemistry, 2021, 60, 249-258.	7.1	29
52	Efficient aerobic oxidation of alcohols to esters by acidified carbon nitride photocatalysts. Journal of Catalysis, 2021, 393, 116-125.	3.1	27
53	Phosphomolybdic acid supported atomically dispersed transition metal atoms (M = Fe, Co, Ni, Cu, Ru,) Tj ETQq1 1 0.784314 rgBT /Ov Advances, 2017, 7, 24925-24932.	1.7	23
54	Selective hydrogenation of acetylene to ethylene on anatase TiO₂ through first-principles studies. Journal of Materials Chemistry A, 2021, 9, 14064-14073.	5.2	23

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55	Theoretical Insight into the Reaction Mechanism of Ethanol Steam Reforming on Co(0001). Journal of Physical Chemistry C, 2015, 119, 2680-2691.	1.5	22
56	Revealing the Origin of Nitrogen Electroreduction Activity of Molybdenum Disulfide Supported Iron Atoms. Journal of Physical Chemistry C, 2022, 126, 5180-5188.	1.5	22
57	Novel Porous Boron Nitride Nanosheet with Carbon Doping: Potential Metalâ€Free Photocatalyst for Visibleâ€Lightâ€Driven Overall Water Splitting. Advanced Theory and Simulations, 2019, 2, 1800174.	1.3	21
58	Î±-MoC Supported Noble Metal Catalysts for Waterâ€“Gas Shift Reaction: Single-Atom Promoter or Single-Atom Player. Journal of Physical Chemistry Letters, 2021, 12, 11415-11421.	2.1	21
59	Environmentally benign synthesis of a PGM-free catalyst for low temperature CO oxidation. Applied Catalysis B: Environmental, 2020, 264, 118547.	10.8	20
60	Dynamics of Initial Hydrogen Spillover from a Single Atom Platinum Active Site to the Cu(111) Host Surface: The Impact of Substrate Electronâ€“Hole Pairs. Journal of Physical Chemistry Letters, 2021, 12, 8423-8429.	2.1	19
61	Coordination structure at work: Atomically dispersed heterogeneous catalysts. Coordination Chemistry Reviews, 2022, 460, 214469.	9.5	15
62	A Visible Light Photocatalyst of Carbonateâ€Like Species Doped TiO₂. Journal of the American Ceramic Society, 2017, 100, 333-342.	1.9	14
63	Origin of Confined Catalysis in Nanoscale Reactors between Two-Dimensional Covers and Metal Substrates: Mechanical or Electronic?. Journal of Physical Chemistry C, 2020, 124, 11564-11573.	1.5	14
64	Construction of frustrated Lewis pairs on carbon nitride nanosheets for catalytic hydrogenation of acetylene. Physical Chemistry Chemical Physics, 2021, 23, 24349-24356.	1.3	14
65	Photo-fluorination of nanodiamonds catalyzing oxidative dehydrogenation reaction of ethylbenzene. Nature Communications, 2021, 12, 6542.	5.8	14
66	Initial Decomposition of Methanol and Water on In₂O₃(110): A Periodic DFT Study. Chinese Journal of Chemistry, 2012, 30, 2036-2040.	2.6	13
67	A comprehensive understanding of water photooxidation on Ag₃PO₄ surfaces. RSC Advances, 2017, 7, 23994-24003.	1.7	13
68	Acetylene hydrogenation catalyzed by bare and Ni doped CeO₂(110): the role of frustrated Lewis pairs. Physical Chemistry Chemical Physics, 2022, 24, 11295-11304.	1.3	12
69	The band structure engineering of fluorine-passivated graphdiyne nanoribbons via doping with BN pairs for overall photocatalytic water splitting. Physical Chemistry Chemical Physics, 2020, 22, 26995-27001.	1.3	11
70	Semi-Hydrogenation of Alkynes by a Tandem Photoredox System Free of Noble Metal. CCS Chemistry, 2022, 4, 2597-2603.	4.6	9
71	Cu/O Frustrated Lewis Pairs on Cu Doped CeO2(111) for Acetylene Hydrogenation: A First-Principles Study. Catalysts, 2022, 12, 74.	1.6	8
72	Halogen-driven bandgap opening in graphdiyne for overall photocatalytic water splitting. Chinese Journal of Chemical Physics, 2021, 34, 805-813.	0.6	7

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73	Design of Catalysts for Selective Hydrogenation of Acrylonitrile via Confining Single Metal Atoms within a C₂N Framework. Journal of Physical Chemistry C, 2022, 126, 10053-10060.	1.5	7
74	Versatile Synthesis of Hollow Metal Sulfides via Cation Exchange Reactions for Photocatalytic CO2 Reduction. Angewandte Chemie, 2021, 133, 25259.	1.6	6
75	Frustrated Lewis Pairs in Heterogeneous Catalysis: Theoretical Insights. Molecules, 2022, 27, 3734.	1.7	5
76	Activation of Reactions in the Complex Region Using Microwave Irradiation. Journal of Physical Chemistry A, 2018, 122, 7540-7547.	1.1	4
77	Dynamics in Heterogeneous and Single-Site Catalysis. , 2024, , 649-657.		0