Sen Lin

List of Publications by Year in Descending Order

74 papers	5,214 citations	29 h-index	72 g-index
78 ext. papers	6,336 ext. citations	8.9 avg, IF	5.94 L-index

#	Paper	IF	Citations
74	Metalized Carbon Nitrides for Efficient Catalytic Functionalization of CO2. *ACS Catalysis*, **2022**, 12, 1797-1808	13.1	5
73	Dynamics in Heterogeneous and Single-Site Catalysis **2022**,		
72	Cu/O Frustrated Lewis Pairs on Cu Doped CeO2(111) for Acetylene Hydrogenation: A First-Principles Study. *Catalysts*, **2022**, 12, 74	4	3
71	Revealing the Origin of Nitrogen Electroreduction Activity of Molybdenum Disulfide Supported Iron Atoms. *Journal of Physical Chemistry C*, **2022**, 126, 5180-5188	3.8	1
70	Coordination structure at work: Atomically dispersed heterogeneous catalysts. *Coordination Chemistry Reviews*, **2022**, 460, 214469	23.2	3
69	Photo-fluorination of nanodiamonds catalyzing oxidative dehydrogenation reaction of ethylbenzene. *Nature Communications*, **2021**, 12, 6542	17.4	3
68	□MoC Supported Noble Metal Catalysts for Water-Gas Shift Reaction: Single-Atom Promoter or Single-Atom Player. *Journal of Physical Chemistry Letters*, **2021**, 12, 11415-11421	6.4	4
67	Construction of frustrated Lewis pairs on carbon nitride nanosheets for catalytic hydrogenation of acetylene. *Physical Chemistry Chemical Physics*, **2021**, 23, 24349-24356	3.6	3
66	Engineering catalyst supports to stabilize PdOx two-dimensional rafts for water-tolerant methane oxidation. *Nature Catalysis*, **2021**, 4, 830-839	36.5	13
65	Revealing the importance of kinetics in N-coordinated dual-metal sites catalyzed oxygen reduction reaction. *Journal of Catalysis*, **2021**, 396, 215-223	7.3	15
64	High-Efficiency Water Gas Shift Reaction Catalysis on □MoC Promoted by Single-Atom Ir Species. *ACS Catalysis*, **2021**, 11, 5942-5950	13.1	16
63	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	13.1	13
62	Efficient aerobic oxidation of alcohols to esters by acidified carbon nitride photocatalysts. *Journal of Catalysis*, **2021**, 393, 116-125	7.3	11
61	Selective hydrogenation of acetylene to ethylene on anatase TiO2 through first-principles studies. *Journal of Materials Chemistry A*, **2021**, 9, 14064-14073	13	6
60	Dynamics of Initial Hydrogen Spillover from a Single Atom Platinum Active Site to the Cu(111) Host Surface: The Impact of Substrate Electron-Hole Pairs. *Journal of Physical Chemistry Letters*, **2021**, 12, 8423-8429	6.4	7
59	Versatile Synthesis of Hollow Metal Sulfides via Reverse Cation Exchange Reactions for Photocatalytic CO2 Reduction. *Angewandte Chemie*, **2021**, 133, 25259	3.6	0
58	Versatile Synthesis of Hollow Metal Sulfides via Reverse Cation Exchange Reactions for Photocatalytic CO Reduction. *Angewandte Chemie - International Edition*, **2021**, 60, 25055-25062	16.4	31

57	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	12	7
56	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	3.8	8
55	Vertically aligned 2D carbon doped boron nitride nanofilms for photoelectrochemical water oxidation. *Journal of Materials Chemistry A*, **2020**, 8, 13059-13064	13	15
54	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	3.8	20
53	Methanol conversion on borocarbonitride catalysts: Identification and quantification of active sites. *Science Advances*, **2020**, 6, eaba5778	14.3	20
52	Ru-polyoxometalate as a single-atom electrocatalyst for N reduction to NH with high selectivity at applied voltage: a perspective from DFT studies. *Physical Chemistry Chemical Physics*, **2020**, 22, 7234-7240	3.6	14
51	Understanding the Activity of Co-N4Cx in Atomic Metal Catalysts for Oxygen Reduction Catalysis. *Angewandte Chemie*, **2020**, 132, 6178-6183	3.6	30
50	Understanding the Activity of Co-N C in Atomic Metal Catalysts for Oxygen Reduction Catalysis. *Angewandte Chemie - International Edition*, **2020**, 59, 6122-6127	16.4	86
49	Perovskite-supported Pt single atoms for methane activation. *Journal of Materials Chemistry A*, **2020**, 8, 4362-4368	13	14
48	The band structure engineering of fluorine-passivated graphdiyne nanoribbons doping with BN pairs for overall photocatalytic water splitting. *Physical Chemistry Chemical Physics*, **2020**, 22, 26995-27001	3.6	3
47	Environmentally benign synthesis of a PGM-free catalyst for low temperature CO oxidation. *Applied Catalysis B: Environmental*, **2020**, 264, 118547	21.8	9
46	Identification of Active Sites on High-Performance Pt/Al2O3 Catalyst for Cryogenic CO Oxidation. *ACS Catalysis*, **2020**, 10, 8815-8824	13.1	16
45	Axial ligand effect on the stability of FeNC electrocatalysts for acidic oxygen reduction reaction. *Nano Energy*, **2020**, 78, 105128	17.1	25
44	Stabilizing High Metal Loadings of Thermally Stable Platinum Single Atoms on an Industrial Catalyst Support. *ACS Catalysis*, **2019**, 9, 3978-3990	13.1	126
43	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	13	40
42	Metalated carbon nitrides as base catalysts for efficient catalytic hydrolysis of carbonyl sulfide. *Chemical Communications*, **2019**, 55, 11259-11262	5.8	18
41	On the mechanism of alkyne hydrogenation catalyzed by Ga-doped ceria. *Journal of Catalysis*, **2019**, 375, 410-418	7.3	21
40	Design of a High-Performance Electrocatalyst for N Conversion to NH by Trapping Single Metal Atoms on Stepped CeO. *ACS Applied Materials & Interfaces*, **2019**, 11, 47525-47534	9.5	35

39	Synthesis of Nickel-Doped Ceria Catalysts for Selective Acetylene Hydrogenation. *ChemCatChem*, **2019**, 11, 1526-1533	5.2	13
38	Novel Porous Boron Nitride Nanosheet with Carbon Doping: Potential Metal-Free Photocatalyst for Visible-Light-Driven Overall Water Splitting. *Advanced Theory and Simulations*, **2019**, 2, 1800174	3.5	16
37	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	3.8	16
36	Phosphomolybdic acid supported single-metal-atom catalysis in CO oxidation: first-principles calculations. *Physical Chemistry Chemical Physics*, **2018**, 20, 20661-20668	3.6	25
35	Single atom detachment from Cu clusters, and diffusion and trapping on CeO(111): implications in Ostwald ripening and atomic redispersion. *Nanoscale*, **2018**, 10, 17893-17901	7.7	25
34	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	9.4	44
33	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	16.4	130
32	Correlating DFT Calculations with CO Oxidation Reactivity on Ga-Doped Pt/CeO_2 Single-Atom Catalysts. *Journal of Physical Chemistry C*, **2018**, 122, 22460-22468	3.8	53
31	Activation of Reactions in the Complex Region Using Microwave Irradiation. *Journal of Physical Chemistry A*, **2018**, 122, 7540-7547	2.8	3
30	A comprehensive understanding of water photooxidation on Ag_3PO_4 surfaces. *RSC Advances*, **2017**, 7, 23994-24003	3.7	9
29	Thermally Stable and Regenerable Platinum-Tin Clusters for Propane Dehydrogenation Prepared by Atom Trapping on Ceria. *Angewandte Chemie - International Edition*, **2017**, 56, 8986-8991	16.4	187
28	Phosphomolybdic acid supported atomically dispersed transition metal atoms (M = Fe, Co, Ni, Cu, Ru, Rh, Pd, Ag, Os, Ir, Pt, and Au): stable single atom catalysts studied by density functional theory. *RSC Advances*, **2017**, 7, 24925-24932	3.7	17
27	Thermally Stable and Regenerable Platinum□Tin Clusters for Propane Dehydrogenation Prepared by Atom Trapping on Ceria. *Angewandte Chemie*, **2017**, 129, 9114-9119	3.6	26
26	Phenyl-doped graphitic carbon nitride: photoluminescence mechanism and latent fingerprint imaging. *Nanoscale*, **2017**, 9, 17737-17742	7.7	54
25	An unsaturated metal site-promoted approach to construct strongly coupled noble metal/HNbO nanosheets for efficient thermo/photo-catalytic reduction. *Nanoscale*, **2017**, 9, 14654-14663	7.7	26
24	Confined Catalysis in the g-CN/Pt(111) Interface: Feasible Molecule Intercalation, Tunable Molecule-Metal Interaction, and Enhanced Reaction Activity of CO Oxidation. *ACS Applied Materials & Interfaces*, **2017**, 9, 33267-33273	9.5	26
23	A Pd/Monolayer Titanate Nanosheet with Surface Synergetic Effects for Precise Synthesis of Cyclohexanones. *ACS Catalysis*, **2017**, 7, 8664-8674	13.1	51
22	A Visible Light Photocatalyst of Carbonate-Like Species Doped TiO_2. *Journal of the American Ceramic Society*, **2017**, 100, 333-342	3.8	11

21	Defective Hexagonal Boron Nitride Nanosheet on Ni(111) and Cu(111): Stability, Electronic Structures, and Potential Applications. *ACS Applied Materials & Interfaces*, **2016**, 8, 24238-47	9.5	43
20	Overall water splitting by Pt/g-CN photocatalysts without using sacrificial agents. *Chemical Science*, **2016**, 7, 3062-3066	9.4	689
19	Molecular Engineering of Conjugated Polybenzothiadiazoles for Enhanced Hydrogen Production by Photosynthesis. *Angewandte Chemie*, **2016**, 128, 9348-9352	3.6	56
18	Invisible Security Ink Based on Water-Soluble Graphitic Carbon Nitride Quantum Dots. *Angewandte Chemie - International Edition*, **2016**, 55, 2773-7	16.4	251
17	Molecular Engineering of Conjugated Polybenzothiadiazoles for Enhanced Hydrogen Production by Photosynthesis. *Angewandte Chemie - International Edition*, **2016**, 55, 9202-6	16.4	265
16	Invisible Security Ink Based on Water-Soluble Graphitic Carbon Nitride Quantum Dots. *Angewandte Chemie*, **2016**, 128, 2823-2827	3.6	53
15	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		69
14	Carbon-doped BN nanosheets for metal-free photoredox catalysis. *Nature Communications*, **2015**, 6, 7698	17.4	482
13	A Cu(111) supported h-BN nanosheet: a potential low-cost and high-performance catalyst for CO oxidation. *Physical Chemistry Chemical Physics*, **2015**, 17, 22097-105	3.6	41
12	Can metal-free silicon-doped hexagonal boron nitride nanosheets and nanotubes exhibit activity toward CO oxidation?. *Physical Chemistry Chemical Physics*, **2015**, 17, 888-95	3.6	82
11	Defect Engineering and Phase Junction Architecture of Wide-Bandgap ZnS for Conflicting Visible Light Activity in Photocatalytic H□Evolution. *ACS Applied Materials & Interfaces*, **2015**, 7, 13915-24	9.5	148
10	Theoretical Insight into the Reaction Mechanism of Ethanol Steam Reforming on Co(0001). *Journal of Physical Chemistry C*, **2015**, 119, 2680-2691	3.8	18
9	Monolayer HNb3O8 for selective photocatalytic oxidation of benzylic alcohols with visible light response. *Angewandte Chemie - International Edition*, **2014**, 53, 2951-5	16.4	171
8	Low-temperature carbon monoxide oxidation catalysed by regenerable atomically dispersed palladium on alumina. *Nature Communications*, **2014**, 5, 4885	17.4	409
7	Monolayer HNb3O8 for Selective Photocatalytic Oxidation of Benzylic Alcohols with Visible Light Response. *Angewandte Chemie*, **2014**, 126, 2995-2999	3.6	29
6	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	3.8	246
5	A computational investigation of CO oxidation on ruthenium-embedded hexagonal boron nitride nanosheet. *Computational and Theoretical Chemistry*, **2013**, 1011, 5-10	2	98
4	Initial Decomposition of Methanol and Water on In2O3(110): A Periodic DFT Study. *Chinese Journal of Chemistry*, **2012**, 30, 2036-2040	4.9	11

3	Co-monomer control of carbon nitride semiconductors to optimize hydrogen evolution with visible light. *Angewandte Chemie - International Edition*, **2012**, 51, 3183-7	16.4	624
2	Pathways of Methanol Steam Reforming on PdZn and Comparison with Cu. *Journal of Physical Chemistry C*, **2011**, 115, 20583-20589	3.8	51
1	Semi-Hydrogenation of Alkynes by a Tandem Photoredox System Free of Noble Metal. *CCS Chemistry*,3185-3191	7.2	0