Li-Ming Yang

List of Publications by Year
in descending order

59 papers	3,611 citations	147726 31 h-index	133188 59 g-index
60 all docs	60 docs citations	60 times ranked	3305 citing authors

#	ARTICLE	IF	CITATIONS
1	Unveiling the Underlying Mechanism of Transition Metal Atoms Anchored Square Tetracyanoquinodimethane Monolayers as Electrocatalysts for N₂ Fixation. Energy and Environmental Materials, 2022, 5, 533-542.	7.3	25
2	Unveiling the underlying mechanism of nitrogen fixation by a new class of electrocatalysts two-dimensional TM@g-C4N3 monosheets. Applied Surface Science, 2022, 576, 151839.	3.1	37
3	Efficient modulation of the catalytic performance of electrocatalytic nitrogen reduction with transition metals anchored on N/O-codoped graphene by coordination engineering. Journal of Materials Chemistry A, 2022, 10, 1481-1496.	5.2	43
4	Single-atom catalysts based on two-dimensional metalloporphyrin monolayers for ammonia synthesis under ambient conditions. Nano Research, 2022, 15, 4039-4047.	5.8	46
5	Prognostication of two-dimensional transition-metal atoms embedded rectangular tetrafluorotetracyanoquinodimethane single-atom catalysts for high-efficiency electrochemical nitrogen reduction. Journal of Colloid and Interface Science, 2022, 621, 24-32.	5.0	10
6	Dual transition metal atoms embedded in N-doped graphene for electrochemical nitrogen fixation under ambient conditions. Journal of Materials Chemistry A, 2022, 10, 13527-13543.	5.2	30
7	The Evolution of Geometric Structures, Electronic Properties, and Chemical Bonding of Small Phosphorus-Boron Clusters. Condensed Matter, 2022, 7, 36.	0.8	2
8	Transition Metals Embedded Two-Dimensional Square Tetrafluorotetracyanoquinodimethane Monolayers as a Class of Novel Electrocatalysts for Nitrogen Reduction Reaction. ACS Applied Materials & Interfaces, 2022, 14, 25317-25325.	4.0	11
9	A Supported Palladium on Gallium-based Liquid Metal Catalyst for Enhanced Oxygen Reduction Reaction. Chemical Research in Chinese Universities, 2022, 38, 1219-1225.	1.3	7
10	Atomistic Structures, Stabilities, Electronic Properties, and Chemical Bonding of Boronâ€“Aluminum Mixed Clusters B3Al0/â^’/+n (nâ€‰=â€‰2â€“6). Journal of Cluster Science, 2021, 32, 1261-1276.	1.7	4
11	Properties and Detailed Adsorption of CO₂ by M₂(dobpdc) with <i>N</i>,<i>N</i>-Dimethylethylenediamine Functionalization. Inorganic Chemistry, 2021, 60, 2656-2662.	1.9	11
12	CO₂ Adsorption Properties of a <i>N</i>,<i>N</i>-Diethylethylenediamine-Appended M₂(dobpdc) Series of Materials and Their Detailed Microprocess. Crystal Growth and Design, 2021, 21, 2474-2480.	1.4	9
13	Single Atomic Cerium Sites with a High Coordination Number for Efficient Oxygen Reduction in Proton-Exchange Membrane Fuel Cells. ACS Catalysis, 2021, 11, 3923-3929.	5.5	156
14	Electrocatalytic Reduction of N₂ Using Metal-Doped Borophene. ACS Applied Materials & Interfaces, 2021, 13, 14091-14101.	4.0	70
15	Two-Dimensional Single-Atom Catalyst TM₃(HAB)₂ Monolayers for Electrocatalytic Dinitrogen Reduction Using Hierarchical High-Throughput Screening. ACS Applied Materials & Interfaces, 2021, 13, 26109-26122.	4.0	56
16	Tailoring Unsymmetricalâ€Coordinated Atomic Site in Oxideâ€Supported Pt Catalysts for Enhanced Surface Activity and Stability. Small, 2021, 17, e2101008.	5.2	20
17	Electrocatalytic Mechanism of N₂ Reduction Reaction by Single-Atom Catalyst Rectangular TM-TCNQ Monolayers. ACS Applied Materials & Interfaces, 2021, 13, 29641-29653.	4.0	42
18	Structural revolution of atomically dispersed Mn sites dictates oxygen reduction performance. Nano Research, 2021, 14, 4512-4519.	5.8	40

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19	Compressive Strain Modulation of Single Iron Sites on Helical Carbon Support Boosts Electrocatalytic Oxygen Reduction. Angewandte Chemie, 2021, 133, 22904-22910.	1.6	4
20	Compressive Strain Modulation of Single Iron Sites on Helical Carbon Support Boosts Electrocatalytic Oxygen Reduction. Angewandte Chemie - International Edition, 2021, 60, 22722-22728.	7.2	113
21	Ammonia Synthesis Using Single-Atom Catalysts Based on Two-Dimensional Organometallic Metal Phthalocyanine Monolayers under Ambient Conditions. ACS Applied Materials & Interfaces, 2021, 13, 608-621.	4.0	82
22	Computational Prediction of the Lowâ€Temperature Ferromagnetic Semiconducting 2D SiN Monolayer. Physica Status Solidi (B): Basic Research, 2020, 257, 1900619.	0.7	15
23	Disclosing the microscopic mechanism and adsorption properties of CO₂ capture in <i>N</i>-isopropylethylenediamine appended M₂(dobpdc) series. Physical Chemistry Chemical Physics, 2020, 22, 24614-24623.	1.3	13
24	Biâ€Based Metalâ€Organic Framework Derived Leafy Bismuth Nanosheets for Carbon Dioxide Electroreduction. Advanced Energy Materials, 2020, 10, 2001709.	10.2	210
25	Structural evolution in boron-based clusters B5Aln0/-/+ (nÂ=Â1â€“4): Al atoms transition from the periphery of the planar W-shaped B5 ring to the vertex of the bipyramid. European Physical Journal D, 2020, 74, 1.	0.6	4
26	Elucidation of the Underlying Mechanism of CO₂ Capture by Ethylenediamine-Functionalized M₂(dobpdc) (M = Mg, Scâ€“Zn). Inorganic Chemistry, 2020, 59, 16665-16671.	1.9	13
27	Unveiling the Molecular Mechanism of CO₂ Capture in <i>N</i>-Methylethylenediamine-Grafted M₂(dobpdc). ACS Sustainable Chemistry and Engineering, 2020, 8, 14616-14626.	3.2	24
28	Atomistic Level Mechanism of CO₂ Adsorption in <i>N</i>-Ethylethylenediamine-Functionalized M₂(dobpdc) Metalâ€“Organic Frameworks. Crystal Growth and Design, 2020, 20, 6337-6345.	1.4	12
29	The structures, electronic properties, and chemical bonding of binary alloy boronâ€“aluminum clusters series B4Aln0/âˆ'/+ (nâ€¯=â€¯1â€“5). Materials Today Communications, 2020, 24, 100914.	0.9	4
30	Adsorption Properties and Microscopic Mechanism of CO₂ Capture in 1,1-Dimethyl-1,2-ethylenediamine-Grafted Metalâ€“Organic Frameworks. ACS Applied Materials & Interfaces, 2020, 12, 18533-18540.	4.0	36
31	Formation Mechanism of Ammonium Carbamate for CO₂ Uptake in <i>N</i>,<i>N</i>â€²-Dimethylethylenediamine Grafted M₂(dobpdc). Langmuir, 2020, 36, 14104-14112.	1.6	9
32	First-Principles Investigations of Single Metal Atoms (Sc, Ti, V, Cr, Mn, and Ni) Embedded in Hexagonal Boron Nitride Nanosheets for the Catalysis of CO Oxidation. Condensed Matter, 2019, 4, 65.	0.8	19
33	Twoâ€Dimensional Organometallic TM₃â€“C₁₂S₁₂ Monolayers for Electrocatalytic Reduction of CO₂. Energy and Environmental Materials, 2019, 2, 193-200.	7.3	34
34	Efficient electrocatalytic reduction of carbon dioxide by metal-doped Î²₁₂-borophene monolayers. RSC Advances, 2019, 9, 27710-27719.	1.7	49
35	Two-Dimensional Anti-Vanâ€™t Hoff/Le Bel Array AlB₆ with High Stability, Unique Motif, Triple Dirac Cones, and Superconductivity. Journal of the American Chemical Society, 2019, 141, 3630-3640.	6.6	154
36	Electrochemical reduction of CO₂ by single atom catalyst TMâ€“TCNQ monolayers. Journal of Materials Chemistry A, 2019, 7, 3805-3814.	5.2	103

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37	Electrocatalytic reduction of CO₂ by two-dimensional transition metal porphyrin sheets. Journal of Materials Chemistry A, 2019, 7, 11944-11952.	5.2	110
38	Efficient and Selective Electroreduction of CO₂ by Single-Atom Catalyst Two-Dimensional TMâ€“Pc Monolayers. ACS Sustainable Chemistry and Engineering, 2018, 6, 15494-15502.	3.2	124
39	Mnâ€“graphene single-atom catalyst evaluated for CO oxidation by computational screening. Theoretical Chemistry Accounts, 2018, 137, 1.	0.5	42
40	The initial stages of melting of graphene between 4000 K and 6000 K. Physical Chemistry Chemical Physics, 2017, 19, 3756-3762.	1.3	72
41	Covalent Triazine Frameworks via a Lowâ€Temperature Polycondensation Approach. Angewandte Chemie, 2017, 129, 14337-14341.	1.6	83
42	Covalent Triazine Frameworks via a Lowâ€Temperature Polycondensation Approach. Angewandte Chemie - International Edition, 2017, 56, 14149-14153.	7.2	441
43	Interior Melting of the C3B16 and C2B14â^' Clusters Between 1000 K and 2000 K. Condensed Matter, 2017, 2, 35.	0.8	1
44	Properties of the Free-Standing Two-Dimensional Copper Monolayer. Journal of Nanomaterials, 2016, 2016, 1-6.	1.5	13
45	Computational Study of Quasi-2D Liquid State in Free Standing Platinum, Silver, Gold, and Copper Monolayers. Condensed Matter, 2016, 1, 1.	0.8	21
46	Coexistence of Three Ferroic Orders in the Multiferroic Compound [(CH₃)₄N][Mn(N₃)₃] with Perovskiteâ€Like Structure. Chemistry - A European Journal, 2016, 22, 7863-7870.	1.7	54
47	Halogenated MOF-5 variants show new configuration, tunable band gaps and enhanced optical response in the visible and near infrared. Physical Chemistry Chemical Physics, 2016, 18, 32319-32330.	1.3	35
48	Tunable magnetism in metal adsorbed fluorinated nanoporous graphene. Scientific Reports, 2016, 6, 31841.	1.6	12
49	Adding a new dimension to the chemistry of phosphorus and arsenic. Physical Chemistry Chemical Physics, 2016, 18, 17586-17591.	1.3	39
50	Four Decades of the Chemistry of Planar Hypercoordinate Compounds. Angewandte Chemie - International Edition, 2015, 54, 9468-9501.	7.2	217
51	Two-Dimensional Cu₂Si Monolayer with Planar Hexacoordinate Copper and Silicon Bonding. Journal of the American Chemical Society, 2015, 137, 2757-2762.	6.6	335
52	The new dimension of silver. Physical Chemistry Chemical Physics, 2015, 17, 19695-19699.	1.3	52
53	Post-anti-van't Hoff-Le Bel motif in atomically thin germaniumâ€“copper alloy film. Physical Chemistry Chemical Physics, 2015, 17, 17545-17551.	1.3	81
54	Exceptional CO₂ working capacity in a heterodiamine-grafted metalâ€“organic framework. Chemical Science, 2015, 6, 3697-3705.	3.7	127

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55	Narrow bandgap covalentâ€“organic frameworks with strong optical response in the visible and infrared. Journal of Materials Chemistry C, 2015, 3, 2244-2254.	2.7	18
56	Ten new predicted covalent organic frameworks with strong optical response in the visible and near infrared. Journal of Chemical Physics, 2015, 142, 244706.	1.2	11
57	Glitter in a 2D monolayer. Physical Chemistry Chemical Physics, 2015, 17, 26036-26042.	1.3	68
58	Revealing unusual chemical bonding in planar hyper-coordinate Ni₂Ge and quasi-planar Ni₂Si two-dimensional crystals. Physical Chemistry Chemical Physics, 2015, 17, 26043-26048.	1.3	95
59	Tuning electronic and optical properties of a new class of covalent organic frameworks. Journal of Materials Chemistry C, 2014, 2, 2404.	2.7	32