

# Jin Shang

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/78954/publications.pdf>

Version: 2024-02-01

95  
papers

4,917  
citations

61984

43  
h-index

102487

66  
g-index

99  
all docs

99  
docs citations

99  
times ranked

5741  
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhanced visible-light-driven heterogeneous photocatalytic CO <sub>2</sub> methanation using a Cu <sub>2</sub> O@Cu-MOF-74 thin film. <i>ChemPhysMater</i> , 2023, 2, 126-133.	2.8	4
2	Recent Advances on Porous Materials for Synergetic Adsorption and Photocatalysis. <i>Energy and Environmental Materials</i> , 2022, 5, 711-730.	12.8	30
3	A modified flower pollen-based photothermocatalytic process for enhanced solar water disinfection: Photoelectric effect and bactericidal mechanisms. <i>Water Research</i> , 2022, 217, 118423.	11.3	21
4	Engineered biochar as a potential adsorbent for carbon dioxide capture. , 2022, , 345-359.		1
5	Customizing high-performance molten salt biochar from wood waste for CO <sub>2</sub> /N <sub>2</sub> separation. <i>Fuel Processing Technology</i> , 2022, 234, 107319.	7.2	23
6	Nanomaterial-enabled photothermal-based solar water disinfection processes: Fundamentals, recent advances, and mechanisms. <i>Journal of Hazardous Materials</i> , 2022, 437, 129373.	12.4	21
7	Regulating the spin state of single-atom doped covalent triazine frameworks for efficient nitrogen fixation. <i>Journal of Colloid and Interface Science</i> , 2022, 627, 931-941.	9.4	4
8	Thio-groups decorated covalent triazine frameworks for selective mercury removal. <i>Journal of Hazardous Materials</i> , 2021, 403, 123702.	12.4	60
9	PAA@ZIF-8 incorporated nanofibrous membrane for high-efficiency PM <sub>2.5</sub> capture. <i>Chemical Engineering Journal</i> , 2021, 405, 126584.	12.7	50
10	Machine learning for the selection of carbon-based materials for tetracycline and sulfamethoxazole adsorption. <i>Chemical Engineering Journal</i> , 2021, 406, 126782.	12.7	119
11	Design and fabrication of exfoliated Mg/Al layered double hydroxides on biochar support. <i>Journal of Cleaner Production</i> , 2021, 289, 125142.	9.3	56
12	The rational design of Li-doped nitrogen adsorbents for natural gas purification. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 971-981.	2.8	6
13	Atomically Dispersed Iron Metal Site in a Porphyrin-Based Metal-Organic Framework for Photocatalytic Nitrogen Fixation. <i>ACS Nano</i> , 2021, 15, 9670-9678.	14.6	127
14	Adsorption and visible-light photocatalytic degradation of organic pollutants by functionalized biochar: Role of iodine doping and reactive species. <i>Environmental Research</i> , 2021, 197, 111026.	7.5	31
15	Direct identification of HMX via guest-induced fluorescence turn-on of molecular cage. <i>Chinese Chemical Letters</i> , 2021, 32, 4006-4010.	9.0	9
16	Ambient NO <sub>2</sub> adsorption removal by Mg-Al layered double hydroxides and derived mixed metal oxides. <i>Journal of Cleaner Production</i> , 2021, 313, 127956.	9.3	25
17	Chrysanthemum flower like silica with highly dispersed Cu nanoparticles as a high-performance NO <sub>2</sub> adsorbent. <i>Journal of Hazardous Materials</i> , 2021, 418, 126400.	12.4	20
18	Toxicity assessment and underlying mechanisms of multiple metal organic frameworks using the green algae <i>Chlamydomonas reinhardtii</i> model. <i>Environmental Pollution</i> , 2021, 291, 118199.	7.5	20

#	ARTICLE	IF	CITATIONS
19	The low-temperature NO <sub>2</sub> removal by tailoring metal node in porphyrin-based metal-organic frameworks. <i>Science of the Total Environment</i> , 2021, 801, 149710.	8.0	17
20	NO <sub>2</sub> Removal by Adsorption on Transition-Metal-Based Layered Double Hydroxides. <i>ACS ES&amp;T Engineering</i> , 2021, 1, 375-384.	7.6	22
21	Photocatalytic Bacterial Inactivation by a Rape Pollen-MoS <sub>2</sub> Biohybrid Catalyst: Synergetic Effects and Inactivation Mechanisms. <i>Environmental Science &amp; Technology</i> , 2020, 54, 537-549.	10.0	69
22	Synthesis and modification of moisture-stable coordination pillared-layer metal-organic framework (CPL-MOF) CPL-2 for ethylene/ethane separation. <i>Microporous and Mesoporous Materials</i> , 2020, 293, 109784.	4.4	30
23	Tuneable functionalities in layered double hydroxide catalysts for thermochemical conversion of biomass-derived glucose to fructose. <i>Chemical Engineering Journal</i> , 2020, 383, 122914.	12.7	28
24	Evidence of inter-species swing adsorption between aromatic hydrocarbons. <i>Environmental Research</i> , 2020, 181, 108814.	7.5	13
25	Gasification biochar from biowaste (food waste and wood waste) for effective CO <sub>2</sub> adsorption. <i>Journal of Hazardous Materials</i> , 2020, 391, 121147.	12.4	132
26	Complete Degradation of Gaseous Methanol over Pt/FeO <sub>x</sub> Catalysts by Normal Temperature Catalytic Ozonation. <i>Environmental Science &amp; Technology</i> , 2020, 54, 1938-1945.	10.0	51
27	Performance Recovery in Degraded Carbon-Based Electrodes for Capacitive Deionization. <i>Environmental Science &amp; Technology</i> , 2020, 54, 1848-1856.	10.0	24
28	Metal-organic framework for sorptive/catalytic removal and sensing applications against nitroaromatic compounds. <i>Journal of Industrial and Engineering Chemistry</i> , 2020, 84, 87-95.	5.8	37
29	Tailoring acidity and porosity of alumina catalysts via transition metal doping for glucose conversion in biorefinery. <i>Science of the Total Environment</i> , 2020, 704, 135414.	8.0	13
30	Transition-Metal-Containing Porphyrin Metal-Organic Frameworks as π-Backbonding Adsorbents for NO <sub>2</sub> Removal. <i>Angewandte Chemie</i> , 2020, 132, 19848-19851.	2.0	2
31	Transition-Metal-Containing Porphyrin Metal-Organic Frameworks as π-Backbonding Adsorbents for NO <sub>2</sub> Removal. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 19680-19683.	13.8	49
32	Machine learning exploration of the critical factors for CO <sub>2</sub> adsorption capacity on porous carbon materials at different pressures. <i>Journal of Cleaner Production</i> , 2020, 273, 122915.	9.3	94
33	Liquid Marbles in Liquid. <i>Small</i> , 2020, 16, e2002802.	10.0	11
34	Carbon Dots in Porous Materials: Host-Guest Synergy for Enhanced Performance. <i>Angewandte Chemie</i> , 2020, 132, 19558-19570.	2.0	12
35	N-doped porous carbon derived from polypyrrole for CO <sub>2</sub> capture from humid flue gases. <i>Chemical Engineering Journal</i> , 2020, 396, 125376.	12.7	62
36	Thermally treated zeolitic imidazolate framework-8 (ZIF-8) for visible light photocatalytic degradation of gaseous formaldehyde. <i>Chemical Science</i> , 2020, 11, 6670-6681.	7.4	130

#	ARTICLE	IF	CITATIONS
37	Carbon dioxide capture in biochar produced from pine sawdust and paper mill sludge: Effect of porous structure and surface chemistry. <i>Science of the Total Environment</i> , 2020, 739, 139845.	8.0	91
38	Effective Dispersion of MgO Nanostructure on Biochar Support as a Basic Catalyst for Glucose Isomerization. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 6990-7001.	6.7	63
39	Facile synthesis of CuBTC and its graphene oxide composites as efficient adsorbents for CO <sub>2</sub> capture. <i>Chemical Engineering Journal</i> , 2020, 393, 124666.	12.7	85
40	Separation of CO <sub>2</sub> and CH <sub>4</sub> by Pressure Swing Adsorption Using a Molecular Trapdoor Chabazite Adsorbent for Natural Gas Purification. <i>Industrial &amp; Engineering Chemistry Research</i> , 2020, 59, 7857-7865.	3.7	44
41	Biorenewable hydrogen production through biomass gasification: A review and future prospects. <i>Environmental Research</i> , 2020, 186, 109547.	7.5	280
42	Carbon Dots in Porous Materials: Host-Guest Synergy for Enhanced Performance. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 19390-19402.	13.8	94
43	Effective Gas Separation Performance Enhancement Obtained by Constructing Polymorphous Core-Shell Metal-Organic Frameworks. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 30234-30239.	8.0	19
44	Fabricating Mechanically Robust Binder-Free Structured Zeolites by 3D Printing Coupled with Zeolite Soldering: A Superior Configuration for CO <sub>2</sub> Capture. <i>Advanced Science</i> , 2019, 6, 1901317.	11.2	61
45	Grafting Free Carboxylic Acid Groups onto the Pore Surface of 3D Porous Coordination Polymers for High Proton Conductivity. <i>Chemistry of Materials</i> , 2019, 31, 8494-8503.	6.7	40
46	Role of Structural Defects in the Adsorption and Separation of C <sub>3</sub> Hydrocarbons in Zr-Fumarate-MOF (MOF-801). <i>Chemistry of Materials</i> , 2019, 31, 8413-8423.	6.7	87
47	Silica Supported MgO as An Adsorbent for Precombustion CO <sub>2</sub> Capture. <i>ACS Applied Nano Materials</i> , 2019, 2, 6565-6574.	5.0	17
48	Modular Metal-Organic Polyhedra Superassembly: From Molecular-Level Design to Targeted Drug Delivery. <i>Advanced Materials</i> , 2019, 31, e1806774.	21.0	48
49	Metal-Organic Framework Nanoparticle-Assisted Cryopreservation of Red Blood Cells. <i>Journal of the American Chemical Society</i> , 2019, 141, 7789-7796.	13.7	82
50	SupraCells: Living Mammalian Cells Protected within Functional Modular Nanoparticle-Based Exoskeletons. <i>Advanced Materials</i> , 2019, 31, e1900545.	21.0	96
51	A review on functional polymer-clay based nanocomposite membranes for treatment of water. <i>Journal of Hazardous Materials</i> , 2019, 379, 120584.	12.4	104
52	Exfoliated Ni-Al LDH 2D nanosheets for intermediate temperature CO <sub>2</sub> capture. <i>Journal of Hazardous Materials</i> , 2019, 374, 365-371.	12.4	55
53	Novel M (Mg/Ni/Cu)-Al-CO <sub>3</sub> layered double hydroxides synthesized by aqueous miscible organic solvent treatment (AMOST) method for CO <sub>2</sub> capture. <i>Journal of Hazardous Materials</i> , 2019, 373, 285-293.	12.4	38
54	Transition metal cation-exchanged SSZ-13 zeolites for CO <sub>2</sub> capture and separation from N <sub>2</sub> . <i>Chemical Engineering Journal</i> , 2019, 370, 1450-1458.	12.7	70

#	ARTICLE	IF	CITATIONS
55	Enhanced photoelectrochemical charge transfer on Mn-doped CdS/TiO <sub>2</sub> nanotube arrays: The roles of organic substrates. <i>Catalysis Today</i> , 2019, 335, 468-476.	4.4	20
56	Generation and extraction of hydrogen from low-temperature water-gas-shift reaction by a ZIF-8-based membrane reactor. <i>Microporous and Mesoporous Materials</i> , 2019, 280, 347-356.	4.4	17
57	Tin-Functionalized Wood Biochar as a Sustainable Solid Catalyst for Glucose Isomerization in Biorefinery. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 4851-4860.	6.7	59
58	Aluminium-biochar composites as sustainable heterogeneous catalysts for glucose isomerisation in a biorefinery. <i>Green Chemistry</i> , 2019, 21, 1267-1281.	9.0	157
59	Efficient Z-scheme visible-light-driven photocatalytic bacterial inactivation by hierarchical MoS <sub>2</sub> -encapsulated hydrothermal carbonation carbon core-shell nanospheres. <i>Applied Surface Science</i> , 2019, 464, 43-52.	6.1	28
60	Amine-Functionalized Metal-Organic Frameworks and Covalent Organic Polymers as Potential Sorbents for Removal of Formaldehyde in Aqueous Phase: Experimental Versus Theoretical Study. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 1426-1439.	8.0	65
61	Modulated anodization synthesis of Sn-doped iron oxide with enhanced solar water splitting performance. <i>Materials Today Chemistry</i> , 2019, 12, 7-15.	3.5	12
62	Versatile Surface Functionalization of Metal-Organic Frameworks through Direct Metal Coordination with a Phenolic Lipid Enables Diverse Applications. <i>Advanced Functional Materials</i> , 2018, 28, 1705274.	14.9	90
63	An optimal trapdoor zeolite for exclusive admission of CO <sub>2</sub> at industrial carbon capture operating temperatures. <i>Chemical Communications</i> , 2018, 54, 3134-3137.	4.1	42
64	Propylene carbonate and $\gamma$ -valerolactone as green solvents enhance Sn(IV)-catalysed hydroxymethylfurfural (HMF) production from bread waste. <i>Green Chemistry</i> , 2018, 20, 2064-2074.	9.0	85
65	Contaminant uptake by polymeric passive samplers: A modeling study with experimental validation. <i>Chemical Engineering Research and Design</i> , 2018, 129, 231-236.	5.6	9
66	Effects of -NO <sub>2</sub> and -NH <sub>2</sub> functional groups in mixed-linker Zr-based MOFs on gas adsorption of CO <sub>2</sub> and CH <sub>4</sub> . <i>Progress in Natural Science: Materials International</i> , 2018, 28, 160-167.	4.4	72
67	Contrasting Roles of Maleic Acid in Controlling Kinetics and Selectivity of Sn(IV)- and Cr(III)-Catalyzed Hydroxymethylfurfural Synthesis. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 14264-14274.	6.7	28
68	Theoretical Study of Moisture-Pretreated Lithium as Potential Material for Natural Gas Upgrading. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, , .	3.7	3
69	Facilitated Dissociation of Water in the Presence of Lithium Metal at Ambient Temperature as a Requisite for Lithium-Gas Reactions. <i>Journal of Physical Chemistry C</i> , 2018, 122, 16016-16022.	3.1	10
70	Pd(0) loaded Zn <sub>2</sub> (azoBDC) <sub>2</sub> (dabco) as a heterogeneous catalyst. <i>CrystEngComm</i> , 2017, 19, 4182-4186.	2.6	13
71	Intensified Biobutanol Recovery by using Zeolites with Complementary Selectivity. <i>ChemSusChem</i> , 2017, 10, 2968-2977.	6.8	30
72	Temperature-regulated guest admission and release in microporous materials. <i>Nature Communications</i> , 2017, 8, 15777.	12.8	60

#	ARTICLE	IF	CITATIONS
73	Synthesis of Nanocontainer Chabazites from Fly Ash with a Template- and Fluoride-Free Process for Cesium Ion Adsorption. <i>Energy &amp; Fuels</i> , 2017, 31, 4301-4307.	5.1	14
74	Metal-Organic Polyhedra-Coated Si Nanowires for the Sensitive Detection of Trace Explosives. <i>Nano Letters</i> , 2017, 17, 1-7.	9.1	56
75	Synthesis, characterization, and CO <sub>2</sub> adsorption of three metal-organic frameworks (MOFs): MIL-53, MIL-96, and amino-MIL-53. <i>Polyhedron</i> , 2016, 120, 103-111.	2.2	92
76	Exchange Method Using Acid-Solvent Synergy for Metal-Organic Framework Synthesis (EASY-MOFs) Based on a Typical Pillar-Layered Parent Structure. <i>European Journal of Inorganic Chemistry</i> , 2016, 2016, 1466-1469.	2.0	6
77	Methylithium-Doped Naphthyl-Containing Conjugated Microporous Polymer with Enhanced Hydrogen Storage Performance. <i>Chemistry - A European Journal</i> , 2016, 22, 7944-7949.	3.3	11
78	A density functional theory study for the adsorption of various gases on a caesium-exchanged trapdoor chabazite. <i>Computational Materials Science</i> , 2016, 122, 307-313.	3.0	25
79	A comparative study on conversion of porous and non-porous metal-organic frameworks (MOFs) into carbon-based composites for carbon dioxide capture. <i>Polyhedron</i> , 2016, 120, 30-35.	2.2	21
80	Novel low energy hydrogen-deuterium isotope breakthrough separation using a trapdoor zeolite. <i>Chemical Engineering Journal</i> , 2016, 288, 161-168.	12.7	30
81	Functionalized UiO-66 by Single and Binary (OH) <sub>2</sub> and NO <sub>2</sub> Groups for Uptake of CO <sub>2</sub> and CH <sub>4</sub> . <i>Industrial &amp; Engineering Chemistry Research</i> , 2016, 55, 7924-7932.	3.7	61
82	Metal-Organic Polyhedra Cages Immobilized on a Plasmonic Substrate for Sensitive Detection of Trace Explosives. <i>Advanced Functional Materials</i> , 2015, 25, 6009-6017.	14.9	47
83	Converting 3D rigid metal-organic frameworks (MOFs) to 2D flexible networks via ligand exchange for enhanced CO <sub>2</sub> /N <sub>2</sub> and CH <sub>4</sub> /N <sub>2</sub> separation. <i>Chemical Communications</i> , 2015, 51, 14716-14719.	4.1	45
84	Tuning the oxygen functional groups in reduced graphene oxide papers to enhance the electromechanical actuation. <i>RSC Advances</i> , 2015, 5, 68052-68060.	3.6	9
85	Effects of amino functionality on uptake of CO <sub>2</sub> , CH <sub>4</sub> and selectivity of CO <sub>2</sub> /CH <sub>4</sub> on titanium based MOFs. <i>Fuel</i> , 2015, 160, 318-327.	6.4	99
86	Density Functional Theory Computational Study of Alkali Cation-Exchanged Sodalite-like Zeolite-like Metal-Organic Framework for CO <sub>2</sub> , N <sub>2</sub> , and CH <sub>4</sub> Adsorption. <i>Journal of Physical Chemistry C</i> , 2015, 119, 27449-27456.	3.1	7
87	Biogas upgrading through kinetic separation of carbon dioxide and methane over Rb- and Cs-ZK-5 zeolites. <i>RSC Advances</i> , 2014, 4, 62511-62524.	3.6	36
88	Adsorption of CO <sub>2</sub> , N <sub>2</sub> , and CH <sub>4</sub> in Cs-exchanged chabazite: A combination of van der Waals density functional theory calculations and experiment study. <i>Journal of Chemical Physics</i> , 2014, 140, 084705.	3.0	43
89	Temperature controlled invertible selectivity for adsorption of N <sub>2</sub> and CH <sub>4</sub> by molecular trapdoor chabazites. <i>Chemical Communications</i> , 2014, 50, 4544.	4.1	33
90	Piezoelectric properties of graphene oxide: A first-principles computational study. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	58

#	ARTICLE	IF	CITATIONS
91	One-step fabrication of ZIF-8/polymer composite spheres by a phase inversion method for gas adsorption. Colloid and Polymer Science, 2013, 291, 2711-2717.	2.1	40
92	Determination of Composition Range for "Molecular Trapdoor" Effect in Chabazite Zeolite. Journal of Physical Chemistry C, 2013, 117, 12841-12847.	3.1	104
93	Amino-functionalized Zr-MOF nanoparticles for adsorption of CO <sub>2</sub> and CH <sub>4</sub> . International Journal of Smart and Nano Materials, 2013, 4, 72-82.	4.2	114
94	Discriminative Separation of Gases by a "Molecular Trapdoor" Mechanism in Chabazite Zeolites. Journal of the American Chemical Society, 2012, 134, 19246-19253.	13.7	321
95	Potassium Chabazite: A Potential Nanocontainer for Gas Encapsulation. Journal of Physical Chemistry C, 2010, 114, 22025-22031.	3.1	45