## Xiaolei Fan

## List of Publications by Year in descending order

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101543 133252 4,222 117 36 59 h-index citations g-index papers 118 118 118 4614 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Mapping the Cu-BTC metal–organic framework (HKUST-1) stability envelope in the presence of water vapour for CO2 adsorption from flue gases. Chemical Engineering Journal, 2015, 281, 669-677.	12.7	248
2	Adsorption of Cd(II) and Pb(II) ions from aqueous solutions using mesoporous activated carbon adsorbent: Equilibrium, kinetics and characterisation studies. Journal of Environmental Chemical Engineering, 2017, 5, 679-698.	6.7	199
3	High flux and fouling resistant flat sheet polyethersulfone membranes incorporated with graphene oxide for ultrafiltration applications. Chemical Engineering Journal, 2018, 334, 789-799.	12.7	183
4	Microwave-assisted synthesis of zirconium-based metal organic frameworks (MOFs): Optimization and gas adsorption. Microporous and Mesoporous Materials, 2018, 260, 45-53.	4.4	167
5	Rheological behaviour of ethylene glycol-titanate nanotube nanofluids. Journal of Nanoparticle Research, 2009, 11, 1513-1520.	1.9	136
6	Plasma-assisted catalytic dry reforming of methane (DRM) over metal-organic frameworks (MOFs)-based catalysts. Applied Catalysis B: Environmental, 2020, 260, 118195.	20.2	135
7	Sustaining metal–organic frameworks for water–gas shift catalysis by non-thermal plasma. Nature Catalysis, 2019, 2, 142-148.	34.4	123
8	Flameless combustion with liquid fuel: A review focusing on fundamentals and gas turbine application. Applied Energy, 2017, 193, 28-51.	10.1	111
9	Mechanistic study of non-thermal plasma assisted CO2 hydrogenation over Ru supported on MgAl layered double hydroxide. Applied Catalysis B: Environmental, 2020, 268, 118752.	20.2	101
10	PVDF membranes containing reduced graphene oxide: Effect of degree of reduction on membrane distillation performance. Desalination, 2019, 452, 196-207.	8.2	92
11	Shielding Protection by Mesoporous Catalysts for Improving Plasma-Catalytic Ambient Ammonia Synthesis. Journal of the American Chemical Society, 2022, 144, 12020-12031.	13.7	75
12	Creating hierarchies promptly: Microwave-accelerated synthesis of ZSM-5 zeolites on macrocellular silicon carbide (SiC) foams. Chemical Engineering Journal, 2017, 312, 1-9.	12.7	73
13	The role of multiwalled carbon nanotubes (MWCNTs) in the catalytic ozonation of atrazine. Chemical Engineering Journal, 2014, 241, 66-76.	12.7	69
14	Creation of Alâ€Enriched Mesoporous ZSMâ€5 Nanoboxes with High Catalytic Activity: Converting Tetrahedral Extraâ€Framework Al into Framework Sites by Post Treatment. Angewandte Chemie - International Edition, 2020, 59, 19478-19486.	13.8	69
15	Coupling non-thermal plasma with Ni catalysts supported on BETA zeolite for catalytic CO <sub>2</sub> methanation. Catalysis Science and Technology, 2019, 9, 4135-4145.	4.1	68
16	Investigation of pressure drop in 3D replicated open-cell foams: Coupling CFD with experimental data on additively manufactured foams. Chemical Engineering Journal, 2019, 377, 120123.	12.7	67
17	A Facile Post-Synthetic Modification Method To Improve Hydrothermal Stability and CO <sub>2</sub> Selectivity of CuBTC Metal–Organic Framework. Industrial & Engineering Chemistry Research, 2016, 55, 7941-7949.	3.7	65
18	Vapor-phase transport (VPT) modification of ZSM-5/SiC foam catalyst using TPAOH vapor to improve the methanol-to-propylene (MTP) reaction. Applied Catalysis A: General, 2017, 545, 104-112.	4.3	63

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19	Bakelite-type anionic microporous organic polymers with high capacity for selective adsorption of cationic dyes from water. Chemical Engineering Journal, 2019, 366, 404-414.	12.7	61
20	CO Poisoning of Ru Catalysts in CO <sub>2</sub> Hydrogenation under Thermal and Plasma Conditions: A Combined Kinetic and Diffuse Reflectance Infrared Fourier Transform Spectroscopy–Mass Spectrometry Study. ACS Catalysis, 2020, 10, 12828-12840.	11.2	59
21	Insights into the synergetic effect for co-pyrolysis of oil sands and biomass using microwave irradiation. Fuel, 2019, 239, 219-229.	6.4	57
22	Potential of â€~nanofluids' to further intensify microreactors. Green Chemistry, 2008, 10, 670.	9.0	54
23	On thermal stability and catalytic reactivity of Zr-based metal–organic framework (UiO-67) encapsulated Pt catalysts. Journal of Catalysis, 2016, 340, 85-94.	6.2	53
24	Non-thermal plasma catalysis for CO <sub>2</sub> conversion and catalyst design for the process. Journal Physics D: Applied Physics, 2021, 54, 233001.	2.8	52
25	2D boron nitride nanosheets in PIM-1 membranes for CO2/CH4 separation. Journal of Membrane Science, 2021, 636, 119527.	8.2	52
26	Microtomography-based numerical simulations of heat transfer and fluid flow through $\hat{l}^2$ -SiC open-cell foams for catalysis. Catalysis Today, 2016, 278, 350-360.	4.4	50
27	Underlying mechanism of the hydrothermal instability of Cu3(BTC)2 metal-organic framework. Frontiers of Chemical Science and Engineering, 2016, 10, 103-107.	4.4	48
28	Selective adsorption of ethane over ethylene on $M(bdc)(ted)0.5$ (M = Co, Cu, Ni, Zn) metal-organic frameworks (MOFs). Microporous and Mesoporous Materials, 2020, 292, 109724.	4.4	48
29	Effect of metal dispersion and support structure of Ni/silicalite-1 catalysts on non-thermal plasma (NTP) activated CO2 hydrogenation. Applied Catalysis B: Environmental, 2020, 272, 119013.	20.2	48
30	X-ray micro computed tomography characterization of cellular SiC foams for their applications in chemical engineering. Materials Characterization, 2017, 123, 20-28.	4.4	43
31	In situ modification of ZIF-67 with multi-sulfonated dyes for great enhanced methylene blue adsorption via synergistic effect. Microporous and Mesoporous Materials, 2020, 303, 110304.	4.4	43
32	Coupling of Heck and hydrogenation reactions in a continuous compact reactor. Journal of Catalysis, 2009, 267, 114-120.	6.2	40
33	Adsorptive separation of C2H6/C2H4 on metal-organic frameworks (MOFs) with pillared-layer structures. Separation and Purification Technology, 2020, 242, 116819.	7.9	40
34	Hierarchical Fe-ZSM-5/SiC foam catalyst as the foam bed catalytic reactor (FBCR) for catalytic wet peroxide oxidation (CWPO). Chemical Engineering Journal, 2019, 362, 53-62.	12.7	38
35	Recent advances in non-thermal plasma (NTP) catalysis towards C1 chemistry. Chinese Journal of Chemical Engineering, 2020, 28, 2010-2021.	3.5	38
36	Facile Stoichiometric Reductions in Flow: An Example of Artemisinin. Organic Process Research and Development, 2012, 16, 1039-1042.	2.7	37

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37	MFI zeolite coating with intrazeolitic aluminum (acidic) gradient supported on SiC foams to improve the methanol-to-propylene (MTP) reaction. Applied Catalysis A: General, 2018, 559, 1-9.	4.3	37
38	Efficient reduction of bromates using carbon nanofibre supported catalysts: Experimental and a comparative life cycle assessment study. Chemical Engineering Journal, 2014, 248, 230-241.	12.7	36
39	Cyclic adsorption of water vapour on CuBTC MOF: Sustaining the hydrothermal stability under non-equilibrium conditions. Chemical Engineering Journal, 2018, 333, 594-602.	12.7	36
40	Understanding the CO Oxidation on Pt Nanoparticles Supported on MOFs by <i>Operando</i> XPS. ChemCatChem, 2018, 10, 4238-4242.	3.7	35
41	On the effect of mesoporosity of FAU Y zeolites in the liquid-phase catalysis. Microporous and Mesoporous Materials, 2019, 278, 297-306.	4.4	35
42	Solvent-Directed Assembly of a Pyridinium-Tailored Methyl Oleanolate Amphiphile: Stepwise Growth of Microrods and Nanofibers. Langmuir, 2016, 32, 1685-1692.	3.5	34
43	Nonthermal plasma (NTP) activated metal–organic frameworks (MOFs) catalyst for catalytic CO <sub>2</sub> hydrogenation. AICHE Journal, 2020, 66, e16853.	3.6	33
44	Velocity variation effect in fixed bed columns: A case study of CO <sub>2</sub> capture using porous solid adsorbents. AICHE Journal, 2018, 64, 2189-2197.	3.6	32
45	Structured ZSM-5 coated SiC foam catalysts for process intensification in catalytic cracking of <i>n</i> -hexane. Reaction Chemistry and Engineering, 2019, 4, 427-435.	3.7	30
46	Synthesis and modification of moisture-stable coordination pillared-layer metal-organic framework (CPL-MOF) CPL-2 for ethylene/ethane separation. Microporous and Mesoporous Materials, 2020, 293, 109784.	4.4	30
47	Dry reforming of methane on bimetallic Pt–Ni@CeO <sub>2</sub> catalyst: a <i>in situ</i> DRIFTS-MS mechanistic study. Catalysis Science and Technology, 2021, 11, 5260-5272.	4.1	30
48	Defects-healing of SAPO-34 membrane by post-synthesis modification using organosilica for selective CO2 separation. Journal of Membrane Science, 2019, 575, 80-88.	8.2	28
49	The effect of oxygen mobility/vacancy on carbon gasification in nano catalytic dry reforming of methane: A review. Journal of CO2 Utilization, 2022, 63, 102109.	6.8	27
50	An insight into the effects of synthesis methods on catalysts properties for methane reforming. Journal of Environmental Chemical Engineering, 2021, 9, 105052.	6.7	25
51	Catalytic combustion of volatile organic compounds (VOCs) over structured Co3O4 nano-flowers on silicalite-1/SiC foam catalysts. Microporous and Mesoporous Materials, 2021, 323, 111173.	4.4	25
52	Mesoporous Zeolitic Materials (MZMs) Derived From Zeolite Y Using a Microwave Method for Catalysis. Frontiers in Chemistry, 2020, 8, 482.	3.6	24
53	Structured silicalite†encapsulated Ni catalyst supported on <scp>SiC</scp> foam for dry reforming of methane. AICHE Journal, 2021, 67, e17126.	3.6	24
54	How starch-g-poly(acrylamide) molecular structure effect sizing properties. International Journal of Biological Macromolecules, 2020, 144, 403-409.	7.5	23

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55	Cellulose nanocrystals (CNCs) as hard templates for preparing mesoporous zeolite Y assemblies with high catalytic activity. Green Chemistry, 2020, 22, 5115-5122.	9.0	23
56	Sequential Microwave-Assisted Dealumination and Hydrothermal Alkaline Treatments of Y Zeolite for Preparing Hierarchical Mesoporous Zeolite Catalysts. Topics in Catalysis, 2020, 63, 340-350.	2.8	22
57	Structured ZSM-5/SiC foam catalysts for bio-oils upgrading. Applied Catalysis A: General, 2020, 599, 117626.	4.3	22
58	Effect of Ball-Milling Pretreatment of Cellulose on Its Photoreforming for H <sub>2</sub> Production. ACS Sustainable Chemistry and Engineering, 2022, 10, 4862-4871.	6.7	22
59	Developing silicalite-1 encapsulated Ni nanoparticles as sintering-/coking-resistant catalysts for dry reforming of methane. Chemical Engineering Journal, 2022, 446, 137439.	12.7	21
60	Kinetic Modeling of Nitrate Reduction Catalyzed by Pdâ€"Cu Supported on Carbon Nanotubes. Industrial & Lamp; Engineering Chemistry Research, 2012, 51, 4854-4860.	3.7	20
61	Using ultrasound to improve the sequential post-synthesis modification method for making mesoporous Y zeolites. Frontiers of Chemical Science and Engineering, 2020, 14, 275-287.	4.4	20
62	Nonthermal Plasma Catalytic Ammonia Synthesis over a Ni Catalyst Supported on MgO/SBA-15. Industrial & Discourse Chemistry Research, 2022, 61, 3292-3302.	3.7	20
63	Synthesis of the antimalarial API artemether in a flow reactor. Catalysis Today, 2015, 239, 90-96.	4.4	19
64	Breaking the equilibrium at the interface: microwave-assisted reactive distillation (MARD). Reaction Chemistry and Engineering, 2019, 4, 688-694.	3.7	19
65	On developing ferrisilicate catalysts supported on silicon carbide (SiC) foam catalysts for continuous catalytic wet peroxide oxidation (CWPO) reactions. Catalysis Today, 2020, 356, 631-640.	4.4	19
66	Integration of Membrane Separation with Nonthermal Plasma Catalysis: A Proof-of-Concept for CO <sub>2</sub> Capture and Utilization. Industrial & Engineering Chemistry Research, 2020, 59, 8202-8211.	3.7	19
67	Simulation of catalytic reduction of nitrates based on a mechanistic model. Chemical Engineering Journal, 2011, 175, 458-467.	12.7	18
68	Comparative study of the effect of TiO2 support composition and Pt loading on the performance of Pt/TiO2 photocatalysts for catalytic photoreforming of cellulose. International Journal of Hydrogen Energy, 2021, 46, 31054-31066.	7.1	18
69	Electrospun Composites Made of Reduced Graphene Oxide and Polyacrylonitrile-Based Activated Carbon Nanofibers (rGO/ACNF) for Enhanced CO2 Adsorption. Polymers, 2020, 12, 2117.	4.5	17
70	Systematic study of H2 production from catalytic photoreforming of cellulose over Pt catalysts supported on TiO2. Chinese Journal of Chemical Engineering, 2020, 28, 2084-2091.	3.5	17
71	A Comparative Study on Mesoporous Y Zeolites Prepared by Hard-Templating and Post-Synthetic Treatment Methods. Applied Catalysis A: General, 2021, 612, 117986.	4.3	17
72	Liquid phase hydrogenation in a structured multichannel reactor. Catalysis Today, 2009, 147, S313-S318.	4.4	16

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73	Understanding the influence of microwave on the relative volatility used in the pyrolysis of Indonesia oil sands. Chinese Journal of Chemical Engineering, 2018, 26, 1485-1492.	3.5	16
74	Microwave-assisted catalyst-free hydrolysis of fibrous cellulose for deriving sugars and biochemicals. Frontiers of Chemical Science and Engineering, 2019, 13, 718-726.	4.4	16
75	Dual cooperative organocatalysts for one-pot synthesis of polyester-polythiocarbonate block copolymers from multiple monomers. Science China Chemistry, 2020, 63, 1807-1814.	8.2	16
76	Understanding ethane/ethylene adsorption selectivity in ethane-selective microporous materials. Separation and Purification Technology, 2020, 241, 116635.	7.9	16
77	Photocatalytic Reforming of Biomass: What Role Will the Technology Play in Future Energy Systems. Topics in Current Chemistry, 2022, 380, .	5.8	16
78	Assessment of MOF's Quality: Quantifying Defect Content in Crystalline Porous Materials. Journal of Physical Chemistry Letters, 2016, 7, 1490-1494.	4.6	15
79	Structured Ni@ <scp>NaA</scp> zeolite supported on silicon carbide foam catalysts for catalytic carbon dioxide methanation. AICHE Journal, 2020, 66, e17007.	3.6	15
80	Kinetic Study of Nonthermal Plasma Activated Catalytic CO2 Hydrogenation over Ni Supported on Silica Catalyst. Industrial & Engineering Chemistry Research, 2020, 59, 9478-9487.	3.7	15
81	Recent developments in multifunctional catalysts for fatty acid hydrodeoxygenation as a route towards biofuels. Molecular Catalysis, 2022, 523, 111492.	2.0	15
82	Photo-induced conversion from supramolecular to covalently linked polymers based on anthracene-appended amphiphiles. Polymer Chemistry, 2015, 6, 4162-4166.	3.9	14
83	Plasmonic Au nanoparticles supported on both sides of TiO2 hollow spheres for maximising photocatalytic activity under visible light. Frontiers of Chemical Science and Engineering, 2019, 13, 665-671.	4.4	14
84	Renewable hydrogen production from steam reforming of glycerol (SRG) over ceria-modified $\hat{l}^3$ -alumina supported Ni catalyst. Chinese Journal of Chemical Engineering, 2020, 28, 2328-2336.	3.5	13
85	Catalytic conversion of bioethanol to value-added chemicals and fuels: A review., 2022, 1, 47-68.		13
86	Multi-stimuli-responsive hydrogels of gluconamide-tailored anthracene. Soft Matter, 2019, 15, 4662-4668.	2.7	12
87	Creation of Alâ€Enriched Mesoporous ZSMâ€5 Nanoboxes with High Catalytic Activity: Converting Tetrahedral Extraâ€Framework Al into Framework Sites by Post Treatment. Angewandte Chemie, 2020, 132, 19646-19654.	2.0	12
88	An efficient microwave-assisted chelation (MWAC) post-synthetic modification method to produce hierarchical Y zeolites. Microporous and Mesoporous Materials, 2021, 311, 110715.	4.4	12
89	Porous Materials for Catalysis. , 2020, , 115-137.		11
90	Pd/C catalysts based on synthetic carbons with bi- and tri-modal pore-size distribution: applications in flow chemistry. Catalysis Science and Technology, 2016, 6, 2387-2395.	4.1	10

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91	C2H4 and C2H6 adsorption-induced structural variation of pillared-layer CPL-2 MOF: A combined experimental and Monte Carlo simulation study. Chemical Engineering Science, 2020, 218, 115566.	3.8	10
92	Thermodynamic analysis of steam reforming of glycerol for hydrogen production at atmospheric pressure. Frontiers of Chemical Science and Engineering, 2021, 15, 60-71.	4.4	10
93	A novel microwave-assisted methanol-to-hydrocarbons process with a structured ZSM-5/SiC foam catalyst: Proof-of-concept and environmental impacts. Chemical Engineering Science, 2022, 255, 117669.	3.8	10
94	A rapid way of preparing switchable bacteria-killing and bacteria-releasing cellulosic material with anti-bacteria adhesion capability. Cellulose, 2022, 29, 5305-5323.	4.9	10
95	Microwave-assisted catalytic alcoholysis of fructose to ethoxymethylfurfural (EMF) over carbon-based microwave-responsive catalyst. Fuel Processing Technology, 2022, 233, 107305.	7.2	10
96	Upcycling Polytetrahydrofuran to Polyester. CCS Chemistry, 2023, 5, 1233-1241.	7.8	10
97	On improving the hydrogen and methanol production using an auto-thermal double-membrane reactor: Model prediction and optimisation. Computers and Chemical Engineering, 2018, 119, 258-269.	3.8	9
98	Highly Efficient and Selective Adsorption of Cationic Dyes in Aqueous Media on Microporous Hyper Crosslinked Polymer with Abundant and Evenly Dispersed Sulfonic Groups. ChemistrySelect, 2020, 5, 6541-6548.	1.5	9
99	Modulation of High-Spin Co(II) in Li/Co-MOFs as Efficient Fenton-like Catalysts. Inorganic Chemistry, 2021, 60, 12405-12412.	4.0	9
100	Nickel encapsulated in silicalite-1 zeolite catalysts for steam reforming of glycerol (SRG) towards renewable hydrogen production. Fuel Processing Technology, 2022, 233, 107306.	7.2	9
101	High-lonic-Strength Wastewater Treatment via Catalytic Wet Oxidation over a MnCeO <sub><i>x</i></sub> Catalyst. ACS Catalysis, 2022, 12, 7598-7608.	11.2	9
102	The Investigation of Perfluoroalkyl Substances in Seasonal Freezeâ€"Thaw Rivers During Spring Flood Period: A Case Study in Songhua River and Yalu River, China. Bulletin of Environmental Contamination and Toxicology, 2018, 101, 166-172.	2.7	8
103	On understanding the sequential post-synthetic microwave-assisted dealumination and alkaline treatment of Y zeolite. Microporous and Mesoporous Materials, 2022, 333, 111736.	4.4	8
104	PtNi bimetallic structure supported on UiO-67 metal-organic framework (MOF) during CO oxidation. Journal of Catalysis, 2020, 391, 522-529.	6.2	7
105	Horseradish Peroxidase-catalyzed "Template―Polymerization of Gallic Acid for the Functionalization of Silk Fabrics. Journal of Natural Fibers, 2022, 19, 9486-9499.	3.1	7
106	Simultaneous determination of sulfoxaflor in 14 daily foods using LC-MS/MS. International Journal of Environmental Analytical Chemistry, 2019, 99, 557-567.	3.3	6
107	Structured hierarchical Mn–Co mixed oxides supported on silicalite-1 foam catalyst for catalytic combustion. Chinese Journal of Chemical Engineering, 2020, 28, 2319-2327.	3.5	6
108	Investigation of flame structure and burning intensity of partially premixed methane enrichment of syngas using OH-PLIF and kinetic simulation. Combustion Theory and Modelling, 2018, 22, 432-445.	1.9	5

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109	Design of 2D materials for selective adsorption: a comparison between Monte Carlo simulations and direct numerical integration. Molecular Systems Design and Engineering, 2018, 3, 636-644.	3.4	5
110	Structured cobalt–manganese oxides on SiC nano-whisker modified SiC foams for catalytic combustion of toluene. Chemical Engineering Research and Design, 2022, 177, 659-669.	5.6	5
111	Additive manufacturing of sodalite monolith for continuous heavy metal removal from water sources. Chinese Journal of Chemical Engineering, 2022, 42, 82-90.	3.5	3
112	Effect of Starch Chain Structure and Nonâ€Starch Components on the Hydrolysis of Starch by αâ€Amylase. Starch/Staerke, 2022, 74, .	2.1	3
113	Palladium-doped hierarchical ZSM-5 for catalytic selective oxidation of allylic and benzylic alcohols. Royal Society Open Science, 2021, 8, 211086.	2.4	2
114	Study on the laminar burning velocity of Medium-Btu syngas flame with N <sub>2</sub> dilution based on OH-PLIF technology. Cogent Engineering, 2018, 5, 1536306.	2.2	1
115	Preface to the CSCST-25 Special Issue. Frontiers of Chemical Science and Engineering, 2019, 13, 629-631.	4.4	1
116	Molecular Insights into Adsorption and Diffusion Mechanism of N-Hexane in MFI Zeolites with Different Si-to-Al Ratios and Counterions. Catalysts, 2022, 12, 144.	3.5	1
117	Growing collaborations between Chinese and UK young scholars on chemical science and technology. Frontiers of Chemical Science and Engineering, 2021, 15, 1-3.	4.4	0