Jong-San Chang

List of Publications by Year
in descending order

85 papers	8,406 citations	76294 40 h-index	48277 88 g-index
96 all docs	96 docs citations	96 times ranked	8378 citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis and catalytic properties of MIL-100(Fe), an iron(iii) carboxylate with large pores. Chemical Communications, 2007, , 2820-2822.	2.2	1,218
2	Amine Grafting on Coordinatively Unsaturated Metal Centers of MOFs: Consequences for Catalysis and Metal Encapsulation. Angewandte Chemie - International Edition, 2008, 47, 4144-4148.	7.2	1,111
3	Controlled Reducibility of a Metalâ€“Organic Framework with Coordinatively Unsaturated Sites for Preferential Gas Sorption. Angewandte Chemie - International Edition, 2010, 49, 5949-5952.	7.2	526
4	Large scale fluorine-free synthesis of hierarchically porous iron(III) trimesate MIL-100(Fe) with a zeolite MTN topology. Microporous and Mesoporous Materials, 2012, 157, 137-145.	2.2	305
5	Energyâ€Efficient Dehumidification over Hierachically Porous Metalâ€“Organic Frameworks as Advanced Water Adsorbents. Advanced Materials, 2012, 24, 806-810.	11.1	298
6	Design of Hydrophilic Metal Organic Framework Water Adsorbents for Heat Reallocation. Advanced Materials, 2015, 27, 4775-4780.	11.1	253
7	Stable polyoxometalate insertion within the mesoporous metal organic framework MIL-100(Fe). Journal of Materials Chemistry, 2011, 21, 1226-1233.	6.7	251
8	A robust large-pore zirconium carboxylate metalâ€“organic framework for energy-efficient water-sorption-driven refrigeration. Nature Energy, 2018, 3, 985-993.	19.8	217
9	The Structure of the Aluminum Fumarate Metalâ€“Organic Framework A520. Angewandte Chemie - International Edition, 2015, 54, 3664-3668.	7.2	206
10	How Water Fosters a Remarkable 5-Fold Increase in Low-Pressure CO₂ Uptake within Mesoporous MIL-100(Fe). Journal of the American Chemical Society, 2012, 134, 10174-10181.	6.6	198
11	Catalytic transfer hydrogenation of ethyl levulinate to Î³-valerolactone over zirconium-based metalâ€“organic frameworks. Green Chemistry, 2016, 18, 4542-4552.	4.6	197
12	Chemical conversion of biomass-derived hexose sugars to levulinic acid over sulfonic acid-functionalized graphene oxide catalysts. Green Chemistry, 2013, 15, 2935.	4.6	195
13	Porous Cobalt(II)â€“Organic Frameworks with Corrugated Walls: Structurally Robust Gas-Sorption Materials. Angewandte Chemie - International Edition, 2007, 46, 272-275.	7.2	194
14	Catalytic Transfer Hydrogenation of Furfural to Furfuryl Alcohol under Mild Conditions over Zr-MOFs: Exploring the Role of Metal Node Coordination and Modification. ACS Catalysis, 2020, 10, 3720-3732.	5.5	187
15	Green Microwave Synthesis of MILâ€100(Al, Cr, Fe) Nanoparticles for Thinâ€Film Elaboration. European Journal of Inorganic Chemistry, 2012, 2012, 5165-5174.	1.0	176
16	In Situ Energy-Dispersive X-ray Diffraction for the Synthesis Optimization and Scale-up of the Porous Zirconium Terephthalate UiO-66. Inorganic Chemistry, 2014, 53, 2491-2500.	1.9	157
17	Three-Dimensional Cage Type Mesoporous CN-Based Hybrid Material with Very High Surface Area and Pore Volume. Chemistry of Materials, 2007, 19, 4367-4372.	3.2	127
18	Synthesis Optimization, Shaping, and Heat Reallocation Evaluation of the Hydrophilic Metalâ€“Organic Framework MILâ€160(Al). ChemSusChem, 2017, 10, 1419-1426.	3.6	122

#	Article	IF	Citations
19	Crystal morphology control of AFI type molecular sieves with microwave irradiation. Journal of Materials Chemistry, 2004, 14, 280.	6.7	107
20	Novel amine-functionalized iron trimesates with enhanced peroxidase-like activity and their applications for the fluorescent assay of choline and acetylcholine. Biosensors and Bioelectronics, 2018, 100, 161-168.	5.3	93
21	Screening the Effect of Water Vapour on Gas Adsorption Performance: Application to CO₂ Capture from Flue Gas in Metalâ€“Organic Frameworks. ChemSusChem, 2017, 10, 1543-1553.	3.6	89
22	Propylene/propane separation by vacuum swing adsorption using Cu-BTC spheres. Separation and Purification Technology, 2012, 90, 109-119.	3.9	85
23	A coordination polymer of (Ph3P)AuCl prepared by post-synthetic modification and its application in 1-hexene/n-hexane separation. Chemical Communications, 2011, 47, 11855.	2.2	84
24	Shaping of porous metalâ€“organic framework granules using mesoporous Ï•alumina as a binder. RSC Advances, 2017, 7, 55767-55777.	1.7	81
25	Utilization of carbon dioxide as soft oxidant in the dehydrogenation of ethylbenzene over supported vanadiumâ€“antimony oxide catalysts. Green Chemistry, 2003, 5, 587-590.	4.6	77
26	Ethane/ethylene separation on a copper benzene-1,3,5-tricarboxylate MOF. Separation and Purification Technology, 2015, 149, 445-456.	3.9	72
27	Rational design of a robust aluminum metal-organic framework for multi-purpose water-sorption-driven heat allocations. Nature Communications, 2020, 11, 5112.	5.8	68
28	Separation of <i>p</i>â€Divinylbenzene by Selective Roomâ€Temperature Adsorption Inside Mgâ€CUKâ€1 Prepared by Aqueous Microwave Synthesis. Angewandte Chemie - International Edition, 2015, 54, 5394-5398.	7.2	53
29	A Metalâ€“Organic Framework with Cooperative Phosphines That Permit Postâ€Synthetic Installation of Open Metal Sites. Angewandte Chemie - International Edition, 2018, 57, 9295-9299.	7.2	52
30	Unraveling the Water Adsorption Mechanism in the Mesoporous MIL-100(Fe) Metalâ€“Organic Framework. Journal of Physical Chemistry C, 2019, 123, 23014-23025.	1.5	51
31	Highly Selective H₂O₂â€Based Oxidation of Alkylphenols to <i>p</i>â€Benzoquinones Over MILâ€125 Metalâ€“Organic Frameworks. European Journal of Inorganic Chemistry, 2014, 2014, 132-139.	1.0	50
32	Syngas Purification by Porous Amino-Functionalized Titanium Terephthalate MIL-125. Energy & Fuels, 2015, 29, 4654-4664.	2.5	48
33	Nanoporous Metal-Containing Nickel Phosphates: A Class of Shape-Selective Catalyst. Angewandte Chemie - International Edition, 2004, 43, 2819-2822.	7.2	47
34	Porous Metalâ€“Organic Framework CUK-1 for Adsorption Heat Allocation toward Green Applications of Natural Refrigerant Water. ACS Applied Materials & Interfaces, 2019, 11, 25778-25789.	4.0	45
35	Plasma-Enhanced Methane Direct Conversion over Particle-Size Adjusted MOx/Al2O3 (MÂ=ÂTi and Mg) Catalysts. Plasma Chemistry and Plasma Processing, 2014, 34, 1317-1330.	1.1	44
36	Template-Free Synthesis of the Nanoporous Nickel Phosphate VSB-5 under Microwave Irradiation. Chemistry of Materials, 2004, 16, 1394-1396.	3.2	43

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37	Low-Valent Metal Ions as MOF Pillars: A New Route Toward Stable and Multifunctional MOFs. Journal of the American Chemical Society, 2021, 143, 13710-13720.	6.6	43
38	Adsorption Properties of MFM-400 and MFM-401 with CO₂ and Hydrocarbons: Selectivity Derived from Directed Supramolecular Interactions. Inorganic Chemistry, 2016, 55, 7219-7228.	1.9	41
39	Protons Make Possible Heterolytic Activation of Hydrogen Peroxide over Zr-Based Metalâ€“Organic Frameworks. ACS Catalysis, 2019, 9, 9699-9704.	5.5	41
40	CO2 reforming of methane over modified Ni/ZrO2 catalysts. Applied Organometallic Chemistry, 2001, 15, 109-112.	1.7	40
41	Observing the Effects of Shaping on Gas Adsorption in Metalâ€Organic Frameworks. European Journal of Inorganic Chemistry, 2016, 2016, 4416-4423.	1.0	40
42	Pressure swing adsorption process for the separation of nitrogen and propylene with a MOF adsorbent MIL-100(Fe). Separation and Purification Technology, 2013, 110, 101-111.	3.9	39
43	Enhanced adsorptive desulfurization with flexible metalâ€“organic frameworks in the presence of diethyl ether and water. Chemical Communications, 2016, 52, 8667-8670.	2.2	32
44	CO2 utilization for the formation of styrene from ethylbenzene over zirconia-supported iron oxide catalysts. Applied Organometallic Chemistry, 2000, 14, 815-818.	1.7	29
45	Organoarsine Metalâ€“Organic Framework with <i>cis</i>-Diarsine Pockets for the Installation of Uniquely Confined Metal Complexes. Journal of the American Chemical Society, 2018, 140, 9806-9809.	6.6	29
46	Defective Zr-Fumarate MOFs Enable High-Efficiency Adsorption Heat Allocations. ACS Applied Materials & Interfaces, 2021, 13, 1723-1734.	4.0	29
47	Trimerization of Isobutene Over Solid Acid Catalysts. Catalysis Surveys From Asia, 2009, 13, 229-236.	1.0	28
48	Unique design of superior metal-organic framework for removal of toxic chemicals in humid environment via direct functionalization of the metal nodes. Journal of Hazardous Materials, 2020, 398, 122857.	6.5	28
49	Preparation and application of nanocatalysts via surface functionalization of mesoporous materials. Research on Chemical Intermediates, 2003, 29, 921-938.	1.3	27
50	An Overview on the Dehydrogenation of Alkylbenzenes with Carbon Dioxide over Supported Vanadiumâ€“Antimony Oxide Catalysts. Catalysis Surveys From Asia, 2007, 11, 59-69.	1.0	27
51	Microporous 3D Graphene-like Zeolite-Templated Carbons for Preferential Adsorption of Ethane. ACS Applied Materials & Interfaces, 2020, 12, 28484-28495.	4.0	25
52	Preparation and characterization of carbon-encapsulated iron nanoparticles and their catalytic activity in the hydrogenation of levulinic acid. Journal of Materials Science, 2015, 50, 334-343.	1.7	23
53	Crystals springing into action: metalâ€“organic framework CUK-1 as a pressure-driven molecular spring. Chemical Science, 2021, 12, 5682-5687.	3.7	21
54	Decoration of the internal structure of mesoporous chromium terephthalate MIL-101 with NiO using atomic layer deposition. Microporous and Mesoporous Materials, 2016, 221, 101-107.	2.2	20

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55	Highly selective adsorption of <i>p</i>-xylene over other C₈ aromatic hydrocarbons by Co-CUK-1: a combined experimental and theoretical assessment. Dalton Transactions, 2017, 46, 16096-16101.	1.6	20
56	Catalytic Performance of Zrâ€Based Metalâ€"Organic Frameworks Zrâ€abtc and MIPâ€200 in Selective Oxidations with H₂O₂. Chemistry - A European Journal, 2021, 27, 6985-6992.	1.7	20
57	Freestanding fiber mats of zeolitic imidazolate framework 7 via oneâ€step, scalable electrospinning. Journal of Applied Polymer Science, 2016, 133, .	1.3	19
58	Oligomerization of isobutene over aluminum chloride-loaded USY zeolite catalysts. Journal of Porous Materials, 2009, 16, 631-634.	1.3	17
59	Size and morphological control of a metalâ€"organic framework Cu-BTC by variation of solvent and modulator. Journal of Porous Materials, 2015, 22, 171-178.	1.3	17
60	C₂/C₃ Hydrocarbon Separation by Pressure Swing Adsorption on MIL-100(Fe). Industrial & Engineering Chemistry Research, 2020, 59, 10568-10582.	1.8	15
61	Title is missing!. Catalysis Letters, 2000, 69, 93-101.	1.4	14
62	Microwave synthesis, characterization and catalytic properties of titanium-incorporated ZSM-5 zeolite. Research on Chemical Intermediates, 2007, 33, 501-512.	1.3	14
63	A Composite Formation Route to Wellâ€Crystalline Manganese Oxide Nanocrystals: High Catalytic Activity of Manganateâ€"Alumina Nanocomposites. Advanced Functional Materials, 2011, 21, 2301-2310.	7.8	14
64	Towards polymer grade ethylene production with Cu-BTC: gas-phase SMB versus PSA. Adsorption, 2018, 24, 203-219.	1.4	14
65	Investigating the effect of alumina shaping on the sorption properties of promising metalâ€"organic frameworks. RSC Advances, 2019, 9, 7128-7135.	1.7	14
66	A Metalâ€"Organic Framework with Cooperative Phosphines That Permit Postâ€Synthetic Installation of Open Metal Sites. Angewandte Chemie, 2018, 130, 9439-9443.	1.6	13
67	A Fluorinated <scp>Metal</scp>â€<scp>Organic</scp> Framework, <scp>FMOF</scp>â€2, for Preferential Adsorption of Ethane over Ethylene. Bulletin of the Korean Chemical Society, 2021, 42, 286-289.	1.0	13
68	Inside Cover: Controlled Reducibility of a Metalâ€"Organic Framework with Coordinatively Unsaturated Sites for Preferential Gas Sorption (Angew. Chem. Int. Ed. 34/2010). Angewandte Chemie - International Edition, 2010, 49, 5804-5804.	7.2	10
69	Propylene/Nitrogen Separation in a By-Stream of the Polypropylene Production: From Pilot Test and Model Validation to Industrial Scale Process Design and Optimization. Industrial & Engineering Chemistry Research, 2014, 53, 9199-9213.	1.8	10
70	Metal Organic Framework: Design of Hydrophilic Metal Organic Framework Water Adsorbents for Heat Reallocation (Adv. Mater. 32/2015). Advanced Materials, 2015, 27, 4803-4803.	11.1	10
71	Water adsorption fingerprinting of structural defects/capping functions in Zrâ€"fumarate MOFs: a hybrid computational-experimental approach. Dalton Transactions, 2021, 50, 1324-1333.	1.6	10
72	Separation of ethane/ethylene gas mixture by ethane-selective CAU-3-NDCA adsorbent. Microporous and Mesoporous Materials, 2022, 330, 111572.	2.2	9

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73	Hydrothermal Green Synthesis of a Robust Al Metal-Organic-Framework Effective for Water Adsorption Heat Allocations. ACS Sustainable Chemistry and Engineering, 2022, 10, 7010-7019.	3.2	9
74	Oxidative dehydrogenation of ethane with carbon dioxide over supported chromium oxide catalysts. Studies in Surface Science and Catalysis, 2004, 153, 339-342.	1.5	8
75	Liquid Phase Oxidation of Organic Compounds by Metal-Organic Frameworks. , 2013, , 371-409.		8
76	Molecular Encapsulation of Trimeric Chromium Carboxylate Clusters in Metalâ€"Organic Frameworks and Propylene Sorption. Chemistry - A European Journal, 2019, 25, 12889-12894.	1.7	8
77	Porous Materials: Energy-Efficient Dehumidification over Hierachically Porous Metal-Organic Frameworks as Advanced Water Adsorbents (Adv. Mater. 6/2012). Advanced Materials, 2012, 24, 710-710.	11.1	7
78	Effect of Mg in Alumina-Supported Sbâ€"Vâ€"O Catalysts for the Ammoxidation of Propane into Acrylonitrile. Catalysis Letters, 2008, 125, 192-196.	1.4	6
79	Nanoporous 3D Graphene-like Zeolite-Templated Carbon for High-Affinity Separation of Xenon from Krypton. ACS Applied Nano Materials, 0, , .	2.4	6
80	CCIQS-1: A Dynamic Metalâ€"Organic Framework with Selective Guest-Triggered Porosity Switching. Chemistry of Materials, 2022, 34, 669-677.	3.2	6
81	Selective formation of styrene via oxidative dehydrogenation of 4-vinylcyclohexene over ZrO2-Supported iron oxide catalysts. Studies in Surface Science and Catalysis, 2004, 153, 347-350.	1.5	5
82	Granulation and Shaping of Metal-Organic Frameworks. , 0, , 551-572.		5
83	Innentitelbild: Controlled Reducibility of a Metal-Organic Framework with Coordinatively Unsaturated Sites for Preferential Gas Sorption (Angew. Chem. 34/2010). Angewandte Chemie, 2010, 122, 5940-5940.	1.6	4
84	Washable and Reusable Zr-Metalâ€"Organic Framework Nanostructure/Polyacrylonitrile Fibrous Mats for Catalytic Degradation of Real Chemical Warfare Agents. ACS Applied Nano Materials, 2022, 5, 9657-9665.	2.4	4
85	Cover Picture: Amine Grafting on Coordinatively Unsaturated Metal Centers of MOFs: Consequences for Catalysis and Metal Encapsulation (Angew. Chem. Int. Ed. 22/2008). Angewandte Chemie - International Edition, 2008, 47, 4029-4029.	7.2	0