

Kui Tan

List of Publications by Year in descending order

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papers

4,519
citations

117453
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all docs

66
docs citations

66
times ranked

5830
citing authors

#	ARTICLE	IF	CITATIONS
1	Identifying the Gate-Opening Mechanism in the Flexible Metal-Organic Framework UTSA-300. <i>Inorganic Chemistry</i> , 2022, 61, 5025-5032.	1.9	9
2	Decoding the Gate Opening Mechanism of the Flexible Framework RPM3-Zn upon Hydrocarbon Inclusion. <i>Chemistry of Materials</i> , 2022, 34, 3246-3252.	3.2	3
3	Metal-Organic Framework Based Hydrogen-Bonding Nanotrap for Efficient Acetylene Storage and Separation. <i>Journal of the American Chemical Society</i> , 2022, 144, 1681-1689.	6.6	172
4	CO ₂ Capture by Hybrid Ultramicroporous TIFSiX ₃ -Ni under Humid Conditions Using Non-Equilibrium Cycling. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	17
5	Fluorescent Detection of Carbon Disulfide by a Highly Emissive and Robust Isorecticular Series of Zr-Based Luminescent Metal Organic Frameworks (LMOFs). <i>Chemistry</i> , 2021, 3, 327-337.	0.9	11
6	Amino-Functionalised Hybrid Ultramicroporous Materials that Enable Single-Step Ethylene Purification from a Ternary Mixture. <i>Angewandte Chemie</i> , 2021, 133, 10997-11004.	1.6	10
7	Ultrastable Zirconium-Based Cationic Metal-Organic Frameworks for Perrhenate Removal from Wastewater. <i>Inorganic Chemistry</i> , 2021, 60, 11730-11738.	1.9	22
8	Amino-Functionalised Hybrid Ultramicroporous Materials that Enable Single-Step Ethylene Purification from a Ternary Mixture. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 10902-10909.	7.2	56
9	Defect Termination in the UiO-66 Family of Metal-Organic Frameworks: The Role of Water and Modulator. <i>Journal of the American Chemical Society</i> , 2021, 143, 6328-6332.	6.6	74
10	Flexible Zn-MOF with Rare Underlying <i>scu</i> Topology for Effective Separation of C6 Alkane Isomers. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 51997-52005.	4.0	22
11	Breaking the trade-off between selectivity and adsorption capacity for gas separation. <i>CheM</i> , 2021, 7, 3085-3098.	5.8	68
12	Tuning the Adsorption Properties of Metal-Organic Frameworks through Coadsorbed Ammonia. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 43661-43667.	4.0	6
13	A switchable sensor and scavenger: detection and removal of fluorinated chemical species by a luminescent metal-organic framework. <i>Chemical Science</i> , 2021, 12, 14189-14197.	3.7	26
14	Rapid desolvation-triggered domino lattice rearrangement in a metal-organic framework. <i>Nature Chemistry</i> , 2020, 12, 90-97.	6.6	93
15	On the UV-Visible Light Synergetic Mechanisms in Au/TiO ₂ Hybrid Model Nanostructures Achieving Photoreduction of Water. <i>Journal of Physical Chemistry C</i> , 2020, 124, 25421-25430.	1.5	16
16	Crystallizing Atomic Xenon in a Flexible MOF to Probe and Understand Its Temperature-Dependent Breathing Behavior and Unusual Gas Adsorption Phenomenon. <i>Journal of the American Chemical Society</i> , 2020, 142, 20088-20097.	6.6	62
17	Porous Ti-MOF-74 Framework as a Strong-Binding Nitric Oxide Scavenger. <i>Journal of the American Chemical Society</i> , 2020, 142, 16562-16568.	6.6	27
18	Fluorescence Enhancement in the Solid State by Isolating Perylene Fluorophores in Metal-Organic Frameworks. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 26727-26732.	4.0	36

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19	Thermally Activated Adsorption in Metal-Organic Frameworks with a Temperature-Tunable Diffusion Barrier Layer. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 18468-18472.	7.2	8
20	Thermally Activated Adsorption in Metal-Organic Frameworks with a Temperature-Tunable Diffusion Barrier Layer. <i>Angewandte Chemie</i> , 2020, 132, 18626-18630.	1.6	0
21	A Beehive Inspired Hydrogen Photocatalytic Device Integrating a Carbon-Benzene Triptych Material for Efficient Solar Photo-Reduction of Seawater. <i>Advanced Sustainable Systems</i> , 2020, 4, 2000121.	2.7	11
22	Peroxide-Templated Assembly of a Trimetal Neodymium Complex Single-Molecule Magnet. <i>Inorganic Chemistry</i> , 2020, 59, 10379-10383.	1.9	8
23	2D-Covalent Organic Frameworks with Interlayer Hydrogen Bonding Oriented through Designed Nonplanarity. <i>Journal of the American Chemical Society</i> , 2020, 142, 12987-12994.	6.6	51
24	Blending Ionic and Coordinate Bonds in Hybrid Semiconductor Materials: A General Approach toward Robust and Solution-Processable Covalent/Coordinate Network Structures. <i>Journal of the American Chemical Society</i> , 2020, 142, 4242-4253.	6.6	72
25	An Encapsulation-Rearrangement Strategy to Integrate Superhydrophobicity into Mesoporous Metal-Organic Frameworks. <i>Matter</i> , 2020, 2, 988-999.	5.0	39
26	Robust fluorescent calcium coordination polymers as Cu ²⁺ sensors with high sensitivity and fast response. <i>Journal of Materials Chemistry C</i> , 2020, 8, 6820-6825.	2.7	30
27	High stability of ultra-small and isolated gold nanoparticles in metal-organic framework materials. <i>Journal of Materials Chemistry A</i> , 2019, 7, 17536-17546.	5.2	41
28	Engineering Structural Dynamics of Zirconium Metal-Organic Frameworks Based on Natural C4 Linkers. <i>Journal of the American Chemical Society</i> , 2019, 141, 17207-17216.	6.6	54
29	Improving Alkylamine Incorporation in Porous Polymer Networks through Dopant Incorporation. <i>Advanced Sustainable Systems</i> , 2019, 3, 1900051.	2.7	3
30	Structure-Driven Photoluminescence Enhancement in a Zn-Based Metal-Organic Framework. <i>Chemistry of Materials</i> , 2019, 31, 7933-7940.	3.2	21
31	Quenching of photoluminescence in a Zn-MOF sensor by nitroaromatic molecules. <i>Journal of Materials Chemistry C</i> , 2019, 7, 2625-2632.	2.7	54
32	Stable and Active Oxidation Catalysis by Cooperative Lattice Oxygen Redox on SmMn ₂ O ₅ Mullite Surface. <i>Journal of the American Chemical Society</i> , 2019, 141, 10722-10728.	6.6	64
33	Reactivity of Atomic Layer Deposition Precursors with OH/H ₂ O-Containing Metal Organic Framework Materials. <i>Chemistry of Materials</i> , 2019, 31, 2286-2295.	3.2	16
34	Luminescent Metal-Organic Framework for Lithium Harvesting Applications. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 6561-6568.	3.2	21
35	Creating Hierarchical Pores by Controlled Linker Thermolysis in Multivariate Metal-Organic Frameworks. <i>Journal of the American Chemical Society</i> , 2018, 140, 2363-2372.	6.6	310
36	Role of Hydrogen Bonding on Transport of Coadsorbed Gases in Metal-Organic Framework Materials. <i>Journal of the American Chemical Society</i> , 2018, 140, 856-859.	6.6	26

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37	Topologically guided tuning of Zr-MOF pore structures for highly selective separation of C ₆ alkane isomers. <i>Nature Communications</i> , 2018, 9, 1745.	5.8	251
38	Selective Extraction of Thorium from Rare Earth Elements Using Wrinkled Mesoporous Carbon. <i>Journal of the American Chemical Society</i> , 2018, 140, 14735-14739.	6.6	70
39	Simultaneous Trapping of C ₂ H ₂ and C ₂ H ₆ from a Ternary Mixture of C ₂ H ₂ /C ₂ H ₄ /C ₂ H ₆ in a Robust Metal-Organic Framework for the Purification of C ₂ H ₄ . <i>Angewandte Chemie</i>	7.2	223
40	Simultaneous Trapping of C ₂ H ₂ and C ₂ H ₆ from a Ternary Mixture of C ₂ H ₂ /C ₂ H ₄ /C ₂ H ₆ in a Robust Metal-Organic Framework for the Purification of C ₂ H ₄ . <i>Angewandte Chemie</i> , 2018, 130, 16299-16303.	1.6	71
41	Modulation of Water Vapor Sorption by a Fourth-Generation Metal-Organic Material with a Rigid Framework and Self-Switching Pores. <i>Journal of the American Chemical Society</i> , 2018, 140, 12545-12552.	6.6	42
42	Controlling Chemical Reactions in Confined Environments: Water Dissociation in MOF-74. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 270.	1.3	10
43	Interaction of Acid Gases SO ₂ and NO ₂ with Coordinatively Unsaturated Metal Organic Frameworks: M-MOF-74 (M = Zn, Mg, Ni, Co). <i>Chemistry of Materials</i> , 2017, 29, 4227-4235.	3.2	99
44	Capture of organic iodides from nuclear waste by metal-organic framework-based molecular traps. <i>Nature Communications</i> , 2017, 8, 485.	5.8	171
45	Trapping gases in metal-organic frameworks with a selective surface molecular barrier layer. <i>Nature Communications</i> , 2016, 7, 13871.	5.8	60
46	Chemistry in confined spaces: reactivity of the Zn-MOF-74 channels. <i>Journal of Materials Chemistry A</i> , 2016, 4, 13176-13182.	5.2	7
47	Rational design of common transition metal-nitrogen-carbon catalysts for oxygen reduction reaction in fuel cells. <i>Nano Energy</i> , 2016, 30, 443-449.	8.2	114
48	Cluster assisted water dissociation mechanism in MOF-74 and controlling it using helium. <i>Journal of Materials Chemistry A</i> , 2016, 4, 11524-11530.	5.2	10
49	Understanding and controlling water stability of MOF-74. <i>Journal of Materials Chemistry A</i> , 2016, 4, 5176-5183.	5.2	155
50	Competitive Coadsorption of CO ₂ with H ₂ O, NH ₃ , SO ₂ , NO, NO ₂ , N ₂ , O ₂ , and CH ₄ in M-MOF-74 (M = Mg, Co, Ni): The Role of Hydrogen Bonding. <i>Chemistry of Materials</i> , 2015, 27, 2203-2217.	3.2	158
51	Structural, elastic, thermal, and electronic responses of small-molecule-loaded metal-organic framework materials. <i>Journal of Materials Chemistry A</i> , 2015, 3, 986-995.	5.2	42
52	Water interactions in metal organic frameworks. <i>CrystEngComm</i> , 2015, 17, 247-260.	1.3	148
53	Study of van der Waals bonding and interactions in metal organic framework materials. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 133002.	0.7	34
54	Synthesis, Characterization, and Photocatalytic Activity of Y-Doped CeO ₂ Nanorods. <i>ACS Catalysis</i> , 2014, 4, 577-584.	5.5	301

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55	Water Reaction Mechanism in Metal Organic Frameworks with Coordinatively Unsaturated Metal Ions: MOF-74. Chemistry of Materials, 2014, 26, 6886-6895.	3.2	149
56	Effect of metal/bulk-heterojunction interfacial properties on organic photovoltaic device performance. Journal of Materials Chemistry A, 2014, 2, 15288.	5.2	11
57	Effective sensing of RDX via instant and selective detection of ketone vapors. Chemical Science, 2014, 5, 4873-4877.	3.7	112
58	Selective, Sensitive, and Reversible Detection of Vapor-Phase High Explosives via Two-Dimensional Mapping: A New Strategy for MOF-Based Sensors. Crystal Growth and Design, 2013, 13, 4204-4207.	1.4	107
59	Water Cluster Confinement and Methane Adsorption in the Hydrophobic Cavities of a Fluorinated Metal-Organic Framework. Journal of the American Chemical Society, 2013, 135, 12615-12626.	6.6	114
60	Mechanism of Preferential Adsorption of SO ₂ into Two Microporous Paddle Wheel Frameworks M(bdc)(ted) _{0.5} . Chemistry of Materials, 2013, 25, 4653-4662.	3.2	127
61	Stability and Hydrolyzation of Metal Organic Frameworks with Paddle-Wheel SBUs upon Hydration. Chemistry of Materials, 2012, 24, 3153-3167.	3.2	368
62	Interaction of Small Molecules within Metal Organic Frameworks Studied by In Situ Vibrational Spectroscopy. , 0, , .		2
63	CO ₂ Capture by Hybrid Ultramicroporous TIFSIX-3-Ni under Humid Conditions Using Non-Equilibrium Cycling. Angewandte Chemie, 0, , .	1.6	3