

Jingwei Hou

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1983388/publications.pdf>

Version: 2024-02-01

110
papers

8,587
citations

34493

54
h-index

51423

90
g-index

112
all docs

112
docs citations

112
times ranked

9810
citing authors

#	ARTICLE	IF	CITATIONS
1	Janus Membranes: Exploring Duality for Advanced Separation. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 13398-13407.	7.2	407
2	Elevated Performance of Thin Film Nanocomposite Membranes Enabled by Modified Hydrophilic MOFs for Nanofiltration. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 1975-1986.	4.0	368
3	Surface zwitterionic functionalized graphene oxide for a novel loose nanofiltration membrane. <i>Journal of Materials Chemistry A</i> , 2016, 4, 1980-1990.	5.2	326
4	Status and progress of membrane contactors in post-combustion carbon capture: A state-of-the-art review of new developments. <i>Journal of Membrane Science</i> , 2016, 511, 180-206.	4.1	249
5	The rapid emergence of two-dimensional nanomaterials for high-performance separation membranes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 3773-3792.	5.2	223
6	Dopamine: Just the Right Medicine for Membranes. <i>Advanced Functional Materials</i> , 2018, 28, 1705327.	7.8	222
7	Formation of Ultrathin, Continuous Metal-Organic Framework Membranes on Flexible Polymer Substrates. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 3947-3951.	7.2	207
8	Polymeric antimicrobial membranes enabled by nanomaterials for water treatment. <i>Journal of Membrane Science</i> , 2018, 550, 173-197.	4.1	198
9	Enzymatic degradation of bisphenol-A with immobilized laccase on TiO ₂ sol-gel coated PVDF membrane. <i>Journal of Membrane Science</i> , 2014, 469, 19-30.	4.1	193
10	Janus Membranes: Creating Asymmetry for Energy Efficiency. <i>Advanced Materials</i> , 2018, 30, e1801495.	11.1	193
11	Enhanced CO ₂ /N ₂ separation by porous reduced graphene oxide/Pebax mixed matrix membranes. <i>Journal of Membrane Science</i> , 2016, 520, 860-868.	4.1	185
12	Improved operational stability of Pebax-based gas separation membranes with ZIF-8: A comparative study of flat sheet and composite hollow fibre membranes. <i>Journal of Membrane Science</i> , 2017, 524, 266-279.	4.1	182
13	Graphene-based antimicrobial polymeric membranes: a review. <i>Journal of Materials Chemistry A</i> , 2017, 5, 6776-6793.	5.2	174
14	Laccase immobilization on titania nanoparticles and titania-functionalized membranes. <i>Journal of Membrane Science</i> , 2014, 452, 229-240.	4.1	173
15	Metal-organic framework gels and monoliths. <i>Chemical Science</i> , 2020, 11, 310-323.	3.7	173
16	MOF-positioned polyamide membranes with a fishnet-like structure for elevated nanofiltration performance. <i>Journal of Materials Chemistry A</i> , 2019, 7, 16313-16322.	5.2	166
17	Surface functionalized UiO-66/Pebax-based ultrathin composite hollow fiber gas separation membranes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 918-931.	5.2	151
18	Rapid water transport through controllable, ultrathin polyamide nanofilms for high-performance nanofiltration. <i>Journal of Materials Chemistry A</i> , 2018, 6, 15701-15709.	5.2	148

#	ARTICLE	IF	CITATIONS
19	Improving the Acidic Stability of Zeolitic Imidazolate Frameworks by Biofunctional Molecules. <i>CheM</i> , 2019, 5, 1597-1608.	5.8	148
20	Surface and interface engineering for organic-inorganic composite membranes. <i>Journal of Materials Chemistry A</i> , 2016, 4, 9716-9729.	5.2	143
21	Liquid-phase sintering of lead halide perovskites and metal-organic framework glasses. <i>Science</i> , 2021, 374, 621-625.	6.0	137
22	Switchable oil/water separation with efficient and robust Janus nanofiber membranes. <i>Carbon</i> , 2017, 115, 477-485.	5.4	131
23	High-flux thin film composite membranes for nanofiltration mediated by a rapid co-deposition of polydopamine/piperazine. <i>Journal of Membrane Science</i> , 2018, 554, 97-108.	4.1	131
24	Direct immobilization of laccase on titania nanoparticles from crude enzyme extracts of <i>P. ostreatus</i> culture for micro-pollutant degradation. <i>Separation and Purification Technology</i> , 2017, 178, 215-223.	3.9	125
25	Nanostructured mesoporous carbon polyethersulfone composite ultrafiltration membrane with significantly low protein adsorption and bacterial adhesion. <i>Carbon</i> , 2017, 111, 689-704.	5.4	122
26	Janus Membranes with Asymmetric Wettability for Fine Bubble Aeration. <i>Advanced Materials Interfaces</i> , 2016, 3, 1500774.	1.9	119
27	Janus hollow fiber membrane with a mussel-inspired coating on the lumen surface for direct contact membrane distillation. <i>Journal of Membrane Science</i> , 2017, 523, 1-7.	4.1	110
28	Rational approach to guest confinement inside MOF cavities for low-temperature catalysis. <i>Nature Communications</i> , 2019, 10, 1340.	5.8	100
29	Graphene oxide-enzyme hybrid nanoflowers for efficient water soluble dye removal. <i>Journal of Hazardous Materials</i> , 2017, 338, 93-101.	6.5	99
30	Biocatalytic degradation of carbamazepine with immobilized laccase-mediator membrane hybrid reactor. <i>Journal of Membrane Science</i> , 2016, 502, 11-20.	4.1	98
31	Metal-organic framework crystal-glass composites. <i>Nature Communications</i> , 2019, 10, 2580.	5.8	97
32	Biocatalytic Janus membranes for CO ₂ removal utilizing carbonic anhydrase. <i>Journal of Materials Chemistry A</i> , 2015, 3, 17032-17041.	5.2	92
33	Long-lasting antibacterial behavior of a novel mixed matrix water purification membrane. <i>Journal of Materials Chemistry A</i> , 2015, 3, 18696-18705.	5.2	85
34	Zwitterionic functionalized layered double hydroxides nanosheets for a novel charged mosaic membrane with high salt permeability. <i>Journal of Membrane Science</i> , 2016, 510, 27-37.	4.1	85
35	Surface Ligands Stabilized Lead Halide Perovskite Quantum Dot Photocatalyst for Visible Light-Driven Hydrogen Generation. <i>Advanced Functional Materials</i> , 2019, 29, 1905683.	7.8	85
36	Cross-linked carbon nanotubes-based biocatalytic membranes for micro-pollutants degradation: Performance, stability, and regeneration. <i>Journal of Membrane Science</i> , 2016, 520, 869-880.	4.1	83

#	ARTICLE	IF	CITATIONS
37	Halogenated Metal-Organic Framework Glasses and Liquids. <i>Journal of the American Chemical Society</i> , 2020, 142, 3880-3890.	6.6	83
38	Morphologically Tunable MOF Nanosheets in Mixed Matrix Membranes for CO ₂ Separation. <i>Chemistry of Materials</i> , 2020, 32, 4174-4184.	3.2	82
39	Gelled Graphene Oxide-Ionic Liquid Composite Membranes with Enriched Ionic Liquid Surfaces for Improved CO ₂ Separation. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 7389-7400.	4.0	79
40	Preparation of titania based biocatalytic nanoparticles and membranes for CO ₂ conversion. <i>Journal of Materials Chemistry A</i> , 2015, 3, 3332-3342.	5.2	77
41	Enzyme-embedded metal-organic framework membranes on polymeric substrates for efficient CO ₂ capture. <i>Journal of Materials Chemistry A</i> , 2017, 5, 19954-19962.	5.2	74
42	Hybrid membrane with TiO ₂ based bio-catalytic nanoparticle suspension system for the degradation of bisphenol-A. <i>Bioresource Technology</i> , 2014, 169, 475-483.	4.8	73
43	Biocatalytic self-propelled submarine-like metal-organic framework microparticles with pH-triggered buoyancy control for directional vertical motion. <i>Materials Today</i> , 2019, 28, 10-16.	8.3	73
44	Intermarriage of Halide Perovskites and Metal-Organic Framework Crystals. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 19434-19449.	7.2	73
45	Novel metal-organic framework materials: blends, liquids, glasses and crystal-glass composites. <i>Chemical Communications</i> , 2019, 55, 8705-8715.	2.2	72
46	High-flux nanofiltration membranes tailored by bio-inspired co-deposition of hydrophilic g-C ₃ N ₄ nanosheets for enhanced selectivity towards organics and salts. <i>Environmental Science: Nano</i> , 2019, 6, 2958-2967.	2.2	68
47	Flux melting of metal-organic frameworks. <i>Chemical Science</i> , 2019, 10, 3592-3601.	3.7	67
48	Superassembled Biocatalytic Porous Framework Micromotors with Reversible and Sensitive pH-Speed Regulation at Ultralow Physiological H ₂ O ₂ Concentration. <i>Advanced Functional Materials</i> , 2019, 29, 1808900.	7.8	66
49	Linking defects, hierarchical porosity generation and desalination performance in metal-organic frameworks. <i>Chemical Science</i> , 2018, 9, 3508-3516.	3.7	65
50	Synthesis and Properties of a Compositional Series of MIL-53(Al) Metal-Organic Framework Crystal-Glass Composites. <i>Journal of the American Chemical Society</i> , 2019, 141, 15641-15648.	6.6	65
51	Oriented Clay Nanotube Membrane Assembled on Microporous Polymeric Substrates. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 34914-34923.	4.0	62
52	Composite PVA/PVDF pervaporation membrane for concentrated brine desalination: Salt rejection, membrane fouling and defect control. <i>Desalination</i> , 2017, 422, 49-58.	4.0	62
53	Biomimetic synthesis of coordination network materials: Recent advances in MOFs and MPNs. <i>Applied Materials Today</i> , 2018, 10, 93-105.	2.3	62
54	Shear-aligned graphene oxide laminate/Pebax ultrathin composite hollow fiber membranes using a facile dip-coating approach. <i>Journal of Materials Chemistry A</i> , 2017, 5, 7732-7737.	5.2	61

#	ARTICLE	IF	CITATIONS
55	In-situ growth of metal-organic framework film on a polydopamine-modified flexible substrate for antibacterial and forward osmosis membranes. <i>Separation and Purification Technology</i> , 2020, 236, 116239.	3.9	56
56	Biocatalytic gas-liquid membrane contactors for CO ₂ hydration with immobilized carbonic anhydrase. <i>Journal of Membrane Science</i> , 2016, 520, 303-313.	4.1	53
57	Superhydrophobic membranes via facile bio-inspired mineralization for vacuum membrane distillation. <i>Journal of Membrane Science</i> , 2017, 540, 98-107.	4.1	53
58	Improving the hydrostability of ZIF-8 membrane by biomolecule towards enhanced nanofiltration performance for dye removal. <i>Journal of Membrane Science</i> , 2021, 618, 118630.	4.1	52
59	Phase boundary engineering of metal-organic-framework-derived carbonaceous nickel selenides for sodium-ion batteries. <i>Nano Research</i> , 2020, 13, 2289-2298.	5.8	51
60	A novel long-lasting antifouling membrane modified with bifunctional capsaicin-mimic moieties via in situ polymerization for efficient water purification. <i>Journal of Materials Chemistry A</i> , 2016, 4, 10352-10362.	5.2	48
61	Ultrasensitive Pebax Membranes Enabled by Templated Microphase Separation. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 20006-20013.	4.0	48
62	Preparation of Iridescent 2D Photonic Crystals by Using a Mussel-Inspired Spatial Patterning of ZIF-8 with Potential Applications in Optical Switch and Chemical Sensor. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 38076-38080.	4.0	47
63	Designing Angstrom-scale Asymmetric MOF-on-MOF Cavities for High Monovalent Ion Selectivity. <i>Advanced Materials</i> , 2022, 34, e2107878.	11.1	47
64	Graphene Oxide Nanosheets Based Novel Facilitated Transport Membranes for Efficient CO ₂ Capture. <i>Industrial & Engineering Chemistry Research</i> , 2016, 55, 5403-5414.	1.8	46
65	Impact of wastewater derived dissolved interfering compounds on growth, enzymatic activity and trace organic contaminant removal of white rot fungi – A critical review. <i>Journal of Environmental Management</i> , 2017, 201, 89-109.	3.8	46
66	Thin film nanocomposite membrane incorporated with 2D-MOF nanosheets for highly efficient reverse osmosis desalination. <i>Journal of Membrane Science</i> , 2022, 653, 120520.	4.1	44
67	Interfacial engineering of a polymer-MOF composite by <i>in situ</i> vitrification. <i>Chemical Communications</i> , 2020, 56, 3609-3612.	2.2	43
68	Mechanochemically Synthesised Flexible Electrodes Based on Bimetallic Metal-Organic Framework Glasses for the Oxygen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	41
69	Templated growth of vertically aligned 2D metal-organic framework nanosheets. <i>Journal of Materials Chemistry A</i> , 2019, 7, 5811-5818.	5.2	40
70	Pinning Down the Water Transport Mechanism in Graphene Oxide Pervaporation Desalination Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 4231-4239.	1.8	35
71	Nanofilms directly formed on macro-porous substrates for molecular and ionic sieving. <i>Journal of Materials Chemistry A</i> , 2018, 6, 2908-2913.	5.2	33
72	Formation of Ultrathin, Continuous Metal-Organic Framework Membranes on Flexible Polymer Substrates. <i>Angewandte Chemie</i> , 2016, 128, 4015-4019.	1.6	32

#	ARTICLE	IF	CITATIONS
73	Iron Phthalocyanine/Two-Dimensional Metal-Organic Framework Composite Nanosheets for Enhanced Alkaline Hydrogen Evolution. <i>Inorganic Chemistry</i> , 2021, 60, 9987-9995.	1.9	32
74	Strategically Designing a Pumpless Microfluidic Device on an Inert Polypropylene Substrate with Potential Application in Biosensing and Diagnostics. <i>Langmuir</i> , 2017, 33, 5565-5576.	1.6	31
75	Removal of trace organic contaminants by enzymatic membrane bioreactors: Role of membrane retention and biodegradation. <i>Journal of Membrane Science</i> , 2020, 611, 118345.	4.1	30
76	Unraveling the Interfacial Structure-Performance Correlation of Flexible Metal-Organic Framework Membranes on Polymeric Substrates. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 5570-5577.	4.0	29
77	Functional Group Mapping by Electron Beam Vibrational Spectroscopy from Nanoscale Volumes. <i>Nano Letters</i> , 2020, 20, 1272-1279.	4.5	28
78	Iono-Elastomer-Based Wearable Strain Sensor with Real-Time Thermomechanical Dual Response. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 32435-32443.	4.0	27
79	Machine Learning Guided Dopant Selection for Metal Oxide-Based Photoelectrochemical Water Splitting: The Case Study of Fe ₂ O ₃ and CuO. <i>Advanced Materials</i> , 2022, 34, e2106776.	11.1	26
80	Janus Reactors with Highly Efficient Enzymatic CO ₂ Nanocascade at Air-Liquid Interface. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 42806-42815.	4.0	25
81	Suppressing Salt Transport through Composite Pervaporation Membranes for Brine Desalination. <i>Applied Sciences (Switzerland)</i> , 2017, 7, 856.	1.3	24
82	Single-Enzyme Biofuel Cells. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 9762-9766.	7.2	23
83	Flexible solar-rechargeable energy system. <i>Energy Storage Materials</i> , 2020, 32, 356-376.	9.5	23
84	Biodesalination: On harnessing the potential of nature's desalination processes. <i>Bioinspiration and Biomimetics</i> , 2016, 11, 041001.	1.5	21
85	Heteroepitaxial growth of vertically orientated zeolitic imidazolate framework (Co/Zn-ZIF) molecular sieve membranes. <i>AIChE Journal</i> , 2020, 66, e16935.	1.8	21
86	Oriented Zeolitic imidazolate framework membranes within polymeric matrices for effective N ₂ /CO ₂ separation. <i>Journal of Membrane Science</i> , 2019, 572, 82-91.	4.1	20
87	Fouling mitigation in submerged VMD for the treatment of brackish groundwater concentrates with transverse vibration and crystallizer. <i>Desalination</i> , 2018, 426, 32-41.	4.0	19
88	Experimental investigation of low temperature distillation coupled with spray evaporation. <i>Desalination</i> , 2010, 258, 5-11.	4.0	18
89	Gold/silver decorated magnetic nanostructures as theranostic agents: Synthesis, characterization and in-vitro study. <i>Journal of Molecular Liquids</i> , 2017, 247, 238-245.	2.3	18
90	Effect of Inorganic Salt Blending on the CO ₂ Separation Performance and Morphology of Pebax1657/Ionic Liquid Gel Membranes. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 3304-3313.	1.8	18

#	ARTICLE	IF	CITATIONS
91	Open-source industrial-scale module simulation: Paving the way towards the right configuration choice for membrane distillation. <i>Desalination</i> , 2019, 464, 48-62.	4.0	18
92	Aquatic environment remediation by atomic layer deposition-based multi-functional materials: A review. <i>Journal of Hazardous Materials</i> , 2021, 402, 123513.	6.5	15
93	Intermarriage of Halide Perovskites and Metal-Organic Framework Crystals. <i>Angewandte Chemie</i> , 2020, 132, 19602-19617.	1.6	14
94	A facile, bio-inspired synthetic route toward flower-like copper phosphate crystals with high specific surface area. <i>Materials Letters</i> , 2015, 161, 601-604.	1.3	13
95	Janus-Membranen: Erforschung ihrer Dualität für hochentwickelte Stofftrennungen. <i>Angewandte Chemie</i> , 2016, 128, 13596-13605.	1.6	13
96	Binder-free mechanochemical metal-organic framework nanocrystal coatings. <i>Nanoscale</i> , 2022, 14, 2221-2229.	2.8	11
97	Crosslinked microporous polyarylate membranes with high Kr/Xe separation performance and high stability under irradiation. <i>Journal of Membrane Science</i> , 2020, 611, 118280.	4.1	9
98	Mechanically stable structured porous boron nitride with high volumetric adsorption capacity. <i>Journal of Materials Chemistry A</i> , 2021, 9, 13366-13373.	5.2	9
99	Janus Membrane: Janus Membranes: Creating Asymmetry for Energy Efficiency (<i>Adv. Mater.</i> 43/2018). <i>Advanced Materials</i> , 2018, 30, 1870328.	11.1	7
100	Mechanochemically Synthesised Flexible Electrodes based on Bimetallic Metal-Organic Framework Glasses for the Oxygen Evolution Reaction. <i>Angewandte Chemie</i> , 0, , .	1.6	7
101	Membranes: Dopamine: Just the Right Medicine for Membranes (<i>Adv. Funct. Mater.</i> 8/2018). <i>Advanced Functional Materials</i> , 2018, 28, 1870052.	7.8	6
102	Transport tuning strategies in MOF film synthesis – a perspective. <i>Journal of Materials Chemistry A</i> , 2022, 10, 14641-14654.	5.2	6
103	Single-Enzyme Biofuel Cells. <i>Angewandte Chemie</i> , 2017, 129, 9894-9898.	1.6	4
104	Fluorescence Enhancement through Confined Oligomerization in Nanochannels: An Anthryl Oligomer in a Metal-Organic Framework. , 2021, 3, 1599-1604.		4
105	Carbonic anhydrase membranes for carbon capture and storage. , 2022, 2, 100031.		4
106	Electron Ptychography Using Fast Binary 4D STEM Data. <i>Microscopy and Microanalysis</i> , 2019, 25, 1662-1663.	0.2	3
107	Editorial: Superwetting Interfaces for Oil/Water Separation. <i>Frontiers in Chemistry</i> , 2021, 9, 667106.	1.8	2
108	Dynamic single-site polysulfide immobilization in long-range disorder Cu-MOFs. <i>Chemical Communications</i> , 2020, 56, 10074-10077.	2.2	1

#	ARTICLE	IF	CITATIONS
109	Sintering of metal-organic frameworks. <i>Cell Reports Physical Science</i> , 2022, 3, 100932.	2.8	1
110	Local Coordination in Metal-Organic Frameworks Probed in the Vibrational and Optical Regime by EELS. <i>Microscopy and Microanalysis</i> , 2019, 25, 606-607.	0.2	0