

Shuwei Liang

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/4222036/shuwei-liang-publications-by-year.pdf>

Version: 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

123
papers

6,992
citations

46
h-index

82
g-index

125
ext. papers

8,956
ext. citations

12
avg, IF

6.23
L-index

#	Paper	IF	Citations
123	Hybrid membranes with 2D vertical continuous channels from layered double hydroxides array for high-efficiency ethanol dehydration. <i>Journal of Membrane Science</i> , 2022 , 643, 120040	9.6	1
122	Perfluorooctanoyl chloride engineering toward high-flux antifouling polyamide nanofilms for desalination. <i>Journal of Membrane Science</i> , 2022 , 644, 120166	9.6	1
121	Charged nanochannels endow COF membrane with weakly concentration-dependent methanol permeability. <i>Journal of Membrane Science</i> , 2022 , 645, 120186	9.6	2
120	Ultrathin nanofiltration membrane assembled by polyethyleneimine-grafted graphene quantum dots. <i>Journal of Membrane Science</i> , 2022 , 642, 119944	9.6	5
119	Ultrathin polyamide nanofiltration membranes with tunable chargeability for multivalent cation removal. <i>Journal of Membrane Science</i> , 2022 , 642, 119971	9.6	3
118	Vapor-liquid interfacial polymerization of covalent organic framework membranes for efficient alcohol dehydration. <i>Journal of Membrane Science</i> , 2022 , 641, 119905	9.6	3
117	Amino-functionalized NUS-8 nanosheets as fillers in PIM-1 mixed matrix membranes for CO ₂ separations. <i>Journal of Membrane Science</i> , 2022 , 641, 119912	9.6	5
116	Ultrathin Membranes for Separations: A New Era Driven by Advanced Nanotechnology.. <i>Advanced Materials</i> , 2022 , e2108457	24	1
115	Weakly pressure-dependent molecular sieving of propylene/propane mixtures through mixed matrix membrane with ZIF-8 direct-through channels. <i>Journal of Membrane Science</i> , 2022 , 648, 120366	9.6	0
114	A facile metal ion pre-anchored strategy for fabrication of defect-free MOF membranes on polymeric substrates. <i>Journal of Membrane Science</i> , 2022 , 650, 120419	9.6	1
113	Incorporating amino acids functionalized graphene oxide nanosheets into Pebax membranes for CO ₂ separation. <i>Separation and Purification Technology</i> , 2022 , 288, 120682	8.3	0
112	Anionic covalent organic framework engineered high-performance polyamide membrane for divalent anions removal. <i>Journal of Membrane Science</i> , 2022 , 650, 120451	9.6	0
111	Modulating interfacial polymerization with phytate as aqueous-phase additive for highly-permselective nanofiltration membranes. <i>Journal of Membrane Science</i> , 2022 , 657, 120673	9.6	0
110	Sulfonated lignin intercalated graphene oxide membranes for efficient proton conduction. <i>Journal of Membrane Science</i> , 2021 , 644, 120126	9.6	3
109	Mix-charged polyamide membranes via molecular hybridization for selective ionic nanofiltration. <i>Journal of Membrane Science</i> , 2021 , 644, 120051	9.6	3
108	Highly permeable and antioxidative graphene oxide membranes for concentration of hydrogen peroxide aqueous solution. <i>Journal of Membrane Science</i> , 2021 , 643, 120036	9.6	3
107	Electrostatic-modulated interfacial polymerization toward ultra-permselective nanofiltration membranes. <i>IScience</i> , 2021 , 24, 102369	6.1	23

106	Tuning the pore size of graphene quantum dots composite nanofiltration membranes by P-aminobenzoic acid for enhanced dye/salt separation. <i>Separation and Purification Technology</i> , 2021 , 263, 118372	8.3	6
105	Fouling-resistant robust membranes via electrostatic complexation for water purification. <i>Chemical Engineering Journal</i> , 2021 , 416, 129139	14.7	6
104	Scalable Fabrication of Crystalline COF Membranes from Amorphous Polymeric Membranes. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 18051-18058	16.4	16
103	Conferring efficient alcohol dehydration to covalent organic framework membranes via post-synthetic linker exchange. <i>Journal of Membrane Science</i> , 2021 , 630, 119319	9.6	6
102	Multifunctional covalent organic framework (COF)-Based mixed matrix membranes for enhanced CO ₂ separation. <i>Journal of Membrane Science</i> , 2021 , 618, 118693	9.6	32
101	Exfoliation-free layered double hydroxides laminates intercalated with amino acids for enhanced CO ₂ separation of mixed matrix membrane. <i>Journal of Membrane Science</i> , 2021 , 618, 118691	9.6	11
100	Vertically oriented Fe ₃ O ₄ nanoflakes within hybrid membranes for efficient water/ethanol separation. <i>Journal of Membrane Science</i> , 2021 , 620, 118916	9.6	4
99	Construction of graphene oxide membrane through non-covalent cross-linking by sulfonated cyclodextrin for ultra-permeable butanol dehydration. <i>Journal of Membrane Science</i> , 2021 , 621, 118938	9.6	14
98	Superwetting membranes: from controllable constructions to efficient separations. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 1395-1417	13	16
97	Three-dimensional covalent organic framework membrane for efficient proton conduction. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 17720-17723	13	6
96	Oil/water separation membranes with a fluorine island structure for stable high flux. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 6905-6912	13	6
95	Organic molecular sieve membranes for chemical separations. <i>Chemical Society Reviews</i> , 2021 , 50, 5468-5516	58.16	55
94	Heterostructured graphene oxide membranes with tunable water-capture coatings for highly selective water permeation. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 7903-7912	13	8
93	Graphene oxide membranes tuned by metal-phytic acid coordination complex for butanol dehydration. <i>Journal of Membrane Science</i> , 2021 , 638, 119736	9.6	8
92	Incorporating covalent organic framework nanosheets into polyamide membranes for efficient desalination. <i>Separation and Purification Technology</i> , 2021 , 274, 119046	8.3	7
91	Loosening ultrathin polyamide nanofilms through alkali hydrolysis for high-permselective nanofiltration. <i>Journal of Membrane Science</i> , 2021 , 637, 119623	9.6	7
90	Electrostatic enhanced surface segregation approach to self-cleaning and antifouling membranes for efficient molecular separation. <i>Journal of Membrane Science</i> , 2021 , 638, 119689	9.6	5
89	Engineering multi-pathway graphene oxide membranes toward ultrafast water purification. <i>Journal of Membrane Science</i> , 2021 , 638, 119706	9.6	6

88	A nonionic polymer-brush-grafted PVDF membrane to analyse fouling during the filtration of oil/water emulsions. <i>Journal of Membrane Science</i> , 2021 , 637, 119644	9.6	6
87	Thermal-facilitated interfacial polymerization toward high-performance polyester desalination membrane. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 8470-8479	13	7
86	Graphene quantum dot engineered ultrathin loose polyamide nanofilms for high-performance nanofiltration. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 23930-23938	13	38
85	Covalent Organic Framework Nanosheets as Reactive Fillers To Fabricate Free-Standing Polyamide Membranes for Efficient Desalination. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 27777-27785	9.5	33
84	Solid-Vapor Interface Engineered Covalent Organic Framework Membranes for Molecular Separation. <i>Journal of the American Chemical Society</i> , 2020 , 142, 13450-13458	16.4	65
83	Ultrathin fluorinated self-cleaning membranes via coordination-driven metal-bridging assembly for water purification. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 4505-4514	13	15
82	Incorporating arginine-FeIII complex into polyamide membranes for enhanced water permeance and antifouling performance. <i>Journal of Membrane Science</i> , 2020 , 602, 117980	9.6	14
81	Two-dimensional nanochannel membranes for molecular and ionic separations. <i>Chemical Society Reviews</i> , 2020 , 49, 1071-1089	58.5	103
80	Plasticization- and aging-resistant membranes with venation-like architecture for efficient carbon capture. <i>Journal of Membrane Science</i> , 2020 , 609, 118215	9.6	8
79	2D layered double hydroxide membranes with intrinsic breathing effect toward CO ₂ for efficient carbon capture. <i>Journal of Membrane Science</i> , 2020 , 598, 117663	9.6	21
78	Weakly Humidity-Dependent Proton-Conducting COF Membranes. <i>Advanced Materials</i> , 2020 , 32, e2005565	16.5	74
77	Membrane-Based Olefin/Paraffin Separations. <i>Advanced Science</i> , 2020 , 7, 2001398	13.6	39
76	Ultrathin heterostructured covalent organic framework membranes with interfacial molecular sieving capacity for fast water-selective permeation. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 19328-19336	13	18
75	In situ construction of chemically heterogeneous hydrogel surfaces toward near-zero-flux-decline membranes for oil-water separation. <i>Journal of Membrane Science</i> , 2020 , 594, 117455	9.6	21
74	Graphene oxide membranes with fixed interlayer distance via dual crosslinkers for efficient liquid molecular separations. <i>Journal of Membrane Science</i> , 2020 , 595, 117486	9.6	31
73	Control of Edge/in-Plane Interactions toward Robust, Highly Proton Conductive Graphene Oxide Membranes. <i>ACS Nano</i> , 2019 , 13, 10366-10375	16.7	28
72	Metal-coordinated sub-10 nm membranes for water purification. <i>Nature Communications</i> , 2019 , 10, 416017.4	17.4	46
71	Ultrathin nanofiltration membrane with polydopamine-covalent organic framework interlayer for enhanced permeability and structural stability. <i>Journal of Membrane Science</i> , 2019 , 576, 131-141	9.6	136

70	Covalent organic framework membranes through a mixed-dimensional assembly for molecular separations. <i>Nature Communications</i> , 2019 , 10, 2101	17.4	157
69	110th Anniversary: Mixed Matrix Membranes with Fillers of Intrinsic Nanopores for Gas Separation. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 7706-7724	3.9	27
68	Constructing channel-mediated facilitated transport membranes by incorporating covalent organic framework nanosheets with tunable microenvironments. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 9912-9923	13	15
67	Bristed acid mediated covalent organic framework membranes for efficient molecular separation. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 20317-20324	13	31
66	Ultraparpermeable graphene oxide membranes with tunable interlayer distances via vein-like supramolecular dendrimers. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 18642-18652	13	29
65	Mixed Nanosheet Membranes Assembled from Chemically Grafted Graphene Oxide and Covalent Organic Frameworks for Ultra-high Water Flux. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 28978-28986	9.5	41
64	Polydopamine-modulated covalent organic framework membranes for molecular separation. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 18063-18071	13	51
63	Supramolecular Calix[4]arenes-Intercalated Graphene Oxide Membranes for Efficient Proton Conduction. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 42250-42260	9.5	8
62	Covalent organic framework-modulated interfacial polymerization for ultrathin desalination membranes. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 25641-25649	13	94
61	Porous organosilicon nanotubes in pebax-based mixed-matrix membranes for biogas purification. <i>Journal of Membrane Science</i> , 2019 , 573, 301-308	9.6	24
60	Graphene quantum dots engineered nanofiltration membrane for ultrafast molecular separation. <i>Journal of Membrane Science</i> , 2019 , 572, 504-511	9.6	41
59	Embedding hydrophobic MoS ₂ nanosheets within hydrophilic sodium alginate membrane for enhanced ethanol dehydration. <i>Chemical Engineering Science</i> , 2018 , 185, 231-242	4.4	24
58	Antifouling membrane surface construction: Chemistry plays a critical role. <i>Journal of Membrane Science</i> , 2018 , 551, 145-171	9.6	200
57	Thin film nanocomposite membranes incorporated with graphene quantum dots for high flux and antifouling property. <i>Journal of Membrane Science</i> , 2018 , 553, 17-24	9.6	112
56	2D Heterostructure Membranes with Sunlight-Driven Self-Cleaning Ability for Highly Efficient Oil/Water Separation. <i>Advanced Functional Materials</i> , 2018 , 28, 1706545	15.6	123
55	Enhanced dehydration performance of hybrid membranes by incorporating fillers with hydrophilic-hydrophobic regions. <i>Chemical Engineering Science</i> , 2018 , 178, 273-283	4.4	11
54	Manipulation of interactions at membrane interfaces for energy and environmental applications. <i>Progress in Polymer Science</i> , 2018 , 80, 125-152	29.6	40
53	Water-selective permeation in hybrid membrane incorporating multi-functional hollow ZIF-8 nanospheres. <i>Journal of Membrane Science</i> , 2018 , 555, 146-156	9.6	38

52	Creation of active-passive integrated mechanisms on membrane surfaces for superior antifouling and antibacterial properties. <i>Journal of Membrane Science</i> , 2018 , 548, 621-631	9.6	46
51	Bimetallic metal-organic frameworks nanocages as multi-functional fillers for water-selective membranes. <i>Journal of Membrane Science</i> , 2018 , 545, 19-28	9.6	38
50	Enhanced dehydration performance of hybrid membranes by incorporating lanthanide-based MOFs. <i>Journal of Membrane Science</i> , 2018 , 546, 31-40	9.6	20
49	Graphene oxide quantum dots incorporated nanocomposite membranes with high water flux for pervaporative dehydration. <i>Journal of Membrane Science</i> , 2018 , 563, 903-913	9.6	36
48	Highly water-selective membranes based on hollow covalent organic frameworks with fast transport pathways. <i>Journal of Membrane Science</i> , 2018 , 565, 331-341	9.6	50
47	In-situ construction of antifouling separation layer via a reaction enhanced surface segregation method. <i>Chemical Engineering Science</i> , 2018 , 190, 89-97	4.4	14
46	Functionally graded membranes from nanoporous covalent organic frameworks for highly selective water permeation. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 583-591	13	76
45	Significantly enhanced CO ₂ capture properties by synergy of zinc ion and sulfonate in Pebax-pitch hybrid membranes. <i>Journal of Membrane Science</i> , 2018 , 549, 670-679	9.6	28
44	Fabrication of Nafion/zwitterion-functionalized covalent organic framework composite membranes with improved proton conductivity. <i>Journal of Membrane Science</i> , 2018 , 568, 1-9	9.6	37
43	Heterostructured filler in mixed matrix membranes to coordinate physical and chemical selectivities for enhanced CO ₂ separation. <i>Journal of Membrane Science</i> , 2018 , 567, 272-280	9.6	33
42	A highly conductive and robust anion conductor obtained via synergistic manipulation in intra- and inter-laminate of layered double hydroxide nanosheets. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 10277-10285	13	22
41	Hierarchical pore architectures from 2D covalent organic nanosheets for efficient water/alcohol separation. <i>Journal of Membrane Science</i> , 2018 , 561, 79-88	9.6	26
40	Preparation of ultrathin, robust membranes through reactive layer-by-layer (LbL) assembly for pervaporation dehydration. <i>Journal of Membrane Science</i> , 2017 , 537, 229-238	9.6	54
39	Construction of molecule-selective mixed matrix membranes with confined mass transfer structure. <i>Chinese Journal of Chemical Engineering</i> , 2017 , 25, 1563-1580	3.2	19
38	Bioinspired Ultrastrong Solid Electrolytes with Fast Proton Conduction along 2D Channels. <i>Advanced Materials</i> , 2017 , 29, 1605898	24	67
37	Fabrication of composite nanofiltration membrane by incorporating attapulgite nanorods during interfacial polymerization for high water flux and antifouling property. <i>Journal of Membrane Science</i> , 2017 , 544, 79-87	9.6	91
36	One-pot synthesis of silica/titania binary nanoparticles with acid/base pairs via biomimetic mineralization to fabricate highly proton-conductive membranes. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 18585-18593	13	14
35	Facilitating Proton Transport in Nafion-Based Membranes at Low Humidity by Incorporating Multifunctional Graphene Oxide Nanosheets. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 27676-27687	9.5	48

34	Hybrid membranes for pervaporation separations. <i>Journal of Membrane Science</i> , 2017 , 541, 329-346	9.6	117
33	Enhancing the permeation flux and antifouling performance of polyamide nanofiltration membrane by incorporation of PEG-POSS nanoparticles. <i>Journal of Membrane Science</i> , 2017 , 540, 454-463	9.6	80
32	Pervaporation performance comparison of hybrid membranes filled with two-dimensional ZIF-L nanosheets and zero-dimensional ZIF-8 nanoparticles. <i>Journal of Membrane Science</i> , 2017 , 523, 185-196	9.6	132
31	Highly water-permeable and stable hybrid membrane with asymmetric covalent organic framework distribution. <i>Journal of Membrane Science</i> , 2016 , 520, 583-595	9.6	80
30	Pervaporation dehydration of an acetone/water mixture by hybrid membranes incorporated with sulfonated carbon molecular sieves. <i>RSC Advances</i> , 2016 , 6, 55272-55281	3.7	10
29	Fabrication of electro-neutral nanofiltration membranes at neutral pH with antifouling surface via interfacial polymerization from a novel zwitterionic amine monomer. <i>Journal of Membrane Science</i> , 2016 , 503, 101-109	9.6	91
28	Incorporating Zwitterionic Graphene Oxides into Sodium Alginate Membrane for Efficient Water/Alcohol Separation. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 2097-103	9.5	90
27	Enhancing the permeation selectivity of sodium alginate membrane by incorporating attapulgite nanorods for ethanol dehydration. <i>RSC Advances</i> , 2016 , 6, 14381-14392	3.7	32
26	Free-Standing Graphene Oxide-Palygorskite Nanohybrid Membrane for Oil/Water Separation. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 8247-56	9.5	168
25	Sulfonated poly(ether ether ketone)-based hybrid membranes containing graphene oxide with acid-base pairs for direct methanol fuel cells. <i>Electrochimica Acta</i> , 2016 , 203, 178-188	6.7	94
24	Engineering amphiphilic nanofiltration membrane surfaces with a multi-defense mechanism for improved antifouling performances. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 7892-7902	13	51
23	A highly permeable graphene oxide membrane with fast and selective transport nanochannels for efficient carbon capture. <i>Energy and Environmental Science</i> , 2016 , 9, 3107-3112	35.4	155
22	Antifouling membranes for sustainable water purification: strategies and mechanisms. <i>Chemical Society Reviews</i> , 2016 , 45, 5888-5924	58.5	676
21	Preparation of Antifouling Nanofiltration Membrane via Interfacial Polymerization of Fluorinated Polyamine and Trimesoyl Chloride. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 8302-8310	3.9	20
20	Fabrication of hybrid membranes by incorporating acid-base pair functionalized hollow mesoporous silica for enhanced proton conductivity. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 16079-16088	13	44
19	Janus composite nanoparticle-incorporated mixed matrix membranes for CO ₂ separation. <i>Journal of Membrane Science</i> , 2015 , 489, 1-10	9.6	49
18	Highly water-selective hybrid membrane by incorporating g-C ₃ N ₄ nanosheets into polymer matrix. <i>Journal of Membrane Science</i> , 2015 , 490, 72-83	9.6	142
17	Nanostructured Ion-Exchange Membranes for Fuel Cells: Recent Advances and Perspectives. <i>Advanced Materials</i> , 2015 , 27, 5280-95	24	273

16	Tunable Nanochannels along Graphene Oxide/Polymer Core/Shell Nanosheets to Enhance Proton Conductivity. <i>Advanced Functional Materials</i> , 2015 , 25, 7502-7511	15.6	83
15	Enhancing the CO ₂ separation performance of composite membranes by the incorporation of amino acid-functionalized graphene oxide. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 6629-6641	13	118
14	Enhanced pervaporative performance of hybrid membranes containing Fe ₃ O ₄ @CNT nanofillers. <i>Journal of Membrane Science</i> , 2015 , 492, 230-241	9.6	37
13	Enhanced interfacial interaction and CO ₂ separation performance of mixed matrix membrane by incorporating polyethylenimine-decorated metal-organic frameworks. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 1065-77	9.5	130
12	Efficient CO ₂ capture by functionalized graphene oxide nanosheets as fillers to fabricate multi-permselective mixed matrix membranes. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 5528-37	9.5	255
11	Pebax/PEG/MWCNT hybrid membranes with enhanced CO ₂ capture properties. <i>Journal of Membrane Science</i> , 2014 , 460, 62-70	9.6	184
10	Separation performance of thin-film composite nanofiltration membrane through interfacial polymerization using different amine monomers. <i>Desalination</i> , 2014 , 333, 59-65	10.3	140
9	Engineering amphiphilic membrane surfaces based on PEO and PDMS segments for improved antifouling performances. <i>Journal of Membrane Science</i> , 2014 , 450, 111-123	9.6	132
8	Surface fluorination of polyamide nanofiltration membrane for enhanced antifouling property. <i>Journal of Membrane Science</i> , 2014 , 455, 15-23	9.6	79
7	A novel positively charged composite nanofiltration membrane prepared by bio-inspired adhesion of polydopamine and surface grafting of poly(ethylene imine). <i>Journal of Membrane Science</i> , 2014 , 470, 9-17	9.6	183
6	Facilitated transport mixed matrix membranes incorporated with amine functionalized MCM-41 for enhanced gas separation properties. <i>Journal of Membrane Science</i> , 2014 , 465, 78-90	9.6	163
5	Biomimetic and bioinspired membranes: Preparation and application. <i>Progress in Polymer Science</i> , 2014 , 39, 1668-1720	29.6	155
4	SPEEK/amine-functionalized TiO ₂ submicrospheres mixed matrix membranes for CO ₂ separation. <i>Journal of Membrane Science</i> , 2014 , 467, 23-35	9.6	69
3	Bioadhesion-inspired polymer/inorganic nanohybrid membranes with enhanced CO ₂ capture properties. <i>Journal of Materials Chemistry</i> , 2012 , 22, 19617		53
2	Zwitterionic polyethersulfone ultrafiltration membrane with superior antifouling property. <i>Journal of Membrane Science</i> , 2008 , 319, 271-278	9.6	142
1	Microstructure Manipulation of Covalent Organic Frameworks (COFs)-based Membrane for Efficient Separations. <i>Chemical Research in Chinese Universities</i> , 1	2.2	0