

# Liang Xian

## List of Publications by Year in descending order

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Version: 2024-02-01

24  
papers

1,191  
citations

430874

18  
h-index

610901

24  
g-index

24  
all docs

24  
docs citations

24  
times ranked

710  
citing authors

#	ARTICLE	IF	CITATIONS
1	Beneficial use of rotatable-spacer side-chains in alkaline anion exchange membranes for fuel cells. <i>Energy and Environmental Science</i> , 2018, 11, 3472-3479.	30.8	196
2	Sulfonated Microporous Polymer Membranes with Fast and Selective Ion Transport for Electrochemical Energy Conversion and Storage. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 9564-9573.	13.8	145
3	Self-aggregating cationic-chains enable alkaline stable ion-conducting channels for anion-exchange membrane fuel cells. <i>Journal of Materials Chemistry A</i> , 2021, 9, 327-337.	10.3	116
4	A benzyltetramethylimidazolium-based membrane with exceptional alkaline stability in fuel cells: role of its structure in alkaline stability. <i>Journal of Materials Chemistry A</i> , 2018, 6, 527-534.	10.3	101
5	Anion exchange membranes with branched ionic clusters for fuel cells. <i>Journal of Materials Chemistry A</i> , 2018, 6, 5993-5998.	10.3	70
6	Highly conductive and stabilized side-chain-type anion exchange membranes: ideal alternatives for alkaline fuel cell applications. <i>Journal of Materials Chemistry A</i> , 2018, 6, 17101-17110.	10.3	58
7	Ionomer Cross-Linking Immobilization of Catalyst Nanoparticles for High Performance Alkaline Membrane Fuel Cells. <i>Chemistry of Materials</i> , 2019, 31, 7812-7820.	6.7	57
8	Cation-dipole interaction that creates ordered ion channels in an anion exchange membrane for fast $\text{OH}^-$ conduction. <i>AIChE Journal</i> , 2021, 67, e17133.	3.6	53
9	Shielded goethite catalyst that enables fast water dissociation in bipolar membranes. <i>Nature Communications</i> , 2021, 12, 9.	12.8	49
10	Improving fuel cell performance of an anion exchange membrane by terminal pending bis-cations on a flexible side chain. <i>Journal of Membrane Science</i> , 2020, 595, 117483.	8.2	48
11	Biomimetic Nanocones that Enable High Ion Permselectivity. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 12646-12654.	13.8	47
12	Achieving high anion conductivity by densely grafting of ionic strings. <i>Journal of Membrane Science</i> , 2018, 559, 35-41.	8.2	38
13	Flexible Bis-piperidinium Side Chains Construct Highly Conductive and Robust Anion-Exchange Membranes. <i>ACS Applied Energy Materials</i> , 2021, 4, 9701-9711.	5.1	34
14	Thermally triggered polyrotaxane translational motion helps proton transfer. <i>Nature Communications</i> , 2018, 9, 2297.	12.8	24
15	3D Zipped Interface: In Situ Covalent Locking for High Performance of Anion Exchange Membrane Fuel Cells. <i>Advanced Science</i> , 2021, 8, e2102637.	11.2	21
16	Biomimetic Nanocones that Enable High Ion Permselectivity. <i>Angewandte Chemie</i> , 2019, 131, 12776-12784.	2.0	20
17	Sulfonated Microporous Polymer Membranes with Fast and Selective Ion Transport for Electrochemical Energy Conversion and Storage. <i>Angewandte Chemie</i> , 2020, 132, 9651-9660.	2.0	20
18	Towards the gemini cation anion exchange membranes by nucleophilic substitution reaction. <i>Science China Materials</i> , 2019, 62, 973-981.	6.3	18

#	ARTICLE	IF	CITATIONS
19	Hydrogen bonding assisted OH <sup>-</sup> transport under low humidity for rapid start-up in AEMFCs. Journal of Membrane Science, 2022, 647, 120303.	8.2	15
20	Development of a High-Performance Proton Exchange Membrane: From Structural Optimization to Quantity Production. Industrial & Engineering Chemistry Research, 2022, 61, 4329-4338.	3.7	14
21	Exploring H-bonding interaction to enhance proton permeability of an acid-selective membrane. Journal of Membrane Science, 2021, 637, 119650.	8.2	13
22	Angioplasty mimetic stented ion transport channels construct durable high-performance membranes. Journal of Materials Chemistry A, 2019, 7, 10030-10040.	10.3	12
23	Fast Bulky Anion Conduction Enabled by Free Shuttling Phosphonium Cations. Research, 2021, 2021, 9762709.	5.7	11
24	High-performance bipolar membrane for electrochemical water electrolysis. Journal of Membrane Science, 2022, 656, 120660.	8.2	11