

Benqiao He

List of Publications by Year in descending order

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110
papers

4,579
citations

81743

39
h-index

118652

62
g-index

112
all docs

112
docs citations

112
times ranked

4440
citing authors

#	ARTICLE	IF	CITATIONS
1	Novel Functionalized Nano-TiO ₂ Loading Electrocatalytic Membrane for Oily Wastewater Treatment. <i>Environmental Science & Technology</i> , 2012, 46, 6815-6821.	4.6	194
2	Preparation and characterization of positively charged polyamide composite nanofiltration hollow fiber membrane for lithium and magnesium separation. <i>Desalination</i> , 2015, 369, 26-36.	4.0	192
3	Biodiesel production using cation-exchange resin as heterogeneous catalyst. <i>Bioresource Technology</i> , 2010, 101, 1518-1521.	4.8	161
4	An Electrocatalytic Membrane Reactor with Self-cleaning Function for Industrial Wastewater Treatment. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 2148-2150.	7.2	132
5	The effect of sulfonated polysulfone on the compatibility and structure of polyethersulfone-based blend membranes. <i>Journal of Membrane Science</i> , 2016, 513, 1-11.	4.1	128
6	An ultrahighly permeable-selective nanofiltration membrane mediated by an <i>in situ</i> formed interlayer. <i>Journal of Materials Chemistry A</i> , 2020, 8, 5275-5283.	5.2	116
7	Antibacterial and environmentally friendly chitosan/polyvinyl alcohol blend membranes for air filtration. <i>Carbohydrate Polymers</i> , 2018, 198, 241-248.	5.1	115
8	A continuous process for biodiesel production in a fixed bed reactor packed with cation-exchange resin as heterogeneous catalyst. <i>Bioresource Technology</i> , 2011, 102, 3607-3609.	4.8	110
9	Ultrahigh adsorption capacities for anionic and cationic dyes from wastewater using only chitosan. <i>Journal of Cleaner Production</i> , 2019, 214, 89-94.	4.6	108
10	Engineering Interface with One-Dimensional Co ₃ O ₄ Nanostructure in Catalytic Membrane Electrode: Toward an Advanced Electrocatalyst for Alcohol Oxidation. <i>ACS Nano</i> , 2017, 11, 12365-12377.	7.3	103
11	A novel route for the removal of Cu(II) and Ni(II) ions via homogeneous adsorption by chitosan solution. <i>Journal of Cleaner Production</i> , 2018, 192, 801-808.	4.6	99
12	Controllable oxidation of glucose to gluconic acid and glucaric acid using an electrocatalytic reactor. <i>Electrochimica Acta</i> , 2014, 130, 170-178.	2.6	96
13	Preparation of PES/SPSf blend ultrafiltration membranes with high performance via H ₂ O-induced gelation phase separation. <i>Journal of Membrane Science</i> , 2017, 540, 136-145.	4.1	95
14	Preparation and characterization of PSSA/PVA catalytic membrane for biodiesel production. <i>Fuel</i> , 2010, 89, 2299-2304.	3.4	91
15	Reversible fluorescence modulation of spiropyran-functionalized carbon nanoparticles. <i>Journal of Materials Chemistry C</i> , 2013, 1, 3716.	2.7	86
16	Continuous biodiesel production in a fixed bed reactor packed with anion-exchange resin as heterogeneous catalyst. <i>Bioresource Technology</i> , 2012, 113, 19-22.	4.8	84
17	Ultra-low graphene oxide loading for water permeability, antifouling and antibacterial improvement of polyethersulfone/sulfonated polysulfone ultrafiltration membranes. <i>Journal of Colloid and Interface Science</i> , 2019, 552, 319-331.	5.0	84
18	Synthesis of amphiphilic ethyl cellulose grafting poly(acrylic acid) copolymers and their self-assembly morphologies in water. <i>Polymer</i> , 2006, 47, 7927-7934.	1.8	82

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19	Biodiesel production from waste chicken fat with low free fatty acids by an integrated catalytic process of composite membrane and sodium methoxide. <i>Bioresource Technology</i> , 2013, 139, 316-322.	4.8	79
20	Multifunctional PVDF/CNT/GO mixed matrix membranes for ultrafiltration and fouling detection. <i>Journal of Hazardous Materials</i> , 2020, 384, 120978.	6.5	76
21	Underwater superoleophobic APTES-SiO ₂ /PVA organohydrogel for low-temperature tolerant, self-healing, recoverable oil/water separation mesh. <i>Chemical Engineering Journal</i> , 2020, 382, 122925.	6.6	72
22	Preparation and characterization of the organic-inorganic hybrid membrane for biodiesel production. <i>Bioresource Technology</i> , 2010, 101, 1501-1505.	4.8	71
23	Fabrication of hyperbranched polyether demulsifier modified PVDF membrane for demulsification and separation of oil-in-water emulsion. <i>Journal of Membrane Science</i> , 2020, 602, 117974.	4.1	70
24	A rubber-like, underwater superoleophobic hydrogel for efficient oil/water separation. <i>Chemical Engineering Journal</i> , 2019, 361, 364-372.	6.6	63
25	Environmentally-friendly halloysite nanotubes@chitosan/polyvinyl alcohol/non-woven fabric hybrid membranes with a uniform hierarchical porous structure for air filtration. <i>Journal of Membrane Science</i> , 2020, 594, 117445.	4.1	61
26	Compactness-tailored hollow fiber loose nanofiltration separation layers based on chemical crosslinking and metal ion coordination for selective dye separation. <i>Journal of Membrane Science</i> , 2021, 620, 118948.	4.1	59
27	Formation and structural evolution of biphenyl polyamide thin film on hollow fiber membrane during interfacial polymerization. <i>Journal of Membrane Science</i> , 2011, 373, 98-106.	4.1	58
28	Controllable oxidation of cyclohexane to cyclohexanol and cyclohexanone by a nano-MnO _x /Ti electrocatalytic membrane reactor. <i>Journal of Catalysis</i> , 2015, 329, 187-194.	3.1	58
29	Continuous esterification to produce biodiesel by SPES/PES/NWF composite catalytic membrane in flow-through membrane reactor: Experimental and kinetic studies. <i>Bioresource Technology</i> , 2013, 129, 100-107.	4.8	52
30	Fabrication of PVDF-based blend membrane with a thin hydrophilic deposition layer and a network structure supporting layer via the thermally induced phase separation followed by non-solvent induced phase separation process. <i>Applied Surface Science</i> , 2017, 419, 429-438.	3.1	52
31	Non-invasive monitoring of fouling in hollow fiber membrane via UTDR. <i>Journal of Membrane Science</i> , 2009, 326, 103-110.	4.1	50
32	Esterification of acidified oil with methanol by SPES/PES catalytic membrane. <i>Bioresource Technology</i> , 2011, 102, 5389-5393.	4.8	49
33	Preparation and Characterization of Polysulfone-graft-4-aminobenzo-15-crown-5-ether for Lithium Isotope Separation. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 3473-3479.	1.8	48
34	Nano-V ₂ O ₅ /Ti porous membrane electrode with enhanced electrochemical activity for the high-efficiency oxidation of cyclohexane. <i>Green Chemistry</i> , 2018, 20, 3944-3953.	4.6	48
35	Improved water permeability and structural stability in a polysulfone-grafted graphene oxide composite membrane used for dye separation. <i>Journal of Membrane Science</i> , 2020, 595, 117547.	4.1	48
36	pH-responsive nanofiltration membrane containing chitosan for dye separation. <i>Journal of Membrane Science</i> , 2021, 635, 119445.	4.1	47

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37	Corrosive environments tolerant, ductile and self-healing hydrogel for highly efficient oil/water separation. <i>Chemical Engineering Journal</i> , 2018, 354, 1185-1196.	6.6	44
38	Ultrahigh-efficient separation of Mg ²⁺ /Li ⁺ using an in-situ reconstructed positively charged nanofiltration membrane under an electric field. <i>Journal of Membrane Science</i> , 2022, 641, 119880.	4.1	44
39	Sulfur removal from fuel using zeolites/polyimide mixed matrix membrane adsorbents. <i>Journal of Hazardous Materials</i> , 2012, 203-204, 204-212.	6.5	40
40	Pregelation of sulfonated polysulfone and water for tailoring the morphology and properties of polyethersulfone ultrafiltration membranes for dye/salt selective separation. <i>Journal of Membrane Science</i> , 2021, 618, 118746.	4.1	37
41	Comprehensive kinetic studies of acidic oil continuous esterification by cation-exchange resin in fixed bed reactors. <i>Bioresource Technology</i> , 2012, 113, 65-72.	4.8	36
42	Experimental investigation of local flux distribution and fouling behavior in double-end and dead-end submerged hollow fiber membrane modules. <i>Journal of Membrane Science</i> , 2014, 453, 18-26.	4.1	36
43	Understanding the multiple functions of styrene-co-maleic anhydride in fabricating polyvinylidene fluoride hollow fiber membrane via coupled phase inversion process and its effect on surface infiltration behavior and membrane permeability. <i>Journal of Membrane Science</i> , 2019, 590, 117269.	4.1	36
44	Electrocatalytic oxidation of n-propanol to produce propionic acid using an electrocatalytic membrane reactor. <i>Chemical Communications</i> , 2013, 49, 4501.	2.2	35
45	Ultrasonic visualization of sub-critical flux fouling in the double-end submerged hollow fiber membrane module. <i>Journal of Membrane Science</i> , 2013, 444, 394-401.	4.1	33
46	A three-stage fixed-bed electrochemical reactor for biologically treated landfill leachate treatment. <i>Chemical Engineering Journal</i> , 2019, 376, 121026.	6.6	31
47	Random lasing in a dye doped cholesteric liquid crystal polymer solution. <i>Optical Materials</i> , 2008, 31, 375-379.	1.7	30
48	Continuous transesterification to produce biodiesel under HTCC/Na ₂ SiO ₃ /NWF composite catalytic membrane in flow-through membrane reactor. <i>Fuel</i> , 2017, 197, 51-57.	3.4	30
49	The carbon nanoparticles grafted with copolymers of styrene and spiropyran with reversibly photoswitchable fluorescence. <i>Carbon</i> , 2015, 91, 30-37.	5.4	28
50	Direct monitoring of sub-critical flux fouling in a horizontal double-end submerged hollow fiber membrane module using ultrasonic time domain reflectometry. <i>Journal of Membrane Science</i> , 2014, 451, 226-233.	4.1	26
51	Continuous biodiesel production from acidic oil using a combination of cation- and anion-exchange resins. <i>Fuel Processing Technology</i> , 2015, 130, 1-6.	3.7	26
52	Significantly improved gas separation properties of sulfonated PIM-1 by direct sulfonation using SO ₃ solution. <i>Journal of Membrane Science</i> , 2021, 635, 119440.	4.1	26
53	Gold nanocluster-based light-controlled fluorescence molecular switch. <i>Journal of Materials Chemistry</i> , 2011, 21, 5867.	6.7	25
54	In situ one-pot formation of crown ether functionalized polysulfone membranes for highly efficient lithium isotope adsorptive separation. <i>European Polymer Journal</i> , 2018, 109, 288-296.	2.6	25

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55	Cation Ion-Exchange Resin/Polyethersulfone Hybrid Catalytic Membrane for Biodiesel Production. <i>Journal of Biobased Materials and Bioenergy</i> , 2011, 5, 85-91.	0.1	25
56	Preparation and properties of water-swallowable elastomer. <i>Journal of Applied Polymer Science</i> , 2004, 93, 1719-1723.	1.3	24
57	An electrocatalytic reactor for the high selectivity production of sodium 2,2,3,3-tetrafluoropropionate from 2,2,3,3-tetrafluoro-1-propanol. <i>Electrochimica Acta</i> , 2014, 123, 33-41.	2.6	24
58	Biodiesel production from soybean oil by guanidinylated chitosan. <i>Fuel</i> , 2015, 159, 33-39.	3.4	24
59	A facile one-step synthesis of fluorescent silicon quantum dots and their application for detecting Cu ²⁺ . <i>RSC Advances</i> , 2016, 6, 14465-14467.	1.7	24
60	Chitosan-graft-benzo-15-crown-5-ether/PVA Blend Membrane with Sponge-Like Pores for Lithium Isotope Adsorptive Separation. <i>ACS Omega</i> , 2018, 3, 554-561.	1.6	24
61	Polyvinyl alcohol-graft-benzo-15-crown-5 ether for lithium isotopes separation by liquid-solid extraction. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2017, 311, 2061-2068.	0.7	23
62	Study on the Flame-retardance and Thermal Stability of the Acid Anhydride-cured Epoxy Resin Flame-retarded by Triphenyl Phosphate and Hydrated Alumina. <i>Journal of Fire Sciences</i> , 2001, 19, 369-377.	0.9	22
63	Used lubricating oil recycling using a membrane filtration: Analysis of efficiency, structural and composing. <i>Desalination and Water Treatment</i> , 2009, 11, 73-80.	1.0	22
64	Polysulfone-graft- β -aminobenzo-15-crown-5-ether based tandem membrane chromatography for efficient adsorptive separation of lithium isotopes. <i>Journal of Chromatography A</i> , 2019, 1602, 206-216.	1.8	22
65	Highly Polarized Blue Luminescence from the Oriented Poly(9,9-dioctylfluorene)/Polyethylene Blending Films. <i>Macromolecules</i> , 2005, 38, 6762-6766.	2.2	21
66	An innovative auto-catalytic esterification for the production of phytosterol esters: experiment and kinetics. <i>RSC Advances</i> , 2014, 4, 64319-64327.	1.7	21
67	Physically Cross-Linked Double-Network Hydrogel for High-Performance Oil-Water Separation Mesh. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 21649-21658.	1.8	21
68	Bifunctional semi-closed YF ₃ -doped 1D carbon nanofibers with 3D porous network structure including fluorinating interphases and polysulfide confinement for lithium-sulfur batteries. <i>Nanoscale</i> , 2019, 11, 21324-21339.	2.8	21
69	Biodiesel Production from Acidified Oils via Supercritical Methanol. <i>Energies</i> , 2011, 4, 2212-2223.	1.6	20
70	Biodiesel Production through Heterogeneous Catalysis Using a Novel Poly(phenylene sulfide) Catalytic Membrane. <i>Energy & Fuels</i> , 2020, 34, 7422-7429.	2.5	20
71	A novel green biosorbent from chitosan modified by sodium phytate for copper (II) ion removal. <i>Polymers for Advanced Technologies</i> , 2018, 29, 285-293.	1.6	18
72	Polyaniline/polysulfone ultrafiltration membranes with improved permeability and anti-fouling behavior. <i>Journal of Water Process Engineering</i> , 2021, 40, 101903.	2.6	18

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73	Preparation of Small-Pore Ultrafiltration Membranes with High Surface Porosity by In Situ CO ₂ Nanobubble-Assisted NIPS. ACS Applied Materials & Interfaces, 2022, 14, 8633-8643.	4.0	17
74	Honeycomb-Structured Porous Films Controlled by the Temperature of Water Bath. Polymer Journal, 2008, 40, 1180-1184.	1.3	16
75	Surface grafting of fluorescent carbon nanoparticles with polystyrene via atom transfer radical polymerization. Carbon, 2014, 73, 155-162.	5.4	16
76	Esterification of Acetic Acid and Ethanol in a Flow-Through Membrane Reactor Coupled with Pervaporation. Chemical Engineering and Technology, 2014, 37, 478-482.	0.9	16
77	A filtration model for prediction of local flux distribution and optimization of submerged hollow fiber membrane module. AIChE Journal, 2015, 61, 4377-4386.	1.8	16
78	Formoxylbenzo-15-crown-5 ether functionalized PVA/NWF composite membrane for enhanced 7Li ⁺ enrichment. Journal of the Taiwan Institute of Chemical Engineers, 2019, 97, 496-502.	2.7	16
79	Design of microstructure for hollow fiber loose nanofiltration separation layer and its compactness-tailoring mechanism. Journal of Hazardous Materials, 2022, 421, 126800.	6.5	16
80	Preparation of PSf-g-BN15C5/NWF composite membrane with sponge-like pore structure for lithium isotopes adsorptive separation. Journal of the Taiwan Institute of Chemical Engineers, 2018, 91, 507-516.	2.7	15
81	Preparation of polysulfone-graft-monoazabenzocrown-5 ether porous membrane for lithium isotope separation. Journal of Radioanalytical and Nuclear Chemistry, 2018, 317, 111-119.	0.7	15
82	Monolayer porphyrin assembled SPSf/PES membrane reactor for degradation of dyes under visible light irradiation coupling with continuous filtration. Journal of the Taiwan Institute of Chemical Engineers, 2020, 109, 62-70.	2.7	15
83	Deactivation and <i>In Situ</i> Regeneration of Anion Exchange Resin in the Continuous Transesterification for Biodiesel Production. Energy & Fuels, 2012, 26, 3897-3902.	2.5	14
84	Preparation of Crown-Ether-Functionalized Polysulfone Membrane by In Situ Surface Grafting for Selective Adsorption and Separation of Li ⁺ . ChemistrySelect, 2020, 5, 3321-3329.	0.7	14
85	Synthesis of fluorescent carbon nanoparticles grafted with polystyrene and their fluorescent fibers processed by electrospinning. RSC Advances, 2014, 4, 57683-57690.	1.7	13
86	Enhanced anodic oxidation and energy saving for dye removal by integrating O ₂ -reducing biocathode into electrocatalytic reactor. Chemosphere, 2020, 252, 126460.	4.2	13
87	Preparation and catalytic performance of N-[(2-Hydroxy-3-trimethylammonium) propyl] chitosan chloride /Na ₂ SiO ₃ polymer-based catalyst for biodiesel production. Renewable Energy, 2016, 88, 51-57.	4.3	12
88	Spiropyran-modified silicon quantum dots with reversibly switchable photoluminescence. Journal of Nanoparticle Research, 2017, 19, 1.	0.8	11
89	The Effect of Diluent Mixture with Upper Critical Solution Temperature on Membrane Formation Process, Microstructure, and Performance of PVDF Hollow Fiber Membrane by TIPS Process. Polymers, 2018, 10, 719.	2.0	10
90	Adsorption for copper(II) ion with chitosan-SP/PET composite adsorbent enhanced by electric field. Adsorption Science and Technology, 2019, 37, 274-287.	1.5	10

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91	Efficiently rejecting and concentrating Li ⁺ by nanofiltration membrane under a reversed electric field. <i>Desalination</i> , 2022, 535, 115825.	4.0	10
92	Studies of Green Emission in Polyfluorenes Using a Model Polymer. <i>Polymer Journal</i> , 2007, 39, 1345-1350.	1.3	9
93	Adsorption of silver ion from the aqueous solution using a polyvinylidene fluoride functional membrane bearing thiourea groups. <i>Journal of Water Process Engineering</i> , 2020, 34, 101184.	2.6	9
94	Multi-ionic electrolytes and E.coli removal from wastewater using chitosan-based in-situ mediated thin film composite nanofiltration membrane. <i>Journal of Environmental Management</i> , 2021, 294, 112996.	3.8	9
95	Mechanochemical copolymerization of poly(vinyl chloride) with methyl methacrylate in an open mill machine. <i>Journal of Vinyl and Additive Technology</i> , 2006, 12, 42-48.	1.8	7
96	Enhanced UV-vis photoinduced hydrogen evolution of metalloporphyrin sensitized PSf/TiO ₂ MMMs by varying center metal ion complexed in porphyrin. <i>Fuel</i> , 2022, 312, 122810.	3.4	7
97	Synthesis of Butyl Acetate in a Membrane Reactor in a Flow-Through Mode. <i>International Journal of Chemical Reactor Engineering</i> , 2016, 14, 579-585.	0.6	6
98	Synthesis of chlorinated polypropylene grafted poly(methyl methacrylate) using chlorinated polypropylene as macro-initiator via atom transfer radical polymerization and its application in lithium ion battery. <i>Materials Letters</i> , 2016, 176, 64-67.	1.3	6
99	Effect of Solvent on Conversion and Selectivity during the Selective Oxidation of Cyclohexane by Nano-V ₂ O ₅ /Ti Membrane Electrode. <i>Journal of the Electrochemical Society</i> , 2018, 165, H460-H465.	1.3	6
100	The Orientation and Photophysical Properties of Conjugated Polymers in Oriented Films. <i>Macromolecular Chemistry and Physics</i> , 2007, 208, 384-388.	1.1	5
101	Factors affecting the separation performance of graphene oxide membranes: mechanical support, properties of graphene oxide, and exotic species. <i>Journal of Chemical Technology and Biotechnology</i> , 2018, 93, 1388-1393.	1.6	5
102	Integrating biocathode into electrocatalytic reactor to reduce applied voltage to generate hydroxyl radicals for advanced oxidation. <i>Journal of Chemical Technology and Biotechnology</i> , 2019, 94, 2487-2496.	1.6	5
103	The morphology and photoelectronic properties of poly(9,9-dioctylfluorene)/ethylcyanoethyl cellulose blends. <i>Journal of Applied Polymer Science</i> , 2007, 106, 1390-1397.	1.3	4
104	Induced Circular Dichroism of Anionic Porphyrin TPPS Aggregates in DNA Solutions. <i>Polymer Journal</i> , 2009, 41, 739-743.	1.3	4
105	The surface modification of coal-based carbon membranes by different acids. <i>Desalination and Water Treatment</i> , 2013, 51, 5855-5862.	1.0	4
106	Preparation of PVDF membrane based on in-situ Template-TIPS technology and the investigation on membrane formation mechanism, microstructure regulation and permeability. <i>Journal of Membrane Science</i> , 2021, 620, 118839.	4.1	3
107	N-isopropylacrylamide and spiropyran copolymer-grafted fluorescent carbon nanoparticles with dual responses to light and temperature stimuli. <i>Polymer Journal</i> , 2020, 52, 1289-1298.	1.3	2
108	Esterification of glycerol with acetic acid using a sulfonated polyphenylene sulfide non-woven fabric as a catalyst. <i>International Journal of Chemical Reactor Engineering</i> , 2020, 18, .	0.6	2

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109	High-Efficiency Separation of Mg ²⁺ /Sr ²⁺ through a NF Membrane under Electric Field. Membranes, 2022, 12, 57.	1.4	2
110	Double Polyamide Layers with CaCO ₃ Nanoparticles as Scaffolds for High Performance Nanofiltration Membranes. ACS Applied Nano Materials, 2022, 5, 8279-8287.	2.4	0