Neil B Mckeown

List of Publications by Year
in descending order

247 papers	22,076 citations	12330 69 h-index	9589 142 g-index
264 all docs	264 docs citations	264 times ranked	11636 citing authors

#	Article	IF	Citations
1	Polymers of intrinsic microporosity (PIMs): organic materials for membrane separations, heterogeneous catalysis and hydrogen storage. Chemical Society Reviews, 2006, 35, 675.	38.1	1,545
2	Polymers of intrinsic microporosity (PIMs): robust, solution-processable, organic nanoporous materials. Chemical Communications, 2004, , 230.	4.1	1,084
3	An Efficient Polymer Molecular Sieve for Membrane Gas Separations. Science, 2013, 339, 303-307.	12.6	884
4	Solution-Processed, Organophilic Membrane Derived from a Polymer of Intrinsic Microporosity. Advanced Materials, 2004, 16, 456-459.	21.0	788
5	Gas separation membranes from polymers of intrinsic microporosity. Journal of Membrane Science, 2005, 251, 263-269.	8.2	730
6	Exploitation of Intrinsic Microporosity in Polymer-Based Materials. Macromolecules, 2010, 43, 5163-5176.	4.8	725
7	The influence of surface modification on the cytotoxicity of PAMAM dendrimers. International Journal of Pharmaceutics, 2003, 252, 263-266.	5.2	655
8	Redefining the Robeson upper bounds for CO₂/CH₄ and CO₂/N₂ separations using a series of ultrapermeable benzotriptycene-based polymers of intrinsic microporosity. Energy and Environmental Science, 2019, 12, 2733-2740.	30.8	509
9	Gas permeation parameters and other physicochemical properties of a polymer of intrinsic microporosity: Polybenzodioxane PIM-1. Journal of Membrane Science, 2008, 325, 851-860.	8.2	470
10	Polymers of Intrinsic Microporosity (PIMs): Bridging the Void between Microporous and Polymeric Materials. Chemistry - A European Journal, 2005, 11, 2610-2620.	3.3	461
11	Towards Polymer-Based Hydrogen Storage Materials: Engineering Ultramicroporous Cavities within Polymers of Intrinsic Microporosity. Angewandte Chemie - International Edition, 2006, 45, 1804-1807.	13.8	421
12	Gas Permeation Properties, Physical Aging, and Its Mitigation in High Free Volume Glassy Polymers. Chemical Reviews, 2018, 118, 5871-5911.	47.7	414
13	Free volume and intrinsic microporosity in polymers. Journal of Materials Chemistry, 2005, 15, 1977.	6.7	364
14	Triptycene Induced Enhancement of Membrane Gas Selectivity for Microporous TrÃ¶ger's Base Polymers. Advanced Materials, 2014, 26, 3526-3531.	21.0	347
15	Highly permeable polymers for gas separation membranes. Polymer Chemistry, 2010, 1, 63.	3.9	308
16	Highâ€Performance Membranes from Polyimides with Intrinsic Microporosity. Advanced Materials, 2008, 20, 2766-2771.	21.0	307
17	A Spirobifluoreneâ€Based Polymer of Intrinsic Microporosity with Improved Performance for Gas Separation. Advanced Materials, 2012, 24, 5930-5933.	21.0	306
18	A triptycene-based polymer of intrinsic microposity that displays enhanced surface area and hydrogen adsorption. Chemical Communications, 2007, , 67-69.	4.1	282

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19	Triptycene-Based Polymers of Intrinsic Microporosity: Organic Materials That Can Be Tailored for Gas Adsorption. Macromolecules, 2010, 43, 5287-5294.	4.8	275
20	Polymer ultrapermeability from the inefficient packing of 2D chains. Nature Materials, 2017, 16, 932-937.	27.5	261
21	Synthesis, Characterization, and Gas Permeation Properties of a Novel Group of Polymers with Intrinsic Microporosity: PIM-Polyimides. Macromolecules, 2009, 42, 7881-7888.	4.8	250
22	Catalysis by microporous phthalocyanine and porphyrin network polymers. Journal of Materials Chemistry, 2008, 18, 573-578.	6.7	246
23	Nanoporous molecular crystals. Journal of Materials Chemistry, 2010, 20, 10588.	6.7	240
24	Hydrophilic microporous membranes for selective ion separation and flow-battery energy storage. Nature Materials, 2020, 19, 195-202.	27.5	237
25	Engineering of dendrimer surfaces to enhance transepithelial transport and reduce cytotoxicity. Pharmaceutical Research, 2003, 20, 1543-1550.	3.5	231
26	Atomistic packing model and free volume distribution of a polymer with intrinsic microporosity (PIM-1). Journal of Membrane Science, 2008, 318, 84-99.	8.2	227
27	Polyamidoamine StarburstÂ® dendrimers as solubility enhancers. International Journal of Pharmaceutics, 2000, 197, 239-241.	5.2	211
28	Highly Conductive Anionâ€Exchange Membranes from Microporous TrÃ¶ger's Base Polymers. Angewandte Chemie - International Edition, 2016, 55, 11499-11502.	13.8	206
29	The potential of organic polymer-based hydrogen storage materials. Physical Chemistry Chemical Physics, 2007, 9, 1802.	2.8	197
30	Heme-Like Coordination Chemistry Within Nanoporous Molecular Crystals. Science, 2010, 327, 1627-1630.	12.6	187
31	Phthalocyanine-based nanoporous network polymers. Chemical Communications, 2002, , 2780-2781.	4.1	179
32	Microporous Polymers as Potential Hydrogen Storage Materials. Macromolecular Rapid Communications, 2007, 28, 995-1002.	3.9	176
33	Phthalocyanine-containing polymers. Journal of Materials Chemistry, 2000, 10, 1979-1995.	6.7	169
34	Polymers of Intrinsic Microporosity. ISRN Materials Science, 2012, 2012, 1-16.	1.0	165
35	A highly permeable polyimide with enhanced selectivity for membrane gas separations. Journal of Materials Chemistry A, 2014, 2, 4874-4877.	10.3	159
36	Highly Permeable Benzotriptycene-Based Polymer of Intrinsic Microporosity. ACS Macro Letters, 2015, 4, 912-915.	4.8	159

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37	Porphyrin-based nanoporous network polymers. Chemical Communications, 2002, , 2782-2783.	4.1	157
38	Polymers of Intrinsic Microporosity Derived from Bis(phenazyl) Monomers. Macromolecules, 2008, 41, 1640-1646.	4.8	150
39	Sulfonated Microporous Polymer Membranes with Fast and Selective Ion Transport for Electrochemical Energy Conversion and Storage. Angewandte Chemie - International Edition, 2020, 59, 9564-9573.	13.8	145
40	Synthesis and gas permeation properties of novel spirobisindane-based polyimides of intrinsic microporosity. Polymer Chemistry, 2013, 4, 3813.	3.9	141
41	The synthesis of polymers of intrinsic microporosity (PIMs). Science China Chemistry, 2017, 60, 1023-1032.	8.2	134
42	Nitrogen and Hydrogen Adsorption by an Organic Microporous Crystal. Angewandte Chemie - International Edition, 2009, 48, 3273-3277.	13.8	132
43	A nanoporous network polymer derived from hexaazatrinaphthylene with potential as an adsorbent and catalyst support. Journal of Materials Chemistry, 2003, 13, 2721-2726.	6.7	128
44	The control of molecular self-association in spin-coated films of substituted phthalocyanines. Journal of Materials Chemistry, 2000, 10, 39-45.	6.7	115
45	Enhancing the Gas Permeability of TrÃ¶gerâ€™s Base Derived Polyimides of Intrinsic Microporosity. Macromolecules, 2016, 49, 4147-4154.	4.8	115
46	Synthesis and characterisation of some 1,4,8,11,15,18,22,25-octa-alkyl- and 1,4,8,11,15,18-hexa-alkyl-22,25-bis(carboxypropyl)phthalocyanines. Journal of the Chemical Society Perkin Transactions 1, 1990, , 1169.	0.9	107
47	Surface modification of the biomedical polymer poly(ethylene terephthalate). Analyst, The, 1993, 118, 463-474.	3.5	107
48	The synthesis of microporous polymers using TrÃ¶ger's base formation. Polymer Chemistry, 2014, 5, 5267-5272.	3.9	105
49	Synthesis and Gas Permeation Properties of Spirobischromaneâ€Based Polymers of Intrinsic Microporosity. Macromolecular Chemistry and Physics, 2011, 212, 1137-1146.	2.2	104
50	Molecular Modeling and Gas Permeation Properties of a Polymer of Intrinsic Microporosity Composed of Ethanoanthracene and TrÃ¶gerâ€™s Base Units. Macromolecules, 2014, 47, 7900-7916.	4.8	104
51	Adsorption Studies of a Microporous Phthalocyanine Network Polymer. Langmuir, 2006, 22, 4225-4229.	3.5	103
52	Polymers of Intrinsic Microporosity (PIMs). Polymer, 2020, 202, 122736.	3.8	94
53	Toward an Understanding of the Microstructure and Interfacial Properties of PIMs/ZIF-8 Mixed Matrix Membranes. ACS Applied Materials & Interfaces, 2016, 8, 27311-27321.	8.0	93
54	A highly rigid and gas selective methanopentacene-based polymer of intrinsic microporosity derived from TrÃ¶ger's base polymerization. Journal of Materials Chemistry A, 2018, 6, 5661-5667.	10.3	92

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55	The synthesis, chain-packing simulation and long-term gas permeability of highly selective spirobifluorene-based polymers of intrinsic microporosity. Journal of Materials Chemistry A, 2018, 6, 10507-10514.	10.3	91
56	Silicon Phthalocyanines with Axial Dendritic Substituents. Angewandte Chemie - International Edition, 1998, 37, 1092-1094.	13.8	83
57	Novel Spirobisindanes for Use as Precursors to Polymers of Intrinsic Microporosity. Organic Letters, 2008, 10, 2641-2643.	4.6	83
58	Gas Permeability of Hexaphenylbenzene Based Polymers of Intrinsic Microporosity. Macromolecules, 2014, 47, 8320-8327.	4.8	82
59	1,4,8,11,15,18,22,25-Octa-alkyl phthalocyanines: new discotic liquid crystal materials. Journal of the Chemical Society Chemical Communications, 1987, , 1086.	2.0	81
60	Metastable Ionic Diodes Derived from an Amineâ€Based Polymer of Intrinsic Microporosity. Angewandte Chemie - International Edition, 2014, 53, 10751-10754.	13.8	81
61	The Synthesis and Glass-Forming Properties of Phthalocyanine-Containing Poly(aryl ether) Dendrimers. Chemistry - A European Journal, 2000, 6, 4630-4636.	3.3	80
62	Polymers of Intrinsic Microporosity (PIMs): High Free Volume Polymers for Membrane Applications. Macromolecular Symposia, 2006, 245-246, 403-405.	0.7	80
63	Synthesis and characterisation of some novel phthalocyanines containing both oligo(ethyleneoxy) and alkyl or alkoxy side-chains: novel unsymmetrical discotic mesogens. Journal of the Chemical Society Perkin Transactions 1, 1995, , 1817.	0.9	78
64	Pervaporation of alcohols through highly permeable PIM-1 polymer films. Polymer Science - Series A, 2008, 50, 444-450.	1.0	78
65	Hexaphenylbenzene-based polymers of intrinsic microporosity. Chemical Communications, 2011, 47, 6822.	4.1	77
66	A novel time lag method for the analysis of mixed gas diffusion in polymeric membranes by on-line mass spectrometry: Method development and validation. Journal of Membrane Science, 2018, 561, 39-58.	8.2	77
67	New asymmetric substitution of phthalocyanines: Derivatives designed for deposition as Langmuir-Blodgett films. Thin Solid Films, 1988, 159, 469-478.	1.8	72
68	Physical aging of polymers of intrinsic microporosity: a SAXS/WAXS study. Journal of Materials Chemistry A, 2014, 2, 11742-11752.	10.3	71
69	Lyotropic and thermotropic mesophase formation of novel tetra[oligo(ethyleneoxy)]-substituted phthalocyanines. Journal of Materials Chemistry, 1994, 4, 1153.	6.7	67
70	The Synthesis of Some Phthalocyanines and Napthalocyanines Derived from Sterically Hindered Phenols. Chemistry - A European Journal, 1998, 4, 1633-1640.	3.3	66
71	Laser Chemosensor with Rapid Responsivity and Inherent Memory Based on a Polymer of Intrinsic Microporosity. Sensors, 2011, 11, 2478-2487.	3.8	66
72	Inexpensive polyphenylene network polymers with enhanced microporosity. Journal of Materials Chemistry A, 2016, 4, 10110-10113.	10.3	66

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73	Tribenzotriquinacene-based polymers of intrinsic microporosity. Polymer Chemistry, 2011, 2, 2257.	3.9	64
74	A Phthalocyanine Clathrate of Cubic Symmetry Containing Interconnected Solvent-Filled Voids of Nanometer Dimensions. Angewandte Chemie - International Edition, 2005, 44, 7546-7549.	13.8	63
75	Synthesis of cardo-polymers using TrÃ¶ger's base formation. Polymer Chemistry, 2014, 5, 5255.	3.9	63
76	The origin of size-selective gas transport through polymers of intrinsic microporosity. Journal of Materials Chemistry A, 2019, 7, 20121-20126.	10.3	63
77	Spectroscopic and X-ray diffraction study of Langmuirâ€“Blodgett films of some 1,4,8,11,15,18-hexaalkyl-22,25-bis(carboxypropyl)phthalocyanines. Journal of Materials Chemistry, 1991, 1, 121-127.	6.7	62
78	A bio-inspired O2-tolerant catalytic CO2 reduction electrode. Science Bulletin, 2019, 64, 1890-1895.	9.0	61
79	Polymers of Intrinsic Microporosity Containing TrÃ¶ger Base for CO₂ Capture. Industrial & Engineering Chemistry Research, 2013, 52, 16939-16950.	3.7	60
80	Toward Effective CO₂/CH₄ Separations by Sulfur-Containing PIMs via Predictive Molecular Simulations. Macromolecules, 2013, 46, 5371-5380.	4.8	58
81	Temperature Dependence of Gas Permeation and Diffusion in Triptycene-Based Ultrapermeable Polymers of Intrinsic Microporosity. ACS Applied Materials & Interfaces, 2018, 10, 36475-36482.	8.0	58
82	Development of efficient aqueous organic redox flow batteries using ion-sieving sulfonated polymer membranes. Nature Communications, 2022, 13, .	12.8	58
83	Triptycene-Based Organic Molecules of Intrinsic Microporosity. Organic Letters, 2014, 16, 1848-1851.	4.6	55
84	Water desalination concept using an ionic rectifier based on a polymer of intrinsic microporosity (PIM). Journal of Materials Chemistry A, 2015, 3, 15849-15853.	10.3	54
85	Characterizing the Structure of Organic Molecules of Intrinsic Microporosity by Molecular Simulations and X-ray Scattering. Journal of Physical Chemistry B, 2013, 117, 355-364.	2.6	51
86	Phthalocyanine-centred and naphthalocyanine-centred aryl ether dendrimers with oligo(ethyleneoxy) surface groups. Tetrahedron, 2003, 59, 3863-3872.	1.9	50
87	Phthalocyanine-Containing Dendrimers. Advanced Materials, 1999, 11, 67-69.	21.0	49
88	The Synthesis of Organic Molecules of Intrinsic Microporosity Designed to Frustrate Efficient Molecular Packing. Chemistry - A European Journal, 2016, 22, 2466-2472.	3.3	49
89	Temperature and Pressure Dependence of Gas Permeation in a Microporous TrÃ¶gerâ€™s Base Polymer. Membranes, 2018, 8, 132.	3.0	49
90	Tunable Porous Organic Crystals: Structural Scope and Adsorption Properties of Nanoporous Steroidal Ureas. Journal of the American Chemical Society, 2013, 135, 16912-16925.	13.7	47

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91	Highly Conductive Anionâ€Exchange Membranes from Microporous TrÃ¶ger's Base Polymers. Angewandte Chemie, 2016, 128, 11671-11674.	2.0	47
92	Mitigation of Physical Aging with Mixed Matrix Membranes Based on Cross-Linked PIM-1 Fillers and PIM-1. ACS Applied Materials & Interfaces, 2020, 12, 46756-46766.	8.0	47
93	Polymer of intrinsic microporosity (PIM) films and membranes in electrochemical energy storage and conversion: A mini-review. Electrochemistry Communications, 2020, 118, 106798.	4.7	45
94	Heterogeneous organocatalysts composed of microporous polymer networks assembled by TrÃ¶ger's base formation. Polymer Chemistry, 2014, 5, 5262.	3.9	44
95	1,4,8,11,15,18-Hexa-alkyl-22,25-bis(carboxypropyl)phthalocyanines: materials designed for deposition as Langmuirâ€“Blodgett films. Journal of the Chemical Society Chemical Communications, 1987, , 1148-1150.	2.0	43
96	Microporous polymeric materials. Materials Today, 2004, 7, 40-46.	14.2	43
97	Polymers of intrinsic microporosity in electrocatalysis: Novel pore rigidity effects and lamella palladium growth. Electrochimica Acta, 2014, 128, 3-9.	5.2	42
98	A Cationic Diode Based on Asymmetric Nafion Film Deposits. ACS Applied Materials & Interfaces, 2017, 9, 11272-11278.	8.0	42
99	Novel polymers of intrinsic microporosity (PIMs) derived from 1,1-spiro-bis(1,2,3,4-tetrahydronaphthalene)-based monomers. Tetrahedron Letters, 2009, 50, 5954-5957.	1.4	41
100	Phthalocyanine-centred aryl ether dendrimers with oligo(ethyleneoxy) surface groups. Tetrahedron Letters, 2001, 42, 813-816.	1.4	40
101	Simulated swelling during low-temperature N₂adsorption in polymers of intrinsic microporosity. Physical Chemistry Chemical Physics, 2013, 15, 20161-20169.	2.8	40
102	Acidâ€“Base Interaction Enhancing Oxygen Tolerance in Electrocatalytic Carbon Dioxide Reduction. Angewandte Chemie - International Edition, 2020, 59, 10918-10923.	13.8	40
103	Synthesis and characterisation of some 1,4,8,11,15,18,22,25-octa(alkoxymethyl)phthalocyanines; a new series of discotic liquid crystals. Journal of the Chemical Society Perkin Transactions 1, 1991, , 3053.	0.9	39
104	Synthesis and Characterization of Mesogenic Phthalocyanines Containing a Single Poly(oxyethylene) Side Chain:Â An Example of Steric Disturbance of the Hexagonal Columnar Mesophase. Macromolecules, 1996, 29, 913-917.	4.8	39
105	Intrinsically Porous Polymer Protects Catalytic Gold Particles for Enzymeless Glucose Oxidation. Electroanalysis, 2014, 26, 904-909.	2.9	39
106	The Synthesis of Symmetrical Phthalocyanines. , 2003, , 61-124.		38
107	The synthetic quest for â€˜splendid isolationâ€™ within phthalocyanine materials. Journal of Porphyrins and Phthalocyanines, 2000, 04, 460-464.	0.8	37
108	Design principles for microporous organic solids from predictive computational screening. Journal of Materials Chemistry A, 2013, 1, 11950.	10.3	37

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109	Imputation of missing gas permeability data for polymer membranes using machine learning. Journal of Membrane Science, 2021, 627, 119207.	8.2	37
110	Molecular assemblies of novel amphiphilic phthalocyanines: an investigation into the self-ordering properties of complex functional materials. Journal of Materials Chemistry, 1998, 8, 2371-2378.	6.7	36
111	Clathrate Formation from Octaazaphthalocyanines Possessing Bulky Phenoxyl Substituents: A New Cubic Crystal Containing Solventâ€Filled, Nanoscale Voids. Chemistry - A European Journal, 2008, 14, 4810-4815.	3.3	36
112	Ultrathin Composite Polymeric Membranes for CO₂/N₂ Separation with Minimum Thickness and High CO₂ Permeance. ChemSusChem, 2017, 10, 4014-4017.	6.8	36
113	Polymer engineering by blending PIM-1 and 6FDA-DAM for ZIF-8 containing mixed matrix membranes applied to CO2 separations. Separation and Purification Technology, 2019, 224, 456-462.	7.9	36
114	Effect of Block Architecture on the Gelation of Aqueous Solutions of Oxyethylene/Oxybutylene Block Copolymers. Langmuir, 1997, 13, 1860-1861.	3.5	35
115	A Novel Time Lag Method for the Analysis of Mixed Gas Diffusion in Polymeric Membranes by On-Line Mass Spectrometry: Pressure Dependence of Transport Parameters. Membranes, 2018, 8, 73.	3.0	35
116	Effect of Backbone Rigidity on the Glass Transition of Polymers of Intrinsic Microporosity Probed by Fast Scanning Calorimetry. ACS Macro Letters, 2019, 8, 1022-1028.	4.8	35
117	Preparation of substituted tetrabenzotriazaporphyrins and a tetranaphthotriazaporphyrin: a route to mono-meso-substituted phthalocyanine analogs. Journal of Organic Chemistry, 1990, 55, 2186-2190.	3.2	34
118	Aging of polymers of intrinsic microporosity tracked by methanol vapour permeation. Journal of Membrane Science, 2016, 520, 895-906.	8.2	34
119	Thermotropic and Lyotropic Mesophase Behavior of Some Novel Phthalocyanine-Centered Poly(oxyethylene)s. Macromolecules, 1996, 29, 1854-1856.	4.8	33
120	Unusual temperature dependence of the positron lifetime in a polymer of intrinsic microporosity. Physica Status Solidi - Rapid Research Letters, 2007, 1, 190-192.	2.4	32
121	A Study of Lyotropic Mesophases of Concentrated Solutions of a Triblock Copolymer of Ethylene Oxide and 1,2-Butylene Oxide, E16B10E16, Using Rheometry, Polarized Light Microscopy, and Small-Angle X-ray Scattering. Langmuir, 1998, 14, 5782-5789.	3.5	31
122	Title is missing!. Journal of Materials Chemistry, 2001, 11, 2784-2789.	6.7	31
123	Highly Permeable MatrimidÂ®/PIM-EA(H2)-TB Blend Membrane for Gas Separation. Polymers, 2019, 11, 46.	4.5	31
124	Molecular assemblies in discotic mesophases and Langmuir-Blodgett films of 1,4,8,11,15,18,22,25-octasubstituted phthalocyanines. Chemistry of Materials, 1989, 1, 287-289.	6.7	30
125	Macrodiscotic liquid crystals derived from planar phthalocyanine oligomers. Tetrahedron Letters, 2004, 45, 4865-4868.	1.4	30
126	Methane oxidation using silica-supported N-bridged di-iron phthalocyanine catalyst. Journal of Catalysis, 2012, 290, 177-185.	6.2	30

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127	pH-induced reversal of ionic diode polarity in 300 nm thin membranes based on a polymer of intrinsic microporosity. Electrochemistry Communications, 2016, 69, 41-45.	4.7	30
128	Highly active manganese porphyrin-based microporous network polymers for selective oxidation reactions. Journal of Catalysis, 2019, 369, 133-142.	6.2	30
129	Triphasic Nature of Polymers of Intrinsic Microporosity Induces Storage and Catalysis Effects in Hydrogen and Oxygen Reactivity at Electrode Surfaces. ChemElectroChem, 2019, 6, 252-259.	3.4	30
130	Polymers with intrinsic microporosity (PIMs) for targeted CO2 reduction to ethylene. Chemosphere, 2020, 248, 125993.	8.2	30
131	Enhancing the rigidity of a network polymer of intrinsic microporosity by the combined use of phthalocyanine and triptycene components,. Polymer Chemistry, 2011, 2, 2190.	3.9	29
132	A porphyrin-based microporous network polymer that acts as an efficient catalyst for cyclooctene and cyclohexane oxidation under mild conditions. Catalysis Communications, 2017, 99, 100-104.	3.3	29
133	Gas sorption in polymers of intrinsic microporosity: The difference between solubility coefficients determined via time-lag and direct sorption experiments. Journal of Membrane Science, 2019, 570-571, 522-536.	8.2	29
134	Ultrapermeable Polymers of Intrinsic Microporosity Containing Spirocyclic Units with Fused Triptycenes. Advanced Functional Materials, 2021, 31, 2104474.	14.9	29
135	Stable glass formation by a hexagonal ordered columnar mesophase of a low molar mass phthalocyanine derivative. Liquid Crystals, 1995, 19, 887-889.	2.2	28
136	The synthesis of metal-free octaazaphthalocyanine derivatives containing bulky phenoxy substituents to prevent self-association. Tetrahedron Letters, 2007, 48, 7358-7361.	1.4	28
137	High density heterogenisation of molecular electrocatalysts in a rigid intrinsically microporous polymer host. Electrochemistry Communications, 2014, 46, 26-29.	4.7	28
138	Fabrication of ultrathin films containing the metal organic framework Fe-MIL-88B-NH 2 by the Langmuirâ€“Blodgett technique. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 470, 161-170.	4.7	28
139	Intrinsically microporous polymer slows down fuel cell catalyst corrosion. Electrochemistry Communications, 2015, 59, 72-76.	4.7	28
140	The synthesis of robust, polymeric hole-transport materials from oligoarylamine substituted styrenes. Journal of Materials Chemistry, 2007, 17, 2088.	6.7	27
141	Synthesis and properties of new aromatic polyimides containing spirocyclic structures. Polymer, 2018, 137, 283-292.	3.8	26
142	Hydrogen Separation at High Temperature with Dense and Asymmetric Membranes Based on PIM-EA(H₂)-TB/PBI Blends. Industrial & Engineering Chemistry Research, 2018, 57, 16909-16916.	3.7	26
143	The Self-Ordering Properties of Novel Phthalocyanines with Out-of-Plane Alkyl Substituents. Chemistry - A European Journal, 2007, 13, 228-234.	3.3	25
144	Electrocatalytic Carbohydrate Oxidation with 4-Benzoyloxy-TEMPO Heterogenised in a Polymer of Intrinsic Microporosity. Electrochimica Acta, 2015, 160, 195-201.	5.2	25

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145	Intrinsically Microporous Polymer Retains Porosity in Vacuum Thermolysis to Electroactive Heterocarbon. Langmuir, 2015, 31, 12300-12306.	3.5	25
146	Polymers of Intrinsic Microporosity in Triphasic Electrochemistry: Perspectives. ChemElectroChem, 2019, 6, 4332-4342.	3.4	25
147	Thin film composite membranes based on a polymer of intrinsic microporosity derived from TrÃ¶ger's base: A combined experimental and computational investigation of the role of residual casting solvent. Journal of Membrane Science, 2019, 569, 17-31.	8.2	25
148	Correlating Gas Permeability and Youngâ€™s Modulus during the Physical Aging of Polymers of Intrinsic Microporosity Using Atomic Force Microscopy. Industrial & Engineering Chemistry Research, 2020, 59, 5381-5391.	3.7	25
149	Innovative methods in electrochemistry based on polymers of intrinsic microporosity. Current Opinion in Electrochemistry, 2018, 10, 61-66.	4.8	24
150	Towards High Performance Metalâ€“Organic Frameworkâ€“Microporous Polymer Mixed Matrix Membranes: Addressing Compatibility and Limiting Aging by Polymer Doping. Chemistry - A European Journal, 2018, 24, 12796-12800.	3.3	24
151	An Interfacial Layer Based on Polymers of Intrinsic Microporosity to Suppress Dendrite Growth on Li Metal Anodes. Chemistry - A European Journal, 2019, 25, 12052-12057.	3.3	24
152	Centrotriindane- and triptindane-based polymers of intrinsic microporosity. Polymer, 2014, 55, 326-329.	3.8	23
153	Intrinsically Microporous Polymer Nanosheets for Highâ€Performance Gas Separation Membranes. Macromolecular Rapid Communications, 2020, 41, e1900572.	3.9	23
154	Upgrading of raw biogas using membranes based on the ultrapermeable polymer of intrinsic microporosity PIM-TMN-Trip. Journal of Membrane Science, 2021, 618, 118694.	8.2	23
155	Solvent cast films derived from amphiphilic phthalocyanines: an alternative to the Langmuirâ€“Blodgett technique for the preparation of ordered multilayer films. Chemical Communications, 1996, , 73-75.	4.1	22
156	Enhanced pulmonary absorption of a macromolecule through coupling to a sequence-specific phage display-derived peptide. Journal of Controlled Release, 2011, 151, 83-94.	9.9	22
157	Polymers of intrinsic microporosity as high temperature templates for the formation of nanofibrous oxides. RSC Advances, 2015, 5, 73323-73326.	3.6	22
158	Novel spiro-polymers with enhanced solubility. Chemical Communications, 1999, , 255-256.	4.1	21
159	Contorted separation. Nature Materials, 2016, 15, 706-707.	27.5	21
160	Polymers of intrinsic microporosity in electrochemistry: Anion uptake and transport effects in thin film electrodes and in free-standing ionic diode membranes. Journal of Electroanalytical Chemistry, 2016, 779, 241-249.	3.8	21
161	Potassium cation induced ionic diode blocking for a polymer of intrinsic microporosity | nafion â€œheterojunctionâ€•on a microhole substrate. Electrochimica Acta, 2017, 258, 807-813.	5.2	21
162	Effect of Bridgehead Methyl Substituents on the Gas Permeability of TrÃ¶gerâ€™s-Base Derived Polymers of Intrinsic Microporosity. Membranes, 2020, 10, 62.	3.0	21

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163	Phthalocyanine-containing polystyrenes. Chemical Communications, 1999, , 419-420.	4.1	20
164	The fabrication of ultrathin films and their gas separation performance from polymers of intrinsic microporosity with two-dimensional (2D) and three-dimensional (3D) chain conformations. Journal of Colloid and Interface Science, 2019, 536, 474-482.	9.4	20
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