

Anita Hill

List of Publications by Year in descending order

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237
papers

18,559
citations

13068

68
h-index

14156

128
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249
all docs

249
docs citations

249
times ranked

16763
citing authors

#	ARTICLE	IF	CITATIONS
1	Biomimetic mineralization of metal-organic frameworks as protective coatings for biomacromolecules. <i>Nature Communications</i> , 2015, 6, 7240.	5.8	1,077
2	Ultrapерmeable, Reverse-Selective Nanocomposite Membranes. <i>Science</i> , 2002, 296, 519-522.	6.0	999
3	Polymers with Cavities Tuned for Fast Selective Transport of Small Molecules and Ions. <i>Science</i> , 2007, 318, 254-258.	6.0	919
4	MOF positioning technology and device fabrication. <i>Chemical Society Reviews</i> , 2014, 43, 5513-5560.	18.7	600
5	Ultrafast selective transport of alkali metal ions in metal organic frameworks with subnanometer pores. <i>Science Advances</i> , 2018, 4, eaq0066.	4.7	368
6	Nanocrack-regulated self-humidifying membranes. <i>Nature</i> , 2016, 532, 480-483.	13.7	362
7	Sorption, Transport, and Structural Evidence for Enhanced Free Volume in Poly(4-methyl-2-pentyne)/Fumed Silica Nanocomposite Membranes. <i>Chemistry of Materials</i> , 2003, 15, 109-123.	3.2	341
8	Thermally rearranged (TR) polymer membranes for CO ₂ separation. <i>Journal of Membrane Science</i> , 2010, 359, 11-24.	4.1	330
9	Discriminative Separation of Gases by a Molecular Trapdoor Mechanism in Chabazite Zeolites. <i>Journal of the American Chemical Society</i> , 2012, 134, 19246-19253.	6.6	321
10	Centimetre-scale micropore alignment in oriented polycrystalline metal-organic framework films via heteroepitaxial growth. <i>Nature Materials</i> , 2017, 16, 342-348.	13.3	298
11	Transport and structural characteristics of crosslinked poly(ethylene oxide) rubbers. <i>Journal of Membrane Science</i> , 2006, 276, 145-161.	4.1	288
12	Applications of magnetic metal-organic framework composites. <i>Journal of Materials Chemistry A</i> , 2013, 1, 13033.	5.2	275
13	Ending Aging in Super Glassy Polymer Membranes. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 5322-5326.	7.2	275
14	Efficient metal ion sieving in rectifying subnanochannels enabled by metal-organic frameworks. <i>Nature Materials</i> , 2020, 19, 767-774.	13.3	275
15	Free Volume and the Mechanism of Plasticization in Water-Swollen Poly(vinyl alcohol). <i>Macromolecules</i> , 1996, 29, 8137-8143.	2.2	274
16	Using Functional Nano- and Microparticles for the Preparation of Metal-Organic Framework Composites with Novel Properties. <i>Accounts of Chemical Research</i> , 2014, 47, 396-405.	7.6	264
17	Effect of Nanoparticles on Gas Sorption and Transport in Poly(1-trimethylsilyl-1-propyne). <i>Macromolecules</i> , 2003, 36, 6844-6855.	2.2	246
18	Thermally Rearranged (TR) Polybenzoxazole: Effects of Diverse Imidization Routes on Physical Properties and Gas Transport Behaviors. <i>Macromolecules</i> , 2010, 43, 7657-7667.	2.2	226

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19	A new method to position and functionalize metal-organic framework crystals. <i>Nature Communications</i> , 2011, 2, 237.	5.8	225
20	Gas Separation, Free Volume Distribution, and Physical Aging of a Highly Microporous Spirobisindane Polymer. <i>Chemistry of Materials</i> , 2008, 20, 2606-2608.	3.2	200
21	Natural Aging in Al-Mg-Si Alloys – A Process of Unexpected Complexity. <i>Advanced Engineering Materials</i> , 2010, 12, 559-571.	1.6	189
22	Gas Separation Membranes Loaded with Porous Aromatic Frameworks that Improve with Age. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 2669-2673.	7.2	175
23	Post-synthetic Ti Exchanged UiO-66 Metal-Organic Frameworks that Deliver Exceptional Gas Permeability in Mixed Matrix Membranes. <i>Scientific Reports</i> , 2015, 5, 7823.	1.6	168
24	Characterization of sodium chloride and water transport in crosslinked poly(ethylene oxide) hydrogels. <i>Journal of Membrane Science</i> , 2010, 358, 131-141.	4.1	160
25	Fast and selective fluoride ion conduction in sub-1-nanometer metal-organic framework channels. <i>Nature Communications</i> , 2019, 10, 2490.	5.8	158
26	Feasibility of zeolitic imidazolate framework membranes for clean energy applications. <i>Energy and Environmental Science</i> , 2012, 5, 7637.	15.6	154
27	Methane storage in metal organic frameworks. <i>Journal of Materials Chemistry</i> , 2012, 22, 16698.	6.7	153
28	Copper Conversion into Cu(OH) ₂ Nanotubes for Positioning Cu ₃ (BTC) ₂ MOF Crystals: Controlling the Growth on Flat Plates, 3D Architectures, and as Patterns. <i>Advanced Functional Materials</i> , 2014, 24, 1969-1977.	7.8	150
29	Metal-organic framework glasses with permanent accessible porosity. <i>Nature Communications</i> , 2018, 9, 5042.	5.8	147
30	Synthesis of hierarchical porous zeolite NaY particles with controllable particle sizes. <i>Microporous and Mesoporous Materials</i> , 2010, 127, 167-175.	2.2	146
31	Kinetics of natural aging in Al-Mg-Si alloys studied by positron annihilation lifetime spectroscopy. <i>Physical Review B</i> , 2011, 83, .	1.1	144
32	Metal-Organic Frameworks Impregnated with Magnesium-Decorated Fullerenes for Methane and Hydrogen Storage. <i>Journal of the American Chemical Society</i> , 2009, 131, 10662-10669.	6.6	134
33	Effect of Free Volume on Water and Salt Transport Properties in Directly Copolymerized Disulfonated Poly(arylene ether sulfone) Random Copolymers. <i>Macromolecules</i> , 2011, 44, 4428-4438.	2.2	133
34	Highly Luminescent Metal-Organic Frameworks Through Quantum Dot Doping. <i>Small</i> , 2012, 8, 80-88.	5.2	132
35	Sorption and Transport in Poly(2,2-bis(trifluoromethyl)-4,5-difluoro-1,3-dioxole-co-tetrafluoroethylene) Containing Nanoscale Fumed Silica. <i>Macromolecules</i> , 2003, 36, 8406-8414.	2.2	130
36	The effect of crosslinking temperature on the permeability of PDMS membranes: Evidence of extraordinary CO ₂ and CH ₄ gas permeation. <i>Separation and Purification Technology</i> , 2014, 122, 96-104.	3.9	128

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37	Chlorine Resistant Glutaraldehyde Crosslinked Polyelectrolyte Multilayer Membranes for Desalination. <i>Advanced Materials</i> , 2015, 27, 2791-2796.	11.1	128
38	Tuning microcavities in thermally rearranged polymer membranes for CO ₂ capture. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 4365.	1.3	126
39	Highly Selective and Permeable Microporous Polymer Membranes for Hydrogen Purification and CO ₂ Removal from Natural Gas. <i>Chemistry of Materials</i> , 2018, 30, 5322-5332.	3.2	121
40	Lithiated Porous Aromatic Frameworks with Exceptional Gas Storage Capacity. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 6639-6642.	7.2	112
41	Cross-Linked Thermally Rearranged Poly(benzoxazole- <i>co</i> -imide) Membranes for Gas Separation. <i>Macromolecules</i> , 2013, 46, 8179-8189.	2.2	112
42	Patterning Techniques for Metal Organic Frameworks. <i>Advanced Materials</i> , 2012, 24, 3153-3168.	11.1	111
43	Tailoring Physical Aging in Super Glassy Polymers with Functionalized Porous Aromatic Frameworks for CO ₂ Capture. <i>Chemistry of Materials</i> , 2015, 27, 4756-4762.	3.2	107
44	Magnetic Metal-Organic Frameworks for Efficient Carbon Dioxide Capture and Remote Trigger Release. <i>Advanced Materials</i> , 2016, 28, 1839-1844.	11.1	107
45	Fast Synthesis of MOF-5 Microcrystals Using Sol-Gel SiO ₂ Nanoparticles. <i>Chemistry of Materials</i> , 2011, 23, 929-934.	3.2	106
46	Advanced Fabrication of Carbon Molecular Sieve Membranes by Nonsolvent Pretreatment of Precursor Polymers. <i>Industrial & Engineering Chemistry Research</i> , 2004, 43, 6476-6483.	1.8	103
47	Nafion-Carbon Nanocomposite Membranes Prepared Using Hydrothermal Carbonization for Proton-Exchange Membrane Fuel Cells. <i>Advanced Functional Materials</i> , 2010, 20, 4394-4399.	7.8	99
48	Combining UV Lithography and an Imprinting Technique for Patterning Metal-Organic Frameworks. <i>Advanced Materials</i> , 2013, 25, 4701-4705.	11.1	98
49	A variable energy positron annihilation lifetime spectroscopy study of physical aging in thin glassy polymer films. <i>Polymer</i> , 2009, 50, 6149-6156.	1.8	97
50	Cavity size, sorption and transport characteristics of thermally rearranged (TR) polymers. <i>Polymer</i> , 2011, 52, 2244-2254.	1.8	97
51	Physical and Electrochemical Characterization of Nanocomposite Membranes of Nafion and Functionalized Silicon Oxide. <i>Chemistry of Materials</i> , 2007, 19, 2372-2381.	3.2	95
52	A Genetically Engineered Protein Responsive to Multiple Stimuli. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 4428-4431.	7.2	93
53	Influence of methanol conditioning and physical aging on carbon spin-lattice relaxation times of poly(1-trimethylsilyl-1-propyne). <i>Journal of Membrane Science</i> , 2004, 243, 37-44.	4.1	92
54	Cross-Linked Thermally Rearranged Poly(benzoxazole- <i>co</i> -imide) Membranes Prepared from <i>ortho</i> -Hydroxycopolyimides Containing Pendant Carboxyl Groups and Gas Separation Properties. <i>Macromolecules</i> , 2015, 48, 2603-2613.	2.2	90

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55	The effects of physical aging in polycarbonate. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1990, 28, 387-405.	2.4	89
56	Desalination of seawater ion complexes by MFI-type zeolite membranes: Temperature and long term stability. <i>Journal of Membrane Science</i> , 2014, 453, 126-135.	4.1	88
57	Metal-Organic Framework-Coated Optical Fibers as Light-Triggered Drug Delivery Vehicles. <i>Advanced Functional Materials</i> , 2016, 26, 3244-3249.	7.8	88
58	Effect of pyrolysis temperature and operating temperature on the performance of nanoporous carbon membranes. <i>Journal of Membrane Science</i> , 2008, 322, 19-27.	4.1	87
59	A Phenomenological Study of the Metal-Oxide Interface: The Role of Catalysis in Hydrogen Production from Renewable Resources. <i>ChemSusChem</i> , 2008, 1, 905-910.	3.6	85
60	Facile stabilization of cyclodextrin metal-organic frameworks under aqueous conditions via the incorporation of C ₆₀ in their matrices. <i>Chemical Communications</i> , 2016, 52, 5973-5976.	2.2	81
61	Crosslinking poly[1-(trimethylsilyl)-1-propyne] and its effect on physical stability. <i>Journal of Membrane Science</i> , 2008, 320, 123-134.	4.1	80
62	Lithium Extraction by Emerging Metal-Organic Framework-Based Membranes. <i>Advanced Functional Materials</i> , 2021, 31, 2105991.	7.8	79
63	Effect of physical aging of poly(1-trimethylsilyl-1-propyne) films synthesized with TaCl ₅ and NbCl ₅ on gas permeability, fractional free volume, and positron annihilation lifetime spectroscopy parameters. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2000, 38, 1222-1239.	2.4	77
64	Porosity in metal-organic framework glasses. <i>Chemical Communications</i> , 2016, 52, 3750-3753.	2.2	76
65	Linking the structures, free volumes, and properties of ionic liquid mixtures. <i>Chemical Science</i> , 2017, 8, 6359-6374.	3.7	74
66	Compositional dependence of free volume in PAN/LiCF ₃ SO ₃ polymer-in-salt electrolytes and the effect on ionic conductivity. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2000, 38, 341-350.	2.4	73
67	Enhanced Gas Permeation through Graphene Nanocomposites. <i>Journal of Physical Chemistry C</i> , 2015, 119, 13700-13712.	1.5	70
68	Exposing the Molecular Sieving Architecture of Amorphous Silica Using Positron Annihilation Spectroscopy. <i>Advanced Functional Materials</i> , 2008, 18, 3818-3826.	7.8	69
69	Predicting gas diffusion regime within pores of different size, shape and composition. <i>Journal of Membrane Science</i> , 2009, 336, 101-108.	4.1	69
70	New relation between diffusion and free volume: I. Predicting gas diffusion. <i>Journal of Membrane Science</i> , 2009, 338, 29-37.	4.1	69
71	Water vapor sorption and free volume in the aromatic polyamide layer of reverse osmosis membranes. <i>Journal of Membrane Science</i> , 2013, 425-426, 217-226.	4.1	69
72	Defect-assisted conductivity in organic ionic plastic crystals. <i>Journal of Chemical Physics</i> , 2005, 122, 064704.	1.2	67

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73	Formation of a thick aromatic polyamide membrane by interfacial polymerisation. Separation and Purification Technology, 2013, 104, 276-283.	3.9	67
74	Flux melting of metal-organic frameworks. Chemical Science, 2019, 10, 3592-3601.	3.7	67
75	Microstructural and molecular level characterisation of plastic crystal phases of pyrrolidinium trifluoromethanesulfonyl salts. Solid State Ionics, 2002, 154-155, 119-124.	1.3	66
76	The effect of hydration on molecular chain mobility and the viscoelastic behavior of resilin-mimetic protein-based hydrogels. Biomaterials, 2011, 32, 8462-8473.	5.7	66
77	Water vapor permeation through cellulose acetate membranes and its impact upon membrane separation performance for natural gas purification. Journal of Membrane Science, 2015, 487, 249-255.	4.1	66
78	Evolution of the Interfacial Structure of a Catalyst Ink with the Quality of the Dispersing Solvent: A Contrast Variation Small-Angle and Ultrasmall-Angle Neutron Scattering Investigation. ACS Applied Materials & Interfaces, 2019, 11, 9934-9946.	4.0	65
79	Dynamic Control of MOF Crystal Positioning Using a Magnetic Field. Advanced Materials, 2011, 23, 3901-3906.	11.1	64
80	Effect of polymer structure on gas transport properties of selected aromatic polyimides, polyamides and TR polymers. Journal of Membrane Science, 2015, 493, 766-781.	4.1	63
81	Unexpectedly Strong Size-Sieving Ability in Carbonized Polybenzimidazole for Membrane H ₂ /CO ₂ Separation. ACS Applied Materials & Interfaces, 2019, 11, 47365-47372.	4.0	63
82	Conduction in ionic organic plastic crystals: The role of defects. Solid State Ionics, 2006, 177, 2569-2573.	1.3	62
83	Magnetic framework composites for polycyclic aromatic hydrocarbon sequestration. Journal of Materials Chemistry, 2012, 22, 11470.	6.7	62
84	Structural effects on SAPO-34 and ZIF-8 materials exposed to seawater solutions, and their potential as desalination membranes. Desalination, 2016, 377, 128-137.	4.0	62
85	Free volume and conductivity of plasticized polyether-urethane solid polymer electrolytes. Journal of Physics Condensed Matter, 1995, 7, 7601-7617.	0.7	61
86	ZnO as an Efficient Nucleating Agent for Rapid, Room Temperature Synthesis and Patterning of Zn-Based Metal-Organic Frameworks. Chemistry of Materials, 2015, 27, 690-699.	3.2	60
87	Finely Tuning the Free Volume Architecture in Iptycene-Containing Polyimides for Highly Selective and Fast Hydrogen Transport. Macromolecules, 2016, 49, 3395-3405.	2.2	60
88	Highly Polar but Amorphous Polymers with Robust Membrane CO ₂ /N ₂ Separation Performance. Joule, 2019, 3, 1881-1894.	11.7	60
89	Magnetic Induction Swing Adsorption: An Energy Efficient Route to Porous Adsorbent Regeneration. Chemistry of Materials, 2016, 28, 6219-6226.	3.2	59
90	Triptycene-containing poly(benzoxazole-co-imide) membranes with enhanced mechanical strength for high-performance gas separation. Journal of Membrane Science, 2018, 551, 305-314.	4.1	59

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91	A positron annihilation lifetime study of isothermal structural relaxation in bisphenol-A polycarbonate. <i>Journal of Polymer Science Part A</i> , 1988, 26, 1541-1552.	2.5	56
92	Advanced fitting algorithms for analysing positron annihilation lifetime spectra. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2009, 603, 456-466.	0.7	56
93	A Robust Metal-Organic Framework for Dynamic Light-Induced Swing Adsorption of Carbon Dioxide. <i>Chemistry - A European Journal</i> , 2016, 22, 11176-11179.	1.7	55
94	Thermally rearranged (TR) bismaleimide-based network polymers for gas separation membranes. <i>Chemical Communications</i> , 2016, 52, 13556-13559.	2.2	55
95	Effect of heat treatment on pervaporation separation of aqueous salt solution using hybrid PVA/MA/TEOS membrane. <i>Separation and Purification Technology</i> , 2014, 127, 10-17.	3.9	54
96	Positioning of the HKUST-1 metal-organic framework (Cu ₃ (BTC) ₂) through conversion from insoluble Cu-based precursors. <i>Inorganic Chemistry Frontiers</i> , 2015, 2, 434-441.	3.0	54
97	A pH-responsive interface derived from resilin-mimetic protein Rec1-resilin. <i>Biomaterials</i> , 2010, 31, 4434-4446.	5.7	53
98	Visible Light Triggered CO ₂ Liberation from Silver Nanocrystals Incorporated Metal-Organic Frameworks. <i>Advanced Functional Materials</i> , 2016, 26, 4815-4821.	7.8	53
99	Molecular Simulations of Physical Aging in Polymer Membrane Materials. <i>Journal of Physical Chemistry B</i> , 2006, 110, 16685-16693.	1.2	52
100	Ultra-thin hybrid polyhedral silsesquioxane-polyamide films with potentially unlimited 2D dimensions. <i>Journal of Materials Chemistry</i> , 2012, 22, 14835.	6.7	52
101	Modeling of the sorption and transport properties of water vapor in polyimide membranes. <i>Journal of Membrane Science</i> , 2012, 409-410, 96-104.	4.1	52
102	Molecular origins of fast and selective gas transport in pentiptycene-containing polyimide membranes and their physical aging behavior. <i>Journal of Membrane Science</i> , 2016, 518, 100-109.	4.1	52
103	In Situ Crystallization of Macroporous Monoliths with Hollow NaP Zeolite Structure. <i>Chemistry of Materials</i> , 2010, 22, 5271-5278.	3.2	51
104	Top-down patterning of Zeolitic Imidazolate Framework composite thin films by deep X-ray lithography. <i>Chemical Communications</i> , 2012, 48, 7483.	2.2	51
105	Positioning an individual metal-organic framework particle using a magnetic field. <i>Journal of Materials Chemistry C</i> , 2013, 1, 42-45.	2.7	51
106	Thermal treatment of dense polyimide membranes. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2008, 46, 1879-1890.	2.4	50
107	Nanoparticle Enhanced Conductivity in Organic Ionic Plastic Crystals: Space Charge versus Strain Induced Defect Mechanism. <i>Journal of Physical Chemistry C</i> , 2007, 111, 11463-11468.	1.5	49
108	Integrated Study of the Calcination Cycle from Gibbsite to Corundum. <i>Chemistry of Materials</i> , 2007, 19, 2877-2883.	3.2	47

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109	Characterization of Aluminum-Neutralized Sulfonated Styrenic Pentablock Copolymer Films. <i>Industrial & Engineering Chemistry Research</i> , 2013, 52, 1056-1068.	1.8	47
110	Self-organization, interfacial interaction and photophysical properties of gold nanoparticle complexes derived from resilin-mimetic fluorescent protein rec1-resilin. <i>Biomaterials</i> , 2011, 32, 2786-2796.	5.7	46
111	MaLISA – a cooperative method to release adsorbed gases from metal-organic frameworks. <i>Journal of Materials Chemistry A</i> , 2016, 4, 18757-18762.	5.2	46
112	Free volume and conductivity in polymer electrolytes. <i>Electrochimica Acta</i> , 2005, 50, 3955-3962.	2.6	45
113	Free volume characterization of sulfonated styrenic pentablock copolymers using positron annihilation lifetime spectroscopy. <i>Journal of Membrane Science</i> , 2014, 453, 425-434.	4.1	45
114	Impact of average free-volume element size on transport in stereoisomers of polynorbornene. I. Properties at 35 Å°C. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2003, 41, 2185-2199.	2.4	44
115	Investigation of the effects of ion and water interaction on structure and chemistry of silicalite MFI type zeolite for its potential use as a seawater desalination membrane. <i>Journal of Materials Chemistry</i> , 2010, 20, 4675.	6.7	43
116	Vacancy Behavior and Solute Cluster Growth During Natural Aging of an Al-Mg-Si Alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012, 43, 4507-4513.	1.1	43
117	An16-resilin: An advanced multi-stimuli-responsive resilin-mimetic protein polymer. <i>Acta Biomaterialia</i> , 2014, 10, 4768-4777.	4.1	43
118	A free volume approach to the mechanical behaviour of miscible polycarbonate blends. <i>Journal of Physics Condensed Matter</i> , 1996, 8, 3811-3827.	0.7	41
119	Tailoring nanospace. <i>Journal of Molecular Structure</i> , 2005, 739, 173-178.	1.8	41
120	Physical approaches for fabrication of organized nanostructure of resilin-mimetic elastic protein rec1-resilin. <i>Biomaterials</i> , 2009, 30, 4868-4876.	5.7	41
121	High Performance Hydrogen Storage from Be-BTB Metal-Organic Framework at Room Temperature. <i>Langmuir</i> , 2013, 29, 8524-8533.	1.6	41
122	Convective transport of boron through a brackish water reverse osmosis membrane. <i>Journal of Membrane Science</i> , 2013, 445, 160-169.	4.1	40
123	A free volume study of miscible polyester blends. <i>Polymer International</i> , 1995, 36, 127-136.	1.6	38
124	Positron Annihilation Lifetime Spectroscopy (PALS) as a Characterization Technique for Nanostructured Self-Assembled Amphiphile Systems. <i>Journal of Physical Chemistry B</i> , 2009, 113, 84-91.	1.2	38
125	Membranes with artificial free-volume for biofuel production. <i>Nature Communications</i> , 2015, 6, 7529.	5.8	38
126	Analysis of governing factors controlling gas transport through fresh and aged triptycene-based polyimide films. <i>Journal of Membrane Science</i> , 2017, 522, 12-22.	4.1	37

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127	Poly(m-xylene adipamide)-montmorillonite nanocomposites: effect of organo-modifier structure on free volume and oxygen barrier properties. <i>Journal of Materials Chemistry</i> , 2008, 18, 911.	6.7	36
128	Ionic liquids as porogens for molecularly imprinted polymers: propranolol, a model study. <i>Organic and Biomolecular Chemistry</i> , 2014, 12, 7201-7210.	1.5	36
129	Effects of quench rate and natural ageing on the age hardening behaviour of aluminium alloy AA6060. <i>Materials Characterization</i> , 2016, 111, 43-52.	1.9	36
130	Structural evolution of photocrosslinked silk fibroin and silk fibroin-based hybrid hydrogels: A small angle and ultra-small angle scattering investigation. <i>International Journal of Biological Macromolecules</i> , 2018, 114, 998-1007.	3.6	35
131	The effect of crystallinity on chain mobility and free volume in the amorphous regions of a miscible polycarbonate/polyester blend. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1994, 32, 1237-1247.	2.4	34
132	Structural ensembles reveal intrinsic disorder for the multi-stimuli responsive bio-mimetic protein Rec1-resilin. <i>Scientific Reports</i> , 2015, 5, 10896.	1.6	34
133	Magnetic Induction Framework Synthesis: A General Route to the Controlled Growth of Metal-Organic Frameworks. <i>Chemistry of Materials</i> , 2017, 29, 6186-6190.	3.2	34
134	Effect of fixed charge group concentration on salt permeability and diffusion coefficients in ion exchange membranes. <i>Journal of Membrane Science</i> , 2018, 566, 307-316.	4.1	34
135	Structural, sorption and transport characteristics of an ultrapermeable polymer. <i>Journal of Membrane Science</i> , 2008, 314, 15-23.	4.1	33
136	Surprising effect of nanoparticle inclusion on ion conductivity in a lithium doped organic ionic plastic crystal. <i>Journal of Materials Chemistry</i> , 2009, 19, 1635.	6.7	33
137	Gas Separation Membranes Loaded with Porous Aromatic Frameworks that Improve with Age. <i>Angewandte Chemie</i> , 2015, 127, 2707-2711.	1.6	33
138	UiO-66 MOF end-face-coated optical fiber in aqueous contaminant detection. <i>Optics Letters</i> , 2016, 41, 1696.	1.7	33
139	Isothermal volume relaxation in aged polycarbonate measured by positron annihilation lifetime spectroscopy. <i>Polymer Engineering and Science</i> , 1990, 30, 762-768.	1.5	32
140	Investigation of the chemical and morphological structure of thermally rearranged polymers. <i>Polymer</i> , 2014, 55, 6649-6657.	1.8	32
141	Slow hydrophobic hydration induced polymer ultrafiltration membranes with high water flux. <i>Journal of Membrane Science</i> , 2014, 471, 27-34.	4.1	32
142	Vacancy Diffusion with Time-Dependent Length Scale: An Insightful New Model for Physical Aging in Polymers. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 12119-12124.	1.8	31
143	New relation between diffusion and free volume: II. Predicting vacancy diffusion. <i>Journal of Membrane Science</i> , 2009, 338, 38-42.	4.1	30
144	The thickness dependence of Matrimid films in water vapor permeation. <i>Chemical Engineering Journal</i> , 2012, 209, 301-312.	6.6	30

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145	Characterization of Pauci-Chain Polystyrene Microlatex Particles Prepared by Chemical Initiator. <i>Macromolecules</i> , 1995, 28, 1592-1597.	2.2	29
146	Photorearrangements of Five 1- and 2-Naphthyl Acylates in Three Unstretched and Stretched Polyethylene Films. Does Reaction Selectivity Correlate with Free Volumes Measured by Positron Annihilation Lifetime Spectroscopy?. <i>Macromolecules</i> , 2000, 33, 7801-7811.	2.2	29
147	Synthesis, physical characterization, and acetone sorption kinetics in random copolymers of poly(ethylene terephthalate) and poly(ethylene 2,6-naphthalate). <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1998, 36, 2981-3000.	2.4	28
148	Role of ethanol in sodalite crystallization in an ethanol- Na_2O - Al_2O_3 - SiO_2 - H_2O system. <i>CrystEngComm</i> , 2011, 13, 4714.	1.3	28
149	The effects of molecular orientation on the physical aging and mobility of polycarbonate?solid state NMR and dynamic mechanical analysis. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2001, 39, 32-46.	2.4	27
150	Reaction mechanism and products of the thermal conversion of hydroxy-containing polyimides. <i>European Polymer Journal</i> , 2011, 47, 394-400.	2.6	27
151	Using Plasticizers to Control the Hydrocarbon Selectivity of a Poly(Methyl Methacrylate)-Coated Quartz Crystal Microbalance Sensor. <i>Analytical Chemistry</i> , 2012, 84, 8564-8570.	3.2	27
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