Brian C Benicewicz

List of Publications by Citations

165 papers	10,098 citations	50 h-index	97 g-index
176 ext. papers	11,115 ext. citations	5.9 avg, IF	6.37 L-index

#	Paper	IF	Citations
165	Anisotropic self-assembly of spherical polymer-grafted nanoparticles. *Nature Materials*, **2009**, 8, 354-9	27	820
164	Quantitative equivalence between polymer nanocomposites and thin polymer films. *Nature Materials*, **2005**, 4, 693-8	27	599
163	Nanocomposites with Polymer Grafted Nanoparticles. *Macromolecules*, **2013**, 46, 3199-3214	5.5	570
162	High-Temperature Polybenzimidazole Fuel Cell Membranes via a Sol□el Process. *Chemistry of Materials*, **2005**, 17, 5328-5333	9.6	467
161	50th Anniversary Perspective: Are Polymer Nanocomposites Practical for Applications?. *Macromolecules*, **2017**, 50, 714-731	5.5	375
160	Synthesis of Well-Defined Polymer Brushes Grafted onto Silica Nanoparticles via Surface Reversible Addition□ragmentation Chain Transfer Polymerization. *Macromolecules*, **2005**, 38, 5929-5936	5.5	320
159	Synthesis and Characterization of Pyridine-Based Polybenzimidazoles for High Temperature Polymer Electrolyte Membrane Fuel Cell Applications. *Fuel Cells*, **2005**, 5, 287-295	2.9	276
158	A Versatile Method To Prepare RAFT Agent Anchored Substrates and the Preparation of PMMA Grafted Nanoparticles. *Macromolecules*, **2006**, 39, 3175-3183	5.5	262
157	Durability Studies of PBI-based High Temperature PEMFCs. *Fuel Cells*, **2008**, 8, 165-174	2.9	245
156	TiO2 nanocomposites with high refractive index and transparency. *Journal of Materials Chemistry*, **2011**, 21, 18623		212
155	Conformational Transitions of Spherical Polymer Brushes: Synthesis, Characterization, and Theory. *Macromolecules*, **2010**, 43, 1564-1570	5.5	209
154	Designed Interfaces in Polymer Nanocomposites: A Fundamental Viewpoint. *MRS Bulletin*, **2007**, 32, 335-340	3.2	207
153	□el-like□Mechanical Reinforcement in Polymer Nanocomposite Melts. *Macromolecules*, **2010**, 43, 1003-1010	5.5	181
152	Sulfonated Polybenzimidazoles for High Temperature PEM Fuel Cells. *Macromolecules*, **2010**, 43, 6706-6715	5.5	174
151	Controlling the thermomechanical properties of polymer nanocomposites by tailoring the polymer□particle interface. *Journal of Polymer Science, Part B: Polymer Physics*, **2006**, 44, 2944-2950	2.6	173
150	Inorganic nanoparticles engineered to attack bacteria. *Chemical Society Reviews*, **2015**, 44, 7787-807	58.5	170
149	Mechanical properties of Al2O3/polymethylmethacrylate nanocomposites. *Polymer Composites*, **2002**, 23, 1014-1025	3	163

148	Mechanical Reinforcement in Polymer Melts Filled with Polymer Grafted Nanoparticles. *Macromolecules*, **2011**, 44, 7473-7477	5.5	145
147	Synthesis and Properties of Functionalized Polybenzimidazoles for High-Temperature PEMFCs. *Macromolecules*, **2009**, 42, 8640-8648	5.5	138
146	Functionalization of Silica Nanoparticles via the Combination of Surface-Initiated RAFT Polymerization and Click Reactions. *Macromolecules*, **2008**, 41, 7986-7992	5.5	133
145	Grafting Bimodal Polymer Brushes on Nanoparticles Using Controlled Radical Polymerization. *Macromolecules*, **2012**, 45, 9303-9311	5.5	120
144	Bimodal surface ligand engineering: the key to tunable nanocomposites. *Langmuir*, **2013**, 29, 1211-20	4	119
143	Mechanical properties of thin glassy polymer films filled with spherical polymer-grafted nanoparticles. *Nano Letters*, **2012**, 12, 3909-14	11.5	108
142	Preparation and optical properties of indium tin oxide/epoxy nanocomposites with polyglycidyl methacrylate grafted nanoparticles. *ACS Applied Materials & Interfaces*, **2011**, 3, 3638-45	9.5	103
141	Ligand engineering of polymer nanocomposites: from the simple to the complex. *ACS Applied Materials & Interfaces*, **2014**, 6, 6005-21	9.5	102
140	Magnetic Field Orientation of Liquid Crystalline Epoxy Thermosets. *Macromolecules*, **1998**, 31, 4730-8	5.5	99
139	Well-controlled polymerization of 2-azidoethyl methacrylate at near room temperature and click functionalization. *Journal of Polymer Science Part A*, **2007**, 45, 4300-4308	2.5	98
138	Segmental Dynamics in PMMA-Grafted Nanoparticle Composites. *Macromolecules*, **2010**, 43, 8275-8281	5.5	96
137	Montmorillonite K 10-catalyzed regioselective addition of thiols and thiobenzoic acids onto olefins: an efficient synthesis of dithiocarboxylic esters. *Tetrahedron Letters*, **2001**, 42, 3791-3794	2	89
136	Influence of polybenzimidazole main chain structure on H2/CO2 separation at elevated temperatures. *Journal of Membrane Science*, **2014**, 461, 59-68	9.6	70
135	Preparation and Properties of Poly(methacrylamide)s Containing Oligoaniline Side Chains. *Macromolecules*, **2003**, 36, 6333-6339	5.5	70
134	Synthesis and characterization of high molecular weight perfluorocyclobutyl-containing polybenzimidazoles (PFCBPBI) for high temperature polymer electrolyte membrane fuel cells. *Polymer*, **2009**, 50, 3911-3916	3.9	69
133	Synthesis and characterization of high molecular weight hexafluoroisopropylidene-containing polybenzimidazole for high-temperature polymer electrolyte membrane fuel cells. *Journal of Polymer Science Part A*, **2009**, 47, 4064-4073	2.5	68
132	Determination of the Molecular Parameters and Studies of the Chain Conformation of Polybenzimidazole in DMAc/LiCl. *Macromolecules*, **2006**, 39, 9409-9418	5.5	68
131	Polymer Crystallization in Nanocomposites: Spatial Reorganization of Nanoparticles. *Macromolecules*, **2009**, 42, 5741-5744	5.5	65

130	Electrochemical hydrogen pumping using a high-temperature polybenzimidazole (PBI) membrane. *Journal of Power Sources*, **2008**, 177, 478-484	8.9	65
129	Rigid rod molecules as liquid crystal thermosets. I. Rigid rod amides. *Journal of Polymer Science Part A*, **1990**, 28, 3403-3415	2.5	65
128	Polymer-Grafted Nanoparticle Membranes with Controllable Free Volume. *Macromolecules*, **2017**, 50, 7111-7120	5.5	64
127	Synthesis and properties of phenylindane-containing polybenzimidazole (PBI) for high-temperature polymer electrolyte membrane fuel cells (PEMFCs). *Journal of Power Sources*, **2013**, 243, 796-804	8.9	64
126	Converting an Electrical Insulator into a Dielectric Capacitor: End-Capping Polystyrene with Oligoaniline. *Chemistry of Materials*, **2013**, 25, 799-807	9.6	63
125	Thermomechanical Properties of Bimodal Brush Modified Nanoparticle Composites. *Macromolecules*, **2013**, 46, 4909-4918	5.5	62
124	Polymer-grafted-nanoparticle surfactants. *Nano Letters*, **2011**, 11, 4569-73	11.5	62
123	Synthesis of Poly (2,2?-(1,4-phenylene) 5,5?-bibenzimidazole) (para-PBI) and Phosphoric Acid Doped Membrane for Fuel Cells. *Fuel Cells*, **2009**, 9, 318-324	2.9	62
122	Phosphorus pentasulfide: A mild and versatile Catalyst/Reagent for the preparation of dithiocarboxylic esters. *Organic Letters*, **2000**, 2, 3213-6	6.2	61
121	Rigid rod molecules as liquid crystal thermosets. II. Rigid rod esters. *Journal of Polymer Science Part A*, **1990**, 28, 3417-3427	2.5	60
120	Dielectric breakdown strength of epoxy bimodal-polymer-brush-grafted core functionalized silica nanocomposites. *IEEE Transactions on Dielectrics and Electrical Insulation*, **2014**, 21, 563-570	2.3	57
119	Nonisotropic Self-Organization of Single-Component Hairy Nanoparticle Assemblies. *ACS Macro Letters*, **2013**, 2, 670-676	6.6	57
118	The Mechanical Properties of Epoxy Composites Filled with Rubbery Copolymer Grafted SiO2. *Polymers*, **2012**, 4, 187-210	4.5	56
117	Bulk transparent epoxy nanocomposites filled with poly(glycidyl methacrylate) brush-grafted TiO2 nanoparticles. *Polymer*, **2013**, 54, 1639-1646	3.9	54
116	A comparative study of phosphoric acid-doped m-PBI membranes. *Journal of Polymer Science, Part B: Polymer Physics*, **2014**, 52, 26-35	2.6	53
115	pH and Thermal Dual-Responsive Nanoparticles for Controlled Drug Delivery with High Loading Content. *ACS Omega*, **2017**, 2, 3399-3405	3.9	50
114	Reversible Addition-Fragmentation Chain-Transfer Polymerization for the Synthesis of Poly(4-acetoxystyrene) and Poly(4-acetoxystyrene)-block-polystyrene by Bulk, Solution and Emulsion Techniques. *Macromolecular Rapid Communications*, **2001**, 22, 1076-1080	4.8	48
113	Functionalised nanoparticles complexed with antibiotic efficiently kill MRSA and other bacteria. *Chemical Communications*, **2014**, 50, 12030-3	5.8	47

112	Phosphoric acid-imbibed three-dimensional polyacrylamide/poly(vinyl alcohol) hydrogel as a new class of high-temperature proton exchange membrane. *Journal of Power Sources*, **2013**, 229, 36-41	8.9	47
111	Thiophene Polymer-Grafted Barium Titanate Nanoparticles toward Nanodielectric Composites. *Chemistry of Materials*, **2014**, 26, 5319-5326	9.6	45
110	Tunable Multiscale Nanoparticle Ordering by Polymer Crystallization. *ACS Central Science*, **2017**, 3, 751-758	10.8	44
109	Engineering nanoparticles to silence bacterial communication. *Frontiers in Microbiology*, **2015**, 6, 189	5.7	43
108	Designing exceptional gas-separation polymer membranes using machine learning. *Science Advances*, **2020**, 6, eaaz4301	14.3	43
107	Cyanobenzyl dithioester reversible addition fragmentation chain-transfer agents for controlled radical polymerizations. *Journal of Polymer Science Part A*, **2005**, 43, 1535-1543	2.5	43
106	Bimodal Polymer Brush Core Shell Barium Titanate Nanoparticles: A Strategy for High-Permittivity Polymer Nanocomposites. *Macromolecules*, **2015**, 48, 8998-9006	5.5	41
105	Effect of graft density and molecular weight on mechanical properties of rubbery block copolymer grafted SiO2 nanoparticle toughened epoxy. *Polymer*, **2013**, 54, 3961-3973	3.9	41
104	Synthesis and Properties of Segmented Block Copolymers of Functionalised Polybenzimidazoles for High-Temperature PEM Fuel Cells. *Fuel Cells*, **2011**, 11, 222-237	2.9	41
103	Suppression of space charge in crosslinked polyethylene filled with poly(stearyl methacrylate)-grafted SiO2 nanoparticles. *Applied Physics Letters*, **2017**, 110, 132903	3.4	38
102	Synthesis and Characterization of Dye-Labeled Poly(methacrylic acid) Grafted Silica Nanoparticles.. *ACS Macro Letters*, **2013**, 2, 173-176	6.6	37
101	Investigation of dielectric breakdown in silica-epoxy nanocomposites using designed interfaces. *Journal of Colloid and Interface Science*, **2017**, 495, 130-139	9.3	36
100	Self-Assembly of Monodisperse versus Bidisperse Polymer-Grafted Nanoparticles. *ACS Macro Letters*, **2016**, 5, 790-795	6.6	36
99	High Polymer Content 3,5-Pyridine-Polybenzimidazole Copolymer Membranes with Improved Compressive Properties. *Fuel Cells*, **2014**, 14, 16-25	2.9	36
98	Tobacco mosaic virus based thin film sensor for detection of volatile organic compounds. *Journal of Materials Chemistry*, **2010**, 20, 5715		36
97	Polymer grafted recyclable magnetic nanoparticles. *Polymer Chemistry*, **2015**, 6, 248-255	4.9	32
96	Bimodal matrix-free polymer nanocomposites. *RSC Advances*, **2015**, 5, 14788-14795	3.7	31
95	Copolymerization and Synthesis of Multiply Binding Histamine Ligands for the Robust Functionalization of Quantum Dots. *Macromolecules*, **2014**, 47, 8137-8144	5.5	30

94	Dispersing Grafted Nanoparticle Assemblies into Polymer Melts through Flow Fields. *ACS Macro Letters*, **2013**, 2, 1051-1055	6.6	30
93	Polybenzimidazole/Acid Complexes as High-Temperature Membranes **2008**, 63-124		30
92	Matrix-Free Polymer Nanocomposite Thermoplastic Elastomers. *Macromolecules*, **2017**, 50, 4742-4753	5.5	29
91	Sulfonated PBI Gel Membranes for Redox Flow Batteries. *Journal of the Electrochemical Society*, **2019**, 166, A1449-A1455	3.9	28
90	The preparation and characterization of carboxylic acid-coated silica nanoparticles. *Journal of Polymer Science Part A*, **2012**, 50, 2533-2540	2.5	28
89	Synthesis and Properties of Random Copolymers of Functionalised Polybenzimidazoles for High Temperature Fuel Cells. *Fuel Cells*, **2011**, 11, 212-221	2.9	26
88	A new sequence isomer of AB-polybenzimidazole for high-temperature PEM fuel cells. *Journal of Polymer Science Part A*, **2012**, 50, 306-313	2.5	25
87	One-pot synthesis of inorganic nanoparticle vesicles via surface-initiated polymerization-induced self-assembly. *Polymer Chemistry*, **2017**, 8, 370-374	4.9	24
86	Poly(alkyl methacrylate)-grafted silica nanoparticles in polyethylene nanocomposites. *Polymer*, **2017**, 109, 339-348	3.9	24
85	Durable High Polymer Content m/p-Polybenzimidazole Membranes for Extended Lifetime Electrochemical Devices. *ACS Applied Energy Materials*, **2019**, 2, 1720-1726	6.1	24
84	Charged Metallopolymer-Grafted Silica Nanoparticles for Antimicrobial Applications. *Biomacromolecules*, **2018**, 19, 417-425	6.9	24
83	Gel permeation chromatography as a multifunctional processor for nanocrystal purification and on-column ligand exchange chemistry. *Chemical Science*, **2016**, 7, 5671-5679	9.4	24
82	Tuning Selectivities in Gas Separation Membranes Based on Polymer-Grafted Nanoparticles. *ACS Nano*, **2020**,	16.7	24
81	Polyethylene Grafted Silica Nanoparticles Prepared via Surface-Initiated ROMP. *ACS Macro Letters*, **2019**, 8, 228-232	6.6	23
80	Polybenzimidazole based random copolymers containing hexafluoroisopropylidene functional groups for gas separations at elevated temperatures. *Polymer*, **2017**, 119, 134-141	3.9	22
79	Polyphenylquinoxaline-based proton exchange membranes synthesized via the PPA Process for high temperature fuel cell systems. *Journal of Membrane Science*, **2012**, 405-406, 57-67	9.6	22
78	Synthesis of Janus nanoparticles via a combination of the reversible click reaction and "grafting to" strategies. *Langmuir*, **2013**, 29, 11547-53	4	22
77	Morphologically dependent alternating-current and direct-current breakdown strength in silica□polypropylene nanocomposites. *Journal of Applied Polymer Science*, **2017**, 134,	2.9	22

76	Polybenzimidazole Membranes for Hydrogen and Sulfuric Acid Production in the Hybrid Sulfur Electrolyzer. *ECS Electrochemistry Letters*, **2012**, 1, F44-F48		22
75	High temperature creep behavior of phosphoric acid-polybenzimidazole gel membranes. *Journal of Polymer Science, Part B: Polymer Physics*, **2015**, 53, 1527-1538	2.6	21
74	High-Frequency Mechanical Behavior of Pure Polymer-Grafted Nanoparticle Constructs. *ACS Macro Letters*, **2019**, 8, 294-298	6.6	20
73	High Polymer Content 2,5-Pyridine-Polybenzimidazole Copolymer Membranes with Improved Compressive Properties. *Fuel Cells*, **2015**, 15, 150-155	2.9	20
72	Well-defined polyisoprene-grafted silica nanoparticles via the RAFT process. *Journal of Polymer Science Part A*, **2017**, 55, 1493-1501	2.5	19
71	Nanoparticle Organization by Growing Polyethylene Crystal Fronts. *ACS Macro Letters*, **2019**, 8, 1341-1346	6.6	19
70	Multinuclear NMR study of the effect of acid concentration on ion transport in phosphoric acid doped poly(benzimidazole) membranes. *Journal of Physical Chemistry B*, **2012**, 116, 12545-51	3.4	19
69	Effects of Hairy Nanoparticles on Polymer Crystallization Kinetics. *Macromolecules*, **2019**, 52, 9186-9198	5.5	19
68	Reinforcement of polychloroprene by grafted silica nanoparticles. *Polymer*, **2019**, 171, 96-105	3.9	18
67	Electrochemical Hydrogen Separation from Reformate Using High-Temperature Polybenzimidazole (PBI) Membranes: The Role of Chemistry. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 6234-6242	8.3	18
66	The effect of tetrahydrofuran as solvent on matrix-assisted laser desorption/ionization and electrospray ionization mass spectra of functional polystyrenes. *Rapid Communications in Mass Spectrometry*, **2006**, 20, 178-80	2.2	18
65	Rational design and demonstration of a high-performance flexible Zn/V2O5 battery with thin-film electrodes and para-polybenzimidazole electrolyte membrane. *Energy Storage Materials*, **2020**, 27, 418-425	19.4	17
64	Role of block copolymer adsorption versus bimodal grafting on nanoparticle self-assembly in polymer nanocomposites. *Soft Matter*, **2016**, 12, 7241-7	3.6	17
63	Mechanical properties of polymer grafted nanoparticle composites. *Nanocomposites*, **2018**, 4, 244-252	3.4	17
62	Surface-initiated polymerization-induced self-assembly of bimodal polymer-grafted silica nanoparticles towards hybrid assemblies in one step. *Polymer Chemistry*, **2016**, 7, 5347-5350	4.9	16
61	Surface labeling of enveloped virus with polymeric imidazole ligand-capped quantum dots via the metabolic incorporation of phospholipids into host cells. *Journal of Materials Chemistry B*, **2016**, 4, 2421-2427	7.3	16
60	Linear rheology of polymer nanocomposites with polymer-grafted nanoparticles. *Polymer*, **2017**, 131, 104-110	3.9	15
59	Thermal and Rheological Analysis of Polystyrene-Grafted Silica Nanocomposites. *Macromolecules*, **2020**, 53, 2123-2135	5.5	15

58	Solution polymerization of polybenzimidazole. *Journal of Polymer Science Part A*, **2016**, 54, 1795-1802	2.5	15
57	High-Capacity Poly(4-vinylpyridine) Grafted PolyHIPE Foams for Efficient Plutonium Separation and Purification. *ACS Omega*, **2018**, 3, 8181-8189	3.9	14
56	Accelerated Local Dynamics in Matrix-Free Polymer Grafted Nanoparticles. *Physical Review Letters*, **2019**, 123, 158003	7.4	14
55	Characterizing Voltage Losses in an SO2Depolarized Electrolyzer Using Sulfonated Polybenzimidazole Membranes. *Journal of the Electrochemical Society*, **2017**, 164, F1591-F1595	3.9	14
54	Compatibilizing Immiscible Polymer Blends with Sparsely Grafted Nanoparticles. *Macromolecules*, **2020**, 53, 10330-10338	5.5	13
53	The effects of nanoparticles and organic additives with controlled dispersion on dielectric properties of polymers: Charge trapping and impact excitation. *Journal of Applied Physics*, **2016**, 120, 055102	2.5	13
52	Surface-initiated reversible addition-fragmentation chain transfer polymerization of chloroprene and mechanical properties of matrix-free polychloroprene nanocomposites. *Polymer*, **2018**, 135, 193-199	3.9	13
51	Photoinitiated Polymerization of 4-Vinylpyridine on polyHIPE Foam Surface toward Improved Pu Separations. *Analytical Chemistry*, **2017**, 89, 5174-5178	7.8	12
50	Polybenzimidazole-based block copolymers: From monomers to membrane electrode assemblies for high temperature polymer electrolyte membrane fuel cells. *Journal of Polymer Science Part A*, **2017**, 55, 1831-1843	2.5	12
49	Surface and Particle Modification via the RAFT Process: Approach and Properties423-453		12
48	Implementing PGM-free electrocatalysts in high-temperature polymer electrolyte membrane fuel cells. *Electrochemistry Communications*, **2018**, 93, 91-94	5.1	12
47	Morphologies of Polyisoprene-Grafted Silica Nanoparticles in Model Elastomers. *Macromolecules*, **2019**, 52, 7638-7645	5.5	11
46	A methacrylate-based polymeric imidazole ligand yields quantum dots with low cytotoxicity and low nonspecific binding. *Journal of Colloid and Interface Science*, **2015**, 458, 310-4	9.3	11
45	Renewable rosin fatty acid polyesters: the effect of backbone structure on thermal properties. *Green Materials*, **2013**, 1, 96-104	3.2	11
44	A versatile approach to different colored photonic films generated from block copolymers and their conversion into polymer-grafted nanoplatelets. *Journal of Materials Chemistry C*, **2017**, 5, 9873-9878	7.1	10
43	Synthesis of well-defined side chain fullerene polymers and study of their self-aggregation behaviors. *Journal of Polymer Science Part A*, **2013**, 51, 3572-3582	2.5	10
42	Investigation into the Thermal and Mechanical Behavior of PMMA/Alumina Nanocomposites. *Materials Research Society Symposia Proceedings*, **2000**, 661, KK2.10.1		10
41	Location of Imbibed Solvent in Polymer-Grafted Nanoparticle Membranes. *ACS Macro Letters*, **2018**, 7, 1051-1055	6.6	9

40	Investigation of sequence isomer effects in AB-polybenzimidazole polymers. *Journal of Polymer Science Part A*, **2014**, 52, 619-628	2.5	9
39	Performance of vapor-fed direct dimethyl ether fuel cell utilizing high temperature polybenzimidazole polymer electrolyte membrane. *Journal of Power Sources*, **2012**, 216, 471-474	8.9	9
38	Polymer Spherulitic Growth Kinetics Mediated by Nanoparticle Assemblies. *Macromolecules*, **2021**, 54, 1063-1072	5.5	9
37	Prediction of interface dielectric relaxations in bimodal brush functionalized epoxy nanodielectrics by finite element analysis method **2014**,		8
36	Substituted oligoanilines: synthesis and characterization. *Synthetic Metals*, **2004**, 146, 133-137	3.6	8
35	Universal Polymeric-to-Colloidal Transition in Melts of Hairy Nanoparticles. *ACS Nano*, **2021**, 15, 16697-16708	16.7	8
34	A Useful Method for Preparing Mixed Brush Polymer Grafted Nanoparticles by Polymerizing Block Copolymers from Surfaces with Reversed Monomer Addition Sequence. *Macromolecular Rapid Communications*, **2017**, 38, 1700300	4.8	7
33	Fuel Impurity Effects on High Temperature PBI Based Fuel Cell Membranes. *ECS Transactions*, **2011**, 41, 1441-1448	1	7
32	Rigid Rod Molecules as Liquid-Crystalline Thermosets. *ACS Symposium Series*, **1990**, 198-206	0.4	7
31	Nanoparticles as antibiotic-delivery vehicles (ADVs) overcome resistance by MRSA and other MDR bacterial pathogens: The grenade hypothesis. *Journal of Global Antimicrobial Resistance*, **2020**, 22, 811-817	3.4	6
30	Dielectric spectroscopy analysis using viscoelasticity-inspired relaxation theory with finite element modeling. *IEEE Transactions on Dielectrics and Electrical Insulation*, **2017**, 24, 3776-3785	2.3	6
29	Enhanced charge trapping in bimodal brush functionalized silica-epoxy nanocomposite dielectrics **2014**,		6
28	Synthesis of Well-Defined Polyolefin Grafted SiO2 Nanoparticles with Molecular Weight and Graft Density Control. *ACS Macro Letters*, **2020**, 9, 1255-1260	6.6	6
27	Electrochemical Hydrogen Pumping **2016**, 527-540		5
26	Refractive Index Engineering of Polymer Nanocomposites Prepared by End-grafted Polymer Chains onto Inorganic Nanoparticles. *Materials Research Society Symposia Proceedings*, **2011**, 1359, 163		5
25	Synthesis of random terpolymers bearing multidentate imidazole units and their use in functionalization of cadmium sulfide nanowires. *Polymer Chemistry*, **2015**, 6, 7036-7044	4.9	4
24	High Polymer Content m/p-Polybenzimidazole Copolymer Membranes for Electrochemical Hydrogen Separation under Differential Pressures. *Journal of the Electrochemical Society*, **2020**, 167, 063504	3.9	4
23	Synthesis and Characterization of a New Fluorine-Containing Polybenzimidazole (PBI) for Proton-Conducting Membranes in Fuel Cells. *Fuel Cells*, **2013**, 13, n/a-n/a	2.9	4

22	Bimodal brush functionalized TiO2/silicone nanocomposites with improved dielectric properties **2015**,		4
21	Synthesis and Characterization of Polymers with Oligoaniline Side Chains. *ACS Symposium Series*, **2003**, 126-139	0.4	4
20	Synthesis of rigid rod polymers. *Polymer Bulletin*, **1990**, 23, 477-481	2.4	4
19	A Thermoelectrochemical Converter Using High-Temperature Polybenzimidazole (PBI) Membranes for Harvesting Heat Energy. *ACS Applied Energy Materials*, **2020**, 3, 614-624	6.1	4
18	Multiply-Binding Polymeric Imidazole Ligands: Influence of Molecular Weight and Monomer Sequence on Colloidal Quantum Dot Stability. *Journal of Physical Chemistry C*, **2018**, 122, 26756-26763	3.8	4
17	Polybenzimidazole Fuel Cell Technology **2013**, 391-431		3
16	PBI Membranes Via the PPA Process **2016**, 217-238		3
15	Surface-Initiated RAFT Polymerization of 2,3-Dimethyl-1,3-butadiene on Silica Nanoparticles for Matrix-free Methyl Rubber Nanocomposites. *Journal of Polymer Science*, **2020**, 58, 417-427	2.4	3
14	Using Nanofiller Assemblies to Control the Crystallization Kinetics of High-Density Polyethylene. *Macromolecules*, **2021**, 54, 5673-5682	5.5	3
13	Beta-silicon carbide whisker-polymer composites. *Polymer Bulletin*, **1988**, 19, 603	2.4	2
12	Surface and Particle Modification via RAFT Polymerization: An Update **2021**, 1017-1049		2
11	Molecular Composites from Liquid Crystalline Polymers and Liquid Crystalline Thermosets **1994**, 87-94		2
10	Nanotargeting of Resistant Infections with a Special Emphasis on the Biofilm Landscape. *Bioconjugate Chemistry*, **2021**, 32, 1411-1430	6.3	2
9	Polybenzimidazole Fuel Cell Technology: Theory, Performance, and Applications **2019**, 477-514		2
8	Activated Transport in Polymer Grafted Nanoparticle Melts. *Macromolecules*, **2021**, 54, 6968-6974	5.5	2
7	RAFT Polymerization on Particle Surfaces: Same Goal, Different Strategies. *ACS Symposium Series*, **2015**, 187-201	0.4	1
6	Free volume in nanodielectrics **2015**,		1
5	Reversible Addition-Fragmentation Chain Transfer Polymerization of 4-Anilinophenyl(meth)acrylates. *ACS Symposium Series*, **2007**, 54-68	0.4	1

4	Unusual High-Frequency Mechanical Properties of Polymer-Grafted Nanoparticle Melts.. *Physical Review Letters*, **2022**, 128, 187801	7.4	0
3	Cryo-SEM of Hydrated High Temperature Proton Exchange Membranes. *Microscopy and Microanalysis*, **2009**, 15, 1420-1421	0.5	
2	Polymer Nanocomposites with Designed Interfaces. *Key Engineering Materials*, **2007**, 334-335, 909-912	0.4	
1	The solution structure of liquid-crystal polymers with small liquid-crystal thermoset maleimides and nadimides. *International Journal of Thermophysics*, **1995**, 16, 309-317	2.1	