Thein Kyu

List of Publications by Year
in descending order

118 papers	3,316 citations	126907 33 h-index	168389 53 g-index
120 all docs	120 docs citations	120 times ranked	3109 citing authors

#	Article	IF	Citations
1	Toughening of silane modified <scp>bisâ€phenolâ€A</scp> epoxides. Journal of Applied Polymer Science, 2022, 139, .	2.6	3
2	Hierarchical Organization of Single Crystal Polymorphs of Azobenzene Chromophore in Anisotropic Media Subjected to Local Thermal Gradients upon Cold Spraying. Macromolecular Rapid Communications, 2022, , 2200044.	3.9	0
3	Flexo-Ionic Effect of Ionic Liquid Crystal Elastomers. Molecules, 2021, 26, 4234.	3.8	9
4	Role of Cationic Size and Valency in Mechanoelectrical Transduction of Ion-Containing Polymers. ACS Sustainable Chemistry and Engineering, 2021, 9, 1837-1845.	6.7	7
5	Flexoelectricity of Multifunctional Polymer Electrolyte Membranes: Effect of Polymer Network Functionality. ACS Applied Energy Materials, 2021, 4, 12767-12779.	5.1	6
6	Polymer Electrolytes as Energyâ€Harvesting Materials to Capture Electrical Energy from Dynamic Mechanical Deformations. Macromolecular Rapid Communications, 2021, , 2100204.	3.9	0
7	In Situ Polymerized Electrolytes with Fully Cross-Linked Networks Boosting High Ionic Conductivity and Capacity Retention for Lithium Ion Batteries. ACS Applied Energy Materials, 2021, 4, 14309-14322.	5.1	8
8	Ion conductive polymer electrolyte membranes based on star-branched poly(ethylene-glycol) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 T	2.7	10
9	Role of dinitrile plasticizer chain lengths in electrochemical performance of highly conductive polymer electrolyte membrane for lithium ion battery. Electrochimica Acta, 2020, 330, 135320.	5.2	17
10	Tuning Flexoelectric Effect in Polymer Electrolyte Membranes via Cation Selection for Potential Energy Harvesting Applications. ACS Applied Energy Materials, 2020, 3, 328-335.	5.1	12
11	Flexoelectricity in Flexoionic Polymer Electrolyte Membranes: Effect of Thiosiloxane Modification on Poly(ethylene glycol) Diacrylate and Ionic Liquid Electrolyte Composites. ACS Applied Materials & Interfaces, 2020, 12, 16978-16986.	8.0	26
12	Mechanoelectrical Transduction of Polymer Electrolyte Membranes: Effect of Branched Networks. ACS Applied Materials & Interfaces, 2020, 12, 7518-7528.	8.0	23
13	Electroresponsive Ionic Liquid Crystal Elastomers. Macromolecular Rapid Communications, 2019, 40, e1900299.	3.9	45
14	Mechanoelectrical Conversion in Highly Ionic Conductive Solidâ€State Polymer Electrolyte Membranes. Macromolecular Materials and Engineering, 2019, 304, 1800777.	3.6	17
15	Effect of dangling side branching of polymer electrolyte membrane at the electrode interface on enhancement of ionic conductivity and capacity retention. Current Opinion in Chemical Engineering, 2018, 19, 124-130.	7.8	8
16	Stabilization of epoxidized soybean oilâ€plasticized poly(vinyl chloride) blends via thermal curing with genistein. Journal of Applied Polymer Science, 2018, 135, 46472.	2.6	11
17	Effect of Chain Architectures of Star-shaped Poly(ethylene glycol) Macromonomers on Enhancement of Thermal, Mechanical, and Electrochemical Performance of Polymer Electrolyte Membranes. Chemistry Letters, 2018, 47, 587-590.	1.3	8
18	Fully flexible lithium ion battery based on a flame retardant, solid-state polymer electrolyte membrane. Solid State Ionics, 2018, 320, 310-315.	2.7	21

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19	Effects of molecular complexation on phase equilibria in mixtures of urea/polyethylene glycol derivatives and electrochemical performance of urethane based polymer electrolyte membranes for solid-state lithium ion battery. Polymer, 2018, 159, 64-74.	3.8	9
20	Highly conductive, flexible polymer electrolyte membrane based on poly(ethylene glycol) diacrylate-co-thiosiloxane network. Solid State Ionics, 2018, 322, 61-68.	2.7	25
21	Role of molecular complexation in solid-liquid phase diagram of poly-ethylene oxide/urea mixture. Polymer, 2017, 116, 350-356.	3.8	8
22	Chemical and electrochemical stability enhancement of lithium bis(oxalato)borate (LiBOB)-modified solid polymer electrolyte membrane in lithium ion half-cells. Electrochimica Acta, 2017, 246, 123-134.	5.2	22
23	Fire retardant, superionic solid state polymer electrolyte membranes for lithium ion batteries. Current Opinion in Chemical Engineering, 2017, 15, 68-75.	7.8	34
24	Highly conductive solid polymer electrolyte membranes based on polyethylene glycol-bis-carbamate dimethacrylate networks. Journal of Power Sources, 2017, 359, 441-449.	7.8	32
25	Effect of Side-Chain Branching on Enhancement of Ionic Conductivity and Capacity Retention of a Solid Copolymer Electrolyte Membrane. Langmuir, 2017, 33, 13973-13981.	3.5	37
26	Effect of Plasticization on Ionic Conductivity Enhancement in Relation to Glass Transition Temperature of Crosslinked Polymer Electrolyte Membranes. Macromolecules, 2016, 49, 5637-5648.	4.8	149
27	Morphology and immunological activities of genistein-modified poly(ethylene glycol) diacrylate networks. Polymer, 2016, 105, 104-112.	3.8	3
28	Highly conductive solvent-free polymer electrolyte membrane for lithium-ion batteries: Effect of prepolymer molecular weight. Journal of Membrane Science, 2016, 498, 208-217.	8.2	103
29	In vitro investigation of antioxidant, antiâ€inflammatory, and antiplatelet adhesion properties of genisteinâ€modified poly(ethersulfone)/poly(vinylpyrrolidone) hemodialysis membranes. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2015, 103, 539-547.	3.4	23
30	Controlled Directional Crystallization of Oligothiophenes Using Zone Annealing of Preseeded Thin Films. ACS Applied Materials & Interfaces, 2015, 7, 23008-23014.	8.0	7
31	Crystal nucleation and motion in an undercooled binary solution. Current Opinion in Chemical Engineering, 2015, 7, 1-5.	7.8	3
32	Effects of Glucose on Cell Viability and Antioxidant and Anti-inflammatory Properties of Phytochemicals and Phytochemically Modified Membranes. Journal of Physical Chemistry B, 2014, 118, 11993-12001.	2.6	10
33	Highly conductive, completely amorphous polymer electrolyte membranes fabricated through photo-polymerization of poly(ethylene glycol diacrylate) in mixtures of solid plasticizer and lithium salt. Solid State Ionics, 2014, 254, 92-100.	2.7	56
34	Supramolecules impregnated proton electrolyte membranes. Current Opinion in Chemical Engineering, 2013, 2, 132-138.	7.8	2
35	Genistein-Modified Poly(ethylene oxide)/Poly(<scp>d</scp>,<scp>l</scp>-lactic acid) Electrospun Mats with Improved Antioxidant and Anti-inflammatory Properties. Biomacromolecules, 2013, 14, 1423-1433.	5.4	20
36	Impregnation of waterwheel supramolecules as proton carriers in Nafion-perfluorinated ionomer membranes. Journal of Materials Science, 2012, 47, 7269-7279.	3.7	5

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37	Solubilization of Genistein in Poly(oxyethylene) through Eutectic Crystal Melting. Journal of Physical Chemistry B, 2012, 116, 7795-7802.	2.6	11
38	Ionic Conductivity in Relation to Ternary Phase Diagram of Poly(ethylene oxide), Succinonitrile, and Lithium Bis(trifluoromethane)sulfonimide Blends. Macromolecules, 2012, 45, 6068-6077.	4.8	95
39	Phase equilibria and photopolymerisation-induced phase transitions of mesogenic diacrylate monomer and low molecular mass liquid crystal mixture. Liquid Crystals, 2012, 39, 745-754.	2.2	3
40	Conductive behavior in relation to domain morphology and phase diagram of Nafion/poly(vinylidene-co-trifluoroethylene) blends. Polymer, 2012, 53, 196-204.	3.8	19
41	In Vitro Evaluation of Antioxidant and Anti-Inflammatory Properties of Genistein-Modified Hemodialysis Membranes. Biomacromolecules, 2011, 12, 2447-2455.	5.4	29
42	Morphology Development in Relation to the Ternary Phase Diagram of Biodegradable PDLLA/PCL/PEO Blends. Macromolecular Chemistry and Physics, 2011, 212, 1379-1391.	2.2	16
43	Membrane morphology and phase diagrams of mangiferin modified poly(amide)/poly(vinyl pyrrolidone) blends. Journal of Membrane Science, 2011, 367, 240-248.	8.2	6
44	Effect oftrans-cisphotoisomerization on phase equilibria and phase transition of liquid-crystalline azobenzene chromophore and its blends with reactive mesogenic diacrylate. Physical Review E, 2011, 83, 031702.	2.1	11
45	Incorporation of Hyperbranched Supramolecules into Nafion Ionic Domains via Impregnation and In-Situ Photopolymerization. Polymers, 2011, 3, 2018-2038.	4.5	17
46	Swimming Photochromic Azobenzene Single Crystals in Triacrylate Solution. Journal of Physical Chemistry B, 2010, 114, 7791-7796.	2.6	13
47	Eutectic Mesophase Transitions and Induced Crystalline Phase in Mixtures of Hexagonal Columnar Liquid Crystal and Mesogenic Diacrylate. Journal of Physical Chemistry B, 2010, 114, 13031-13041.	2.6	3
48	Effects of photointensity gradient on directional crystal growth in blends of crystalline polymer and photoreactive monomer undergoing photopolymerization-induced phase transformation. Journal of Chemical Physics, 2009, 130, 174904.	3.0	3
49	Hydrogen bonding interactions and miscibility studies of poly(amide)/poly(vinyl pyrrolidone) blends containing mangiferin. Polymer, 2009, 50, 2885-2892.	3.8	17
50	Miscibility Characterization in Relation to Phase Morphology of Poly(ether sulfone)/Poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 222	2.6	13
51	Theory and computation of photopolymerization-induced phase transition and morphology development in blends of crystalline polymer and photoreactive monomer. Physical Review E, 2009, 79, 031802.	2.1	7
52	Photopolymerization-Induced Crystallization in Relation to Solidâ^'Liquid Phase Diagram of Poly(ethylene oxide)/Diacrylate Monomer Blends. Macromolecules, 2009, 42, 1180-1188.	4.8	6
53	Kinetics of photopolymerization-induced phase separation and morphology development in mixtures of a nematic liquid crystal and multifunctional acrylate. Polymer, 2008, 49, 534-545.	3.8	47
54	Crystallineâ^'Amorphous Interaction in Relation to the Phase Diagrams of Binary Polymer Blends Containing a Crystalline Constituent. Journal of Physical Chemistry B, 2008, 112, 6460-6466.	2.6	47

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55	Photopolymerization-induced crystallization and phase separation in poly(ethylene oxide)/triacrylate blends. Journal of Chemical Physics, 2008, 129, 244901.	3.0	7
56	Photopolymerization-induced directional crystal growth in reactive mixtures. Physical Review E, 2007, 75, 051804.	2.1	6
57	Morphology Development in Polymer Fibers undergoing Solvent/Nonâ€solvent Exchange. Macromolecular Symposia, 2007, 258, 170-178.	0.7	6
58	Experimental and Theoretical Investigations of Porous Structure Formation in Electrospun Fibers. Macromolecules, 2007, 40, 7689-7694.	4.8	169
59	Influence of Acrylate Arm Topology on Phase Diagrams of Mixtures of Multiarm Acrylate Photocurative Monomers and Nematic Liquid Crystals. Journal of Physical Chemistry B, 2007, 111, 5116-5123.	2.6	2
60	Influence of Photopolymerization Reaction Kinetics on Diffraction Efficiency of H-PDLC Undergoing Photopatterning Reaction in Mixtures of Acrylic Monomer/Nematic Liquid Crystals. Macromolecules, 2007, 40, 3190-3197.	4.8	41
61	Morphology development of main-chain liquid crystalline polymer fibers during solvent evaporation. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 429-435.	2.1	13
62	Dynamics and morphology development in electrospun fibers driven by concentration sweeps. Physics of Fluids, 2007, 19, 107106.	4.0	27
63	Porous fiber formation in polymer-solvent system undergoing solvent evaporation. Journal of Applied Physics, 2006, 100, 043512.	2.5	104
64	Phase Diagrams of Binary Crystallineâ^'Crystalline Polymer Blends. Journal of Physical Chemistry B, 2006, 110, 16059-16065.	2.6	47
65	Role of Crystalâ^'Amorphous Interaction in Phase Equilibria of Crystalâ^'Amorphous Polymer Blends. Journal of Physical Chemistry B, 2006, 110, 12728-12732.	2.6	48
66	Phase equilibria and phase separation dynamics in a polymer composite containing a main-chain liquid crystalline polymer. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 3621-3630.	2.1	5
67	Threeâ€dimensional switchable polymer photonic crystals via various optical wave interference techniques. Liquid Crystals, 2006, 33, 775-788.	2.2	7
68	Holographic polymer-dispersed liquid crystals and polymeric photonic crystals formed by holographic photolithography. Macromolecular Research, 2006, 14, 155-165.	2.4	7
69	Dynamics of Hollow Nanofiber Formation During Solidification Subjected to Solvent Evaporation. Macromolecular Theory and Simulations, 2006, 15, 87-93.	1.4	70
70	Breakup of spiral and concentric ringed spherulites in polymer crystallization. Physical Review E, 2006, 74, 011801.	2.1	14
71	Reaction induced phase separation in mixtures of multifunctional polybutadiene and epoxy. Polymer, 2005, 46, 12511-12522.	3.8	28
72	Collaborative studies of thermo-oxidative degradation of styreneâ€“isoprene diblock copolymer. Polymer, 2005, 46, 5580-5587.	3.8	6

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73	Theoretical Modeling of the Phase Separation Dynamics in Blends of Reactive Monomers. Macromolecular Theory and Simulations, 2005, 14, 312-324.	1.4	3
74	Effect of thermal transport on spatiotemporal emergence of lamellar branching morphology during polymer spherulitic growth. Journal of Chemical Physics, 2005, 123, 124908.	3.0	27
75	Phase-field modeling on morphological landscape of isotactic polystyrene single crystals. Physical Review E, 2005, 72, 011804.	2.1	77
76	Holographic Photopolymerization-Induced Phase Separation in Reference to the Phase Diagram of a Mixture of Photocurable Monomer and Nematic Liquid Crystal. Macromolecules, 2005, 38, 4844-4854.	4.8	43
77	Effect of carbon nanotubes on phase transitions of nematic liquid crystals. Liquid Crystals, 2005, 32, 815-821.	2.2	135
78	Role of curvature elasticity in sectorization and ripple formation during melt crystallization of polymer single crystals. Physical Review E, 2004, 69, 061802.	2.1	24
79	Spatio-temporal growth of broken spiral and concentric ringed spherulites in blends of poly(vinylidene fluoride) and ethylene-vinylacetate copolymers. Polymer, 2004, 45, 8485-8490.	3.8	9
80	Dynamics of spherulitic growth in blends of polypropylene isomers. Journal of Polymer Science, Part B: Polymer Physics, 2004, 42, 2892-2899.	2.1	13
81	Transport Controlled Pattern Photopolymerization in a Single-Component System. Macromolecules, 2004, 37, 3792-3798.	4.8	17
82	Effect of Chemical Modification on Macroscopic Phase Separation in Styreneâ˜Isoprene Block Copolymer Driven by Thermooxidative Reactions. Macromolecules, 2004, 37, 1484-1491.	4.8	4
83	Spinodal phase separation and isothermal crystallization behavior in blends of VDF/TrFE(75/25) copolymer and poly(1,4-butylene adipate) (I). Fibers and Polymers, 2003, 4, 188-194.	2.1	5
84	Theoretical simulation of thermally induced phase separation in a main-chain liquid-crystalline polymer solution. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 913-926.	2.1	1
85	Simulations of Microlens Arrays Formed by Pattern-Photopolymerization-Induced Phase Separation of Liquid Crystal/Monomer Mixtures. Macromolecules, 2001, 34, 9168-9172.	4.8	35
86	Reaction Kinetics of Thermooxidative Degradation in a Styrene-b-butadiene Diblock Copolymer. Macromolecules, 2001, 34, 645-649.	4.8	9
87	Theoretical Simulation on Dynamics of Macrophase Separation in Styrene-block-butadiene Copolymer Driven by Thermooxidative Reactions. Macromolecules, 2001, 34, 3790-3797.	4.8	3
88	Formation of Microporous Films via Pattern Photo-Polymerization Induced Phase Separation. Materials Research Society Symposia Proceedings, 2001, 709, 1.	0.1	0
89	Morphology development during polymerization-induced phase separation in a polymer dispersed liquid crystal. Polymer, 2001, 42, 9173-9185.	3.8	59
90	Effect of aromatic substitution on phase behavior of blends of halogenated polystyrene and conventional polystyrene. Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 1605-1615.	2.1	7

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91	Theoretical simulation of holographic polymer-dispersed liquid-crystal films via pattern photopolymerization-induced phase separation. Physical Review E, 2001, 63, 061802.	2.1	46
92	Spatiotemporal growth of faceted and curved single crystals. Physical Review E, 2000, 61, 4161-4170.	2.1	35
93	Theoretical investigation on dynamics of photopolymerization-induced phase separation and morphology development in nematic liquid crystal/polymer mixtures. Journal of Chemical Physics, 2000, 113, 6429-6436.	3.0	54
94	Macrophase Separation in Styreneâ^'Butadiene Block Copolymers Driven by Thermooxidative Reactions. Macromolecules, 2000, 33, 9568-9574.	4.8	13
95	Morphology Development and Dynamics of Photopolymerization-Induced Phase Separation in Mixtures of a Nematic Liquid Crystal and Photocuratives. Macromolecules, 2000, 33, 1416-1424.	4.8	43
96	Spatioâ€“temporal growth of nematic domains in liquid crystal polymer mixtures. Journal of Chemical Physics, 1999, 110, 5998-6006.	3.0	34
97	Miscibility, phase behavior, and Curie transition in blends of vinylidene fluoride/trifluoroethylene copolymer and Poly(1,4-butylene adipate). Polymer, 1999, 40, 6125-6134.	3.8	9
98	Phase Behavior of Mixtures of Low Molar Mass Nematic Liquid Crystal and in Situ Photo-Cross-Linked Polymer Network. Macromolecules, 1999, 32, 664-674.	4.8	43
99	Phase transitions, structure evolution, and mechanical properties of blends of two crystalline polymers: poly(vinylidene fluoride) and poly(butylene adipate). Polymer, 1998, 39, 4599-4608.	3.8	24
100	Phase Diagram and Photopolymerization Behavior of Mixtures of UV-Curable Multifunctional Monomer and Low Molar Mass Nematic Liquid Crystal. Macromolecules, 1998, 31, 6806-6812.	4.8	54
101	Spiral Crystal Growth in Blends of Poly(vinylidene fluoride) and Poly(vinyl acetate). Macromolecules, 1998, 31, 5823-5829.	4.8	61
102	Phase equilibria of a nematic and smectic-A mixture. Journal of Chemical Physics, 1998, 108, 3249-3255.	3.0	20
103	Phase diagrams of a binary smectic-A mixture. Journal of Chemical Physics, 1997, 107, 6859-6866.	3.0	27
104	Miscible Blends of Two Crystalline Polymers. 3. Liquidâ^'Liquid Phase Separation in Blends of Poly(vinylidene fluoride)/Poly(butylene adipate). Macromolecules, 1996, 29, 91-96.	4.8	52
105	Phase equilibria of a polymerâ€“smectic-liquid-crystal mixture. Physical Review E, 1996, 53, 3618-3622.	2.1	37
106	Phase Diagrams and Phase Separation Dynamics in Mixtures of Side-Chain Liquid Crystalline Polymers and Low Molar Mass Liquid Crystals. Macromolecules, 1996, 29, 1051-1058.	4.8	42
107	Nucleation Initiated Spinodal Decomposition in a Polymerizing System. Physical Review Letters, 1996, 76, 3746-3749.	7.8	84
108	Equilibrium phase behavior of nematic mixtures. Journal of Chemical Physics, 1995, 103, 7471-7481.	3.0	93

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109	Spinodals in a polymer dispersed liquid crystal. Journal of Chemical Physics, 1995, 102, 556-562.	3.0	142
110	Scaling analysis in the phase separation of poly(p-phenylene benzobisthiazole)Nylon 66 rigid-rod molecular composites. Polymer, 1989, 30, 1591-1595.	3.8	33
111	Kinetics of phase separation by spinodal decomposition in a liquid-crystalline polymer solution. Liquid Crystals, 1988, 3, 631-644.	2.2	26
112	Underwater stress relaxation studies of nafion (perfluorosulfonate) ionomer membranes. Journal of Polymer Science, Polymer Symposia, 1984, 71, 203-219.	0.1	19
113	Electrorheological effects in ionomer membranes. I. The nafion polymers. Journal of Polymer Science, Polymer Letters Edition, 1983, 21, 589-592.	0.4	1
114	Dynamic mechanical studies of partially ionized and neutralized Nafion polymers. Canadian Journal of Chemistry, 1983, 61, 680-687.	1.1	71
115	Mechanical Relaxations in Perfluorosulfonate Ionomer Membranes. ACS Symposium Series, 1982, , 79-110.	0.5	30
116	Template Crystallization of Ultrahigh Molecular Weight Polypropylene Induced by Chain Orientation of Cocrystallized Ultrahigh Molecular Weight Polyethylene. , 0, , 577-595.		0
117	Morphological Phase Diagrams of Blends of Polypropylene Isomers with Poly(Ethyleneâ€“Octene) Copolymer. , 0, , 157-197.		0
118	Phase Field Approach to Thermodynamics and Dynamics of Phase Separation and Crystallization of Polypropylene Isomers and Ethyleneâ€“Propyleneâ€“Diene Terpolymer Blends. , 0, , 473-497.		0