Alamgir Karim

List of Publications by Year in descending order

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201 papers	9,831 citations	34100 52 h-index	42393 92 g-index
206 all docs	206 docs citations	206 times ranked	10809 citing authors

#	Article	IF	Citations
1	Nanoscale Strategies to Enhance the Energy Storage Capacity of Polymeric Dielectric Capacitors: Review of Recent Advances. Polymer Reviews, 2022, 62, 211-260.	10.9	50
2	CaSnO3 coupled g-C3N4 S-scheme heterostructure photocatalyst for efficient pollutant degradation. Diamond and Related Materials, 2022, 124, 108873.	3.9	15
3	Drawnâ€onâ€Skin Sensors from Fully Biocompatible Inks toward Highâ€Quality Electrophysiology. Small, 2022, 18, .	10.0	12
4	Soft-Shear-Aligned Vertically Oriented Lamellar Block Copolymers for Template-Free Sub-10 nm Patterning and Hybrid Nanostructures. ACS Applied Materials & Interfaces, 2022, 14, 12824-12835.	8.0	9
5	Advanced triboelectric nanogenerators based on low-dimension carbon materials: A review. Carbon, 2022, 194, 81-103.	10.3	37
6	In situ synthesized amphiphilic polysulfoneâ€poly(ethyleneâ€glycol) block copolymer/silver nanocomposite for separating oil/water emulsion. Journal of Applied Polymer Science, 2022, 139, .	2.6	1
7	Allâ€Polymer Based Stretchable Rubbery Electronics and Sensors. Advanced Functional Materials, 2022, 32, .	14.9	14
8	Allâ€Polymer Based Stretchable Rubbery Electronics and Sensors (Adv. Funct. Mater. 15/2022). Advanced Functional Materials, 2022, 32, .	14.9	0
9	Enhanced Dielectric Strength and Capacitive Energy Density of Cyclic Polystyrene Films. ACS Polymers Au, 2022, 2, 324-332.	4.1	12
10	Heterogeneous Bimetallic Phosphide Ni₂Pâ€Fe₂P as an Efficient Bifunctional Catalyst for Water/Seawater Splitting. Advanced Functional Materials, 2021, 31, .	14.9	385
11	Alignment frustration in block copolymer films with block copolymer grafted <scp>TiO₂</scp> nanoparticles under <scp>softâ€shear</scp> cold zone annealing. Polymers for Advanced Technologies, 2021, 32, 2052-2060.	3.2	6
12	Observation of General Entropyâ€“Enthalpy Compensation Effect in the Relaxation of Wrinkled Polymer Nanocomposite Films. Nano Letters, 2021, 21, 1274-1281.	9.1	12
13	Multifunctional Oil Absorption with Macroporous Polystyrene Fibers Incorporating Silver-Doped ZnO. ACS Omega, 2021, 6, 8081-8093.	3.5	11
14	Recent Advances in the Synthesis of Polymer-Grafted Low-K and High-K Nanoparticles for Dielectric and Electronic Applications. Molecules, 2021, 26, 2942.	3.8	13
15	Development of photovoltaic solar cells based on heterostructure of layered materials: challenges and opportunities. Emergent Materials, 2021, 4, 881-900.	5.7	6
16	Late Stage Domain Coarsening Dynamics of Lamellar Block Copolymers. ACS Macro Letters, 2021, 10, 727-731.	4.8	5
17	Ionic Liquid Enhanced Parallel Lamellar Ordering in Block Copolymer Films. Macromolecules, 2021, 54, 4531-4545.	4.8	11
18	Control of Phase Morphology of Binary Polymer Grafted Nanoparticle Blend Films via Direct Immersion Annealing. ACS Nano, 2021, 15, 12042-12056.	14.6	17

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19	Solvent Processing and Ionic Liquid-Enabled Long-Range Vertical Ordering in Block Copolymer Films with Enhanced Film Stability. Macromolecules, 2021, 54, 8512-8525.	4.8	6
20	Scalable inter-diffused zwitterionic polyurethanes for durable antibacterial coatings. Chemical Engineering Journal, 2021, 422, 130085.	12.7	30
21	Recent developments in the synthesis of chemically modified nanomaterials for use in dielectric and electronics applications. Nanotechnology, 2021, 32, 142004.	2.6	30
22	Ultra-Fast Vertical Ordering of Lamellar Block Copolymer Films on Unmodified Substrates. Macromolecules, 2021, 54, 1564-1573.	4.8	16
23	Enhanced resistance to decay of imprinted nanopatterns in thin films by bare nanoparticles compared to polymer-grafted nanoparticles. Nanoscale Advances, 2021, 3, 5348-5354.	4.6	3
24	Networked Zwitterionic Durable Antibacterial Surfaces. ACS Applied Bio Materials, 2020, 3, 911-919.	4.6	25
25	White Graphene-Cobalt Oxide Hybrid Filler Reinforced Polystyrene Nanofibers for Selective Oil Absorption. Polymers, 2020, 12, 4.	4.5	23
26	High broadband photoconductivity of few-layered MoS2 field-effect transistors measured using multi-terminal methods: effects of contact resistance. Nanoscale, 2020, 12, 22904-22916.	5.6	5
27	Nanosized Organo-Silica Particles with â€œBuilt-Inâ€•Surface-Initiated Atom Transfer Radical Polymerization Capability as a Platform for Brush Particle Synthesis. ACS Macro Letters, 2020, 9, 1218-1223.	4.8	10
28	Vertically oriented nanoporous block copolymer membranes for oil/water separation and filtration. Soft Matter, 2020, 16, 9648-9654.	2.7	26
29	Nanoscale Pattern Decay Monitored Line by Line via In Situ Heated Atomic Force Microscopy. ACS Applied Materials & Interfaces, 2020, 12, 15943-15950.	8.0	4
30	Effect of Molecular Weight and Layer Thickness on the Dielectric Breakdown Strength of Neat and Homopolymer Swollen Lamellar Block Copolymer Films. ACS Applied Polymer Materials, 2020, 2, 3072-3083.	4.4	20
31	Designing Flexible and Porous Fibrous Membranes for Oil Water Separationâ€”A Review of Recent Developments. Polymer Reviews, 2020, 60, 671-716.	10.9	66
32	Facile synthesis of nanoparticle-stacked tungsten-doped nickel iron layered double hydroxide nanosheets for boosting oxygen evolution reaction. Journal of Materials Chemistry A, 2020, 8, 8096-8103.	10.3	73
33	Directed Self-assembly of Block Copolymers with Dynamic Thermal Gradients. , 2020, , 373-409.		6
34	Thermodynamics, Morphology, and Mechanisms Relevant to P3HT:PCBM Organic Photovoltaic Blend Film Properties and Devices. , 2020, , 249-302.		0
35	Natural and Synthetic Routes to Structural Color. , 2020, , 339-371.		0
36	Tuning the Relaxation of Imprinted Polymer Films with Polymer-Grafted Nanoparticles. Microscopy and Microanalysis, 2019, 25, 2238-2239.	0.4	1

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37	Aligned Morphologies in Near-Edge Regions of Block Copolymer Thin Films. Macromolecules, 2019, 52, 7224-7233.	4.8	11
38	Nanoimprint Directed Assembly of Associating Polymer-Grafted Nanoparticles for Polymer Thin Films with Enhanced Stability. ACS Applied Polymer Materials, 2019, 1, 3242-3252.	4.4	9
39	Block copolymer ordering on elastomeric substrates of tunable surface energy. Emergent Materials, 2019, 2, 11-22.	5.7	13
40	Dynamical Correlations for Statistical Copolymers from High-Throughput Broad-Band Dielectric Spectroscopy. ACS Combinatorial Science, 2019, 21, 276-299.	3.8	5
41	Comparative solvent quality dependent crystallization in solvent vapor annealing of P3HT:PCBM thin films by in-situ GIWAXS. Polymer, 2019, 165, 101-111.	3.8	7
42	Natural polymer based composite membranes for water purification: a review. Polymer-Plastics Technology and Materials, 2019, 58, 1295-1310.	1.3	22
43	Capillary Force Lithography Pattern-Directed Self-Assembly (CFL-PDSA) of Phase-Separating Polymer Blend Thin Films. ACS Omega, 2018, 3, 2161-2168.	3.5	16
44	Structure, nanomechanics, and dynamics of dispersed surfactantâ€free clay nanocomposite films. Polymer Engineering and Science, 2018, 58, 1285-1295.	3.1	2
45	Controlling nanoparticle crystallinity and surface enrichment in polymer (P3HT)/Nanoparticle(PCBM) blend films with tunable soft confinement. Polymer, 2018, 136, 37-46.	3.8	4
46	Hierarchically Patterned Elastomeric and Thermoplastic Polymer Films through Nanoimprinting and Ultraviolet Light Exposure. ACS Omega, 2018, 3, 15426-15434.	3.5	10
47	Tuning the Relaxation of Nanopatterned Polymer Films with Polymer-Grafted Nanoparticles: Observation of Entropyâ€“Enthalpy Compensation. Nano Letters, 2018, 18, 7441-7447.	9.1	23
48	Solvent and Substrate Induced Synergistic Ordering in Block Copolymer Thin Films. Macromolecules, 2018, 51, 7186-7196.	4.8	9
49	Enhanced thermoelectric properties of two-dimensional conjugated polymers. Emergent Materials, 2018, 1, 67-76.	5.7	20
50	Poly(styrene-block-methylmethacrylate) derived electrospun mesoporous nanofibers. Surfaces and Interfaces, 2018, 12, 168-178.	3.0	3
51	Nanoclay compatibilization of phase separated polysulfone/polyimide films for oxygen barrier. Applied Clay Science, 2017, 137, 123-134.	5.2	30
52	Entropy-driven segregation of polymer-grafted nanoparticles under confinement. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2462-2467.	7.1	38
53	Facile Assembly of Aligned Magnetic Nanoparticle Chains in Polymer Nanocomposite Films by Magnetic Flow Coating. ACS Applied Materials & Interfaces, 2017, 9, 11290-11298.	8.0	24
54	In-situ orientation and crystal growth kinetics of P3HT in drop cast P3HT:PCBM films. Polymer, 2017, 113, 200-213.	3.8	8

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55	Dual Imprinted Polymer Thin Films via Pattern Directed Self-Organization. ACS Applied Materials & Interfaces, 2017, 9, 20928-20937.	8.0	5
56	Directed ordering of phase separated domains and dewetting of thin polymer blend films on a topographically patterned substrate. Soft Matter, 2017, 13, 4709-4719.	2.7	23
57	Specular and Diffuse Reflectance of Phaseâ€Separated Polymer Blend Films. Macromolecular Rapid Communications, 2017, 38, 1600803.	3.9	5
58	Chain Conformation near the Buried Interface in Nanoparticle-Stabilized Polymer Thin Films. Macromolecules, 2017, 50, 7657-7665.	4.8	26
59	Film Confinement Induced â€œJump-Percolationâ€•Wetting Transition in Amphiphilic Block Copolymer Films. ACS Applied Materials & Interfaces, 2017, 9, 35349-35359.	8.0	2
60	Through-Thickness Vertically Ordered Lamellar Block Copolymer Thin Films on Unmodified Quartz with Cold Zone Annealing. Nano Letters, 2017, 17, 7814-7823.	9.1	18
61	Flexible Pressure Sensor Based on PVDF Nanocomposites Containing Reduced Graphene Oxide-Titania Hybrid Nanolayers. Polymers, 2017, 9, 33.	4.5	108
62	Synergistic Effect of Functionalized Carbon Nanotubes and Micronâ€Sized Rubber Particles on the Mechanical Properties of Epoxy Resin. Macromolecular Materials and Engineering, 2016, 301, 542-548.	3.6	14
63	Polymer ligandâ€“induced autonomous sorting and reversible phase separation in binary particle blends. Science Advances, 2016, 2, e1601484.	10.3	30
64	Pattern-Directed Phase Separation of Polymer-Grafted Nanoparticles in a Homopolymer Matrix. Macromolecules, 2016, 49, 3965-3974.	4.8	21
65	Synthesis of Nanoparticle Assemblies: general discussion. Faraday Discussions, 2016, 186, 123-152.	3.2	0
66	Applications to Soft Matter: general discussion. Faraday Discussions, 2016, 186, 503-527.	3.2	1
67	Shape Memory of Microscale and Nanoscale Imprinted Patterns on a Supramolecular Polymer Compound. Macromolecular Rapid Communications, 2016, 37, 1932-1938.	3.9	6
68	Reduced Domain Size and Interfacial Width in Fast Ordering Nanofilled Block Copolymer Films by Direct Immersion Annealing. Macromolecules, 2016, 49, 8563-8571.	4.8	26
69	Ordering Pathway of Block Copolymers under Dynamic Thermal Gradients Studied by in Situ GISAXS. Macromolecules, 2016, 49, 8633-8642.	4.8	34
70	Harnessing Structureâ€“Property Relationshipsfor Poly(alkyl thiophene)â€“Fullerene Derivative Thin Filmsto Optimize Performance in Photovoltaic Devices. Advanced Functional Materials, 2016, 26, 1908-1920.	14.9	7
71	Vertical orientation of solvent cast nanofilled PS-b-PEO block copolymer thin films at high nanoparticle loading. Polymer, 2016, 82, 22-31.	3.8	4
72	Directed Self-Assembly of Block Copolymers for High Breakdown Strength Polymer Film Capacitors. ACS Applied Materials & Interfaces, 2016, 8, 7966-7976.	8.0	65

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73	Soft-shear induced phase-separated nanoparticle string-structures in polymer thin films. Faraday Discussions, 2016, 186, 31-43.	3.2	6
74	Antimicrobial and cell viability measurement of bovine serum albumin capped silver nanoparticles (Ag/BSA) loaded collagen immobilized poly(3-hydroxybutyrate-co-3-hydroxyvalerate) (PHBV) film. Journal of Colloid and Interface Science, 2016, 465, 140-148.	9.4	23
75	Influence of graphene oxide on mechanical, morphological, barrier, and electrical properties of polymer membranes. Arabian Journal of Chemistry, 2016, 9, 274-286.	4.9	98
76	What do we still need to understand to commercialize cellulose nanomaterials?^{â€}. Green Materials, 2015, 3, 53-58.	2.1	12
77	Orientation control in nanoparticle filled block copolymer cold zone annealed films. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 604-614.	2.1	13
78	Thermally-induced transition of lamellae orientation in block-copolymer films on â€˜neutralâ€™ nanoparticle-coated substrates. Soft Matter, 2015, 11, 5154-5167.	2.7	25
79	Synthesis of highly dispersed, block copolymerâ€grafted TiO 2 nanoparticles within neat block copolymer films. Journal of Polymer Science Part A, 2015, 53, 468-478.	2.3	8
80	Interplay of Substrate Surface Energy and Nanoparticle Concentration in Suppressing Polymer Thin Film Dewetting. Macromolecules, 2015, 48, 373-382.	4.8	53
81	Efficiencies of perovskite hybrid solar cells influenced by film thickness and morphology of CH3NH3PbI3â''xClx layer. Organic Electronics, 2015, 21, 19-26.	2.6	56
82	Ultrasensitive solution-processed perovskite hybrid photodetectors. Journal of Materials Chemistry C, 2015, 3, 6600-6606.	5.5	104
83	Thermo-cross-linkable fullerene for long-term stability of photovoltaic devices. Journal of Materials Chemistry A, 2015, 3, 21856-21863.	10.3	30
84	Controlled Directional Crystallization of Oligothiophenes Using Zone Annealing of Preseeded Thin Films. ACS Applied Materials & Interfaces, 2015, 7, 23008-23014.	8.0	7
85	Enhanced vertical ordering of block copolymer films by tuning molecular mass. RSC Advances, 2015, 5, 32307-32318.	3.6	12
86	Direct Immersion Annealing of Thin Block Copolymer Films. ACS Applied Materials & Interfaces, 2015, 7, 21639-21645.	8.0	48
87	Extending Dynamic Range of Block Copolymer Ordering with Rotational Cold Zone Annealing (RCZA) and Ionic Liquids. Macromolecules, 2015, 48, 7567-7573.	4.8	17
88	Highly Crystalline Films of PCPDTBT with Branched Side Chains by Solvent Vapor Crystallization: Influence on Optoâ€Electronic Properties. Advanced Materials, 2015, 27, 1223-1228.	21.0	51
89	Structural Control in Block Copolymer-Templated Nanoporous Carbon Films. ACS Symposium Series, 2014, , 35-60.	0.5	0
90	Room-Temperature, Solution-Processed MoO_x Thin Film as a Hole Extraction Layer to Substitute PEDOT/PSS in Polymer Solar Cells. ACS Photonics, 2014, 1, 87-90.	6.6	20

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91	Mesoporous Carbonâ€“Vanadium Oxide Films by Resol-Assisted, Triblock Copolymer-Templated Cooperative Self-Assembly. ACS Applied Materials & Interfaces, 2014, 6, 19288-19298.	8.0	15
92	Suppression of target patterns in domain aligned cold-zone annealed block copolymer films with immobilized film-spanning nanoparticles. Soft Matter, 2014, 10, 3656.	2.7	6
93	Dispersion Morphology and Correlation to Moduli Using Buckling Metrology in Clayâ€“Biopolymer Nanocomposite Thin Films. ACS Applied Materials & Interfaces, 2014, 6, 13378-13388.	8.0	10
94	Dopamine-Based Copper-Free Click Kit for Efficient Surface Functionalization. ACS Macro Letters, 2014, 3, 1084-1087.	4.8	7
95	Enhanced Performance of Polymer Solar Cells using PEDOT:PSS Doped with Fe₃O₄ Magnetic Nanoparticles Aligned by an External Magnetostatic Field as an Anode Buffer Layer. ACS Applied Materials & Interfaces, 2014, 6, 13201-13208.	8.0	30
96	Design parameters of nanocomposite matrices deposited on silicon substrates, in the optical domain. , 2014, , .		0
97	Anisotropic Mechanical Properties of Aligned Polystyrene-block-polydimethylsiloxane Thin Films. Macromolecules, 2013, 46, 8608-8615.	4.8	27
98	Highly Aligned Block Copolymer Thin Films by Synergistic Coupling of Static Graphoepitaxy and Dynamic Thermal Annealing Fields. ACS Macro Letters, 2013, 2, 346-350.	4.8	24
99	Fine-Tuning of Fluorinated Thieno[3,4-b]thiophene Copolymer for Efficient Polymer Solar Cells. Journal of Physical Chemistry C, 2013, 117, 4358-4363.	3.1	38
100	2-D gold nanoparticle arrays from thermally directed self-assembly of peptide-derivatized block copolymers. Soft Matter, 2013, 9, 8023.	2.7	6
101	2.5D constructs for characterizing phase separated polymer blend surface morphology in tissue engineering scaffolds. Journal of Biomedical Materials Research - Part A, 2013, 101A, 1502-1510.	4.0	6
102	Capillary Wave Confinement-Induced Stabilization of Polymer Films. ACS Applied Materials & Interfaces, 2013, 5, 4006-4010.	8.0	13
103	Facile control of long range orientation in mesoporous carbon films with thermal zone annealing velocity. Nanoscale, 2013, 5, 12440.	5.6	21
104	Unidirectional self-assembly of soft templated mesoporous carbons by zone annealing. Nanoscale, 2013, 5, 7928.	5.6	27
105	Spinodal clustering induced dewetting and non-monotonic stabilization of polymer blend films at high nanofiller concentrations. Polymer, 2013, 54, 6206-6209.	3.8	5
106	Polymer Chain Dynamics in Intercalated Poly(Îµ-caprolactone)/Nanoplatelet Blends. Macromolecules, 2013, 46, 2235-2240.	4.8	16
107	Dispersionâ€“orientation effects of fulleropyrrolidine in zone annealed block-copolymer films toward optimizing OPV interfaces. Polymer, 2013, 54, 1415-1424.	3.8	11
108	Large-Scale Roll-to-Roll Fabrication of Vertically Oriented Block Copolymer Thin Films. ACS Nano, 2013, 7, 5291-5299.	14.6	55

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109	Solution-Processed Fe₃O₄ Magnetic Nanoparticle Thin Film Aligned by an External Magnetostatic Field as a Hole Extraction Layer for Polymer Solar Cells. ACS Applied Materials & Interfaces, 2013, 5, 10325-10330.	8.0	51
110	Nanoparticleâ€Driven Orientation Transition and Softâ€Shear Alignment in Diblock Copolymer Films via Dynamic Thermal Gradient Field. Macromolecular Rapid Communications, 2013, 34, 1642-1647.	3.9	24
111	Multimodal optical studies of single and clustered colloidal quantum dots for the long-term optical property evaluation of quantum dot-based molecular imaging phantoms. Biomedical Optics Express, 2012, 3, 1312.	2.9	17
112	Combinatorial Block Copolymer Ordering on Tunable Rough Substrates. Macromolecules, 2012, 45, 4303-4314.	4.8	19
113	From finite-amplitude equilibrium structures to dewetting in thin polymer films on chemically patterned substrates. Soft Matter, 2012, 8, 10394.	2.7	15
114	Tuning Molecular Relaxation for Vertical Orientation in Cylindrical Block Copolymer Films via Sharp Dynamic Zone Annealing. Macromolecules, 2012, 45, 7107-7117.	4.8	78
115	Fullerene Nanoparticles as Molecular Surfactant for Dewetting of Phase-Separating Polymer Blend Films. Macromolecules, 2012, 45, 4716-4722.	4.8	12
116	Dynamic Thermal Field-Induced Gradient Soft-Shear for Highly Oriented Block Copolymer Thin Films. ACS Nano, 2012, 6, 10335-10342.	14.6	124
117	Imaging magnetic flux lines with iron oxide nanoparticles using a â€œfossilized liquid assemblyâ€• Soft Matter, 2011, 7, 5756.	2.7	4
118	Using block copolymer self-assembly to imprint the crystallization of polymer dendrites. Soft Matter, 2011, 7, 8969.	2.7	2
119	Influence of C₆₀ Nanoparticles on the Stability and Morphology of Miscible Polymer Blend Films. Macromolecules, 2011, 44, 8136-8142.	4.8	25
120	Quantification of the binding affinity of a specific hydroxyapatite binding peptide. Biomaterials, 2010, 31, 2955-2963.	11.4	56
121	Observation of a characteristic length scale in the healing of glassy polymer interfaces. Soft Matter, 2010, 6, 2153.	2.7	11
122	Solvent Retention in Thin Spin-Coated Polystyrene and Poly(methyl methacrylate) Homopolymer Films Studied By Neutron Reflectometry. Macromolecules, 2010, 43, 1117-1123.	4.8	48
123	Characterization of Non-Equilibrium Nanoparticle Adsorption on a Model Biological Substrate. Langmuir, 2010, 26, 4822-4830.	3.5	15
124	Interaction of Gold Nanoparticles with Common Human Blood Proteins. ACS Nano, 2010, 4, 365-379.	14.6	863
125	Thermally Reversible Surface Morphology Transition in Thin Diblock Copolymer Films. ACS Nano, 2010, 4, 3653-3660.	14.6	13
126	Surface Effects on the Thin Film Morphology of Block Copolymers with Bulk Orderâ^'Order Transitions. Macromolecules, 2010, 43, 3406-3414.	4.8	26

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127	Evolution of block-copolymer order through a moving thermal zone. Soft Matter, 2010, 6, 92-99.	2.7	65
128	SPR imaging study of DNA wrapped single wall carbon nanotube (ssDNA-SWCNT) adsorption on a model biological (collagen) substrate. Soft Matter, 2010, 6, 5581.	2.7	9
129	Direct observation of interfacial C₆₀cluster formation in polystyreneâ€“C₆₀nanocomposite films. Nanotechnology, 2009, 20, 105705.	2.6	11
130	Effect of fluorosurfactant on capillary instabilities in nanoimprinted polymer patterns. Journal of Polymer Science, Part B: Polymer Physics, 2009, 47, 2591-2600.	2.1	10
131	Target Patterns Induced by Fixed Nanoparticles in Block Copolymer Films. ACS Nano, 2009, 3, 2115-2120.	14.6	21
132	Langmuir Adsorption Study of the Interaction of CdSe/ZnS Quantum Dots with Model Substrates: Influence of Substrate Surface Chemistry and pH. Langmuir, 2009, 25, 443-450.	3.5	67
133	Dielectric Spectroscopy Investigation of Relaxation in C₆₀â^'Polyisoprene Nanocomposites. Macromolecules, 2009, 42, 3201-3206.	4.8	60
134	Competition between crystallization and dewetting fronts in thin polymer films. Soft Matter, 2009, 5, 562-567.	2.7	18
135	Disordered nanoparticle interfaces for directed self-assembly. Soft Matter, 2009, 5, 622-628.	2.7	35
136	Capillary instability in nanoimprinted polymer films. Soft Matter, 2009, 5, 2913.	2.7	24
137	Interfacial fluctuations in an ideal block copolymer resist. Soft Matter, 2009, 5, 4266.	2.7	15
138	Selfâ€assembly of polymerâ€coated ferromagnetic nanoparticles into mesoscopic polymer chains. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 2267-2277.	2.1	53
139	Nanoimprint Lithography and the Role of Viscoelasticity in the Generation of Residual Stress in Model Polystyrene Patterns. Advanced Functional Materials, 2008, 18, 1854-1862.	14.9	30
140	Selfâ€Sealing of Nanoporous Low Dielectric Constant Patterns Fabricated by Nanoimprint Lithography. Advanced Materials, 2008, 20, 1934-1939.	21.0	16
141	Surface Morphology Diagram for Cylinder-Forming Block Copolymer Thin Films. ACS Nano, 2008, 2, 2331-2341.	14.6	82
142	Nanoscale thermalâ€“mechanical probe determination of â€˜softening transitionsâ€™ in thin polymer films. Nanotechnology, 2008, 19, 495703.	2.6	24
143	Block-Copolymer Ordering with a Spatiotemporally Heterogeneous Mobility. Physical Review Letters, 2007, 99, 216101.	7.8	31
144	Pattern-directed to isotropic dewetting transition in polymer films on micropatterned surfaces with differential surface energy contrast. Soft Matter, 2007, 3, 613.	2.7	67

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145	Effect of Temperature on the Morphology and Kinetics of Surface Pattern Formation in Thin Block Copolymer Films. Langmuir, 2007, 23, 12380-12387.	3.5	19
146	Orientational Order in Block Copolymer Films Zone Annealed below the Orderâ˜Disorder Transition Temperature. Nano Letters, 2007, 7, 2789-2794.	9.1	169
147	Crystallization of Poly(ethylene oxide) Patterned by Nanoimprint Lithography. Macromolecules, 2007, 40, 2968-2970.	4.8	21
148	Environment-Controlled Spin Coating To Rapidly Orient Microdomains in Thin Block Copolymer Films. Macromolecules, 2007, 40, 4102-4105.	4.8	47
149	Relaxation Behavior of Polymer Structures Fabricated by Nanoimprint Lithography. ACS Nano, 2007, 1, 84-92.	14.6	52
150	Field Induced Formation of Mesoscopic Polymer Chains from Functional Ferromagnetic Colloids. Journal of the American Chemical Society, 2007, 129, 6291-6297.	13.7	72
151	Photocurable Oil/Water Interfaces as a Universal Platform for 2-D Self-Assemblyâ€. Langmuir, 2007, 23, 3530-3537.	3.5	31
152	UVO-Tunable Superhydrophobic to Superhydrophilic Wetting Transition on Biomimetic Nanostructured Surfaces. Langmuir, 2007, 23, 2608-2614.	3.5	69
153	Quantum Mazes: Luminescent Labyrinthine Semiconductor Nanocrystals Having a Narrow Emission Spectrum. ACS Nano, 2007, 1, 337-347.	14.6	10
154	Spontaneous Formation of Vesicles of Diblock Copolymer EO6BO11in Water:Â A SANS Studyâ€. Journal of Physical Chemistry B, 2006, 110, 62-67.	2.6	18
155	Generation of Hierarchical Topologies from Photocrosslinkable, Particle-Stabilized Emulsions. Macromolecular Rapid Communications, 2006, 27, 1212-1216.	3.9	16
156	Combinatorial approach to the edge delamination test for thin film reliabilityâ€"adaptability and variability. Thin Solid Films, 2005, 476, 379-385.	1.8	15
157	Phase behavior of block co-poly(ethylene oxideâ€"butylene oxide), E18B9 in water, by small angle neutron scattering. Journal of Colloid and Interface Science, 2005, 288, 155-165.	9.4	19
158	Sinusoidal phase grating created by a tunably buckled surface. Applied Physics Letters, 2004, 85, 4016-4018.	3.3	275
159	A buckling-based metrology for measuring the elastic moduli of polymeric thin films. Nature Materials, 2004, 3, 545-550.	27.5	1,197
160	Combinatorial Approach to Characterizing Epoxy Curing. Macromolecular Rapid Communications, 2004, 25, 259-263.	3.9	36
161	Scattering Measurements for High Throughput Materials Science Research. Macromolecular Rapid Communications, 2004, 25, 307-311.	3.9	7
162	Phase Behavior of PSâ˜PVME Nanocomposites. Macromolecules, 2004, 37, 507-515.	4.8	73

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163	Combinatorial characterization of cell interactions with polymer surfaces. Journal of Biomedical Materials Research - Part A, 2003, 66A, 483-490.	4.0	151
164	Combinatorial Mapping of Surface Energy Effects on Diblock Copolymer Thin Film Ordering. Macromolecular Rapid Communications, 2003, 24, 131-135.	3.9	75
165	Combinatorial investigations of interfacial failure. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 883-891.	2.1	15
166	Combinatorial Measurements of Crystallization Growth Rate and Morphology in Thin Films of Isotactic Polystyrene. Langmuir, 2003, 19, 3935-3940.	3.5	85
167	Influence of Layered Silicates on the Phase-Separated Morphology of PSâ^'PVME Blends. Macromolecules, 2003, 36, 7256-7267.	4.8	116
168	Combinatorial Approach for Studying the Effects of 4-Biphenyl Carboxylic Acid on Polypropylene Films. Langmuir, 2003, 19, 6582-6585.	3.5	12
169	Combinatorial Edge Delamination Test for Thin Film Adhesion --- Concept, Procedure, Results. European Structural Integrity Society, 2003, 32, 365-371.	0.1	0
170	Growth pulsations in symmetric dendritic crystallization in thin polymer blend films. Physical Review E, 2002, 65, 051606.	2.1	71
171	Combinatorial Methods for Investigations in Polymer Materials Science. MRS Bulletin, 2002, 27, 330-335.	3.5	103
172	Organization of Hybrid Dendrimerâ^'Inorganic Nanoparticles on Amphiphilic Surfaces. Macromolecules, 2002, 35, 4852-4854.	4.8	35
173	Pattern-Directed Dewetting of Ultrathin Polymer Films. Langmuir, 2002, 18, 7041-7048.	3.5	175
174	Phase Diagram of a Nearly Isorefractive Polyolefin Blend. Macromolecules, 2002, 35, 1072-1078.	4.8	79
175	Co-extrusion of biocompatible polymers for scaffolds with co-continuous morphology. Journal of Biomedical Materials Research Part B, 2002, 60, 20-29.	3.1	93
176	Multifunctional ToF-SIMS: combinatorial mapping of gradient energy substrates. Applied Surface Science, 2002, 200, 150-164.	6.1	85
177	Combinatorial methods for polymer materials science: Phase behavior of nanocomposite blend films. Polymer Engineering and Science, 2002, 42, 1836-1840.	3.1	34
178	The Critical Role of Solvent Evaporation on the Roughness of Spin-Cast Polymer Films. Macromolecules, 2001, 34, 4669-4672.	4.8	230
179	High-throughput characterization of pattern formation in symmetric diblock copolymer films. Journal of Polymer Science, Part B: Polymer Physics, 2001, 39, 2141-2158.	2.1	72
180	Influence of nanoparticles and polymer branching on the dewetting of polymer films. Advances in Colloid and Interface Science, 2001, 94, 83-104.	14.7	46

#	Article	IF	Citations
181	Combinatorial Study of Surface Pattern Formation in Thin Block Copolymer Films. Physical Review Letters, 2001, 87, 015503.	7.8	112
182	High-Throughput Measurement of Polymer Blend Phase Behavior. Macromolecules, 2000, 33, 5760-5762.	4.8	178
183	Suppression of Dewetting in Nanoparticle-Filled Polymer Films. Macromolecules, 2000, 33, 4177-4185.	4.8	177
184	Combinatorial Materials Science for Polymer Thin-Film Dewetting. Macromolecules, 2000, 33, 9747-9756.	4.8	217
185	Shear Orientation of Viscoelastic Polymerâ^'Clay Solutions Probed by Flow Birefringence and SANS. Macromolecules, 2000, 33, 7219-7222.	4.8	164
186	Influence of generation number on the dewetting of hypergraft poly(2-ethyl-2-oxazoline) films. Polymer International, 2000, 49, 463-468.	3.1	5
187	Transient Target Patterns in Phase Separating Filled Polymer Blends. Macromolecules, 1999, 32, 5917-5924.	4.8	60
188	Excitation of Surface Deformation Modes of a Phase-Separating Polymer Blend on a Patterned Substrate. Macromolecules, 1999, 32, 2356-2364.	4.8	99
189	Formation and dissolution of phase-separated structures in ultrathin blend films. Journal of Polymer Science, Part B: Polymer Physics, 1998, 36, 191-200.	2.1	73
190	Control of Polystyrene Film Dewetting through Sulfonation and Metal Complexation. Macromolecules, 1998, 31, 484-493.	4.8	67
191	Coupling between Phase Separation and Surface Deformation Modes in Self-Organizing Polymer Blend Films. Physical Review Letters, 1998, 81, 3900-3903.	7.8	57
192	Lamellar Orientation of Diblock Copolymer Solutions under Steady Shear Flow. Macromolecules, 1998, 31, 8083-8090.	4.8	24
193	Neutron Reflection Studies on Segment Distribution of Block Chains in Lamellar Microphase-Separated Structures. Macromolecules, 1997, 30, 2907-2914.	4.8	60
194	Compatibilization of Polymer Blends by Complexation. 2. Kinetics of Interfacial Mixing. Macromolecules, 1996, 29, 3918-3924.	4.8	29
195	Neutron reflection studies of phase separation and transesterification in thin film polymer blends. Physica B: Condensed Matter, 1996, 221, 301-305.	2.7	6
196	Ordering in asymmetric poly (ethyleneâ€“propylene)â€“poly (ethylethylene) diblock copolymer thin films. Journal of Chemical Physics, 1994, 100, 1620-1629.	3.0	99
197	Surface segregation in model symmetric polyolefin diblock copolymer melts. Journal De Physique II, 1994, 4, 2231-2248.	0.9	11
198	Entropy-driven surface segregation in block copolymer melts. Physical Review Letters, 1993, 70, 307-310.	7.8	89

#	Article	IF	Citations
199	Interfacial segment density profiles of end-anchored polymers in a melt. Macromolecules, 1992, 25, 2359-2368.	4.8	92
200	An automated neutron reflectometer (POSY II) at the intense pulsed neutron source. Physica B: Condensed Matter, 1991, 173, 17-24.	2.7	25
201	Phase Morphology and Molecular Structure Correlations in Model Fullerene-Polymer Nanocomposites. Materials Science Forum, 0, 714, 63-66.	0.3	3