

PMSE Division of ACS

American Chemical Society

Division of Polymeric Materials:
Science and Engineering

PMSE Preprints Volume 96, Spring 2007

Papers Presented at the 233rd ACS National Meeting

March 25-29, 2007
Chicago, Illinois, USA

Volume 1 of 2

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571
www.proceedings.com

ISBN: 978-1-60423-330-8

Some format issues inherent in the e-media version may also appear in this print version.

ISBN: 978-1-60423-330-8

Copyright (2007) by the PMSE Division of ACS.
All rights reserved.

For permission requests, please contact the PMSE Division of ACS at the address below.

PMSE Division of ACS
Proceedings
5200 Bayway Drive
Baytown, Texas 77520

TABLE OF CONTENTS

VOLUME 1

Silicatein Proteins Reveal Unique Mechanisms of Hierarchical Self-Assembly and Catalytic Nanofabrication, Leading to a New, Generic, Low-Temperature Method for Catalytic Nanofabrication	1
<i>Morse, Daniel E.;Murr, Meredith M.;Schwenzer, Birgit;Gomm, John R.;Brutchey, Richard L.</i>	
Making Magnets by Microbes: Biochemical and Genetic Control of Magnetosome Biomineralization in Magnetotactic Bacteria	2
<i>Schüler, Dirk</i>	
Biogenic Nanostructured Silica Formation in Diatoms: Proteins, Genes, and Structure	3
<i>Hildebrand, Mark</i>	
In Vivo Immobilization of Functional Proteins in Diatom Silica	4
<i>Poulsen, Nicole;Berne, Cécile;Spain, Jim;Kröger, Nils</i>	
Microstructural Deformation and Plasticity of Bone	6
<i>Gupta, Himadri Shikhar;Fratzl, Peter;Wagermaier, Wolfgang;Seto, Jong;Kerschnitzki, Michael;Benecke, Gunthard;Zaslansky, Paul;Boesecke, Peter;Kirchner, Helmut O.K.</i>	
Structure and Dynamics of Poly(L-Lysine) in Silica Nanocomposites	8
<i>Mirau, Peter A.;Garber, Jenna A.;Lyons, Marjan</i>	
Bone-Like Nanocomposites: Implications for Bone Formation In Vivo	10
<i>Olszta, Matthew J.;Cheng, Xingguo;Jee, Sang Soo;Kumar, Rajendra;Kim, Yi-Yeoun;Kaufman, Michael J.;Douglas, Elliot P.;Gower, Laurie B.</i>	
Defined Materials to Reveal Spatial Regulation of Cellular Signaling	12
<i>Baird, Barbara A.;Holowka, David A.</i>	
Model Surfaces to Study Cell Adhesion and Function	13
<i>Chen, Christopher S.</i>	
Cellular Microarrays by Chemically Amplified Constructive Microlithography	15
<i>Andruzzi, Luisa;Schwake, Gerlinde;Rädler, Joachim O.;Sohn, Karen E.;Mates, Thomas E.;Kramer, Edward J.</i>	
Controlled Synthesis and Use of Peptide-Polymer Hybrid Molecules to Promote the Adhesion and Spreading of Living Cells on Artificial Surfaces	17
<i>Biesalski, Markus A.;Duman, Sidar;Shroff, Kamlesh;Ruhe, Jurgen</i>	
Checking on Neurons with Microfluidics and Surface Science Methods	19
<i>Jeon, Noo Li</i>	
Hydrophobicity Contrast Surfaces for Directing Cell Adhesion and Motility	20
<i>Moussallem, Maroun D.;Schlenoff, Joseph B.;Olenych, Scott G.;Keller, Thomas C.S.</i>	
Surface-Attached Polymer Networks: Versatile Surface Architectures for Controlling the Interaction of Surfaces with Cell Membrane Models and Cells	22
<i>Prucker, Oswald;Wörz, Anke;Baaken, Gerhard;Sundermann, Markus;Behrends, Jan;Egert, Ulrich;Ruehe, Juergen</i>	
Quantifying Cell Receptor-Adhesion Ligand Bonds in 3D Culture with FRET	24
<i>Kong, Hyun Joon;Boonthekul, Tanyarut;Mooney, David J.</i>	

Novel Nanostructures Based Upon Polyferrocenylsilane Block Copolymer Self-Assembly	26
<i>Winnik, Mitchell A.;Guerin, Gerald;Wang, Hai;Wang, Xiao-Song;Manners, Ian</i>	
Recognition-Mediated Assembly of Nanoscale Systems	28
<i>Rotello, Vincent M.</i>	
Block Copolymer Templated Surfactant-Modified Magnetic Nanoparticles	29
<i>Yang, Ta-I;Kempel, Leo C.;Kofinas, Peter</i>	
Hybrid Nanomaterials from Hierarchical Self-Assembly of Nanoparticles and Clusters on Diblock Copolymer Films	31
<i>Darling, S. B.;Hoffmann, Axel;Yufa, N. A.;Bader, S.D.;Sibener, S.J.</i>	
Morphology and Thermal Properties of Polycarbosilane-g-PMMA Copolymers	33
<i>Hyun, JaeYong;Ryu, Chang Y.;Interrante, Leonard V.</i>	
Preparation of Highly Ordered Silica and Vanadium Oxide Nanoparticles on Surfaces Using Diblock Copolymer Micelles as Templates	35
<i>Frömsdorf, Andreas;Roth, Stephan V.;Stillrich, Holger;Pütter, Sabine</i>	
Synthesis and Assembly Properties of Amphiphilic Organoboron Block Copolymers	39
<i>Jäkle, Frieder;Cui, Chengzhong;Qin, Yang;Banipal, Jatinder S.</i>	
Synthesis and Study of Hybrid Organic-Inorganic POSS-PS-POSS Triblock Copolymers	41
<i>Gadodia, Gunjan A.;Yang, Ling;Cardoen, Gregoire;Russell, Thomas P.;Coughlin, E. Bryan</i>	
Dynamic Mechanical Properties of Poly(Methyl Methacrylate)–Silica Nanoparticle Composites	43
<i>Kraft, Arno;Adams, Paul M.E.;Arrighi, Valeria;Harkins, John;McAnaw, Amelia;McEwen, Iain J.;Mayhew, Steven J.;Ragupathy, Lakshminarayanan;Waring, Carla</i>	
Kinetic Models for CNT Modified Epoxy Composites: An Application Related Status Review	45
<i>Raja Manuri Venkata, Goplaa Krishna Rao;Avadhanam, Vanaja</i>	
Hybrid Nanocomposite Membranes for PEMFC Applications	48
<i>Niepceron, Frédéric;Galiano, Hervé;Balland-Longeau, Alexia;Mazabraud, Philippe;Tassin, J.F.</i>	
Thermal Behavior of Trisilanolphenyl-POSS Filled Poly(T-Butyl Acrylate) Ultrathin Films	49
<i>Karabiyik, Ufuk;Paul, Rituparna;Swift, Michael C.;Esker, Alan R.</i>	
Melt Extrusion Process for Exfoliation of Polyamide 6/Clay Nanocomposites: Study of Oxygen Permeability	51
<i>Swain, Sarat K.;Isayev, Avraam I.</i>	
Direct Laser Writing of Microstructures on Nanocomposite Materials	53
<i>Chen, Hui;Liu, Xiong;Muthuraman, Harish;Zou, Jianhua;Wang, Jinhai;Dai, Qiu;Huo, Qun</i>	
Synthetic Smectic Clay for the Reinforcement of Epoxy Polymers	54
<i>Xue, Siqi;Pinnavaia, Thomas J.</i>	
Poly(ϵ-Caprolactone) Initiation with Acid Functional Imidazolium Modified Montmorillonite and Its Use to Make Nanocomposites	56
<i>Xun, Xiumei;Wang, Junzuo;Goswami, Shailesh K.;Mathias, Lon J.</i>	
Polymer/Clay Aerogel Composites	58
<i>Schiraldi, David A.;Gawryla, Matthew D.;Bandi, Suneel A.;Reinardy, Ann E.;Arndt, Eric;Finlay, Katherine;Lamison, Kevin</i>	
Quiescent and Flow-Induced Crystallization of Polypropylene-Clay Nanocomposites	60
<i>Treece, Mark A.;Oberhauser, James P.</i>	

Rheology and Mesoscale Structure of Polystyrene-Clay Nanocomposite Solutions: Depletion Flocculation Versus Polymer Bridging	62
<i>Li, Jin;Fitz-Gerald, James M.;Oberhauser, James P.</i>	
Preferred Orientation of Organoclay in Nanocomposites by 3D-TEM and Directional SAXS Study	64
<i>Nawani, Pranav;Burger, Christian;Gelfer, Mikhail;Chu, Benjamin;Hsiao, Benjamin S.;Tsou, Andy H.;Weng, Weiqing</i>	
Biom mineralization and Catalysis of Mesostructured Silica Templated by Condensable Peptidic 'lizard' Amphiphiles with a Cleavable Alkyl Tail	67
<i>Kinbara, Kazushi;Otani, Wataru;Aida, Takuzo</i>	
Biological Routes to Inorganic Material Synthesis	68
<i>Crookes-Goodson, Wendy J.;Slocik, Joseph M.;Tomczak, Melanie M.;Drummy, Lawrence F.;Naik, Rajesh R.</i>	
Using the Interfaces in Self-Assembled Protein Cage Architectures for Materials Synthesis	70
<i>Douglas, Trevor;Young, Mark J.</i>	
Bio-Enabled Synthesis of Amorphous and Crystalline Titania at Ambient Temperature and Neutral PH	71
<i>Kröger, Nils;Dickerson, Matthew B.;Ahmad, Gul;Sandhage, K.H.;Poulsen, Nicole C.</i>	
Rapid Peptide-Induced Formation of Phase Pure, Crystalline CaMoO₄	73
<i>Ahmad, Gul;Dickerson, Matthew B.;Church, Benjamin;Cai, Ye;Ernst, Eric;Jones, Sharon E.;Naik, Rajesh R.;King, Jeffrey S.;Summers, Christopher J.;Kröger, Nils;Sandhage, K.H.</i>	
Self-Assembly and Mineralization of Artificial Spicules of Marine Sponges	74
<i>Tahir, M.N.;Wolf, S.;Müller, W.E.G.;Schröder, H.-C.;Loges, N.;Tremel, Wolfgang</i>	
Shape-Induced Inhibition of Phagocytosis by Macrophages	76
<i>Champion, Julie;Katara, Yogesh;Mitrugotri, Samir</i>	
PCADK: A New Polyketal for Drug Delivery	78
<i>Murthy, Niren;Heffernan, Michael;Yang, Stephen;Lee, Sungmun;Khaja, Siraj;Wilson, Scott</i>	
Intracellular Drug Delivery via pH-Sensitive Hydrogel Nanoparticles	80
<i>Hu, Yuhua;Litwin, Tamara;Doyle, Patrick S.;Irvine, Darrell J.</i>	
Glycoconjugates Enhanced Phagocytosis of B. Cereus Spores Using Dictyostelium Discoideum as a Model	82
<i>Tarasenko, Olga;Burton, Elizabeth;Desikan, Sai;Bush, John;Alusta, Pierre</i>	
Multicompartment Micelles in Mixed Systems	84
<i>Triftaridou, Aggeliki;Liu, Chun;Li, Zhibo;Hillmyer, Marc;Lodge, Timothy P.</i>	
Supramolecular Assemblies from Amphiphilic Homopolymers	85
<i>Thayumanavan, S.</i>	
Janus Discs: Preparation, Size-Tunability, Visualization, Self-Assembly	86
<i>Walther, Andreas;André, Xavier;Drechsler, Markus;Abetz, Volker;Müller, Axel H.E.</i>	
Poly(Imide Siloxane) Block Copolymers and Their Morphologies from Dilute Solutions	88
<i>Ku, Chun-Kang;Lee, Yu-Der</i>	
High Hard Block Content Polyurethanes: Morphology and Phase Behavior	90
<i>Saiani, Alberto;Higgins, Julia S.</i>	
Multicompartment Micelles from ABC Triblock Terpolymers	94
<i>Schacher, Felix;Walther, Andreas;Ruppel, Markus;Müller, Axel H.E.</i>	
Role of the Architecture of Block Copolymers on Their Interfacial Behavior	96
<i>Peleshanko, Sergiy;Gunawidjaja, Ray;Tsukruk, V.V.</i>	

Langevin Dynamics Simulation of Amphiphilic Linear-Dendritic Block Copolymer Self-Assembly	97
<i>Suek, Nicholas W.;Lamm, Monica H.</i>	
First Cumulant of the Dynamic Structure Factor for Flexible Polymers. Excluded-Volume Effects	99
<i>Osa, Masashi;Sawatari, Nobuo;Yoshizaki, Takenao;Yamakawa, Hiromi</i>	
Coarse-Grained Simulation of Atactic Polystyrene on a Bond Fluctuation Lattice from Rotational Isomeric State Theory	100
<i>Waheed, Numan;Tatek, Yergou B.;Mattice, Wayne L.</i>	
Characterizing Electrospun Fibers of Poly(Ether) Imide Solutions by Relation to Their Dielectric Properties	102
<i>Mills, Karmann C.;Franzek, Elizabeth;Hinestroza, Juan P.</i>	
Dielectric Spectroscopy of Vinylidene Fluoride Copolymers and Terpolymers with Different Compositions	103
<i>Noreña, Luis E.;Xu, Kui;Claude, Jason;Lu, Yingying;Wang, Qing</i>	
Small-Angle Neutron Scattering Investigation of a Structural Change in the Light Induced Polymerization of the Dodecyl Acrylate Microemulsion	105
<i>Marszalek, Jolanta E.;Pojman, John A.;Hoyle, Charles E.;Page, Kirt</i>	
Molecular and Thin-Film NLO Response Amplification via Introduction of a Strong Brønsted Acid	107
<i>Frattarelli, David L.;Schiavo, Michele;Facchetti, Antonio;Ratner, Mark A.;Marks, Tobin J.</i>	
Investigating the Two-Photon Absorption Behavior and Coupling of Excited States in Cyclic Thiophenes Using Ultrafast Spectroscopy	109
<i>Bhaskar, Ajit;Ramakrishna, Guda;Goodson, Theodore</i>	
Detection of Trivalent and Hexavalent Chromium Using Structurally Colored Biopolymer Thin Films	111
<i>Cathell, Matthew D.;Schauer, Caroline L.</i>	
Auto-Oxidation Study of Model Fatty Acid Functionalized Methacrylic Copolymers	113
<i>Black, Micah S.;Whittemore, James H.;Rawlins, James W.</i>	
Mechanical Degradation of Linear Polymers and Polymer Nanogels in Extensional Flow	115
<i>Sun, Mingyun;Ng, Wenny;Barron, Annelise E.</i>	
Effect on Morphological Transitions in Block Copolymers and Their Effect on Mechanical Behavior	117
<i>Mamodia, Mohit;Lesser, Alan J.</i>	
Self-Organized Crystal Growth of Hierarchically Structured Inorganic Crystals in Cooperation with Polymeric Species	119
<i>Imai, Hiroaki;Oaki, Yuya;Kotachi, Akiko</i>	
Polymer Controlled Crystallization of Inorganic Minerals: The Roles of a Mixed Solvent and Air/solution Interface	120
<i>Yu, Shu-Hong</i>	
Self-Organized Surfactants as Templates for the Mineralization of CaCO₃	123
<i>Popescu, Daniela C.;Smulders, Maarten M.J.;Pichon, Benoît P.;Bomans, Paul H.H.;Chebotareva, Natalia;Sijbesma, Rint P.;Frederik, Peter M.;Sommerdijk, Nico A.J.M.</i>	
Precursor Structures During Crystallization of CaCO₃ and Control by Polyelectrolytes	125
<i>Rieger, Jens</i>	
Polymer-Directed Synthesis of Inorganic Materials with Controlled Morphologies and Architectures	127
<i>Qi, Limin</i>	

Patterned Mineral Films Using the Polymer-Induced Liquid Precursor Process	128
<i>Kim, Yi-Yeoun;Douglas, Elliot P.;Gower, Laurie B.</i>	
Cyanoacrylate-Based Photoreactive Polymers and Their Applications	130
<i>Woods, John G.</i>	
Evaluation of Initiator Systems for Controlled and Sequentially Curable Free-Radical/Cationic Hybrid Photopolymerizations	131
<i>Oxman, Joe D.;Scranton, Alec B.;Jacobs, Dwight W.;Trom, Matthew C.;Sipani, Vishal;Ficek, Beth</i>	
Ester-Free Thiol-Ene Photopolymer Systems	132
<i>Herr, Donald</i>	
Photopolymerization of Thiol-Enes: Click to the Future	134
<i>Hoyle, Charles E.</i>	
Development of Photopolymerized Clay-Polymer Nanocomposites Utilizing Polymerizable Surfactants	135
<i>Guymon, C. Allan</i>	
Photopolymerization of Thick Systems and Elimination of Oxygen Inhibition	136
<i>Scranton, Alec B.;Kenning, Nicole Stephenson;Gou, Lijing</i>	
Thiol-Ene Photopolymerization Reactions: Fundamentals, Development, and Applications	137
<i>Bowman, Christopher N.;Cramer, Neil B.;Lee, Tai Yeon;Carioscia, Jacquelyn A.</i>	
Supramolecular Polymers Formed by Intermolecular Interaction of Hydrogen Bonding	138
<i>Park, Taiho;Zimmerman, Steven C.;Ong, Hugo C.;Todd, Eric M.;Kuykendall, Darrell W.;Quansah, Kwansima</i>	
Reversible Nanostructures from Rod Amphiphiles	140
<i>Lee, Myongsoo</i>	
Smart Self-Assemblies from Block Copolymers Obtained via RAFT Polymerization	141
<i>Perrier, Sébastien</i>	
Temperature and pH Responsive Block Copolymer Assemblies from Polypeptides	143
<i>Naik, Sandeep S.;Gebhardt, Kay E.;Venkatachalam, Gopal;Savin, Daniel A.</i>	
Nanofibers with Tunable Stiffness from Self-Assembly of an Amphiphilic Wedge-Coil Molecule	145
<i>Kim, Jung-Keun;Lee, Eunji;Lee, Myongsoo</i>	
Photoresponsive Lamellar Structures Utilizing Azobenzene-Modified Surfactants	146
<i>Abdallah, Dalia;Li, Yuzhuo;Shipp, Devon A.</i>	
Synthesis and Study of Triblock Copolymer Assemblies Containing a Thermoresponsive N-Isopropyl Acrylamide Block	148
<i>Sundaraman, Anand;Stephan, Tim;Grubbs, Robert B.</i>	
Morphological Transformation and Photophysical Properties of Fluorene Based Rod-Coil Copolymers in Solution	150
<i>Tung, Yi-Chih;Wu, Wen Chung;Chen, Wen-Chang</i>	
Mussel-Inspired Polymers for Surface Modification: Preventing and Encouraging Bioadhesion	152
<i>Messersmith, Phillip B.</i>	
Multilayered Polyelectrolyte Assemblies as Platforms for Surface-Mediated Delivery of DNA	153
<i>Lynn, David M.</i>	

Tailored Substrates for Cell Biology	154
<i>Mrksich, Milan</i>	
Polymers for Patterning Proteins in Specific Orientations at the Micro- and Nanoscale	155
<i>Maynard, Heather D.</i>	
Design and Assembly of Functional Materials for Controlled, Non-Viral Gene Delivery	156
<i>Saul, Justin M.;Park, In-Kyu;Linnes, Michael;Ratner, Buddy D.;Qin, Dong;Jiang, Shaoyi;Giachelli, Cecilia;Pun, Suzie H.</i>	
In-Situ ATR-FTIR and AFM Studies on Poly(Ethyleneimine)/Poly(Acrylic Acid) Multilayers: Dependence on Medium Parameters and Protein Selectivity	157
<i>Müller, Martin;Bohata, Karolina;Keßler, Bernd;Ouyang, Wuye;Pientka, Zbynek;Brynda, Eduard</i>	
Functionalization of Poly(Oligo(Ethylene Glycol)Methacrylate) Brushes on Titanium	159
<i>Raynor, Jenny E.;Petrie, Timothy A.;Garcia, Andres J.;Collard, David M.</i>	
Development of Polyphosphazenes for Surface and Biomedical Applications	160
<i>Singh, Anurima;Steely, Lee;Krogman, Nicholas;Allcock, Harry R.</i>	
Materials for Power	161
<i>Welna, Daniel</i>	
Polyphosphazene Poly(Lactide-Co-Glycolide) Blends: The Development of a Novel Biomedical Material	162
<i>Laurencin, Cato T.;Nair, Lakshmi S.;Deng, Meng</i>	
Polymerization of Cyclophosphazenes with Methacrylate Containing Substituents	163
<i>Allen, Christopher W.</i>	
Fluoropolymer Surface Science Including Unusual Surface Morphology (TM-AFM) and Wetting Behavior of Bis(Trifluoroethoxy)phosphazene	164
<i>Mullins, Allison;Zheng, Ying;Steely, Lee;Allcock, Harry R.;Wynne, Kenneth J.</i>	
ATRP: A Versatile Methodology to Prepare Polymers for Various Applications	165
<i>Matyjaszewski, Krzysztof</i>	
Programming Nanostructures for Mineralization	166
<i>Stupp, Samuel I.</i>	
Structural and Biomolecular Controls on Templated Nucleation and Growth of Calcite	167
<i>De Yoreo, James J.;Lee, Jonathan R.I.;Elhadj, Selim;Wang, Dongbo;Han, Yong-jin;Willey, Trevor M.;Meulenber, Robert W.;Terminello, Louis J.;van Buuren, Tony;Dove, Patricia M.</i>	
Morphogenesis Evolution of Calcite Crystals on Self-Assembled Monolayers in the Presence of Polymer Additives	169
<i>Wang, Tongxin;Aizenberg, Joanna;Börner, Hans G.;Yang, Shu</i>	
Studying the Nucleation and Growth of Calcium Carbonate	171
<i>Lam, Raymond S.K.;Meldrum, Fiona;Pacha, Fakhruddin</i>	
Conformal Mineralization on Nanostructured 3-D Bioclastic Templates Using Dendritic Hydroxyl Amplification for Enhanced Surface Sol-Gel Processing	172
<i>Weatherspoon, M.R.;Dickerson, M. B.;Wang, G.;Cai, Y.;Jones, S.C.;Sandhage, K.H.;Marder, Seth R.</i>	
Importance of the Hydrophobic Core of Nanostructures Prepared from Amphiphilic Block Copolymers to the Morphology of Calcium Carbonate Crystals	173
<i>Venkataraman, Shrinivas;Qi, Kai;Wopenka, Brigitte;Pasteris, Jill D.;Wooley, Karen L.</i>	

Polymer Brushes as Ionotropic Matrices for the Directed Fabrication of Microstructured Calcite Thin Films	174
<i>Klok, Harm-Anton;Tugulu, Stefano;Harms, Marc;Fricke, Marc;Volkmer, Dirk</i>	
Directed Nucleation and Growth of Cadmium Sulfide on Photo-Oxidized Poly(Ethylene Terephthalate) and Their Device Applications	176
<i>Amos, Fairland F.;Morin, Stephen A.;Jin, Song</i>	
New Organic Semiconductors for Sensors, Diodes, Magnetics, and Floating Gate Devices	178
<i>Katz, Howard E.</i>	
New Organic Materials for High Performance Transistors	179
<i>Bao, Zhenan</i>	
Thieno[3,2-B]Thiophene Semiconducting Co-Polymers for Organic Field Effect Transistor (OFET) Applications	180
<i>Tierney, Steve;Bailey, Clare;Duffy, Warren;Hamilton, Rick;Heeney, Martin;MacDonald, Iain;Shkunov, Maxim;Sparrowe, David;Zhang, Weimin;McCulloch, Iain</i>	
Synthesis and Characterization of Alternating Thiophene-Perfluoroarene Copolymers and Fully/Partially Fluorinated Small-Molecule Polycyclics	182
<i>Wang, Yongfeng;Watson, Mark D.</i>	
New Polymers for Organic Electronics	183
<i>Wudl, Fred;Patil, Satish;Yang, Jian;Marchioni, Filippo;Chiechi, Ryan</i>	
Oligo- And Polythiophenes Containing Organoborane Moieties	184
<i>Jäkle, Frieder;Sundaraman, Anand;Li, Haiyan;Venkatasubbaiah, Krishnan</i>	
Symmetric and Unsymmetric Conjugated Thiopheno Azomethines Synthesized Selectively by a One-Pot Method	186
<i>Bourdeaux, Marie;Dufresne, Stéphane;Perez Guarin, Sergio;Skene, W.G.</i>	
Synthesis of a New Low Energy Gap, Processible, and Functionable Conjugated Polymer Poly(3-Dodecyl-2,5-Thienylenevinylene)	187
<i>Cleveland, Taina;Zhang, Cheng;Sun, Sam-Shajing</i>	
Polyarylsilanes and Polyarylgermanes as Precursors to Conductive Polymers: Processing and Morphology Control	188
<i>Sotzing, Gregory A.;Asemota, Chris I.;Bokria, Jayesh G.;Choi, Jia;Kumar, Arvind;Ner, Yogesh;Ombaba, Matthew;Seshadri, Venkataramanan;Tran, Arlene;Yavuz, Mustafa S.</i>	
Directed Assembly of Block Copolymers to Pattern Isolated Features and Essential Integrated Circuit Geometries	189
<i>Stoykovich, Mark P.;Kang, Huiman;Liu, Guoliang;Daoulas, Kostas Ch.;Müller, Marcus;dePablo, Juan J.;Nealey, Paul F.</i>	
Semiconducting Block Copolymers: Optimized Synthesis and Processing for Efficient Photovoltaic Devices	191
<i>Hadziioannou, Georges</i>	
Self-Aligned, Self-Assembled Organosilicate Line Patterns from Block-Copolymer Mediated Self-Assembly	193
<i>Kim, Ho-Cheol;Sundström, Linnea;Rettner, Charles;Cheng, Joy Y.;Park, Oun-Ho;Hinsberg, W.;Miller, Robert D.;Hart, Mark</i>	
Hard-Surface Effect and Mixed Lamellae in Symmetric Diblock Copolymer Thin Films	195
<i>Meng, Dong;Wang, Qiang</i>	
Directed Self-Assembly of Block-Copolymer-Based Hybrid Nanostructures	196
<i>Cheng, Joy Y.;Ruiz, Ricardo;Black, Charles T.;Kim, Ho-Cheol</i>	
Effects of Zone Annealing on Thin Films of Block Copolymers	198
<i>Berry, Brian C.;Jones, Ronald L.;Karim, Alamgir</i>	

Nanocavities Via Amphiphilic Block Copolymer Thin Films	200
<i>Miller, Andrew C.;Bennett, Ryan D.;Hammond, Paula T.;Cohen, Robert E.;Irvine, Darrell J.</i>	
Symmetric Diblock Copolymers in Nanopores: Monte Carlo Simulations and Strong-Stretching Theory	202
<i>Wang, Qiang</i>	
Fully Degradable Functionalized Polymers: A Versatile Approach Using Ring-Opening Polymerization of Cyclic Carbonates	204
<i>Pratt, Russell C.;Nederberg, Fredrik;Lohmeijer, Bas G.G.;Waymouth, Robert M.;Hedrick, James L.</i>	
Polyarginine Segments in Block Copolypeptides Drive Both Vesicular Assembly and Intracellular Delivery	206
<i>Deming, Timothy J.;Holowka, Eric;Sun, Victor;Kamei, Daniel</i>	
Non-Covalent Assembly of Peptide-Growth Factor Complexes to Spatially Control Cell Activity	207
<i>Hudalla, Gregory;Murphy, William L.</i>	
Non-Canonical Amino Acids in Protein Engineering and Analysis	209
<i>Tirrell, David A.</i>	
Environmentally Sensitive Gels Assembled Through Protein-Polysaccharide Interactions	210
<i>Butterfield, Karen C.;Seal, Brandon;Chaput, John;Panitch, Alyssa</i>	
Self-Assembling Peptide Nanofibers with Orthogonal Control Over Assembly Conditions, Extent of Assembly and Bioactive Function	211
<i>Paramonov, Sergey E.;Dong, He;Galler, Kerstin;Hartgerink, Jeffrey D.</i>	
Self-Assembling β-Hairpin Peptide Hydrogels: Effect of Strand Symmetry on the Fibrillar Nanostructure	212
<i>Nagarkar, Radhika P.;Hule, Rohan A.;Pochan, Darrin J.;Schneider, Joel P.</i>	
Organic-Inorganic Polymer Nano-Hybrids	214
<i>Chujo, Yoshiki</i>	
Silylamino and Silylanilino Derivatives of Phosphorus and Boron	215
<i>Neilson, Robert H.</i>	
Fluorescent Organic Nanotubes: Self-Assembly and Biosensory Characteristics	216
<i>Kim, Chulhee</i>	
Cyclic and Polymeric (Alkyl/Arylphosphazenes)	218
<i>Wisian-Neilson, Patty</i>	
Functional and Supramolecular Metallopolymers	219
<i>Manners, Ian</i>	
Control of Properties in Hybrid Inorganic-Organic Polymers: Polyphosphazenes as Biomedical, Energy-Related and Optical Materials	220
<i>Allcock, Harry R.</i>	
Growing Crystals In and On Micropatterns	221
<i>Aizenberg, Joanna</i>	
Bio-Inspired Mineralization of 3D Polyelectrolyte Scaffolds	222
<i>Lewis, Jennifer A.</i>	
Biomimetic Synthesis of Titania on Micropatterned Polymer Templates	223
<i>Ford, Jamie;Yang, Shu</i>	
Double Direct Templating of Periodically Nanostructured Inorganic Hollow Microspheres	225
<i>Braun, Paul V.;Wolosiuk, Alejandro;Son, Dongyeon;Gough, Dara Van</i>	

Biomimetic Assembly of Zinc Oxide Microarrays on Flexible Polycarbonate Film	227
<i>Morin, Stephen A.;Amos, Fairland F.;Jin, Song</i>	
Polymerization Shrinkage Stress Development and Mechanical Strength of ACP Acrylic Resin Composites	229
<i>Antonucci, Joseph M.;O'Donnell, Justin N. R.;Skrtic, Drago</i>	
Modular Approach to Conjugated Oligomers and Their Application in Molecular Electronics	232
<i>Yu, Luping;Lin, Gan;Liang, Y.;Yuan, S.;Lee, Yongu</i>	
Design Aspects of Functionalized Organic Semiconductors	234
<i>Anthony, John E.</i>	
Smart Sunglasses and Goggles Based on Electrochromic Polymers	235
<i>Ma, Chao;Taya, Minoru;Xu, Chunye</i>	
Dielectric Properties of [Rh(1,4-Diisocyanobenzene)⁺_{4/2}(Cl)]_n with Respect to Moisture	238
<i>Carson, Cantwell G.;Gerhardt, Rosario A.;Tannenbaum, Rina</i>	
Development of 3,6 Dialkylthieno[3,2-B]thiophene Semiconducting Co-Polymers for OFET Applications	240
<i>McCulloch, Iain;Bailey, Clare;Duffy, Warren;Heeney, Martin;Shkunov, Maxim;Sparrowe, David;Tierney, Steve;Zhang, Weimin</i>	
Mono-End Functionalized Conjugated Polymers for Donor-Bridge-Acceptor (DBA) Block Copolymers	242
<i>Zhang, Cheng;Cleveland, Taina;Sun, Sam-Shajing</i>	
Conjugated Fluoreno Azomethines: Photophysical and Electrochemical Investigation	244
<i>Perez Guarin, Sergio;Dufresne, Stéphane;Tsang, Derek;Sylla, Assa;Skene, W.G.</i>	
Surface and Interface Properties of Poly (3, 4-Ethylenedioxythiophene) Via Oxidative Chemical Vapor Deposition (OCVD)	246
<i>Im, Sung Gap;Olivetti, Elsa A.;Gleason, Karen K.</i>	
Terpyridine-Functionalized (Metallo-)Star Polymers	248
<i>Guerrero-Sanchez, Carlos;Ott, Christina;Schubert, Ulrich S.</i>	
Supramolecular Graft-Copolymers Based on Complementary Quadruple Hydrogen Bonding	250
<i>Sijbesma, Rint P.;Ligthart, G.B.W.L.;Ohkawa, Haruki;Meijer, E.W.</i>	
Amphiphilic Hyperbranched-Hyperbranched Block Copolymers Based on Polycarbosilane and Polyglycerol	252
<i>Schüle, Hanna;Nieberle, Jörg;Frey, Holger</i>	
Architecture of Nanostructured Inclusion Complexes Composed of Amylose and Synthetic Polymers in Polymerization Systems	254
<i>Kadokawa, Jun-ichi;Kaneko, Yoshiro;Beppu, Koutarou</i>	
Polymeric Self-Assembly Driven by Molecular Recognition	256
<i>Nelson, Alshakim;Chun, Doris</i>	
Chemically and Electrically Tunable Block Copolymer Photonic Gels: Exceptionally Large Tunability Via Uniaxial Swelling	258
<i>Kang, Youngjong;Walish, Joe;Gorishnyy, Taras;Thomas, Edwin L.</i>	
Towards Polyion Complex Aggregates with Segregating Solvating Chains	260
<i>Hordyjewicz-Baran, Zofia;Schlaad, Helmut</i>	
Supramolecularly Modified PEG Hydrogels	262
<i>Baughman, Travis W.;Meijer, E.W.</i>	

Studying Protein Function and Controlling Cell Adhesion with Polymer Brushes	263
<i>Klok, Harm-Anton;Tugulu, Stefano;Arnold, Anke;Sielaff, India;Johnsson, Kai;Silacci, Paolo;Stergiopoulos, Nikolaos</i>	
Smart Biohybrid Materials	265
<i>Stayton, Patrick S.;Hoffman, Allan S.</i>	
Peptide Mimics of the Extracellular Matrix: Non-Covalent and Covalent Strategies	266
<i>Jones, Julia L.;Cronier, Samantha A.;Collier, Joel H.</i>	
Organic Delivery Vehicles for Probing and Treating Biological Systems: Adapting Fabrication Processes from the Electronics Industry for Use in Nano-Medicine	268
<i>DeSimone, Joseph M.;Gratton, Stephanie E.A.;Galloway, Ashley L.;Murphy, Andrew J.;Pohlhaus, Patrick D.</i>	
Polyvalent Recognition of Biopolymers: The Design of Potent Inhibitors of Anthrax Toxin	269
<i>Rai, Prakash;Yanjarappa, Mallinamadagu;Gujratty, Kunal;Saraph, Arundhati;Joshi, Amit;Poon, Vincent;Padala, Chakradhar;Kate, Sandesh;Mogridge, Jeremy;Kane, Ravi S.</i>	
Receptor-Responsive, Protein-Crosslinked Polymeric Hydrogels	270
<i>Yamaguchi, Nori;Zhang, Le;Chae, Byeong Seok;Palla, Chandra;Furst, Eric M.;Kiick, Kristi L.</i>	
Self-Assembling Multifunctional Nanoparticles from Elastin-Like Polypeptides	271
<i>Megeed, Zak;Rege, Kaushal;Selby, Luke;Yarmush, Martin L.</i>	
Dispersions of Carbon Nanotubes in Polyol Ester Oils for Heat Transfer Applications	272
<i>Hong, Haiping;Wright, Brian;Roy, Walter</i>	
Ordered Honeycomb-Structured Films from Fluoro-Polyimide	274
<i>Wang, Lihua;Tian, Ye;Ding, Huaiyu;Liu, Biqian</i>	
Electrospinning of Ceramic Nanofibers	276
<i>Eick, Benjamin M.;Youngblood, Jeffrey P.</i>	
Syntheses of Polyesters Having Precisely Tuned Sizes	278
<i>Takizawa, Kenichi;Oza, Neal N.;Cordaro, Joseph;Hawker, Craig J.</i>	
Preparation of Honeycomb Films from a Hydrophobic Polymer and the Differences Between Hydrophobic and Hydrophilic Polymers on Pattern Formation	280
<i>Tian, Ye;Ding, Huaiyu;Wang, Lihua;Liu, Biqian</i>	
Air-Gap Sacrificial Materials: Initiated-CVD Synthesis, Characterization and Air-Gap Construction	282
<i>Lee, Long Hua;Gleason, Karen K.</i>	
Effects of Different Dispersing Agents on Polymer Carbon Nanotube Composites	284
<i>Camponeschi, Erin;Garmestani, Hamid;Tannenbaum, Rina</i>	
Inter Particle Electromagnetic Coupling in Assembled Gold-Polylysine Hybrid Nano-Necklace Particles	286
<i>Ramakrishna, Guda;Dai, Qiu;Zou, Jianhua;Huo, Qun;Goodson, Theodore</i>	
Preferential Location of Conducting Carbon Black in Multiphase Polymer Composites	287
<i>Zhang, Qinghua;Xiong, Hui;Li, Wei;Chen, Dajun;Zhu, Meifang</i>	
Preparation and Characterization of Fibriform Nanocomposites of Polylactic Acid/ Attapulgit	289
<i>Fan, Xiaoye;Tang, Songchao;Shao, Jiamin;Li, Li</i>	
Development of Functional High Temperature Polymers for Molecular Recognition Processes	291
<i>Eade, Gillian F.;Milliron, Delia J.;Nelson, Alshakim;Pratt, Russell C.;Hedrick, James L.</i>	

Versatile Conductive Patterning Using Exfoliated Graphite Nanoplatelets, Copper, and Polyelectrolytes	293
<i>Hendricks, Troy R.;Lu, Jue;Drzal, Lawrence T.;Lee, Ilsoon</i>	
Charge Transport at Organic-Organic Heterointerfaces	295
<i>Sirringhaus, Henning</i>	
Controlling the Microstructure of Polymeric Semiconductors and Investigating Its Effect on Charge Transport	296
<i>Salleo, Alberto;Jimison, Leslie H.;Chabinyo, Michael L.;Toney, Michael F.</i>	
Discrete Reactive Conjugated Oligomers for Electronic Devices	297
<i>Nielsen, Christian B.;Reynolds, John R.;Jacob, Monsy M.;Wang, Fei;Rauh, R. David</i>	
Solution Processible Quaterthiophene-Containing Carbosilane Dendrimers	298
<i>Ponomarenko, Sergei A.;Tatarinova, Elena A.;Meyer-Friedrichsen, Timo;Kirchmeyer, Stephan;Setayesh, Sepas;Leeuw, Dago de;Magonov, Sergei;Muzafarov, Aziz M.</i>	
Push and Pull of Electrons in Polyheterocycles	300
<i>Reynolds, John R.;Dyer, Aubrey L.;Ertas, Merve;Galand, Emilie M.;Kim, Young-Gi;Steckler, Timothy T.;Thompson, Barry C.;Turkcu, Harun</i>	
Printed Plastic Switches and Organic Transistors for Large-Area Electronics	301
<i>Someya, Takao;Sekitani, Tsuyoshi;Kato, Yusaku;Noguchi, Yoshiaki;Nakano, Shintaro;Takatani, Shinya;Takamiya, Makoto;Sakurai, Takayasu</i>	
Self-Assembled Nanostructures of Oligo(2,5-Bis(Hexyloxy)-P-Phenylene Vinylene) and Its Hybrids	302
<i>Hsieh, Chi-Chun;Jaw, Jenn-Huey;Lin, King-Fu;Ogawa, Tetsuya;Nemoto, Takashi;Isoda, Seiji</i>	
Carboxylic Acid-Functionalized Polyethylenedioxythiophenes (PEDOTs): Syntheses, Characterization, and Electronic Properties	304
<i>Ali, Emril M.;Kantchev, Eric Assen B.;Yu, Hsiao-hua;Ying, Jackie Y.</i>	
Aqueous Polyalkyne Dispersions	306
<i>Huber, Johannes;Mecking, Stefan</i>	
Self-Assembly in Thin Films of Rod-Coil Block Copolymers	308
<i>Olsen, Brad. D.;Li, Xuefa;Wang, Jin;Segalman, Rachel A.</i>	
Nanostructures from Confined Self-Assembly of Block Copolymers	310
<i>Shi, An-Chang</i>	
Polystyrene-B-Poly(Ethylene Oxide) Blends: Effect of Molecular Weight and Composition	311
<i>Logan, Jennifer;Schiller, Ben;Wu, Timothy;Baker, Shenda M.</i>	
Synthesis and Morphology of ABC Triblock Copolymers Containing Styrene and 4-Vinylpyridine	313
<i>Tang, Chuanbing;Dimitriou, Michael;Fredrickson, Glenn H.;Kramer, Edward J.;Hawker, Craig J.</i>	
Microphase Separation of Block Copolymers Under Cylindrical Confinement: Electrospun Fibers with Internal Structure	315
<i>Ma, Minglin;Krikorian, Vahik;Yu, Jian H.;Thomas, Edwin L.;Rutledge, Gregory C.</i>	
Single-Chain-in-Mean Field Simulations and Experimental Studies of Directed Block Copolymer Assembly on Patterned Substrates	317
<i>Daoulas, Kostas Ch.;Stoykovich, Mark P.;Kang, Huiman;Liu, Guoliang;De Pablo, Juan J.;Nealey, Paul F.;Müller, Marcus</i>	
Versatile Layer-by-Layer Surface Modification Using Functionalized Star-Polymers and Epitaxial Polyvalent Self-Assembly	319
<i>Sly, Joseph;Samuel, J. D. Jeyaprakash;Bonifacio, Cecile S.;Chang, Lilian;Lee, Victor Y.;McNeil, Melanie;Risk, William P.;Jefferson, C. Michael;Miller, Robert D.</i>	

Microphase Separated Block Copolymers Prepared by ROMP	321
<i>Stubenrauch, Kurt;Fritz, Gerhard;Glatter, Otto;Ingolic, Elisabeth;Grogger, Werner;Stelzer, Franz;Trimmel, Gregor</i>	
Quantitative Studies of Multivalent Polymers Designed for Targeted Drug Delivery	323
<i>Banaszak Holl, Mark M.;Leroueil, Pascale;Hong, Seungpyo;Baker, James R.;Orr, Bradford G.;DiMaggio, Stassi;Kelly, Christopher</i>	
Macromolecules with Tailored Non-Covalent Interactions for Biomedical Applications	325
<i>Layman, John M.;Hirani, Anjali A.;Hunley, Matthew T.;Lee, Yong Woo;Lepene, Benjamin;Thatcher, Craig D.;Long, Timothy E.</i>	
Glycopolymers for DNA Drug Delivery to Cardiomyocytes	327
<i>Liu, Yemin;Fichter, Katie;Gulick, Jim;Robbins, Jeffrey;Reineke, Theresa M.</i>	
Novel Polymer-Drug Conjugates	328
<i>Cooper, Beth M.;Parrish, Bryan;Emrick, Todd</i>	
Doxorubicin-Conjugated Amphiphilic Scorpion-Like Macromolecules: Synthesis, Characterization and Intracellular Drug Delivery	329
<i>Uhrich, Kathryn E.;del Rosario, Leilani;Djordjevic, Jelena;Wang, Jinzhong</i>	
Preparation of High-Boron Content Diblock Copolymers for BNCT Applications	331
<i>Simon, Yoan C.;Eren, Tarik;Coughlin, E. Bryan</i>	
Polymeric Nanoparticles with Controlled Sizes for Targeted Drug Delivery	333
<i>Tong, Rong;Cheng, Jianjun</i>	
Hyperbranched Fluoropolymers (HBFP(III)), Designed as Complex Nanostructures for Potential Imaging and Therapeutic Delivery	334
<i>Powell, Kenya T.;Cheng, Chong;Du, Wenjun;Wooley, Karen L.</i>	
Polymer Blend Dielectrics for Organic Thin-Film-Transistors: Update on Dielectric Properties and Device Performance	335
<i>Yan, He;Facchetti, Antonio;Marks, Tobin J.</i>	
Silole-Based Polymeric Semiconductors for Organic Thin-Film Transistors	337
<i>Usta, Hakan;Lu, Gang;Facchetti, Antonio;Marks, Tobin J.</i>	
Reactive Block Copolymer Scaffolds Prepared by RAFT Polymerization	339
<i>Li, Ronald C.;Hwang, Jungyeon;Maynard, Heather D.</i>	
Immobilization of Biomolecules on Pulsed Plasma Polymerized Poly (Vinylacetic Acid) Thin Films	340
<i>Bhattacharyya, Dhiman;Pillai, Karthikeyan;Chyan, Oliver;Tang, Liping;Timmons, Richard B.</i>	
Effect of NaCl on Properties of Freeze/Thawed Hydrogels Composed of Poly(Vinyl Alcohol) and Chitosan	342
<i>He, Guanghua;Zheng, Hua;Chen, Jianfeng;Qin, Huiyu</i>	
Effect of Spatial Relationship Between Positive Charge and Alkyl Tail on the Biocidal Activity of Pyridinium Polymers	345
<i>Sambhy, Varun;Hoar, Jason L.;Peterson, Blake R.;Sen, Ayusman</i>	
Aminoxy Functionalized Polymers by ATRP for Chemoselective Conjugation to Proteins	346
<i>Heredia, Karina L.;Tolstyka, Zachary P.;Maynard, Heather D.</i>	
Association of Hydrotropic Dendrimers in Aqueous Solution: Effects on Solubilization of Poorly Soluble Drugs	347
<i>Ooya, Tooru;Takaoka, Yuta;Sano, Haruyuki</i>	
Controlled Release with Ultra-Thin Polymeric Nanocomposite Films	350
<i>Jiang, Chaoyang;Zimnitsky, Dmitry;Tucker, Craig;Liu, Chang;Tsukruk, V.V.</i>	

Formation and Characterization of a Stimulus-Responsive Dynamic Hydrogel Based on a Nanometer-Scale Protein Conformational Change	351
<i>Sui, Zhijie;Murphy, William L.</i>	
Monomodal Polyelectrolyte Complex Nanoparticles: Preparation by Consecutive Centrifugation and Protein Interaction	352
<i>Ouyang, Wuyue;Keßler, Bernd;Richter, Sven;Müller, Martin</i>	
Study of Interactions Between Anionic Surfactants and Collagen	354
<i>Li, Yuping;Asadi, Amran;Monroe, Margo;Douglas, Elliot P.</i>	
Site Specific Targeting for Treatment of Cancer Using Temperature Sensitive Nanoparticles	356
<i>Singh, Dipti;Choudhary, Veena;Koul, Veena;Kuckling, Dirk;Dinda, Amit K.;Adler, Hans-Juergen</i>	
Well-Defined Glycopolymers Synthesized from an ATRP Amino Acid Initiator	358
<i>Broyer, Rebecca M.;Maynard, Heather D.</i>	
Synthesis of Complex Hyperbranched Polymer Amphiphiles	359
<i>Nieberle, Jörg;Wurm, Frederik;Frey, Holger</i>	
Synthesis of Dual-Responsive Block Copolymers of Poly(Acrylic Acid) and Poly(Oligo(Oxyethylene) Styrene) and Their Self-Assembly in Water	361
<i>Hua, Fengjun;Hong, Kunlun;Britt, Phillip F.;Mays, Jimmy W.</i>	
Synthesis of Poly(Methyl Methacrylate-co-Hydroxyethyl Methacrylate)-b-Polyisobutylene-b-Poly(Methyl Methacrylate-co-Hydroxyethyl Methacrylate)	363
<i>Feng, Dingsong;Faust, Rudolf</i>	
Preparation and Characterization of Multiwalled Carbon Nanotube/Chitosan Fibers by Electrospinning	365
<i>Feng, Wei;Wu, Zigang</i>	
Preparation and Characterization of Poly(Vinyl Alcohol)/Carboxymethyl Chitosan Hydrogels Obtained by Freezing/Thawing Techniques	367
<i>He, Guanghua;Zheng, Hua;Fu, Zhongjun;Qin, Huiyu</i>	
Assembling Salicylic Acids Into a Drug-Tree: A Novel Platform for Drug Delivery	369
<i>Tang, Shengzhuang;June, Stephen M.;Howell, B.A.;Chai, Minghui</i>	
Competitive Adsorption of Polystyrenes in Cyclohexane Into Nanoporous Silica	372
<i>Tsai, Felicia;Kim, Chansu;Ryu, Chang Y.</i>	
Novel Class of Organic-Inorganic Nanohybrids from Functionalized Silsesquioxane-Based Nanoparticles and Micelles of Poly(n-Butyl Acrylate)-block-Poly(Acrylic Acid)	374
<i>Schumacher, Manuela;Ruppel, Markus;Burkhardt, Markus;Drechsler, Markus;Colombani, Olivier;Schweins, Ralf;Müller, Axel H.E.</i>	
Reaction Between Organotin Polymers and the Matrix Material 2,5-Dihydroxy Benzoic Acid	376
<i>Carraher, Charles E.;Barot, Girish;Battin, Amitabh J.</i>	
Molecular Weight Calculations for High Mass Polymers	380
<i>Carraher, Charles E.</i>	
Ability of a Series of Organotin Poly(Ethylene Glycols) to Inhibit Various Cancer Cell Lines	383
<i>Shahi, Kim;Roner, Michael R.;Carraher, Charles E.;Barot, Girish</i>	
Ability of Organotin Polymers Derived from Diaminopyrimidines to Inhibit Cancer Cell Growth	387
<i>Shahi, Kim;Roner, Michael R.;Carraher, Charles E.;Battin, Amitabh J.</i>	
F MALDI MS for Polymers from Ciprofloxacin and Organotin Dihalides	390
<i>Zhao, Anna;Carraher, Charles E.</i>	

Synthesis and Structural Characterization of Diallyltin and Divinyltin Poly(amine esters) Containing Ciprofloxacin	393
<i>Zhao, Anna;Carraher, Charles E.</i>	
Antibacterial and Antiyeast Activity of Aliphatic Organotin Polyethers	396
<i>Naoshima, Yoshinobu;Nagao, Kazutaka;Barot, Girish;Carraher, Charles E.</i>	
F MALDI TOF MS of Organotin Polyethers from Aliphatic Methylene Diols	399
<i>Barot, Girish;Carraher, Charles E.</i>	
TOF F MALDI MS of the Organotin Ether Derived from 2-Butyne-1,4-Diol and Dibutyltin Dichloride	402
<i>Barot, Girish;Carraher, Charles E.</i>	
Ability of Dibutyltin Polypyrimidine Amines to Inhibit Bacteria and Yeast	405
<i>Naoshima, Yoshinobu;Nagao, Kazutaka;Battin, Amitabh J.;Carraher, Charles E.</i>	
Synthesis and Characterization of Diallyltin and Divinyltin Derivatives of Acyclovir	408
<i>Sabir, Theodore S.;Carraher, Charles E.</i>	
Electrical Conductivity of Titanocene Polyester Derivatives of Terephthalic Acid	411
<i>Battin, Amitabh J.;Carraher, Charles E.</i>	
Aggregation-Induced Emission Enhancement of Polyacetylenes	414
<i>Jim, Cathy Ka Wai;Qin, Anjun;Lam, Jacky Wing Yip;Häußler, Matthias;Tang, Ben Zhong</i>	
New Catalysts for Polymerizations of 1-Chloro-2-Phenylacetylenes	416
<i>Liu, Jianzhao;Sun, Jingzhi;Dong, Yongqiang;Lam, Jacky Wing Yip;Yuan, Wangzhang;Xu, Haipeng;Tang, Ben Zhong</i>	
Unique Photoluminescence from Nonconjugated Alternating Copolymer Poly[(Maleic Anhydride)-Alt-(Vinyl Acetate)]	418
<i>Xing, Chang-Min;Lam, Jacky Wing Yip;Qin, Anjun;Dong, Yongqiang;Häußler, Matthias;Yang, Wan-Tai;Tang, Ben Zhong</i>	
Rheological Properties of Soy Protein Isolate and Polyurethane in Polyacrylonitrile/Dimethyl Sulfoxide Solution	420
<i>Xiao, Ru;Yin, Duan;Gu, Lixia</i>	
Characterization of Polyacrylonitrile/Soy Protein Isolate Blend Fiber	422
<i>Xiao, Ru;Zhu, Qingfang;Gu, Lixia</i>	
Size Exclusion Chromatography Coupled to Online Fourier Transform Infra Red Spectroscopy: A Powerful Tool for Polymer Characterization	424
<i>McConville, John A.;Saunders, Greg;Woods, Andrew;O'Donohue, Stephen</i>	
Automatic Continuous Online Monitoring of Copper-Mediated Living Radical Polymerizations	426
<i>McConville, John A.;Saunders, Greg;Willoughby, Ian;O'Donohue, Stephen</i>	
Synthesis of PEO-b-PNiPAM via RAFT Polymerization and Its Use for Preparation of Gold Nanoparticle	428
<i>Jeon, Hee Jung;Park, Hyeong Soo;Go, Da Hyeon;Kim, Kyung Min;Choi, Song-ye;Yoo, Hyun-Oh;Kim, Hoon Sik;Kim, Jungahn</i>	
Synthesis of Water-Soluble Chitosan Using Anhydride-Terminated Poly(ethylene oxide)	429
<i>Go, Da Hyeon;Park, Hyung Soo;Jeon, Hee Jung;Choi, Song Yee;Kim, Kyung Min;Kim, Young Woo;Kim, Jungahn</i>	
Controlled Styrene Radical Polymerization Initiated by Epoxide Ring Opening with Dichlorotitanium Phenoxides	431
<i>Asandei, Alexandru D.;Chen, Yanhui;Tang, Liming;Hanna, Tracy A.;Liu, Lihua</i>	

Effect of Styrene/initiator Ratios in Cp₂TiCl Catalyzed Radical Polymerizations from Oxiranes, Carbonyls and Thermal Initiators	433
<i>Asandei, Alexandru D.;Chen, Yanhui;Saha, Gobinda;Moran, Isaac W.</i>	
Poly(glycidyl methacrylate) Graft Copolymers with Styrene and Methacrylates by Cp₂TiCl-Catalyzed Epoxide Radical Ring Opening	435
<i>Asandei, Alexandru D.;Saha, Gobinda</i>	
Temperature Dependence of Styrene Polymerizations Initiated by Cp₂TiCl from Epoxides, Aldehydes and Peroxides	437
<i>Asandei, Alexandru D.;Saha, Gobinda;Chen, Yanhui;Moran, Isaac W.</i>	
Preparation and Character of Blend Gel Beads in Colon Specific Drug Delivery	439
<i>Xu, Yongmei;Zhan, Changyou;Wang, Le;Lou, Yiceng</i>	
Preparation and Character of Nanoparticles Based on Crosslinking Between Ca²⁺ and Carboxymethyl Chitosan	441
<i>Xu, Yongmei;Zhan, Changyou;Zheng, Hua;Wang, Le</i>	
Preparation and Character of Alginate and Sodium Carboxymethyl Cellulose Blend Beads as Floating Drug Delivery System	443
<i>Xu, Yongmei;Zhan, Changyou;Wang, Le;Zheng, Hua</i>	
Encapsulation of Carbon Nanotubes Poly(2-Ethyl-2-Oxazoline)-Block-Poly(ϵ-Caprolactone)	446
<i>Park, Chiyong;Lee, Sanghwa;Lee, Jung Ho;Lim, Jino;Lee, Sang Cheon;Park, Min;Kim, Junkyung;Park, Chong Rae;Kim, Chulhee</i>	
Formation of Metal Nanoparticles in the Template of Polymer Micelle	448
<i>Park, Chiyong;Rhue, Mikyo;Lim, Jino;Park, Heon Joo;Choi, Eun Kyung;Kim, Chulhee</i>	
Nanovalves for Mesoporous Silica Particles Based on Polypseudorotaxane Motif	450
<i>Park, Chiyong;Oh, Kyoungho;Lee, Sang Cheon;Kim, Chulhee</i>	
Cyclodextrin-Covered Organic Nanotubes: Self-Assembly and Functionalization	452
<i>Park, Chiyong;Im, Moon Sup;Lim, Jino;Lee, Sanghwa;Kim, Chulhee</i>	
Effects of Diamine Structure on Swelling of Polyimide Membranes	454
<i>Yang, Libin;Sun, Benhui;Xu, Yexin;Chen, Cuixian;Li, Jiding</i>	
Swelling Characteristics of Polyimide Membrane in Different Aqueous Solutions	456
<i>Yang, Libin;Sun, Benhui;Xu, Yexin;Chen, Cuixian;Li, Jiding</i>	
Effects of Different Solvents and Monomer Structures on Swelling of Polyimide Membranes	458
<i>Yang, Libin;Sun, Benhui;Xu, Yexin;Chen, Cuixian;Li, Jiding</i>	
Functional Organic-Inorganic Hybrid Materials for Optical Waveguide Applications	460
<i>Han, Jae Kook;Kwon, Yong Ku</i>	
Synthesis and Morphology of a Nanostructured Chemosensor Incorporated with an ESIPT Molecule and Polydiacetylene	462
<i>Jung, Jin Mi;Kwon, Yong Ku</i>	
In Situ Electrospinning Route for the Carbon/Cu₂S Heterostructured Nanofibers	464
<i>Liu, Jieyu;Wang, Ce</i>	
Preparation and Characteristics of Ultrafine Fiber from Electrospinning of BPDA-ODA Poly(Amic Acid) Solution	466
<i>Liu, Jieyu;Hu, Nantao;Wang, Ce</i>	
Preparation of Asymmetric Porous Gelatin Scaffolds	467
<i>Huo, Yanli;Huang, Yaqin</i>	
Synthesis and Bacteriostatic Activity of Novel Ce(III)-Gelatin Complex	469
<i>Wei, Tingting;Huang, Yaqin</i>	

Effect of Molecular Structure of Carboxymethyl Chitosan and Preparative Condition on Protein Encapsulation of Carboxymethyl Chitosan Nanoparticles	471
<i>Tan, Jinhai;Wei, Renxiong;Chen, Jinpeng;Zhan, Changyou;Xu, Yongmei</i>	
Swelling and Sustained Drug Release Profiles of Beads Based on Ionic Crosslinkage	474
<i>Xu, Yongmei;Zhan, Changyou;Zheng, Hua</i>	
Effect of pH on the Composite Modulus of Soy Protein Aggregates and Carboxylated Styrene-Butadiene Latex	476
<i>Jong, Lei;Peterson, Steven C.</i>	
Green Composites of Natural Rubber and Defatted Soy Flour	478
<i>Jong, Lei</i>	
Surface Resistivity of Hydrophilic Polyurethane Dispersion Containing MWNT	480
<i>Cheong, Hoon;Chin, In-Joo</i>	
Synthesis and Characterization of the Hyperbranched Urethane-g-acrylic Polymer with Unsaturated Double Bond and Hydroxyl Functional Group	482
<i>Cheong, Hoon;Chin, In-Joo</i>	

VOLUME 2

High-Interlayer-Spacing Modification of Layered Clays and Their Amphiphilic Self-Assembling Properties	484
<i>Lin, Jiang-Jen;Chen, Yu Min</i>	
Mechanistic Aspects of Clay Intercalation with Amphiphilic Poly(styrene-co-maleic anhydride)-Grafting Polyamine Salts	486
<i>Lin, Jiang-Jen;Hsu, Yen-Chi;Wei, Kuan-Liang</i>	
Synthesis of Poly(4-vinylphenol) Derivatives and Preparation of Multilayered Films from Aqueous Media	488
<i>Carroll, Vincent M.;Baumler, Megan A.;Cadwalader, John C.;Drapo, Jeanette R.;Ingalsbe, Michelle L.;Pinto, Matthew S.;van Dongen, Mallory A.;Priefer, Ronny</i>	
Nanoencapsulation of Isocyanate Functional Cores by Hydroxyl or Amine Functionalized Shells	490
<i>Yang, Huaxiang;Mendon, Sharathkumar K.;Rawlins, James W.</i>	
Novel Silica-Encapsulated Dendrimer-Palladium Catalyst	492
<i>Vincent, David;Clarke, Stephen R.;Dvornic, Petar R.;Hartmann-Thompson, Claire;Matison, Janis G.</i>	
Towards Biosensors Based on Covalently Functionalized Poly(pyrrolepropionic acid) Nanowires	494
<i>Wanekaya, Adam K.;Tolani, Sagar</i>	
Novel Synthesis of Poly(phenylene ethynylene) Composed of Alternating Fluorinated and Non-Fluorinated Units	495
<i>Dutta, Tanmoy;Watson, Mark D.</i>	
Synthesis and Optical Properties of Unsymmetrical Benzoperylenes	496
<i>Sivamurugan, Vajiravelu;Valiyaveetil, Suresh</i>	
Incorporation of Microencapsulated Dicyclopentadiene Into an Acrylic Bone Cement Matrix	498
<i>Biggs, Patrick;Jones, LeRoy;Lewis, Gladius</i>	
Adsorption of Nitrogen Oxide on Immersion Modified Activated Carbon Fiber Felt	499
<i>Song, Xiaofeng;Zhang, H.;Wang, Ce</i>	
Alkoxysilane Oligomer Modified Epoxy Coatings	501
<i>Gu, Hua;Soucek, Mark D.</i>	

Characterization and Curing Behavior of Polyamine Crosslinked α, β-Unsaturated Resin via aza-Michael Reaction	503
<i>Park, Deok Min;Cheong, Hoon;Chin, In-Joo</i>	
Cure Characterization of Polyimide-Graphite Composite by FTIR-Photoacoustic Spectroscopy	505
<i>Vijayaraghavan, Ravikumar;Sung, Chong Sook Paik</i>	
Determination of Gelation Time Using Rheological Methods	509
<i>Liu, Changdeng;Vailhe, Christophe</i>	
Dynamic Viscoelastic Properties of Hydroxyl-Terminated Poly(amidoamine) Dendrimer Physiological Saline Solutions	511
<i>Zhang, Dong-Hui;Ravi, Nathan</i>	
Energy Storage Study of Ferroelectric P(VDF-TrFE-CTFE) Terpolymers	513
<i>Zhang, Zhicheng;Chen, Wei;Chung, T.C.</i>	
Energy Transfer in a Dendrimer Exhibiting a Delocalized Donor and a Localized Acceptor	515
<i>Hagedorn, Kevin V.;Varnavski, Oleg;Hartwig, John F.;Goodson, Theodore</i>	
Epoxy Nanocomposites from Dual-Functionalized Clay Prepared from One-Pot Reaction	516
<i>Wang, Junzuo;Mathias, Lon J</i>	
Epoxy Nanocomposites with Organoclay Containing Mixed Pendant Groups or with Mixed Organoclays	518
<i>Chen, Chenggang</i>	
FEM Analysis of the Thermal Residual Stress of Carbon Fiber/PPESK Composite	520
<i>Lu, Chun;Chen, Ping;Yu, Baijie;Yu, Qi;Liu, Shengping</i>	
Formation of Micellar Structure in Alginate	523
<i>Sankaran, Swetha;Arechederra, Robert L.;Minteer, Shelley D.</i>	
Gate Dielectric Chemical Control of Pentacene Film Microstructure and Field-Effect Transistor Performance	525
<i>Kim, Choongik;Facchetti, Antonio;Marks, Tobin J.</i>	
Influence of Polyborosiloxane on the Flame Retardancy of Polyethylene Terephthalate-Clay Nanocomposite	528
<i>Huo, Yue;Fan, Qinguo;Dembsey, Nicholas;Patra, Prabir K.</i>	
Kinetics of the Dynamic Elastic Modulus Recovery During Annealing for Poly(Dimethylsiloxane) Composites with Nanosilica	531
<i>Lin, Gui;Zhang, Xiujuan;Qian, Yanchao;Zhang, Liqun</i>	
Light Induced Fluorescent Patterning of Polybenzoxazole and Enhanced Emission of Hydroxyphenyl-Benzoxazole Oligomer	533
<i>Kim, Hyong-Jun;Kim, Taehoon;Lee, Jin Koo;Lee, Taek Seung;Kim, Jinsang</i>	
Morphology and Properties of Polyacrylates-Silica Nanocomposites	535
<i>Li, Jia-ning;Li, Wang;Yuan, Qiao-long;Wu, Su-sen</i>	
Nanophase-Separated Structure from a Diblock-Type Supramacromolecule via Biocomplementary Hydrogen Bonding	537
<i>Noro, Atsushi;Nagata, Yutaka;Takano, Atsushi;Matsushita, Yushu</i>	
Novel Copolymers of Vinyl Acetate and Alkyl Ring-Substituted 2-Phenyl-1,1-Dicyanoethylenes	539
<i>Kharas, Gregory B.;Russell, Selenia M.;Baecher, Daniel P.;Becker, Jeffrey H.;Borgmeyer, Samuel;Mancias, Jacqueline;Duzo, Emina;Delgado, Alicia M.;Rose, Torri;Hartmann, Meagan K.</i>	

Organic-Inorganic Hybrid Filler to Improve Physical Properties of Poly(Lactic Acid)	542
<i>Jin, Fengzhe; Satoh, Masahiro</i>	
Overview of Continuous Polymerization Process Technology	543
<i>Sharma, Kal Renganathan</i>	
Patterning of Electrochromic Polyterthiophene Fiber Mats and Films and Potential Applications	544
<i>Asemota, Chris I.; Rousselle, Marissa; Kumar, Arvind; Sotzing, Gregory A.</i>	
Polymer/clay and Polymer/Ceramic Aerogel Composites	546
<i>Gawryla, Matthew D.; Bandi, Suneel A.; Schiraldi, David A.</i>	
Positive Temperature Coefficient Resistivity Effect in Polyorganosiloxane Modified Polyolefin Composites	548
<i>Kang, Doo Whan; Lee, Byoung Chul; Kim, Ohyoung</i>	
Square Arrays of Vertical Cylinders of PS-b-PMMA on Chemically Spot-Patterned Surfaces	550
<i>Park, Sang-Min; Solak, Harun H.; La, Young-Hye; Nealey, Paul F.</i>	
Preparation and Characterization of a Novel Carboxymethyl Chitosan Hydrogel for Drug Controlled Release	552
<i>Zheng, Hua; Qin, Huiyu; Huo, Jintao; Xu, Peihu; He, Guanghua</i>	
Preparation of Organoclay and its Application in Acrylic Coatings	554
<i>Jiratumnukul, Nantana; Pissaroop, Thatsaporn</i>	
Preparation of Poly(styrene-co-maleic anhydride) (SMA) Hydrogel Nanofiber by Electrospinning	555
<i>Liu, Hai-Qing; Tang, Chunyi; Ye, Shuhai</i>	
Properties of Homogeneously Modified Starch and its Blend with Poly(ϵ-Caprolactone)	557
<i>Li, Yongfeng; Lin, Jiaping; Lu, Chong; Cheng, Shujun</i>	
Schizophrenic Micelles from a Poly(Acrylic Acid)-Block Poly(N,N-Diethylacrylamide) Copolymer	560
<i>Andre, Xavier; Burkhardt, Markus; Drechsler, Markus; Lindner, Peter; Gradzielski, Michael; Müller, Axel H.E.</i>	
Stimulus Responsive Aggregation of a Novel Rod-Coil Type Double Hydrophilic Block Copolymer Containing Rigid Strictly Alternating Polyampholyte in Aqueous Solution	562
<i>Mao, Min; Turner, S. Richard</i>	
Structural Differences in Aerogels Prepared with Different Clay Minerals	565
<i>Johnson, Jack R.; Schiraldi, David A.</i>	
Study on Effect of Feed Ratio on Controlled Cross-Linking Polymerization Process	567
<i>Li, Fangxing; sun, Ruimin; Zhou, Qingye; Cheng, Xiaohui; Zhou, Xingdi; Liu, Zunfeng; Liu, Dongping; Chen, Jun</i>	
Study on the Properties of Protein as an Immunoabsorbent Using an Activated Agarose as a Carrier	570
<i>Wang, Zhigang; Li, Guangji; Zhang, Xufeng; Wu, Lisha; Yang, Dongsheng</i>	
Surface-Initiated ATRP Polymerization from Self-Assembled Peptide Nanotubes - Synthesis of Polymer-Wrapped Peptide Nanotubes	573
<i>Couet, Julien; Biesalski, Markus A.</i>	
Synthesis and Characterization of Novel Co-Polymer for Reversible Bio-Conjugation	575
<i>Ghosh, Suhrit; Lartey, Michael; Basu, Subhadeep; Sandanaraj, Britto S.; Thayumanavan, S.</i>	

Synthesis and Characterization of Poly(3hexylthiophene)-Polyethylene Block Copolymers	576
<i>Nielsen, Christian B.;Janssen, René A.J.</i>	
Synthesis and Dyed Poly(Trimethylene Terephthalate) Fibers with Novel Water-Repellent Azo Dyes	578
<i>Liao, Shen-Kung;Huang, Po-Han;Yu, Chiu-Fen;Lin, Shang-Min</i>	
Synthesis and Evaluation of New Amorphous Biodegradable Elastomers	581
<i>Liu, Jinrong;Olson, David A.;Sheares, Valerie V.</i>	
Synthesis, Self-Assembly and Characterization of a Novel Rod-Coil-Rod Block Copolymer Containing Conjugated Oligomers	584
<i>Li, Kun;Wang, Qing</i>	
Biological Effect of Amine Density Within Poly(Glycoamidoamine) DNA Delivery Vehicles	586
<i>Lee, Chen-Chang;Reineke, Theresa M.</i>	
Preparation and the Properties of the Gelatin /XNBR Blends	587
<i>Li, Xiaolin;Xin, Xiao;Yin, Yunshan</i>	
White Light Emitting Diodes by Blending Poly (oxadiazole-co-fluorene) (POXF) and MEH-PPV	589
<i>Kim, Myung-Su;Lee, Kangwon;Kim, Hyong-Jun;Shtein, Max;Kim, Jinsang</i>	
Novel Approach Toward Biogenic Amine Sensing Using Cross-Reactive Poly(thiophene)s Sensor Arrays	591
<i>Deason, Travis K.;Maynor, Marc S.;Nelson, Toby L.;Lavigne, John J.</i>	
Ampholytic Diblock-Copolymers by the RAFT Technique: Candidates for Self-Assembled Micelles for Drug Delivery	593
<i>Licea-Claverie, Angel;Obeso-Vera, Claudia;Flores-Parra, Mercedes C.;Cornejo-Bravo, Jose M.;Frank, Curtis W.</i>	
Anion Sensors in Polyurethane Matrices: Synergy Between Matrix and Sensor Materials Improves Selectivity of the Sensing Process	595
<i>Palacios, Manuel A.;Pohl, Radek;Zyryanov, Grigory;Anzenbacher, Pavel</i>	
Antifouling Block Copolymer Surfaces That Resist Settlement of Barnacle Larvae	597
<i>Weinman, Craig J.;Krishnan, Sitaraman;Park, Daewon;Paik, Marvin Y.;Wong, Kaiming;Fischer, Daniel A.;Handlin, Dale L.;Kowalke, Greg L.;Wendt, Dean E.;Sohn, Karen E.;Kramer, Edward J.;Ober, Christopher K.</i>	
Antimicrobial Cellulosic Fibers with Incorporation of Aminopyridinium Salts	599
<i>Zhao, Tao;Sun, Gang</i>	
Atomistic Simulations of Graphite Polypropylene Nanocomposites Including Covalent Graphite Modification	601
<i>Chambliss, Rozlyn Nicole;Reeves, Melissa S.</i>	
Azide End-Capped Hyperbranched Polyglycerol: Complex Polymer Structures Via Click Chemistry	603
<i>Shen, Yi;Shen, Zhong;Nieberle, Jörg;Barriau, Emilie;Frey, Holger</i>	
Behavior of Matching Molecular Weight Linear and Star PEG Self-Assembled Monolayers Upon Protein Adsorption	605
<i>Jullian, Christelle F.;Claus, Richard O.;Spillman, William B.;Robertson, John L.</i>	
Bio-Degradable/Absorbable Polymer Alloys	606
<i>Oyama, Hideko T.;Iizuka, Yutaka</i>	
Carbocationic Polymerization of Styrene Under Environmentally Benign Conditions	607
<i>Verebélyi, Klára;Groh, Péter Werner;Iván, Béla</i>	

Characterization of Copolymeric Hydrogel Vitreous Substitutes That Gel In Situ	609
<i>Swindle, Katelyn E.;Hamilton, Paul D.;Shui, Ying-Bo;Beebe, David C.;Ravi, Nathan</i>	
Characterization of Nanoclays in Solvents	611
<i>Tse, Mun F.;Hsiao, Benjamin S.;Nawani, Pranav</i>	
Characterization of Water in Nafion by Near-IR, Solid-State NMR Studies and Conductivity Measurement	614
<i>Koo, Donghun;Sung, Chong Sook Paik</i>	
Chitosan Modified Electrodes for Ethanol/ Oxygen Biofuel Cells	617
<i>Duma, Rodica;Minteer, Shelley D.</i>	
Comparative Study on Z-Supported RAFT Polymerization Based on Silica Particles and Merrifield Resin	619
<i>Zhao, Youliang;Perrier, Sébastien</i>	
Confinement of Diblock Copolymers in Submicro-Patterns for Hierarchically Ordered Nanostructures	621
<i>Kim, Sehee;Char, Kookheon;Sohn, Byeong-Hyeok</i>	
Controlled Release of Low Molecular Weight Cationic Molecules from Electrospun Weak Polyelectrolyte Fibers	622
<i>Chunder, Anindarupa;Sarkar, Sourangsu;Yu, Yingbo;Zhai, Lei</i>	
Controlling Refractive Index of Methyl Methacrylate/Styrene/Acrylonitrile Terpolymer Through Continuous Process	624
<i>Jin, Youngsub;Hong, Jae Keun;Park, Whan Seok;Lee, Byeong Do;Kim, Joong In</i>	
Copolymerization of 2-Hydroxyethyl Acrylate and 2-Hydroxyethyl Methacrylate: Controlling the Water Content of Hydrogels	626
<i>Grubbs, W. Tandy;Ramirez, Alfonso</i>	
Delivery of Antisense DNA to Nuclear Telomere RNA by Use of a Natural Polysaccharide of Schizophyllan	628
<i>Minari, Jusaku;Kubo, Takanori;Shimada, Naohiko;Takeda, Yoichi;Nagasaki, Takeshi;Shinkai, Seiji;Sakurai, Kazuo</i>	
Dielectric and Mechanical Behavior of Surface-Modified BaTiO₆/polyamide-6 Composite Films	630
<i>Lee, Sang-Soo;Kim, Tae Ho;Kim, Junkyung</i>	
Effect of Antisetling Agent on the Performance of Copper-Based Conductive Coatings	632
<i>Li, Zhengli;Liu, Xiangxuan;Wang, Xuanjun;Zhang, Youzhi</i>	
Effect of Hydrogen Bond on the Interaction Between the Superplasticizer Molecules and Cement Particles	635
<i>Li, Wenwei;Pan, Qiwei;Zhang, Jin;Li, Cheng;Pei, Meishan;Kong, Xiang Z;Zhu, Xiaoli</i>	
Effect of Hydrogen Bonding on Properties of Styrene/Vinyl Phenol Copolymers	637
<i>Chigwada, Grace;Olson, Brian G.;Hassan, Mohammad K.;Mauritz, Kenneth A.;Nazarenko, Sergei</i>	
Effect of Moisture Absorption on Property of Epoxy Resin/Cyanate Ester/Glass Cloth Composites	639
<i>Huang, Li;Wang, Chen;Lu, Yafei</i>	
Effect of Solvents on the Properties of Thermoplastic Polyurethane/clay Nanocomposites	641
<i>Dan, Cheol Ho;Kim, Wan Tae;Kim, Jeong Ho</i>	
Effects of Molecular Weight on Poly(Galactaramidoamine) Toxicity and DNA Delivery	643
<i>Taori, Vijay P.;Reineke, Theresa M.</i>	

Effects of Nanoparticles with Various Structures on Soy Protein-Based Nanocomposites	644
<i>Wei, Ming;Yu, Jiahui;Huang, Jin</i>	
Effects of Secondary Amine Number in Trehalose Click Polymers for Transfection	646
<i>Kizjakina, Karina;Reineke, Theresa M.</i>	
Electrospun PCL/CNF Scaffolds with Controlled Surface Chemistry	647
<i>Deshpande, Himani;Jose, Moncy V.;Thomas, Vinoy;Clem, William;Chowdhary, S;Dean, Derrick R.;Nyairo, Elijah</i>	
Excellent Control Over Branching Kinetics via a One-Pot RAFT Polymerization Reaction	648
<i>Mounteney, Philip;Rannard, Steven P.;Findlay, Paul;Duncalf, David J;Perrier, Sébastien</i>	
Exploring Cellular Internalization Mechanisms of Polymeric Gene Delivery Vectors	650
<i>McLendon, Patrick M.;Reineke, Theresa M.</i>	
Exploring the Mechanism of Acrylic/alkyd Hybrid Systems by Means of One- And Two- Dimensional NMR	652
<i>Hasseman, Jamie S.;Thatte, Mrunal;Soucek, Mark D.</i>	
Fabrication of Organic Dyes/PMMA 1D Nanocomposite with FRET Properties	654
<i>Lee, Kyung Jin;Jang, Jyongsik</i>	
Functional Self-Assembled Monolayers for Large Photoinduced Charge Transfer in Organic Field-Effect Transistors	656
<i>Paoprasert, Peerasak;Park, Byoungnam;In, Insik;Zwickey, Jodi;Evans, Paul G.;Gopalan, Padma</i>	
Gadolinium-Containing Glyco-Polymers for MRI	658
<i>Bryson, Joshua M.;Reineke, Theresa M.</i>	
Graphoepitaxy and Orientational Control of Lithographically Patternable Diblock Copolymers by Solvent Annealing	659
<i>Bosworth, Joan K.;Schwartz, Evan L.;Huang, Jenny Q.;Ko, Albert W.;Ruiz, Ricardo;Black, Charles T.;Ober, Christopher K.</i>	
Hierarchical Fabrication of Linear (1-D) Arrays of Metal and Metal Oxide Nanoparticles Using Block Copolymer Templates	661
<i>La, Young-Hye;Stoykovich, Mark P.;Park, Sang-Min;Nealey, Paul F.</i>	
High Performance Soft Lithography by Developing Photocurable Stamps	663
<i>Choi, Kyung M.</i>	
Highly Mobile Antimicrobial Silicone Oligomers	665
<i>Wynne, James H.;Pant, Ramesh R.;Buckley, Joseph P.;Lloyd, Christopher T.;Santangelo, Patrick G.;Rasley, Brian T.</i>	
Hyperbranched Polymer Nanocomposites with Composition Dependant Morphologies	667
<i>Decker, Jeremy J.;Chigwada, Grace;Olson, Brian G.;Wicks, Douglas A.;Nazarenko, Sergei</i>	
In Situ Polymerized Phenolic Bonded NdFeB Magnets	669
<i>Huang, Li;Yan, Haisheng;Lu, Yafei</i>	
Layered-Clay-Skeleton Initiated Epoxy Polymerization and Formation of Unique Silicate/Polymer Hybrid Assemblies	670
<i>Lin, Jiang-Jen;Chan, Ying-Nan;Jeng, Ru-Jong</i>	
Lipase-Immobilized Electrospun Polyacrylonitrile Nanofibrous Membrane	672
<i>Chen, Jyh-Ping;Li, Sheng-Feng;Wu, Wen-Teng</i>	

Mechanical Investigations of Wheat Gluten/thiolated Poly(Vinyl Alcohol) Blends	673
<i>Dicharry, Rebecca;Ye, Peng;Saha, Gobinda;Waxman, Eleanor;Parnas, Richard S.;Asandei, Alexandru D.</i>	
Microwave Synthesis of Star-Shaped Poly(ϵ-Caprolactone) with Polyol Initiator	675
<i>Yu, Zhaoju;Liu, Lijian</i>	
Moisture Outgassing from Silica-Filled Polydimethylsiloxane TR55 and S5370	676
<i>Dinh, Long N.;Burnham, Alan k.;Schildbach, Marcus A.;Maxwell, Robert S.;Balazs, Bryan;McLean, William, II</i>	
Multi-Photon Fluorescence Quenching of Conjugated Polymers for TNT Detection	678
<i>Narayanan, Aditya;Varnavski, Oleg;Swager, Timothy M.;Goodson, Theodore</i>	
Nanorings from the Self-Assembly of Amphiphilic Molecular Dumbbells	679
<i>Lee, Eunji;Kim, Jung-Keun;Lee, Myongsoo</i>	
Novel Branched Structure Material with High Frequency Dielectric Response	680
<i>Guo, Meng;Goodson, Theodore</i>	
Novel Dual Crosslinked Complex Gel Bead Based on Carboxymethyl Chitosan/Alginate for Oral Delivery of Protein Drugs	681
<i>Zheng, Hua;Qin, Huiyu;Zhang, Chengsen;He, Guanghua</i>	
Novel Preparative Method of Polylactide Microspheres and Effect on Anisodamine Encapsulation Efficiency	683
<i>Lou, Yiceng;Yan, Xiangfeng;Zhao, Feng;Yang, Han;Song, Qing</i>	
Novel Strategy for Polymer/carbon Nanotube Composites Preparation: Ultrahigh Shearing	685
<i>Chen, Guang-Xin;Shimizu, Hiroshi</i>	
PAN-Based Mesoporous Carbon with Tunable Pore Diameter: Synthesis and Electrochemical Performance	686
<i>Choi, Moonjung;Jang, Jyongsik</i>	
Phase Behavior of Blends of PS-<i>b</i>-PB Diblock Copolymer and PS Homopolymer in Emulsion Droplets	688
<i>Jeon, Seog-Jin;Yi, Gi-Ra;Yang, Seung-Man</i>	
Photo-Patternable Nanoporous Titania Films by Coassembly of Diblock Copolymer and Chemically Modified Titanium Alkoxide	690
<i>Park, Oun-Ho;Cheng, Joy Y.;Kim, Hyun Suk;Rice, Philip. M.;Topuria, Teya;Krupp, Leslie E.;Miller, Robert D;Kim, Ho-Cheol</i>	
Polyacrylonitrile-graft-poly(ethylene glycol) (PAN-g-PEG) for Size-Selective, Fouling Resistant Nanofiltration (NF) Membranes	692
<i>Asatekin, Ayse;Mayes, Anne M.</i>	
Polyelectrolyte Templating of Calcium Carbonate Microspheres and 3D Scaffolds	694
<i>Parker, Sara T.;Lewis, Jennifer A.</i>	
Polymerization of Di(ethylene glycol) 2-Ethyl Hexyl Ether Acrylate via Reversible Addition-Fragmentation Chain Transfer Polymerization	695
<i>Venkataraman, Shrinivas;Wooley, Karen L.</i>	
Polyphenylene Based Branched Polymers: Synthesis, Characterization and Properties Investigation	696
<i>Zhuang, Haiyu;Valiyaveetil, Suresh</i>	
Preparation and Characterization of Silk Fibroin/Bacterial Cellulose Composite Films	698
<i>Jung, Rira;Kim, Hun Sik;Park, Won-Il;Jin, Hyoung-Joon</i>	
Preparation of Aligned Polyetherimide Fiber by Electrospinnig	700
<i>Moon, SungCheal;Kim, HeeSun;Choi, JaeKon;Farris, Richard J.</i>	

Preparation of Low T_g Phosphate Glasses and Their Blends with Polymers for High Barrier Applications	703
<i>Gupta, Mohit;Deans, Taneisha;Schiraldi, David A.</i>	
Robust and Biocompatible Ultrathin Silk Fibroin Films	706
<i>Jiang, Chaoyang;Wang, Xianyan;Gunawidjaja, Ray;Lin, Yen-Hsi;Gupta, Maneesh K.;Kaplan, David;Naik, Rajesh R.;Tsukruk, V.V.</i>	
Study on Amphiphile Triblock Copolymer: Cholesteryl-PCL-mPEG	707
<i>Guo, Jinbao;Sun, Jie;Zhao, Dongyu;Cao, H.;Yang, Huai</i>	
Study on Inclusion Complexes Formed by Cholesteryl-(ε-Caprolactone) Polymer and β-Cyclodextrin	709
<i>Sun, Jie</i>	
Supramolecular Assembly in Common Organic Solvent from Block Copolymer and Organic Acid	711
<i>Peng, Huisheng;Zhu, Yuntian Throdore</i>	
Synthesis and Characterization of Novel Biomaterials Based on Cyclic Acetal and PEG Hydrogels	713
<i>Kaihara, Sachiko;Fisher, John P.;Matsumura, Shuichi</i>	
Synthesis and Mobility of Novel Ionic Silicones	714
<i>Pant, Ramesh R.;Wynne, James H.;Buckley, Joseph P.</i>	
Synthesis and Properties of Telechelic Poly(lactic acid) Ionomers	716
<i>Ro, Andrew J.;Weiss, Robert A.;Huang, Samuel J.</i>	
Synthesis of Functionalized Hexacene for OTFT Application	718
<i>Purushothaman, Balaji;Parkin, Sean R.;Anthony, John E.</i>	
Synthesis of Modified Polybutadiene by Sol-Gel Process and Its Application to Dye-Sensitized Solar Cell	719
<i>Yeo, Yun-Seon;Lee, Jin-Kook;Kim, Mi-Ra</i>	
Synthesis, Optical and Thermal Properties of Oligothiophenesilane Dendrimers	720
<i>Borshchev, Oleg V.;Ponomarenko, Sergei A.;Surin, Nikolai M.;Luponosov, Yury N.;Buzin, Mikhail I.;Muzafarov, Aziz M.</i>	
TEM Studies of Wheat Gluten/Thiolated Poly (Vinyl Alcohol) Blends	722
<i>Dong, Jing;Dicharry, Rebecca;Parnas, Richard S.;Asandei, Alexandru D.</i>	
Templated Microreactors: A Synthetic Approach to Enzyme Entrapment	724
<i>Gough, Dara Van;Wolosiuk, Alejandro;Braun, Paul V.</i>	
Comparison of the Rheological Properties of M-LLDPE and Commercial PEs	726
<i>Yang, Jiping;Li, Li;Zhang, Zheng</i>	
Thiol-ene Photopolymerization Kinetics Study of Difunctional Thiol with Different Alkenes	728
<i>Wutticharoenwong, Kosin;Soucek, Mark D.</i>	
Tunable Hydrogels Prepared from Star PDMS and Linear PEO	730
<i>Regan, Katherine R.;Hou, Yaping;Hanh, Mariah S.;Liao, Huimin;Grunlan, Melissa A.</i>	
Unusual Location of a Broad Glass Transition Temperature in Gradient Copolymer	732
<i>Wong, Christopher L. H.;Kim, Jungki;Torkelson, John M.</i>	
Use of New Tetraalkylborate Initiators for Remote Polymerization of Acrylates	734
<i>Ermoshkin, Andrey A.;Nikolaeva, Ekaterina S.;Neckers, Douglas C.;Fedorov, Andrei V.</i>	
Mechanical Properties of Self-Assembled Nanostructural Lipid Tubules	735
<i>Zhao, Yue;Fang, Jiyu</i>	

Controlled Assembly of Nanoparticles Using Biological and Abiotic Building Blocks	736
<i>Rotello, Vincent M.</i>	
Self-Assembly of Polymer-Tethered Nanoparticle Shape Amphiphiles	738
<i>Glotzer, Sharon C.;Horsch, Mark A.;Iacovella, Christopher R.;Keys, Aaron S.;Chan, Elaine R.;Zhang, Xi;Zhang, Zhenli</i>	
Implementation of Dentric Molecular Transporter Into Nanoobjects with Control of Delivery to Intracellular Compartments	739
<i>Huang, Kui;Cohen, Mitchell J.;Croce, Teresa A.;Hamilton, Sharon K.;Evans, Bill L.;Voss, Bryan;Hamm, Heidi;Harth, Eva</i>	
Conducting Polymer-Cellulose Nanocomposites	741
<i>Weder, Christoph</i>	
Polymerization of the Ligands of Gold Nanoparticles Segregated to an Oil-Water Interface	742
<i>Glogowski, Elizabeth;Tangirala, Ravisubhash;He, Jinbo;Russell, Thomas P.;Emrick, Todd</i>	
Stimuli-responsive Polymer Microgel Particles	743
<i>Richtering, Walter;Keerl, Martina;Wong, John E.;Müller, C. Bernd</i>	
Scaling Behavior and Transport Phenomena in Organic and Polymer Transistors	745
<i>Dodabalapur, Ananth;Wang, Liang;Fine, Daniel;Basu, Debarshi</i>	
Microstructure Foundations of High Carrier Mobility in Polymer Semiconductors	746
<i>DeLongchamp, Dean M.;Kline, R. Joseph;Lin, Eric K.;Fischer, Daniel A.;Richter, Lee J.;Moad, Andrew J.;Heeney, Martin;McCulloch, Iain;Northrup, John E.</i>	
Interesting Sensory Molecules Based on Cross Conjugated Water Soluble Poly(para-phenylenes)	747
<i>Li, Hairong;Valiyaveetil, Suresh</i>	
High Mobilities for Block Copolymers of Regioregular Poly(3-Hexylthiophene)	749
<i>Sauvé, Geneviève;McCullough, Richard D.</i>	
Combining Soft and Hard Materials for Unconventional Electronics	751
<i>Wang, Lian;Yoon, Myung-Han;Facchetti, Antonio;Marks, Tobin J.</i>	
Tuning of Molecular and Solid State Electronic Properties by Fluorination - A Theoretical Study	753
<i>Gierschner, Johannes;Milián Medina, Begoña;Egelhaaf, Hans-Joachim;Beljonne, David;Brédas, Jean-Luc</i>	
Ultrafast Energy Transfer in Conjugated Systems Based on Fluorene Oligomers and Aluminum Tris(8-quinolinolate)	755
<i>Montes, Victor A.;Anzenbacher, Pavel</i>	
Novel Fluorene-Based Copolymer for Cyan and Green Light-Emitting Diodes	757
<i>Li, Jianfeng;Lu, Gang;Facchetti, Antonio;Marks, Tobin J.</i>	
Microphase Separation in Designed Block Copolymers	759
<i>Khokhlov, Alexei R.;Khalatur, Pavel G.</i>	
Nucleobase-Containing Triblock Copolymers as Templates for the Dispersion of Guest Molecules at the Nanoscale	762
<i>Mather, Brian D.;Baker, Margaux B.;Long, Timothy E.;Beyer, Frederick L.</i>	
Softness and Order in Self-Assembled Materials	764
<i>Schellbach, Carsten;Frömsdorf, Andreas;Lindner, Peter;Roth, Stephan V.;Förster, Stephan</i>	
Amphiphilic Supramolecular Polymers Based on Coiled-Coil Peptide Mediated Self-Assembly	765
<i>Robson Marsden, Hana;Korobko, Alexander V.;van Leeuwen, Ellen N.M.;Sommerdijk, Nico A.J.M.;Kros, Alexander</i>	

Synthesis of Membrane-Disruptive Diblock Copolymers for Non-Viral Drug Delivery	767
<i>Convertine, Anthony J.;Johns, Rachel E.;Hoffman, Allan S.;Stayton, Patrick S.</i>	
Combining Rigid Self-Assembling Peptide Rings with Soft Polymers for the Construction of Shape-Defined Hybrid Nanostructures	769
<i>Biesalski, Markus A.;Duman, Sidar;Couet, Julien</i>	
Grafting Short Peptides Onto Polybutadiene-block-poly(ethylene oxide): A New Platform for Self-Assembling Hybrid Amphiphiles	771
<i>Geng, Yan</i>	
Supramolecular Nanoplatelets Assembled from Pluronic/Cyclodextrin Polyrotaxanes and Reinforced Soy Protein-Based Nanocomposites Thereof	773
<i>Zhou, Ziyang;Zheng, Hua;Yu, Jiahui;Huang, Jin</i>	
Biofunctional Nanorods in Supramolecular Thermoplastic Elastomers	775
<i>Wisse, Eva;Meijer, E.W.</i>	
Synthesis of Functional Lactide Copolymers	777
<i>Noga, David E.;Kumar, Anjali;Collard, David M.;Weck, Marcus;Garcia, Andres</i>	
Protein, Cell and Bacterial Fouling Resistance of Peptidomimetic Polymer Modified Titanium Surfaces	778
<i>Statz, Andrea R.;Honabberger, Matthew O.;Barron, Annelise E.;Messersmith, Phillip B.</i>	
Molecularly Imprinted Polymers for Selective Recognition of Signal Peptides	780
<i>Janiak, Daniel S.;Culver, James N.;Kofinas, Peter</i>	
Antibacterial Materials for Coatings and General Applications: Pyridinium Polymers and Silver Bromide Based Nanocomposites	781
<i>Sambhy, Varun;Peterson, Blake R.;Sen, Ayusman</i>	
Control of DNA Incorporation into Poly-L-Lysine Multilayers	783
<i>Dorris, Annie C.;Barrett, Christopher J.</i>	
Novel Designed Immunoisulatory Membranes of PDMAAm/PDMS	785
<i>Kennedy, Joseph P.;Erdodi, Gabor;Kang, Jungmee;Ely, Daniel</i>	
Study of Homogeneity and Template Removal During Virus Imprinted Polymer Synthesis	787
<i>Bolisay, Linden D.;Culver, James N.;Kofinas, Peter</i>	
Photoswitch Assembly of Dispiropyran-Polymer Conjugates	788
<i>Fujiwara, Tomoko;Vandenbos, Aaron;Fukushima, Kazuki</i>	
Nanoparticles and Nanocages Originating from Well-Defined Brush Block Copolymers	790
<i>Cheng, Chong;Qi, Kai;Khoshdel, Ezat;Wooley, Karen L.</i>	
Nanoparticles in Polymer Solutions: Phase Behavior, Gelation and Elastic Modulus	791
<i>Surve, Megha;Pryamitsyn, Victor;Ganesan, Venkat</i>	
Simulation of Nanoparticle Formation by Irreversible Collapse of Unfolded Macromolecular Precursors	792
<i>Duxbury, Phillip M.;Liu, Jiwu;Mackay, Michael E.</i>	
Conformational Changes of Chain Molecules on an Adsorbing Substrate: Solvent and Temperature Effects	793
<i>McGarrity, Erin S.;Bohnsack, Tiffany E.;Frischknecht, Amalie L.;Mackay, Michael E.</i>	
In-Situ Formation of Ag Nanoparticles in Polystyrene (PS) Core-Poly Acrylic Acid (PAA) Brush Particles by UV-Irradiation	795
<i>Lu, Yan;Mei, Yu;Schrinner, Marc;Ballauff, Matthias</i>	

Measurement of Nanoparticle Diffusion Coefficients in Polymer Melts: Breakdown of the Continuum Stokes-Einstein Relation	797
<i>Tuteja, Anish;Mackay, Michael E.;Narayanan, Suresh;Wong, Michael S.;Hawker, Craig</i>	
Preparation of Functional Ferromagnetic Colloids and Assembly Into 1-D Mesostructures	798
<i>Korth, Bryan D.;Keng, Peiyuin;Kim, Boyun;Pyun, Jeffrey</i>	
Nanoblossoms: Photoinduced Stretching and Photoinduced Dissolution of Polycation Stars by Switching the Charge of Counterions	799
<i>Plamper, Felix A.;Müller, Axel H.E.;Ballauff, Matthias</i>	
Nanostructured Composites of Polymers and Ionic Liquids	801
<i>He, Yiyong;Simone, Peter M.;Lodge, Timothy P.</i>	
Interface Modifications in Hybrid Organic-Inorganic Photovoltaic Cells Using Benzoic Acid Derivatives	803
<i>Goh, Chia Tzun;Scully, Shawn R.;McGehee, Michael D.</i>	
Self-Assembled Nanostructures for Organic Photovoltaics	805
<i>Bullock, Joseph E.; Kelley, Richard F.; Wasielewski, Michael R.</i>	
Photoinduced Electron Transfer in a Molecular Donor-Acceptor Quartet.....	807
<i>Liang, Yongye;Chen, Lin X.;Xiao, Shengqiang;Yu, Luping</i>	
Polydiacetylene/TiO₂ Nanocomposites for Photovoltaic Applications	809
<i>Wang, Yanping;Li, Lian;Yan, Fadong;Samuelson, Lynne A.;Kumar, Jayant</i>	
Electron and Hole Transport in Poly(P-Phenylene Vinylene).....	811
<i>Blom, Paul W. M.;Mandoc, M.M.;Craciun, N.I.;de Boer, B.</i>	
Nature of Electronic Excitations in Conjugated Polymers: Role of Conformational Kinks and Chemical Defects	812
<i>Hennebicq, Emmanuelle G.;Beljonne, David;Deleener, Caroline;Brédas, Jean-Luc</i>	
Bulk-Heterojunction Organic Solar Cells: Interfacial Engineering Routes to Increased Open-Circuit Voltage and Power Conversion Efficiency	814
<i>Hains, Alexander W.;Martinson, Alex B.F.;Irwin, Michael D.;Yan, He;Marks, Tobin J.</i>	
Atomic Force Photovoltaic Microscopy	816
<i>Leever, Benjamin J.;Pingree, Liam S. C.;Hains, Alexander W.;Irwin, Michael D.;Marks, Tobin J.;Hersam, Mark C.</i>	
Novel Conjugated Oligomers for Organic Electronics.....	818
<i>Hancock, Jessica M.;Gifford, Angela P.;Zhu, Yan;Jenekhe, Samson A.</i>	
Controlled Free Radical Polymerization Mediated by Cysteine and Glutathione-Based Chain Transfer Agents.....	820
<i>Zhao, Youliang;Perrier, Sébastien</i>	
New Approach to End-Graft Charged Polymer Onto Mica and Silica Surfaces	822
<i>Liberelle, Benoît;Giasson, Suzanne</i>	
New Developments in Controlled Anionic Polymerization of Propylene Oxide.....	824
<i>Labbé, Amélie;Carlotti, Stéphane;Deffieux, Alain</i>	
Seeded Semi-Continuous Emulsion Polymerization of n-BA/ MMA/ GMA: Effect of Copolymer Composition on the Adhesive Properties	826
<i>Mishra, Sujata;Choudhary, Veena;Singh, Jagbir</i>	
Surface-Initiated Atom Transfer Radical Polymerization of Styrene: Observed Transition from First-Order to Zero-Order Reaction Kinetics	828
<i>Samadi, Azadeh;Kilbey, S. Michael, II;Husson, Scott M.</i>	
Block Copolymer of n-Butyl Acrylate and Styrene by RAFT: First Practical Isolation and Measurements of "Dead Chains"	830
<i>Nasrullah, Mohammed J.;Raghunadh, V.;Ryu, Chang Y.;Benicewicz, Brian C.</i>	

Microwave-Assisted Polymerizations: From Discovery to Upscaling	832
<i>Hoogenboom, Richard;Paulus, Renzo M.;Schubert, Ulrich S.</i>	
Synthesis and Characterization of Soluble Polyimide Membrane Materials for Pervaporation of n-Octane/Thiophene Mixtures	834
<i>Wang, Lihua;Tian, Ye;Ding, Huaiyu;Liu, Biqian</i>	
Synthesis and Characterization of Sulfonated Polyimides for Fuel Cell Applications	836
<i>Chhabra, Pooja;Choudhary, Veena</i>	
Synthesis of Acrylic Telechelic Siloxanes for UV Curable Applications	838
<i>Chakraborty, Ruby;Soucek, Mark D.</i>	
Bimodal Polyethylene: Synthesis and Study of Shear Induced Oriented Structures Generated from High Molecular Weight Polyethylene Chains	840
<i>Kukalyekar, Nileshkumar;Balzano, Luigi;Chadwick, John C.;Rastogi, Sanjay</i>	
Utilizing d-Limonene as a Chain Transfer Agent and Renewable Solvent for Ring Opening Metathesis Polymerizations	842
<i>Mathers, Robert;McMahon, Kerry C.;Baker, Jeffrey R.</i>	
Understanding DNA Binding Mechanisms of Trehalose-Based Polymeric Gene Delivery Vectors	843
<i>Prevette, Lisa E.;Lynch, Matthew L.;Reineke, Theresa M.</i>	
Impact of Chemical Modification on the Physical and Biological Properties of Hyaluronan	845
<i>Gianolio, Diego;Avila, Luis;Young, Lauren;Yang, Laura;Ulinski, Greg;Hempel, Donna;Perricone, Michael;Miller, Robert J.</i>	
Cationic and Biodegradable Polymer Micelles for Efficient Gene Delivery and Effect of Core-Shell Structure	846
<i>Yang, Yi-Yan;Wang, Yong;Ke, Chyan Ying</i>	
Synthesis and Characterization of Stimuli-Responsive Core-Shell Nanogels	848
<i>Kuckling, Dirk;Mendrek, Sebastian;Adler, Hans-Juergen;Dworak, Andrzej</i>	
Non-Covalent Synthesis of a Multivalent Enzyme	850
<i>van Baal, Ingrid;Lempens, Edith H.M.;van Dongen, Joost L.J.;Merkx, Maarten;Meijer, E.W.</i>	
Engineering Multi-Component Assembles of Proteins: Investigating Collective Protein Function and Dynamics with Molecular Precision	852
<i>Diehl, Michael R.</i>	
Small Angle Neutron Scattering Studies of the Counterion Effects on the Molecular Conformation and Structure of Charged G4 PAMAM Dendrimers in Aqueous Solutions	853
<i>Chen, Wei-Ren;Porcar, Lionel;Liu, Yun</i>	
Design and Synthesis of Novel Amphiphilic Polymers for MRI and Selective Targeting in Cancer Diagnosis /Therapy	855
<i>Pandey, Mukesh K.;Tyagi, Rahul;Kumar, Rajesh;Parmar, Virinder S.;Watterson, Arthur C.;Kumar, Jayant;Hardiman, Michelle T.;Zhou, Jin;Brower, Kevin P.;Fisher, Robert J.;Colton, Clark K.</i>	
Effect of Electrostatic Interactions on Collagen Fibrillogenesis	857
<i>Li, Yuping;Asadi, Amran;Monroe, Margo R.;Douglas, Elliot P.</i>	
Polysaccharides for Skin Scaffolds	859
<i>Smith, Brian T. L.;Ebaugh, Justin M.;Kross, Bob;Mueller, Anja</i>	
Synthesis of Polyphenylacetylene Brushes on Substrates Using Anchored Organometallic Catalysts	861
<i>Dronavajjala, Krishna D.;Rajagopalan, Ramakrishnan;Allara, David L.;Foley, Henry C.</i>	

Tunable Release of Anionic Polyelectrolytes from Multilayered Polyelectrolyte Films	862
<i>Zhang, Jingtao;Lynn, David M.</i>	
pH Induced Conformational Transition in Polyelectrolyte Brushlike Macromolecules	864
<i>Boyce, Jamie R.;Lee, Hyung-il;Matyjaszewski, Krzysztof;Sheiko, Sergei S</i>	
Novel Self-Assembling Nucleobase Scaffold Coating with Nano-Scale Control	866
<i>Kumar, Aryavarta M.S.;Sivakova, Sona;Fox, Justin D.;Green, Jennifer E.;Rowan, Stuart J.;Marchant, Roger E.</i>	
Hierarchically Ordered Micelles and Materials Constructed Through Self-Assembly of Charged Triblock Copolymers	868
<i>Cui, Honggang;Chen, Zhiyun;Wooley, Karen L.;Pochan, Darrin J.</i>	
Novel Fabrication of Anisotropic Polymer Nanoparticles Using Solvent-Aided Nano-injection Molding Process	869
<i>Srivastava, Devesh;Lee, Ilsoon</i>	
Synthesis of Maleimide Functionalized Poly(ϵ-Caprolactone)-<i>b</i>-poly(ethylene glycol) for Nanoparticle Formation	871
<i>Ji, Shengxiang;Hoye, Thomas R.;Macosko, Christopher W.</i>	
Synthesis, Degradation, in Vitro Release, and Bioconjugation of Functional Nanogels Prepared by Inverse Miniemulsion ATRP for Biomedical Applications	873
<i>Oh, Jung Kwon;Siegwart, Daniel J.;Matyjaszewski, Krzysztof</i>	
Preparation and Characterization of Polypyrrole Nanodisc Templated by Tobacco Mosaic Virus	876
<i>Li, Siqu;Niu, Zhongwei;Wang, Qian</i>	
Polymer Hybrids of Manganese Based Single Molecule Magnets: Synthesis and Analysis	878
<i>Johnson, Lucas P.;Matisons, Janis G.;Clarke, Stephen R.</i>	
Deformation and Failure Mechanisms of Glassy Polymer Nanocomposites	880
<i>Lee, Jong-Young;Zhang, Qingling;Emrick, Todd;Crosby, Alfred J.</i>	
Modeling Insights in Organic Electronics: Formalisms and Results	882
<i>Ratner, Mark A.</i>	
Designing, Measuring and Controlling Molecular- and Supramolecular-Scale Properties for Molecular Devices	883
<i>Weiss, Paul S.</i>	
Facile Synthesis, Electronic and Optical Properties of Regioregular Head-to-Tail Oligothiazoles	885
<i>Gan, Lin;Yu, Luping</i>	
Polydiacetylene Based Monolayer Field Effect Transistors	887
<i>Jespher Daniel, Jeyaprakash S. Samuel;Scott, J. Campbell;Rettner, Charles;Swanson, Sally A.;Fujita, Katsu;Wong, Alice Y.;Cho, Clara Ji-Hyun;Fuller, Gerald G.;Miller, Robert D.</i>	
Self-Assembly, Characterization and Conduction Properties of Oligomers in Solid State Junctions	889
<i>Allara, David L.;Mayer, Theresa S.;Yoon, Heayoung;Maitani, Masato;Cabassi, Marco;McGuinness, Christine;Cabarcos, Orlando</i>	
Self-Assembled Monolayer and Multilayer Films for Non-Volatile Memories and Chemical Sensors	890
<i>Altman, Marc;Gupta, Tarkeshwar;Zubkov, Tatiana;Cohen, Revital;van der Boom, Milko E.</i>	
Polymeric and Molecular Thin Film Modeling vs. Experimental Dielectric Response	893
<i>DiBenedetto, Sara A.;Paci, Irina;Facchetti, Antonio;Marks, Tobin J.;Ratner, Mark A.</i>	

Uniaxial Optical and Electronic Properties of 1D Nanomaterials Fabricated from Rigid, Planar Semiconductor Molecules	895
<i>Zang, Ling; Moore, Jeffrey S.; Yen, Max; Balakrishnan, Kaushik; Huang, Jialing; Datar, Aniket; Yang, Xiaomei; Naddo, Tammene</i>	
Fiber Formation and Thermal Characterization of the Stereocomplex PMMA	896
<i>Crne, Matija; Park, Jung Ok; Srinivasarao, Mohan</i>	
Immobilization of Cofacially Aligned Porphyrins	898
<i>Lee, Youngu; Lee, Dong-Chan; Morales, Gustavo; Yu, Luping</i>	
Systematic Coarse-Graining of a Phase-Separating Polymer Blend: Polyisoprene and Polystyrene	900
<i>Sun, Qi; Faller, Roland</i>	
In-Situ Synthesis of Single-Layer White Luminescent Polymers for Bright White Light-Emitting-Diodes Through Plasma Polymerization	902
<i>Chang, Chun-Chih; Chang, Yi-Hsin; Chen, Ying-Chu; Jou, Jwo-Huei; Hwang, Kuo-Chu; Yang, Arnold Chang-Mou</i>	
Powder Casting Stabilization Over Colloid Deposition for Layer-by-Layer Assembly	907
<i>Abebe, Daniel G.; Farhat, Tarek R.</i>	
Dual Cure Mechanisms in the Cationic Photopolymerization of Partially Epoxidized Soybean Oil	909
<i>Black, Micah S.; Whittemore, James H.; Rawlins, James W.</i>	
Influences of the Compatibility Between the Polymer and Its Solvent on Regular Pattern Formation by Water Droplets Templating	911
<i>Liu, Shuang; Tian, Ye; Ding, Huaiyu; Wang, Lihua; Liu, Biqian</i>	
Strongly Interacting Organic Conjugated Dendrimers for Light Harvesting and Nonlinear Optical Applications	913
<i>Varnavski, Oleg; Mongin, Oliver; Blanchard-Desce, Mireille; Goodson, Theodore</i>	
Optimization of an Implantable Glucose Sensor via Layer-by-Layer Assembly of Outer Diffusion Limiting Membrane	914
<i>Vaddiraju, Santhisagar; Tipnis, Ritesh; Jain, Faquir; Burgess, Diane J.; Papadimitrakopoulos, Fotios</i>	
Porous PPS Membrane with High Durability Against Solvents by a Thermally Induced Phase Separation Method	916
<i>Ding, Huaiyu; Tian, Ye; Wang, Lihua; Liu, Biqian</i>	
Preparation of Ultrahigh Molecular Weight Polyethylene Membrane via Thermally Induced Phase Separation Method	918
<i>Ding, Huaiyu; Tian, Ye; Wang, Lihua; Liu, Biqian</i>	
Responsive Hydrogels as Optical Sensors	920
<i>Wackerly, Jay Wm.; Mack, Nathan H.; Malyarchuck, Viktor; Rogers, John A.; Nuzzo, Ralph G.; Moore, Jeffrey S.</i>	
pH-Responsive Polymer Microgel Particles: Matrices for Metal Nanocrystals	921
<i>Vamvakaki, Maria; Palioura, Dafni; Armes, Steven P.; Anastasiadis, Spiros H.</i>	
Iron Tris(dibenzoylmethane-poly lactide) Nanoparticles	923
<i>Pfister, Anne; Chen, Jianbin; Chen, Yin Jie; Fraser, Cassandra L.</i>	
Multilayered Polycarbonate/Polyvinylidene Fluoride Films for High Energy Density Capacitor Applications	924
<i>Wolak, Mason A.; Pan, Ming-Jen; MacKey, Matthew; Flandin, Lionel; Baer, Eric; Shirk, James S.</i>	
Probing the Structure of Waterborne Core-Shell Particles in Pressure-Sensitive Adhesives with Atomic Force Microscopy	926
<i>Lei, C-H.; Ouzineb, K.; Dupont, O.; Keddie, J.L.</i>	

Impact on Glass Transition Temperature of Confinement in 1-Dimensional Patterned Polymer Nanostructures	928
<i>Mundra, Manish K.;Donthu, Suresh;Dravid, Vinayak P;Torkelson, John M.</i>	
Blocked Diisocyanate Incorporation Into Polystyrene Nanospheres	930
<i>Yang, Huaxiang;Mendon, Sharathkumar K.;Rawlins, James W.</i>	
Monodisperse Polymer-Virus Nanoparticles	932
<i>Cornelissen, Jeroen;Sikkema, Friso D.;Comellas-Aragones, Marta;de la Escosura Navazo, Andres;Verduin, Benedictus J.M.;Nolte, Roeland J. M.</i>	
Recognition Induced Polymeric Nanocomposite: Control of Shape, Location, and Function	933
<i>Xu, Hao;Shenhar, Roy;Hong, Rui;Srivastava, Sudhanshu;Rotello, Vincent M.</i>	
Block Copolymer Micelles in Ionic Liquids	936
<i>Guerrero-Sanchez, Carlos;Wouters, Daan;Hoeppener, Stephanie;Gohy, Jean-François;Thijs, Hanneke;Hoogenboom, Richard;Schubert, Ulrich S.</i>	
Arylene Ethynylene Macrocycles: Investigating the Self-Assembly and Their Respective Binding with Fullerenes – A New Insight for Development of Opto-Electronic Devices	938
<i>Balakrishnan, Kaushik;Datar, Aniket;Huang, Jialing;Yang, Xiaomei;Moore, Jeffrey S.;Zang, Ling</i>	
Films of Carbon Nanotubes for Polymer Electronics	940
<i>Rogers, John A.</i>	
High Carrier Density and Metallic Conductivity in Organic Semiconductors Achieved by Electrostatic Charge Injection	941
<i>Frisbie, C. Daniel</i>	
Ultra-Thin Layer-by-Layer Films with Conjugated Polyelectrolytes	942
<i>Jiang, Chaoyang;Lin, Yen-Hsi;Xu, Jun;Lin, Zhiqun;Tsukruk, V.V.</i>	
Delocalized Excitations in Cyclic Thiophenes	943
<i>Varnavski, Oleg;Hegadorn, Kevin;Bäuerle, Peter;Goodson, Theodore</i>	
Vegetable Oil Macromonomer Swollen Emulsions Based on 2-(dimethylamino)Ethyl Methacrylate	944
<i>Hao, Guangjie;Tregre, Gregory;Rawlins, James W.</i>	
Glycoconjugates and Their Role in Phagocytosis and Destruction of B. cereus Spores	946
<i>Tarasenko, Olga;Burton, Elizabeth;Soderberg, Lee;Alusta, Pierre</i>	
Application of Thermoplastic Polyurethane/ Zinc Oxide Composite and Visible-Light Cured Urethane-Acrylate Monomer in Dental Root Canal Material	948
<i>Liao, Ken-Hsuan;Han, Jin-Lin;Lin, Chun-Pin;Hsieh, Kuo-Huang</i>	
Effect of Ions on the Thermodynamic Properties of Biopolymer Gels	950
<i>Horkay, Ferenc;Basser, Peter J.</i>	
Novel Biocomposites from Polylactide (PLA) and Bamboo Fibers	952
<i>Huda, Masud S.;Drzal, Lawrence T.;Sahoo, Saswata;Hamada, Hiroyuki;Misra, Manjusri</i>	
Rubbery Thermosets Prepared by Ring Opening Metathesis Polymerization of a Functionalized Castor Oil and Cyclooctene	954
<i>Henna, Phillip H.;Larock, Richard C.</i>	
Optimizing the Acid Catalyzed Synthesis of Hyperbranched Poly(Glycerol-Diacid) Oligomers	956
<i>Wyatt, Victor T.;Nuñez, Alberto;Foglia, Thomas A.;Marmer, William N.</i>	
POSS-Based Photocured Double Networks as Biodegradable Shape Memory Polymers	958
<i>Lee, Kyung Min;Chung, Taekwoong;Mather, Patrick T.</i>	

Study of Polyurethane Materials Immobilized with Bioactive Fungal Polysaccharide Derivatives	960
<i>Wang, Yifeng;Xu, Wei;Chen, Hong</i>	
In Vitro Release and In Vivo Biodistribution of Paclitaxel from a Chitosan-Egg Phosphatidylcholine Implant System	962
<i>Lim Soo, Patrick;Grant, Justin;Ho, Emmanuel;Mak, Monty;Piquette-Miller, Micheline;Allen, Christine</i>	
DNA Degradation in Transient Extensional Flow by Transient Extension and Hydrodynamic Shear	964
<i>Sun, Mingyun;Ng, Wenny;Barron, Annelise E.</i>	
Electrospun Poly(L-lactic acid)/Multi-Walled Carbon Nanotubes/Hydroxyapatite Nanofibrous Membranes for Guided Tissue Regeneration	965
<i>Wu, Sizhu;Yang, Xiaoping;Deng, Xuliang</i>	
Author Index	