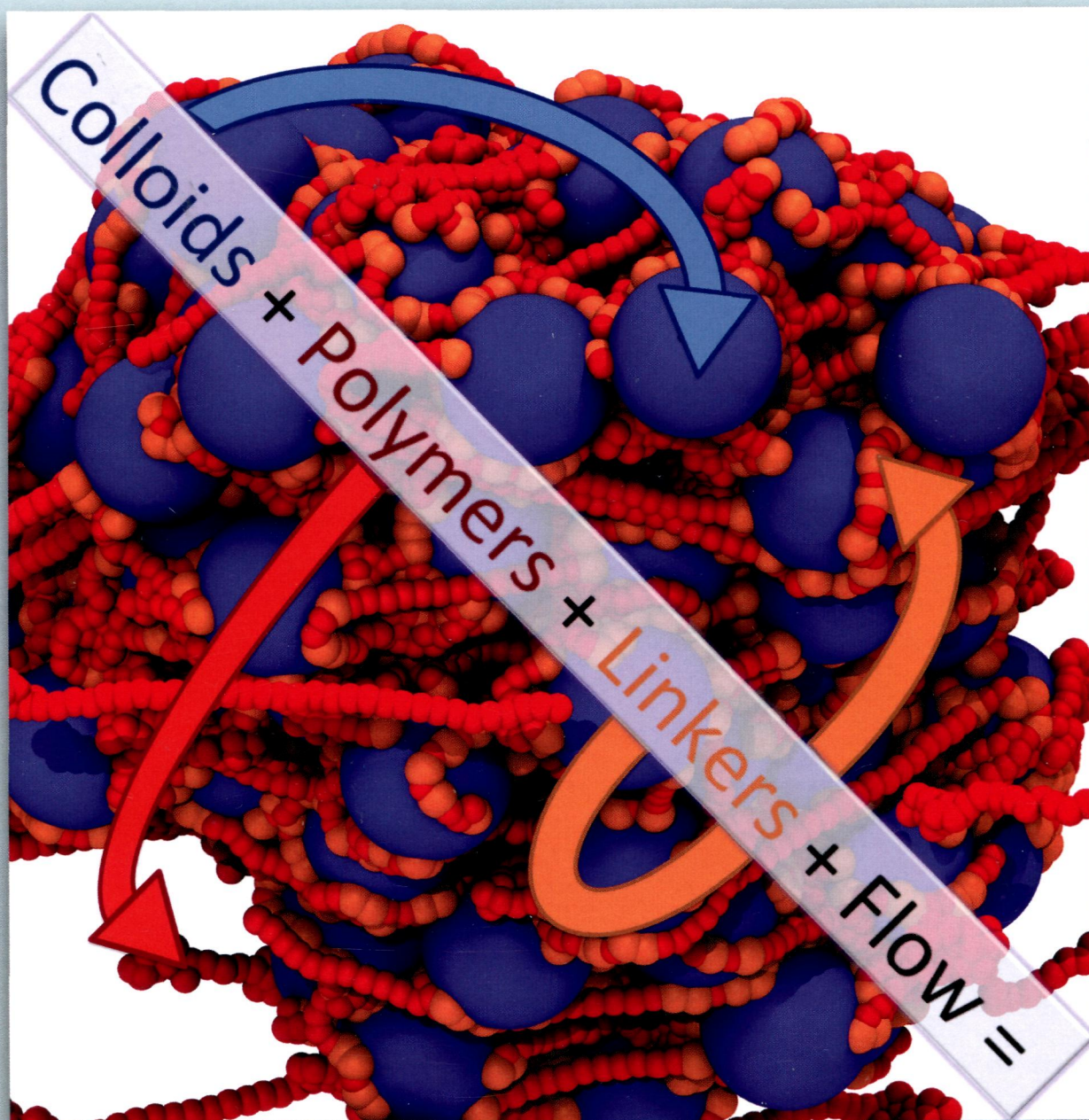


March 11, 2014
Volume 47
Number 5

Macromolecules

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ON THE COVER: Supramolecular polymer–colloid aggregate inspired by blood clotting. The (blue) spheres are colloids which are bound through supramolecular bonds (orange beads) to polymer chains (red). These aggregates are reversible and only form in the presence of flow. See page 1503.

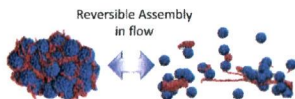
Perspective

1503

[dx.doi.org/10.1021/ma4007768](https://doi.org/10.1021/ma4007768)

Toward Novel Polymer-Based Materials Inspired in Blood Clotting

Alfredo Alexander-Katz

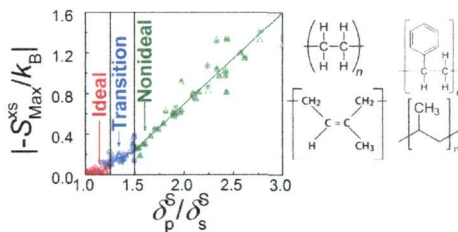


Articles

1514 **S**[dx.doi.org/10.1021/ma402593m](https://doi.org/10.1021/ma402593m)

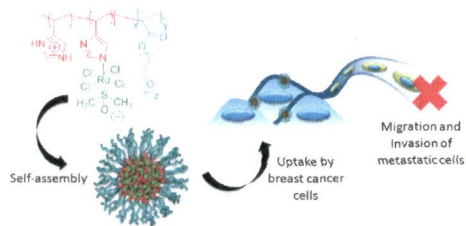
Trends in the Athermal Entropy of Mixing of Polymer Solutions

Amir Vahid, Neil H. Gray, and J. Richard Elliott*



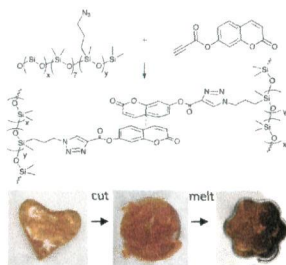
Superior Chemotherapeutic Benefits from the Ruthenium-Based Anti-Metastatic Drug NAMI-A through Conjugation to Polymeric Micelles

Bianca M. Blunden, Aditya Rawal, Hongxu Lu, and Martina H. Stenzel*



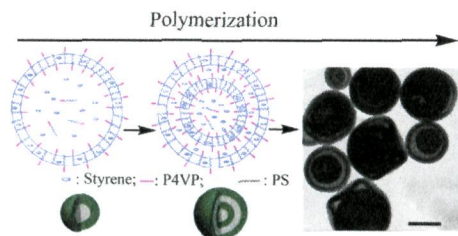
Thermoplastic Silicone Elastomers through Self-Association of Pendant Coumarin Groups

Amanda S. Fawcett and Michael A. Brook*



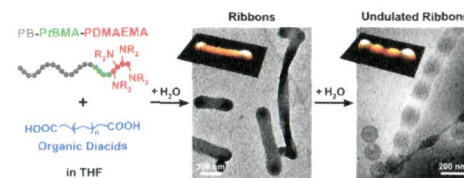
Fabrication of Spaced Concentric Vesicles and Polymerizations in RAFT Dispersion Polymerization

Wen-Jian Zhang, Chun-Yan Hong, and Cai-Yuan Pan*



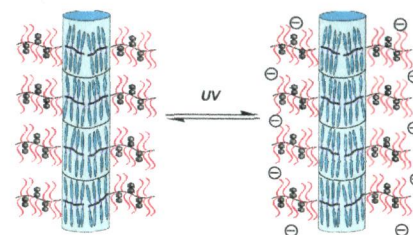
Self-Assembly of Amphiphilic Triblock Terpolymers Mediated by Multifunctional Organic Acids: Vesicles, Toroids, and (Undulated) Ribbons

Eva Betthausen, Christoph Hanske, Melanie Müller, Andreas Fery, Felix H. Schacher,* Axel H. E. Müller,* and Darrin J. Pochan*



Photocontrolled Ionization in the Corona of Rodlike Assemblies of Diblock Copolymers

Jing Sun, Lin Jia, Matthieu Emond, Min-Hui Li, Emmanuelle Marie, Ludovic Jullien, and Christophe Tribet*



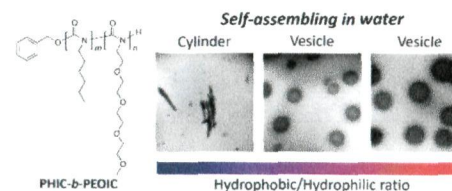
Phosphazene-Promoted Metal-Free Ring-Opening Polymerization of Ethylene Oxide Initiated by Carboxylic Acid

Junpeng Zhao, David Pahovnik, Yves Gnanou, and Nikos Hadjichristidis*

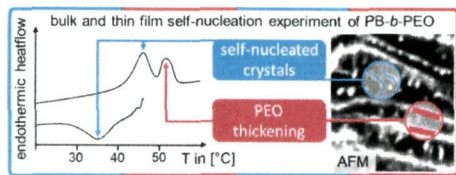



Rod-Like Amphiphile of Diblock Polyisocyanate Leading to Cylindrical Micelle and Spherical Vesicle in Water

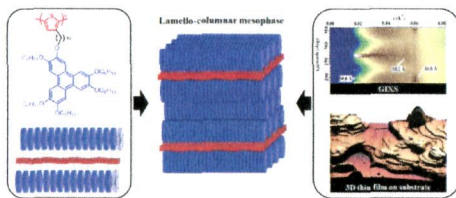
Naoya Sakai, Toshifumi Satoh, and Toyoji Kakuchi*




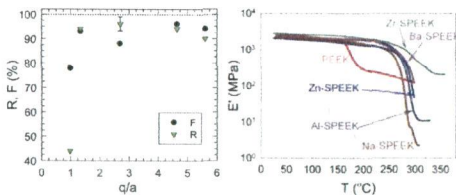
1705  dx.doi.org/10.1021/ma401984t
How the Calorimetric Properties of a Crystalline Copolymer Correlate to Its Surface Nanostructures
 Robert Schulze, Matthias M. L. Arras, Christian Helbing, Stefan Hölzer, Ulrich S. Schubert, Thomas F. Keller, and Klaus D. Jandt*



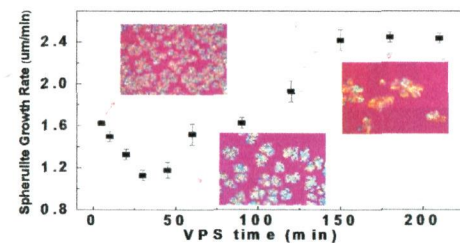
1715  dx.doi.org/10.1021/ma4020356
Intertwined Lamello-Columnar Coassemblies in Liquid-Crystalline Side-Chain Π -Conjugated Polymers: Toward a New Class of Nanostructured Supramolecular Organic Semiconductors
 Danli Zeng, Ibtissam Tahar-Djebbar, Yiming Xiao, Farid Kameche, Navaphun Kayunkid, Martin Brinkmann, Daniel Guillon, Benoît Heinrich, Bertrand Donnio,* Dimitri A. Ivanov, Emmanuelle Lacaze, David Kreher, Fabrice Mathevet,* and André-Jean Attias*



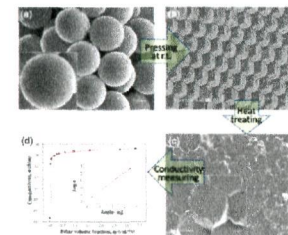
1732  dx.doi.org/10.1021/ma500119k
Sulfonated Poly(ether ether ketone) Ionomers and Their High Temperature Shape Memory Behavior
 Ying Shi and R. A. Weiss*



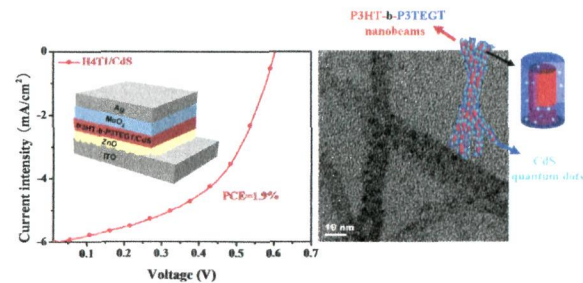
1741  dx.doi.org/10.1021/ma5001496
Effective Morphology Control in an Immiscible Crystalline/Crystalline Blend by Artificially Selected Viscoelastic Phase Separation Pathways
 Zhiyuan He, Weichao Shi, Fenghua Chen, Wei Liu, Yongri Liang,* and Charles C. Han*



1749  dx.doi.org/10.1021/ma402364r
Highly Ordered 3D Graphene-Based Polymer Composite Materials Fabricated by "Particle-Constructing" Method and Their Outstanding Conductivity
 Liang Yang, Zhaoqun Wang,* Yucheng Ji, Jianing Wang, and Gi Xue*

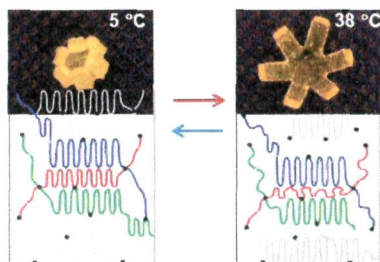


1757  dx.doi.org/10.1021/ma402154g
In Situ Fabricating One-Dimensional Donor-Acceptor Core-Shell Hybrid Nanobeams Network Driven by Self-Assembly of Diblock Copolythiophenes
 Yueqin Shi, Licheng Tan, Lie Chen, and Yiwang Chen*



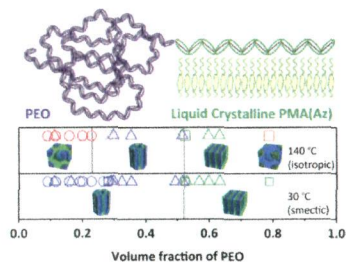
Shapeshifting: Reversible Shape Memory in Semicrystalline Elastomers

Jing Zhou, Sara A. Turner, Sarah M. Brosnan, Qiaoxi Li, Jan-Michael Y. Carrillo, Dmytro Nykypanchuk, Oleg Gang, Valerie S. Ashby, Andrey V. Dobrynin, and Sergei S. Sheiko*



Enormously Wide Range Cylinder Phase of Liquid Crystalline PEO-*b*-PMA(Az) Block Copolymer

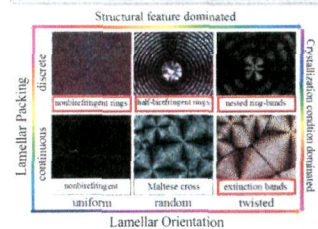
Hideaki Komiyama, Ryohei Sakai, Shingo Hadano, Sadayuki Asaoka, Kaori Kamata, Tomokazu Iyoda, Motonori Komura,* Takeshi Yamada, and Hirohisa Yoshida



Tuning Radial Lamellar Packing and Orientation into Diverse Ring-Banded Spherulites: Effects of Structural Feature and Crystallization Condition

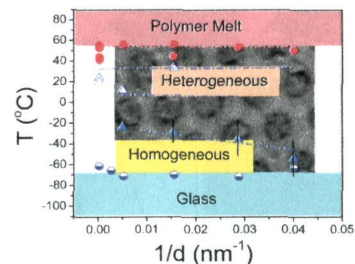
Yiguo Li, Haijing Huang, Zongbao Wang,* and Tianbai He*

Spherulite Patterns with Varied Radial Lamellar Organization



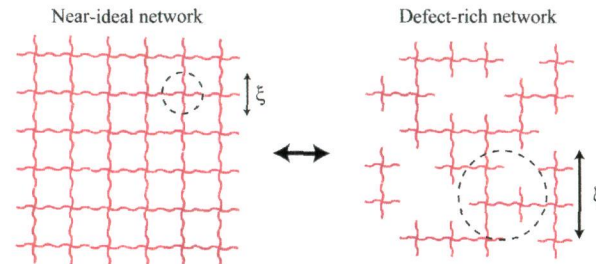
Suppression of Poly(ethylene oxide) Crystallization in Diblock Copolymers of Poly(ethylene oxide)-*b*-poly(ϵ -caprolactone) Confined to Nanoporous Alumina

Yasuhito Suzuki, Hatice Duran, Martin Steinhart, Hans-Jürgen Butt, and George Floudas*



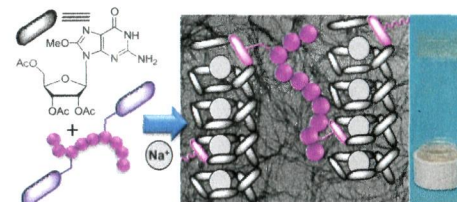
Small-Angle Neutron Scattering Study on Defect-Controlled Polymer Networks

Kengo Nishi, Hanako Asai, Kenta Fujii, Young-Soo Han, Tae-Hwan Kim, Takama Sakai, and Mitsuhiro Shibayama*



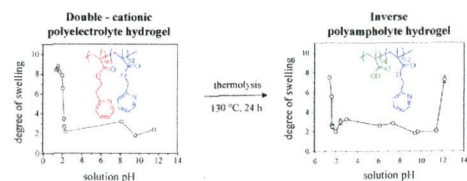
Enhancing the Mechanical Properties of Guanosine-Based Supramolecular Hydrogels with Guanosine-Containing Polymers

Amanda E. Way, Angie B. Korpusik, Taylor B. Dorsey, Lauren E. Buerkle, Horst A. von Recum, and Stuart J. Rowan*



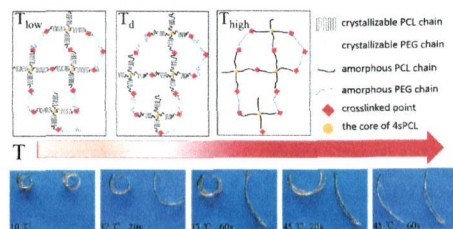
"Inverse Polyampholyte" Hydrogels from Double-Cationic Hydrogels: Synthesis by RAFT Polymerization and Characterization

Kyriaki S. Pafiti, Marios Elladiou, and Costas S. Patrickios*



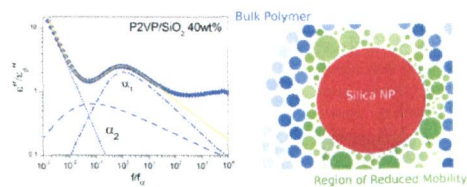
Tunable Temperature Memory Effect of Photo-Cross-Linked Star PCL-PEG Networks

Lin Wang, Shubin Di, Wenxi Wang, Hongmei Chen, Xifeng Yang, Tao Gong, and Shaobing Zhou*



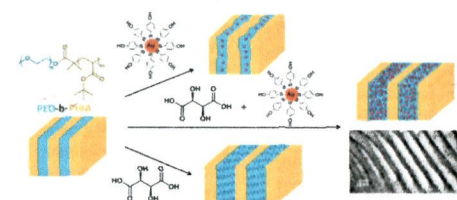
Dynamics at the Polymer/Nanoparticle Interface in Poly(2-vinylpyridine)/Silica Nanocomposites

Adam P. Holt,* Philip J. Griffin, Vera Bocharova, Alexander L. Agapov, Adam E. Imel, Mark D. Dadmun, Joshua R. Sangoro, and Alexei P. Sokolov



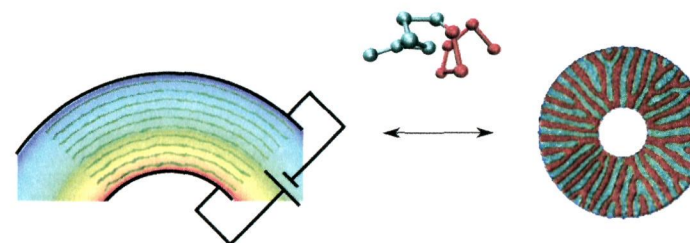
Ultrahigh Loading of Nanoparticles into Ordered Block Copolymer Composites

Li Yao, Ying Lin, and James J. Watkins*



Block Copolymer Ordering in Cylindrical Capacitors

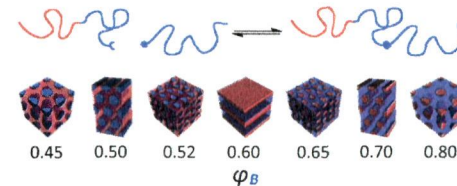
U. Welling,* M. Müller, H. Shalev, and Y. Tsori



Phase Coexistence Calculations of Reversibly Bonded Block Copolymers: A Unit Cell Gibbs Ensemble Approach

Zoltan Mester, Nathaniel A. Lynd, Kris T. Delaney, and Glenn H. Fredrickson*

Self-assembly of dynamically bonded AB + B polymers



Fabrication of Reversible Phase Transition Polymer Gels toward Metal Ion Sensing

Huan Shao, Cai-Feng Wang,* Jing Zhang, and Su Chen*

