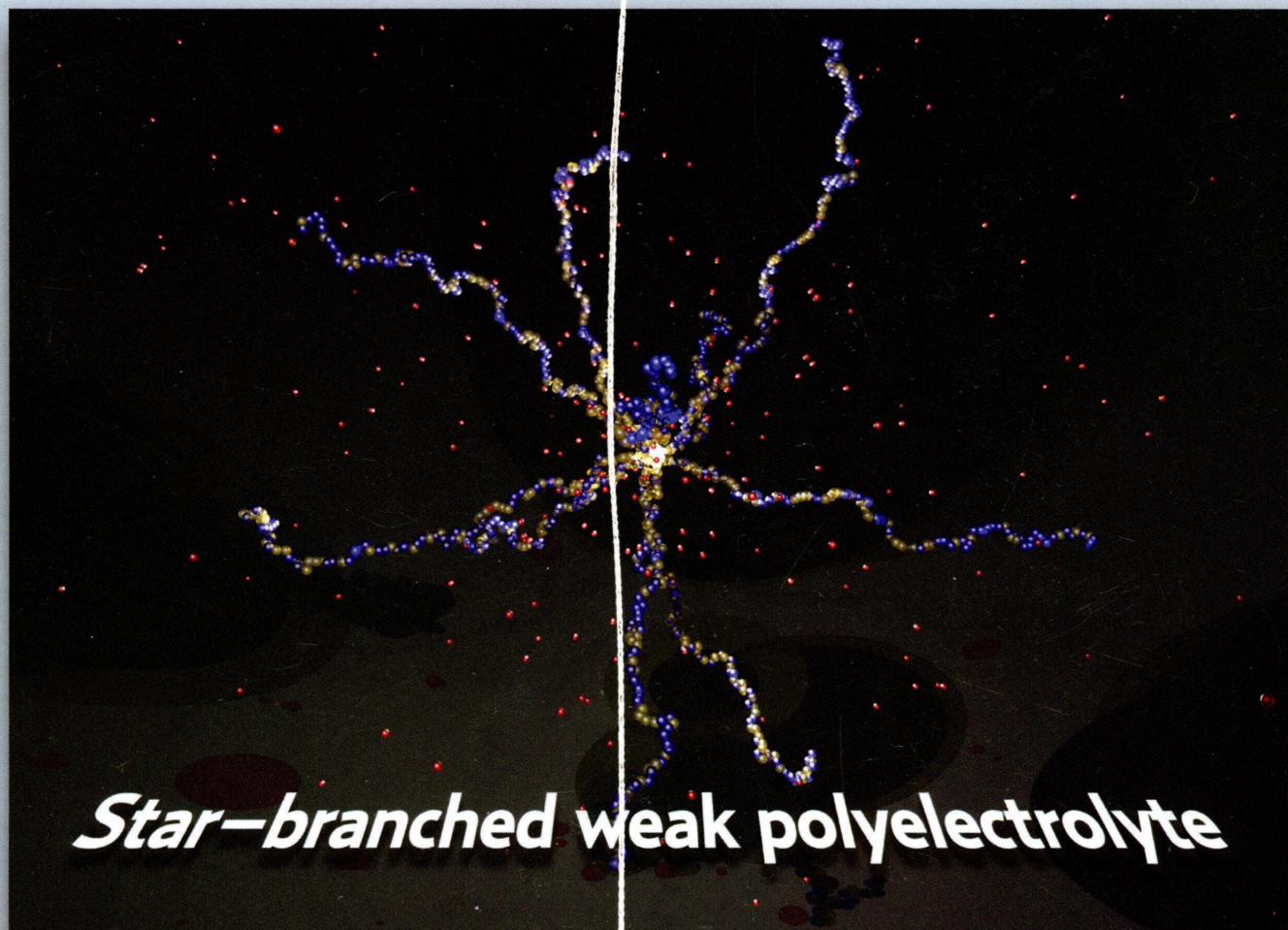


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July 22, 2014
Volume 47
Number 14

Macromolecules

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JULY 22, 2014

VOLUME 47 ISSUE 14

MAMOBX 47(14) 4531–4846 (2014)

ISSN 0024-9297

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ON THE COVER: Simulation snapshot of a star-branched weak polyelectrolyte, consisting of 10 arms, each 100 segments long. The average degree of dissociation of the polymer is (approximately) 50%. The blue beads represent dissociated segments of the polymer, yellow are the non-dissociated ones, and red are small free counterions of the polyelectrolyte. One can observe that dissociation is strongly suppressed in the central region of the star and increases toward the periphery. See *Macromolecules* **2014**, *47* (12), 4004–4016.

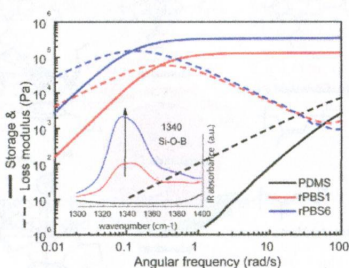
Articles

4531

dx.doi.org/10.1021/ma500632f

Polyborosiloxanes (PBSs), Synthetic Kinetics, and Characterization

Zhen Liu, Stephen J. Picken, and Nicolaas A. M. Besseling*



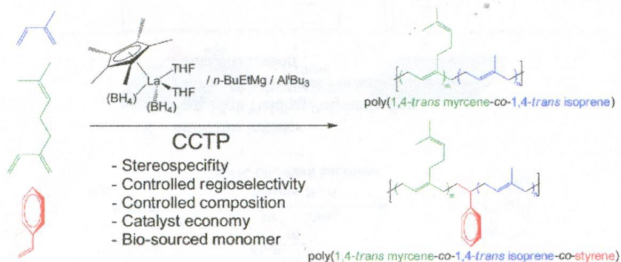
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dx.doi.org/10.1021/ma500889e

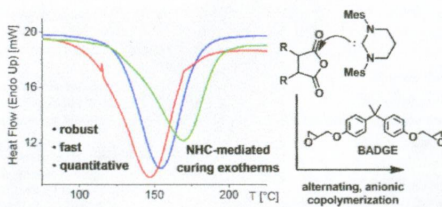
Coordinative Chain Transfer Copolymerization and Terpolymerization of Conjugated Dienes

Sébastien Georges, Ahmed Osmane Touré, Marc Visseaux, and Philippe Zinck*



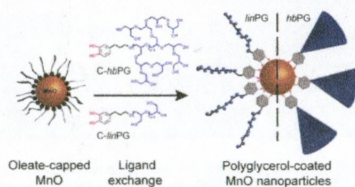
Air Stable and Latent Single-Component Curing of Epoxy/Anhydride Resins Catalyzed by Thermally Liberated *N*-Heterocyclic Carbenes

Stefan Naumann, Maria Speiser, Roman Schowner, Elisabeth Giebel, and Michael R. Buchmeiser*



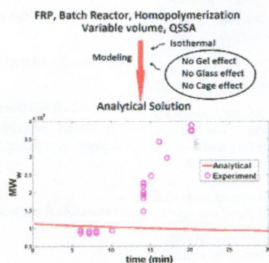
The "Needle in the Haystack" Makes the Difference: Linear and Hyperbranched Polyglycerols with a Single Catechol Moiety for Metal Oxide Nanoparticle Coating

Anja Thomas, Heiko Bauer, Anna-Maria Schilmann, Karl Fischer, Wolfgang Tremel, and Holger Frey*



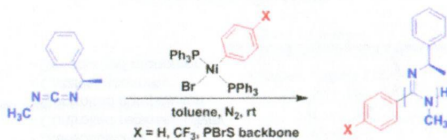
Analytical Solution of Free Radical Polymerization: Derivation and Validation

Dhiraj K. Garg, Christophe A. Serra,* Yannick Hoarau, Dambarudhar Parida, Michel Bouquoy, and René Muller



Controlled Living Polymerization of Carbodiimides Using Versatile, Air-Stable Nickel(II) Initiators: Facile Incorporation of Helical, Rod-like Materials

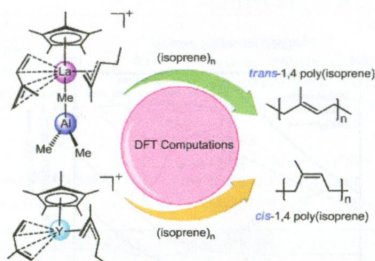
James F. Reuther, Mahesh P. Bhatt, Gonglu Tian, Benjamin L. Batchelor, Raymond Campos, and Bruce M. Novak*



- ✓ Air-Stable Initiator
- ✓ Fast, High Yielding Polymerization
- ✓ Facile *In Situ* Initiator Formation and End-Functionalization

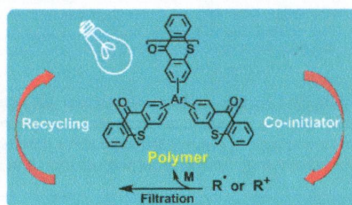
Theoretical Mechanistic Studies on the *trans*-1,4-Specific Polymerization of Isoprene Catalyzed by a Cationic La–Al Binuclear Complex

Xiaohui Kang, Yi Luo,* Guangli Zhou, Xingbao Wang, Xuerong Yu, Zhaomin Hou, and Jingping Qu



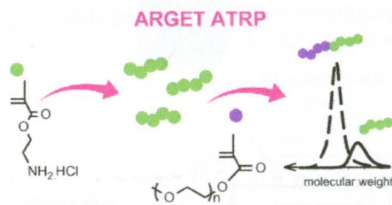
Microporous Thioxanthone Polymers as Heterogeneous Photoinitiators for Visible Light Induced Free Radical and Cationic Polymerizations

Sajjad Dadashi-Silab, Hakan Bildirir, Robert Dawson, Arne Thomas, and Yusuf Yagci*



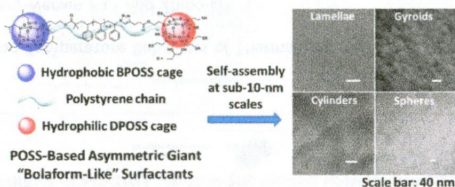
Straightforward ARGET ATRP for the Synthesis of Primary Amine Polymethacrylate with Improved Chain-End Functionality under Mild Reaction Conditions

Patrícia V. Mendonça, Saadyah E. Averick, Dominik Konkolewicz, Arménio C. Serra, Anatolij V. Popov, Tamaz Guliyashvili, Krzysztof Matyjaszewski, and Jorge F. J. Coelho*



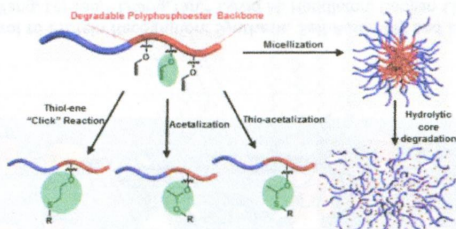
Asymmetric Giant "Bolaform-like" Surfactants: Precise Synthesis, Phase Diagram, and Crystallization-Induced Phase Separation

Kan Wu, Mingjun Huang, Kan Yue,* Chang Liu, Zhiwei Lin, Hao Liu, Wei Zhang, Chih-Hao Hsu, An-Chang Shi, Wen-Bin Zhang,* and Stephen Z. D. Cheng*



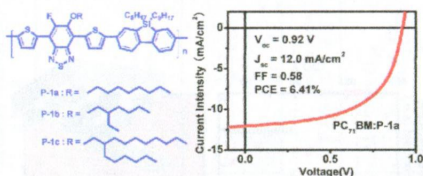
Development of a Vinyl Ether-Functionalized Polyphosphoester as a Template for Multiple Postpolymerization Conjugation Chemistries and Study of Core Degradable Polymeric Nanoparticles

Young H. Lim, Gyu Seong Heo, Yohannes H. Rezenom, Stephanie Pollack, Jeffery E. Raymond, Mahmoud Elsbahy, and Karen L. Wooley*



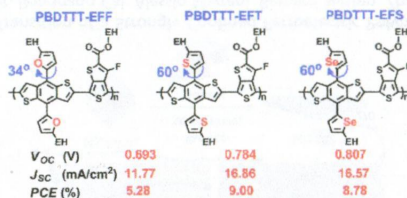
5-Alkyloxy-6-fluorobenzo[c][1,2,5]thiadiazole- and Silafluorene-Based D–A Alternating Conjugated Polymers: Synthesis and Application in Polymer Photovoltaic Cells

Guangwu Li, Chong Kang, Xue Gong, Jicheng Zhang, Cuihong Li,* Youchun Chen, Huanli Dong, Wenping Hu, Fenghong Li, and Zhishan Bo*



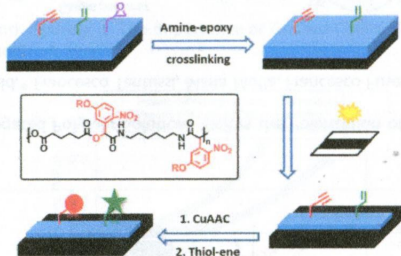
Side Chain Selection for Designing Highly Efficient Photovoltaic Polymers with 2D-Conjugated Structure

Shaoqing Zhang, Long Ye, Wenchao Zhao, Delong Liu, Huifeng Yao, and Jianhui Hou*



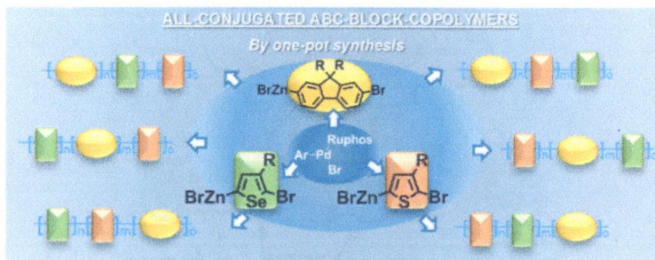
Multifunctional Photodegradable Polymers for Reactive Micropatterns

Lei Li, Xin-Xing Deng, Zi-Long Li, Fu-Sheng Du, and Zi-Chen Li*

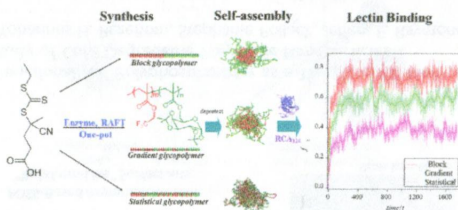


All-Conjugated ABC-block-copolymer Formation with a Varying Sequence via an Unassociated Catalyst

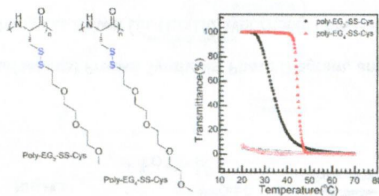
Michiel Verswyvel, Joost Steverlynck, Slim Hadj Mohamed, Mahmoud Trabelsi, Benoît Champagne, and Guy Koecelberghs*

**From Polymer Sequence Control to Protein Recognition: Synthesis, Self-Assembly and Lectin Binding**

Jiawei Lu, Changkui Fu, Shiqi Wang, Lei Tao,* Litang Yan,* David M. Haddleton, Gaojian Chen,* and Yen Wei

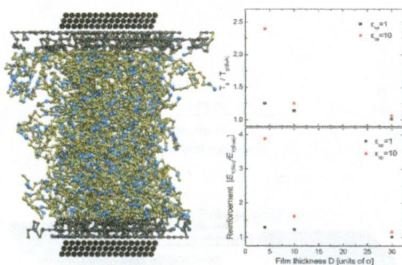
**Irreversible Low Critical Solution Temperature Behaviors of Thermal-responsive OEGylated Poly(L-cysteine) Containing Disulfide Bonds**

Yinan Ma, Xiaohui Fu, Yong Shen, Wenxin Fu,* and Zhibo Li*



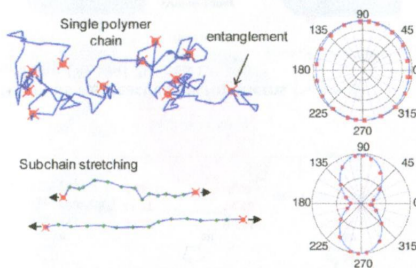
Confinement-Induced Stiffening of Thin Elastomer Films: Linear and Nonlinear Mechanics vs Local Dynamics

Chrysostomos Batakis,* M. A. J. Michels, and Alexey V. Lyulin



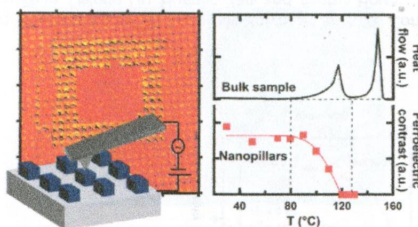
Conformational Evolution of Elongated Polymer Solutions Tailors the Polarization of Light-Emission from Organic Nanofibers

Andrea Camposeo,* Israel Greenfeld,* Francesco Tantussi, Maria Moffa, Francesco Fuso, Maria Allegrini, Eyal Zussman, and Dario Pisignano*



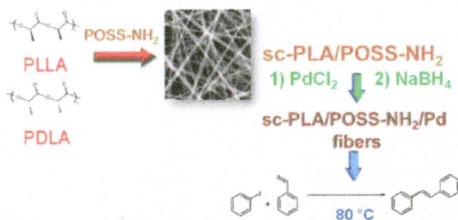
The Ferro- to Paraelectric Curie Transition of a Strongly Confined Ferroelectric Polymer

Hailu G. Kassa, Laurianne Nougaret, Ronggang Cai, Alessio Marrani, Bernard Nysten, Zhijun Hu,* and Alain M. Jonas*



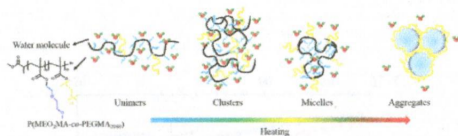
New Stereocomplex PLA-Based Fibers: Effect of POSS on Polymer Functionalization and Properties

Orietta Monticelli,* Matilde Putti, Lorenza Gardella, Dario Cavallo, Andrea Basso, Mirko Prato, and Simone Nitti



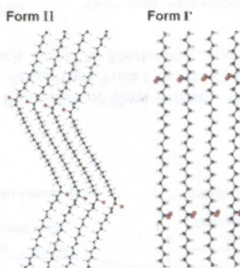
In Depth Analysis on the Unusual Multistep Aggregation Process of Oligo(ethylene glycol) Methacrylate-Based Polymers in Water

Bo Zhang, Hui Tang, and Peiyi Wu*



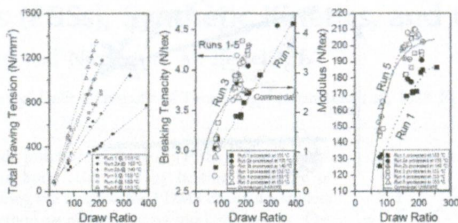
Polymorphism and Phase Transitions of Precisely Halogen-Substituted Polyethylene. (1) Crystal Structures of Various Crystalline Modifications of Bromine-Substituted Polyethylene on Every 21st Backbone Carbon

Masafumi Tasaki, Hiroko Yamamoto, Makoto Hanesaka, Kohji Tashiro,* Emine Boz, Kenneth B. Wagener, Carolina Ruiz-Orta, and Rufina G. Alamo*



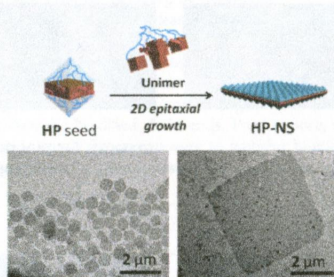
Influence of Polymerization Conditions on Melting Kinetics of Low Entangled UHMWPE and Its Implications on Mechanical Properties

Dario Romano, Niek Tops, Efen Andablo-Reyes, Sara Ronca, and Sanjay Rastogi*



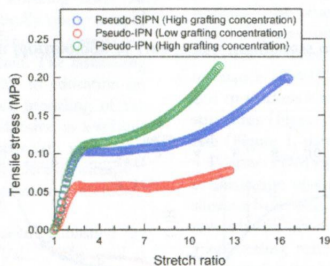
Size-Tunable Nanosheets by the Crystallization-Driven 2D Self-Assembly of Hyperbranched Poly(ether amine) (hPEA)

Bing Yu, Xuesong Jiang,* and Jie Yin



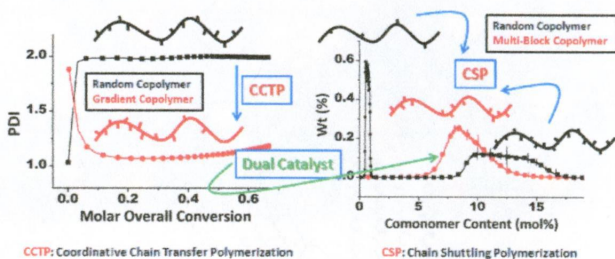
Deconstructing the Double-Network Hydrogels: The Importance of Grafted Chains for Achieving Toughness

S. Shams Es-haghi, A. I. Leonov,* and R. A. Weiss*



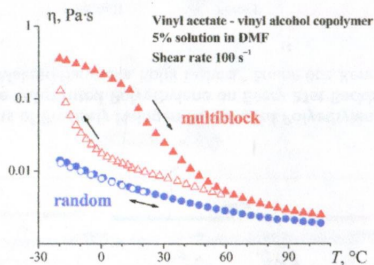
A Detailed Model on Kinetics and Microstructure Evolution during Copolymerization of Ethylene and 1-Octene: From Coordinative Chain Transfer to Chain Shuttling Polymerization

Yousef Mohammadi, Mostafa Ahmadi,* Mohammad Reza Saeb, Mohammad Mehdi Khorasani, Pianpian Yang, and Florian J. Stadler*



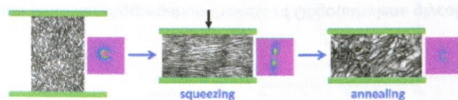
Effect of Chain Structure on the Rheological Properties of Vinyl Acetate–Vinyl Alcohol Copolymers in Solution and Bulk

Sergey O. Ilyin, Alexander Ya. Malkin, Valery G. Kulichikhin, Yulia I. Denisova, Liya B. Krentsel, Georgiy A. Shandryuk, Arkadiy D. Litmanovich, Ekaterina A. Litmanovich, Galina N. Bondarenko, and Yaroslav V. Kudryavtsev*



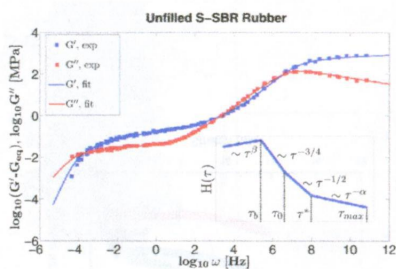
Shear-Induced Orientation of Cocontinuous Nanostructured Polymer Blends

Cinzia Rotella,* Sylvie Tencé-Girault,* Michel Cloitre, and Ludwik Leibler



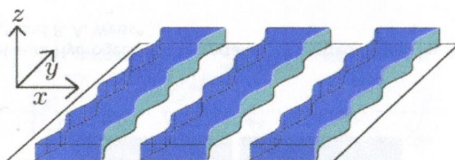
Multiscale Approach to Dynamic-Mechanical Analysis of Unfilled Rubbers

Marina Saphiannikova,* Vladimir Toshchevnikov, Igor Gazuz, Frank Petry, Stephan Westermann, and Gert Heinrich



Response of Block Copolymer Thin-Film Morphology to Line-Width Roughness on a Chemoepitaxial Template

Paul N. Patrone* and Gregg M. Gallatin*



Dynamic Properties of Linear and Cyclic Chains in Two Dimensions. Computer Simulation Studies

Piotr Polanowski, Jeremiasz K. Jeszka, and Andrzej Sikorski*



Linear chains

Ring chains

Unwinding Dynamics of a Helically Wrapped Polymer

J.-C. Walter,* M. Baiesi, E. Carlon, and H. Schiessel

