

March 24, 2015

Volume 48

Number 6

Macromolecules

pubs.acs.org/Macromolecules



ACS Publications
Most Trusted. Most Cited. Most Read.

www.acs.org

Macromolecules

March 24, 2015: Vol. 48, Iss. 6

Content

- 1. Enhancement of Photoinduced Electron Transfer in Self-Assembled Polymer Films Using Mixed Metal–Terpyridine Complexes**
Dong-Cheol Jeong, Jiyoung Lee, Yunmi Lee, Chinnadurai Satheeshkumar, and Changsik Song
Macromolecules **2015** 48 (6), 1621-1626
DOI: 10.1021/ma502619a
- 2. 1,4-Selective Polymerization of 1,3-Cyclohexadiene and Copolymerization with Styrene by Cationic Half-Sandwich Fluorenyl Rare Earth Metal Alkyl Catalysts**
Gaixia Du, Yingyun Long, Jiaping Xue, Shaowen Zhang, Yuping Dong, and Xiaofang Li
Macromolecules **2015** 48 (6), 1627-1635
DOI: 10.1021/acs.macromol.5b00037
- 3. Dynamic Network Formation of POSS-Pendant Polymer via Cage Scrambling Mediated by Fluoride Ion**
Kousuke Tsuchiya, Hitoshi Arai, Yoshihito Ishida, and Atsushi Kameyama
Macromolecules **2015** 48 (6), 1636-1643
DOI: 10.1021/acs.macromol.5b00120
- 4. Syntheses of Monosubstituted Rhodocenium Derivatives, Monomers, and Polymers**
Yi Yan, T. Maxwell Deaton, Jiuyang Zhang, Hongkun He, Jeffery Hayat, Parasmani Pageni, Krzysztof Matyjaszewski, and Chuanbing Tang
Macromolecules **2015** 48 (6), 1644-1650
DOI: 10.1021/acs.macromol.5b00471
- 5. Asymmetric Copolymerization of Cyclopentene Oxide and CO₂ Using a Dinuclear Zinc–AzePhenol Catalyst: Enlightened by DFT Calculations**
Yuan-Zhao Hua, Xiao-Chao Yang, Meng-Meng Liu, Xixi Song, Min-Can Wang, and Jun-Biao Chang
Macromolecules **2015** 48 (6), 1651-1657
DOI: 10.1021/acs.macromol.5b00066
- 6. Polyethylene-g-poly(cyclohexene oxide) by Mechanistic Transformation from ROMP to Visible Light-Induced Free Radical Promoted Cationic Polymerization**
Mustafa Ciftci, Senem Kork, Guangjuan Xu, Michael R. Buchmeiser, and Yusuf Yagci
Macromolecules **2015** 48 (6), 1658-1663
DOI: 10.1021/acs.macromol.5b00086
- 7. Zwitterionic Ring-Opening Copolymerization of Tetrahydrofuran and Glycidyl Phenyl Ether with B(C₆F₅)₃**
Isabel Asenjo-Sanz, Antonio Veloso, José I. Miranda, Angel Alegría, José A. Pomposo, and Fabienne Barroso-Bujans
Macromolecules **2015** 48 (6), 1664-1672
DOI: 10.1021/acs.macromol.5b00096
- 8. Hydrophilic Polycarbonates: Promising Degradable Alternatives to Poly(ethylene glycol)-Based Stealth Materials**
Amanda C. Engler, Xiyu Ke, Shujun Gao, Julian M. W. Chan, Daniel J. Coady, Robert J. Ono, Roy Lubbers, Alshakim Nelson, Yi Yan Yang, and James L. Hedrick
Macromolecules **2015** 48 (6), 1673-1678
DOI: 10.1021/acs.macromol.5b00156

9. Dramatic Behavioral Differences of the Copolymerization Reactions of 1,4-Cyclohexadiene and 1,3-Cyclohexadiene Oxides with Carbon Dioxide

Donald J. Darensbourg, Wan-Chun Chung, Andrew D. Yeung, and Mireya Luna

Macromolecules **2015** *48* (6), 1679-1687

DOI: 10.1021/acs.macromol.5b00172

10. One-Pot Orthogonal Copper-Catalyzed Synthesis and Self-Assembly of L-Lysine-Decorated Polymeric Dendrimers

Derong Lu, Md. D. Hossain, Zhongfan Jia, and Michael J. Monteiro

Macromolecules **2015** *48* (6), 1688-1702

DOI: 10.1021/acs.macromol.5b00195

11. Macromolecular Design via an Organocatalytic, Monomer-Specific and Temperature-Dependent “On/Off Switch”. High Precision Synthesis of Polyester/Polycarbonate Multiblock Copolymers

Peter Olsén, Karin Odelius, Helmut Keul, and Ann-Christine Albertsson

Macromolecules **2015** *48* (6), 1703-1710

DOI: 10.1021/acs.macromol.5b00254

12. Controlling Optoelectronic Behavior in Poly(fluorene) Networks Using Thiol–Ene Photo-Click Chemistry

Andrew R. Davis and Kenneth R. Carter

Macromolecules **2015** *48* (6), 1711-1722

DOI: 10.1021/ma5014226

13. Two-Dimensionally Extended π -Conjugation of Donor–Acceptor Copolymers via Oligothieryl Side Chains for Efficient Polymer Solar Cells

Jaewon Lee, Joo-Hyun Kim, Byungho Moon, Heung Gyu Kim, Min Kim, Jisoo Shin, Hyeongjin Hwang, and Kilwon Cho

Macromolecules **2015** *48* (6), 1723-1735

DOI: 10.1021/acs.macromol.5b00056

14. Stimuli-Responsive Iron-Cross-Linked Hydrogels That Undergo Redox-Driven Switching between Hard and Soft States

Jeffrey T. Auletta, Gregory J. LeDonne, Kai C. Gronborg, Colin D. Ladd, Haitao Liu, William W. Clark, and Tara Y. Meyer

Macromolecules **2015** *48* (6), 1736-1747

DOI: 10.1021/acs.macromol.5b00142

15. Phenylene Ring Motions in Isomeric Glassy Epoxy Networks and Their Contributions to Thermal and Mechanical Properties

Jianwei Tu, Samuel J. Tucker, Stephen Christensen, Abdelwahed R. Sayed, William L. Jarrett, and Jeffrey S. Wiggins

Macromolecules **2015** *48* (6), 1748-1758

DOI: 10.1021/ma5022506

16. Polymer/Polymer Blend Solar Cells Using Tetraazabenzodifluoranthene Diimide Conjugated Polymers as Electron Acceptors

Haiyan Li, Ye-Jin Hwang, Taeshik Earmme, Rachel C. Huber, Brett A. E. Courtright, Conor O'Brien, Sarah H. Tolbert, and Samson A. Jenekhe

Macromolecules **2015** *48* (6), 1759-1766

DOI: 10.1021/ma502042k

17. Noncovalent Grafting of Carbon Nanotubes with Triblock Terpolymers: Toward Patchy 1D Hybrids

Thomas Gegenhuber, André H. Gröschel, Tina I. Löbling, Markus Drechsler, Sascha Ehlert, Stephan Förster, and Holger Schmalz

Macromolecules **2015** *48* (6), 1767-1776

DOI: 10.1021/ma5023378

18. Polyimide and Imide Compound Exhibiting Bright Red Fluorescence with Very Large Stokes Shifts via Excited-State Intramolecular Proton Transfer

Kenta Kanosue, Takamichi Shimosaka, Junji Wakita, and Shinji Ando

Macromolecules **2015** *48* (6), 1777-1785

DOI: 10.1021/ma502456f

19. Enhanced Polystyrene Surface Mobility under Carbon Dioxide at Low Temperature for Nanoparticle Embedding Control

Qiuyan Yang, Qun Xu, and Katja Loos

Macromolecules **2015** *48* (6), 1786-1794

DOI: 10.1021/ma5025686

20. Effect of CO₂ on a Mobility Gradient of Polymer Chains near an Impenetrable Solid

Naisheng Jiang, Levent Sendogdular, Xiaoyu Di, Mani Sen, Peter Gin, Maya K. Endoh, Tadanori Koga, Bulent Akgun, Michael Dimitriou, and Sushil Satija

Macromolecules **2015** *48* (6), 1795-1803

DOI: 10.1021/ma502591x

21. Confined Nucleation and Crystallization Kinetics in Lamellar Crystalline–Amorphous Diblock Copolymer Poly(ϵ -caprolactone)-b-poly(4-vinylpyridine)

Lanlan Chen, Jing Jiang, Lai Wei, Xiaoliang Wang, Gi Xue, and Dongshan Zhou

Macromolecules **2015** *48* (6), 1804-1812

DOI: 10.1021/ma5025945

22. BCC Grain Formation Triggered by Miscibility Jump on Temperature Drop

Akifumi Matsushita, Shigeru Okamoto, Eiko Tamura, and Tadashi Inoue

Macromolecules **2015** *48* (6), 1813-1823

DOI: 10.1021/acs.macromol.5b00024

23. Viscoelasticity of Poly(ethylene glycol) Solutions on Supported Lipid Bilayers via Quartz Crystal Microbalance with Dissipation

Ziliang Zhao, Xiangling Ji, Rumiana Dimova, Reinhard Lipowsky, and Yonggang Liu

Macromolecules **2015** *48* (6), 1824-1831

DOI: 10.1021/acs.macromol.5b00095

24. End Block Design Modulates the Assembly and Mechanics of Thermoresponsive, Dual-Associative Protein Hydrogels

Matthew J. Glassman and Bradley D. Olsen

Macromolecules **2015** *48* (6), 1832-1842

DOI: 10.1021/ma502494s

25. Micelle Structure of Novel Diblock Polyethers in Water and Two Protic Ionic Liquids (EAN and PAN)

Zhengfei Chen, Paul A. FitzGerald, Yumi Kobayashi, Kazuhide Ueno, Masayoshi Watanabe, Gregory G. Warr, and Rob Atkin

Macromolecules **2015** *48* (6), 1843-1851

DOI: 10.1021/acs.macromol.5b00082

26. Crystallization of Poly(2-isopropyl-2-oxazoline) in Organic Solutions

Natalia Oleszko, Alicja Utrata-Wesołek, Wojciech Wałach, Marcin Libera, Anna Hercog, Urszula Szeluga, Marian Domański, Barbara Trzebicka, and Andrzej Dworak

Macromolecules **2015** *48* (6), 1852-1859

DOI: 10.1021/ma502586x

27. Influence of DNA Binding Dyes on Bare DNA Structure Studied with Atomic Force Microscopy

Aleksandre Japaridze, Alexander Benke, Sylvain Renevey, Carine Benadiba, and Giovanni Dietler

Macromolecules **2015** *48* (6), 1860-1865

DOI: 10.1021/ma502537g

28. Shear-Dependent Interactions in Hydrophobically Modified Ethylene Oxide Urethane (HEUR) Based Coatings: Mesoscale Structure and Viscosity

Antony K. Van Dyk, Tirtha Chatterjee, Valeriy V. Ginzburg, and Alan I. Nakatani

Macromolecules **2015** *48* (6), 1866-1882

DOI: 10.1021/ma502174x

29. Multiple and Co-Nanoprecipitation Studies of Branched Hydrophobic Copolymers and A–B Amphiphilic Block Copolymers, Allowing Rapid Formation of Sterically Stabilized Nanoparticles in Aqueous Media

Jane Ford, Pierre Chambon, Jocelyn North, Fiona L. Hatton, Marco Giardiello, Andrew Owen, and Steve P. Rannard

Macromolecules **2015** *48* (6), 1883-1893

DOI: 10.1021/acs.macromol.5b00099

30. Arrested Spinodal Decomposition in Polymer Brush Collapsing in Poor Solvent

Anna Lappala, Saahil Mendiratta, and Eugene M. Terentjev

Macromolecules **2015** *48* (6), 1894-1900

DOI: 10.1021/ma501985r

31. Dynamical Theory of Segmental Relaxation and Emergent Elasticity in Supercooled Polymer Melts

Stephen Mirigian and Kenneth S. Schweizer

Macromolecules **2015** *48* (6), 1901-1913

DOI: 10.1021/ma5022083