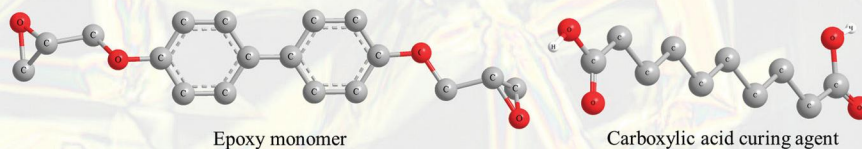
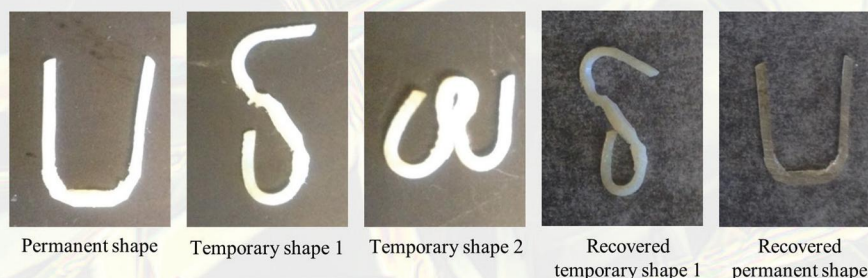


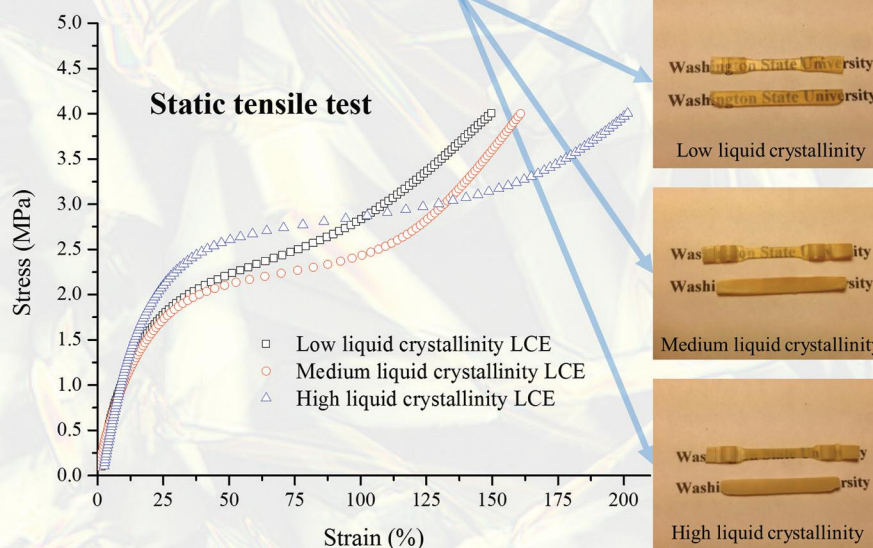
Macromolecules

pubs.acs.org/Macromolecules

Tunable Shape Memory Liquid Crystalline Elastomer



Different ratios



Macromolecules

May 12, 2015: Vol. 48, Iss. 9

Content

1. Multifunctional Poly[N-(2-hydroxypropyl)methacrylamide] Copolymers via Postpolymerization Modification and Sequential Thiol–Ene Chemistry

Nora Francini, Laura Purdie, Cameron Alexander, Giuseppe Mantovani, and Sebastian G. Spain
Macromolecules **2015** *48* (9), 2857-2863
DOI: 10.1021/acs.macromol.5b00447

2. Controlled Shape Memory Behavior of a Smectic Main-Chain Liquid Crystalline Elastomer

Yuzhan Li, Cole Pruitt, Orlando Rios, Liqing Wei, Mitch Rock, Jong K. Keum, Armando G. McDonald, and Michael R. Kessler
Macromolecules **2015** *48* (9), 2864-2874
DOI: 10.1021/acs.macromol.5b00519

3. Phenanthrothiophene–Isoindigo Copolymers: Effect of Side Chains on Their Molecular Order and Solar Cell Performance

Shuhei Nishinaga, Hiroki Mori, and Yasushi Nishihara
Macromolecules **2015** *48* (9), 2875-2885
DOI: 10.1021/acs.macromol.5b00622

4. Phase Behaviors of Side-Chain Liquid Crystalline Polyacetylenes with Different Length of Spacer: Where Will the Decoupling Effect Appear?

Zhen-Qiang Yu, Ting-Ting Li, Zhe Zhang, Jia-Hao Liu, Wang Zhang Yuan, Jacky W. Y. Lam, Shuang Yang, Er-Qiang Chen, and Ben Zhong Tang
Macromolecules **2015** *48* (9), 2886-2893
DOI: 10.1021/acs.macromol.5b00692

5. Stereoregular Two-Dimensional Polymers Constructed by Topochemical Polymerization

Zhihan Wang, Katelyn Randazzo, Xiaodong Hou, Jeffrey Simpson, Jochem Struppe, Angel Ugrinov, Brent Kastern, Erin Wysocki, and Qianli R. Chu
Macromolecules **2015** *48* (9), 2894-2900
DOI: 10.1021/acs.macromol.5b00109

6. Fluorinated Microgels in Star Polymers: From In-Core Dynamics to Fluorous Encapsulation

Yuta Koda, Takaya Terashima, and Mitsuo Sawamoto
Macromolecules **2015** *48* (9), 2901-2908
DOI: 10.1021/acs.macromol.5b00166

7. Reevaluation of the Formation and Reactivity of Midchain Radicals in Nitroxide-Mediated Polymerization of Acrylic Monomers

Nicholas Ballard, José Ignacio Santos, and José M. Asua
Macromolecules **2015** *48* (9), 2909-2915
DOI: 10.1021/acs.macromol.5b00347

8. Branched Amino Acid Based Poly(ester urea)s with Tunable Thermal and Water Uptake Properties

Jiayi Yu, Fei Lin, and Matthew L. Becker
Macromolecules **2015** *48* (9), 2916-2924
DOI: 10.1021/acs.macromol.5b00376

9. Synthesis of Functional Polypropylene Containing Hindered Phenol Stabilizers and Applications in Metallized Polymer Film Capacitors

Gang Zhang, Houxiang Li, Martin Antensteiner, and T. C. Mike Chung

Macromolecules **2015** *48* (9), 2925-2934

DOI: 10.1021/acs.macromol.5b00439

10. Twofold Helical Polymerization: Thermal Solid-State Polymerization of 7-Cyano-7-(2'-haloethoxycarbonyl)-1,4-benzoquinone Methides

Takahito Itoh, Kyoko Tachino, Naoki Akira, Takahiro Uno, Masataka Kubo, Norimitsu Tohnai, and Mikiji Miyata

Macromolecules **2015** *48* (9), 2935-2947

DOI: 10.1021/ma502606s

11. Benzo[1,2-b:4,5-b']dithiophene and Thieno[3,4-c]pyrrole-4,6-dione Based Donor- π -Acceptor Conjugated Polymers for High Performance Solar Cells by Rational Structure Modulation

Shu Liu, Xichang Bao, Wei Li, Kailong Wu, Guohua Xie, Renqiang Yang, and Chuluo Yang

Macromolecules **2015** *48* (9), 2948-2957

DOI: 10.1021/acs.macromol.5b00251

12. 3D Image Storage in Photopolymer/ZnS Nanocomposites Tailored by "Photoinitiator"

Mingli Ni, Haiyan Peng, Yonggui Liao, Zhifang Yang, Zhigang Xue, and Xiaolin Xie

Macromolecules **2015** *48* (9), 2958-2966

DOI: 10.1021/acs.macromol.5b00261

13. Oxygen Sensing Difluoroboron Dinaphthoylemethane Polylactide

Christopher A. DeRosa, Jelena Samonina-Kosicka, Ziyi Fan, Hansford C. Hendargo, Douglas H. Weitzel, Gregory M. Palmer, and Cassandra L. Fraser

Macromolecules **2015** *48* (9), 2967-2977

DOI: 10.1021/acs.macromol.5b00394

14. Synthesis of Poly(3-hexylthiophene), Poly(3-hexylselenophene), and Poly(3-hexylselenophene-alt-3-hexylthiophene) by Direct C-H Arylation Polymerization via N-Heterocyclic Carbene Palladium Catalysts

Yu-Ying Lai, Tsu-Chien Tung, Wei-Wei Liang, and Yen-Ju Cheng

Macromolecules **2015** *48* (9), 2978-2988

DOI: 10.1021/acs.macromol.5b00488

15. Mixed-Ligand Approach to Palladium-Catalyzed Direct Arylation Polymerization: Synthesis of Donor-Acceptor Polymers with Dithienosilole (DTS) and Thienopyrroledione (TPD) Units

Eisuke Iizuka, Masayuki Wakioka, and Fumiyuki Ozawa

Macromolecules **2015** *48* (9), 2989-2993

DOI: 10.1021/acs.macromol.5b00526

16. Supramolecular Polylactides by the Cooperative Interaction of the End Groups and Stereocomplexation

M. Brzeziński and T. Biela

Macromolecules **2015** *48* (9), 2994-3004

DOI: 10.1021/acs.macromol.5b00208

17. Temperature Dependence of the Segmental Relaxation Time of Polymers Revisited

B. Schmidtke, M. Hofmann, A. Lichtinger, and E. A. Rössler

Macromolecules **2015** *48* (9), 3005-3013

DOI: 10.1021/acs.macromol.5b00204

18. Viscoelastic Relaxation of Rouse Chains undergoing Head-to-Head Association and Dissociation: Motional Coupling through Chemical Equilibrium

Hiroshi Watanabe, Yumi Matsumiya, Yuichi Masubuchi, Osamu Urakawa, and Tadashi Inoue

Macromolecules **2015** *48* (9), 3014-3030

DOI: 10.1021/acs.macromol.5b00409

- 19. Thermal Imidization Kinetics of Ultrathin Films of Hybrid Poly(POSS-imide)s**
Michiel J. T. Raaijmakers, Emiel J. Kappert, Arian Nijmeijer, and Nieck E. Benes
Macromolecules **2015** *48* (9), 3031-3039
DOI: 10.1021/acs.macromol.5b00473
- 20. Simple NMR Experiments Reveal the Influence of Chain Length and Chain Architecture on the Crystalline/Amorphous Interface in Polyethylenes**
Arifuzzaman Tapash, Paul J. DesLauriers, and Jeffery L. White
Macromolecules **2015** *48* (9), 3040-3048
DOI: 10.1021/acs.macromol.5b00475
- 21. Layered Poly(3-hexylthiophene) Nanowhiskers Studied by Atomic Force Microscopy and Kelvin Probe Force Microscopy**
Frederick M. McFarland, Benjamin Brickson, and Song Guo
Macromolecules **2015** *48* (9), 3049-3056
DOI: 10.1021/ma502411n
- 22. Thermomechanically Consistent and Temperature Transferable Coarse-Graining of Atactic Polystyrene**
David D. Hsu, Wenjie Xia, Steven G. Arturo, and Sinan Keten
Macromolecules **2015** *48* (9), 3057-3068
DOI: 10.1021/acs.macromol.5b00259
- 23. Cooperative and Sequential Phase Transitions in it-Poly(propylene oxide)-b-poly(ethylene oxide)-b-it-poly(propylene oxide) Triblock Copolymers**
Weichao Shi, Alaina J. McGrath, Youli Li, Nathaniel A. Lynd, Craig J. Hawker, Glenn H. Fredrickson, and Edward J. Kramer
Macromolecules **2015** *48* (9), 3069-3079
DOI: 10.1021/acs.macromol.5b00326
- 24. Formation of Poly(3-hydroxybutyrate) (PHB) Inclusion Compound with Urea and Unusual Crystallization Behavior of Coalesced PHB**
Pavithran Ravindran and Nadarajah Vasanthan
Macromolecules **2015** *48* (9), 3080-3087
DOI: 10.1021/acs.macromol.5b00387
- 25. Dual Stimuli-Responsive Redox-Active Injectable Gel by Polyion Complex Based Flower Micelles for Biomedical Applications**
Shiro Ishii, Junya Kaneko, and Yukio Nagasaki
Macromolecules **2015** *48* (9), 3088-3094
DOI: 10.1021/acs.macromol.5b00305
- 26. Facile Formation of Highly Mobile Supported Lipid Bilayers on Surface-Quaternized pH-Responsive Polymer Brushes**
N. Cheng, P. Bao, S. D. Evans, G. J. Leggett, and S. P. Armes
Macromolecules **2015** *48* (9), 3095-3103
DOI: 10.1021/acs.macromol.5b00435
- 27. Swelling and Thermoresponsive Behavior of Linear versus Cyclic Poly(N-isopropylacrylamide) Thin Films**
David Magerl, Martine Philipp, Xing-Ping Qiu, Françoise M. Winnik, and Peter Müller-Buschbaum
Macromolecules **2015** *48* (9), 3104-3111
DOI: 10.1021/acs.macromol.5b00436
- 28. Self-Assembly of Polymer Tethered Molecular Nanoparticle Shape Amphiphiles in Selective Solvents**
Shiyong Ma, Yi Hu, and Rong Wang
Macromolecules **2015** *48* (9), 3112-3120
DOI: 10.1021/ma5026219

29. Self-Diffusion and Constraint Release in Isotropic Entangled Rod–Coil Block Copolymers

Muzhou Wang, Ksenia Timachova, and Bradley D. Olsen

Macromolecules **2015** *48* (9), 3121-3129

DOI: 10.1021/ma501954k

30. Thermosensitive Ionic Microgels with pH Tunable Degradation via in Situ Quaternization Cross-Linking

Xianjing Zhou, Jingjing Nie, Qi Wang, and Binyang Du

Macromolecules **2015** *48* (9), 3130-3139

DOI: 10.1021/acs.macromol.5b00482

31. Melt Rheology of Ring Polystyrenes with Ultrahigh Purity

Yuya Doi, Kazuki Matsubara, Yutaka Ohta, Tomohiro Nakano, Daisuke Kawaguchi, Yoshiaki Takahashi, Atsushi Takano, and Yushu Matsushita

Macromolecules **2015** *48* (9), 3140-3147

DOI: 10.1021/acs.macromol.5b00076

32. Proof of Tacticity of Stereoregular ROMP Polymers through Post Polymerization Modification

Jakub Hyvl, Benjamin Autenrieth, and Richard R. Schrock

Macromolecules **2015** *48* (9), 3148-3152

DOI: 10.1021/acs.macromol.5b00477