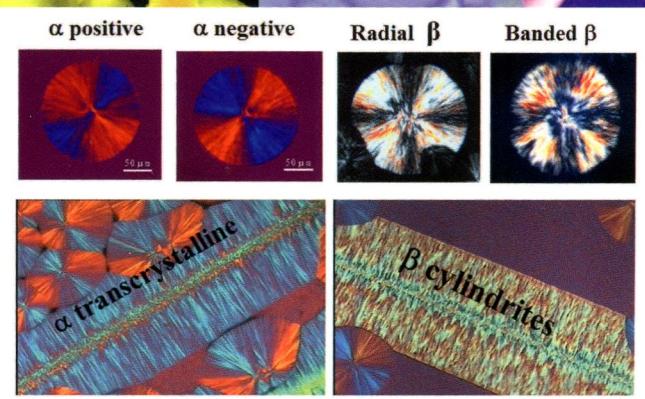
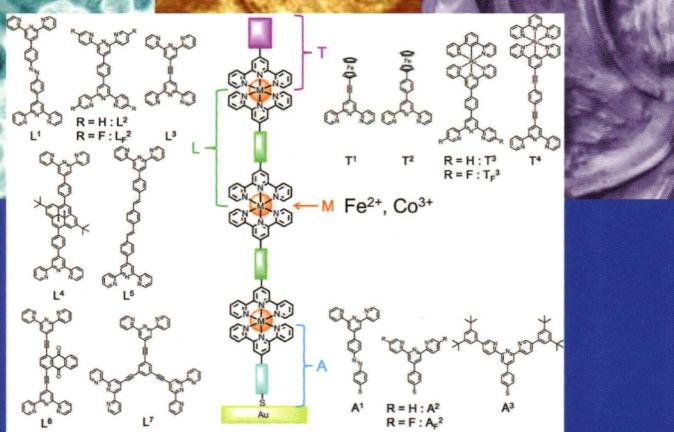
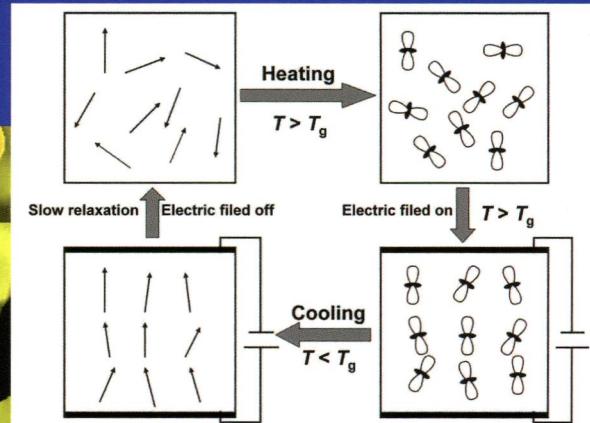
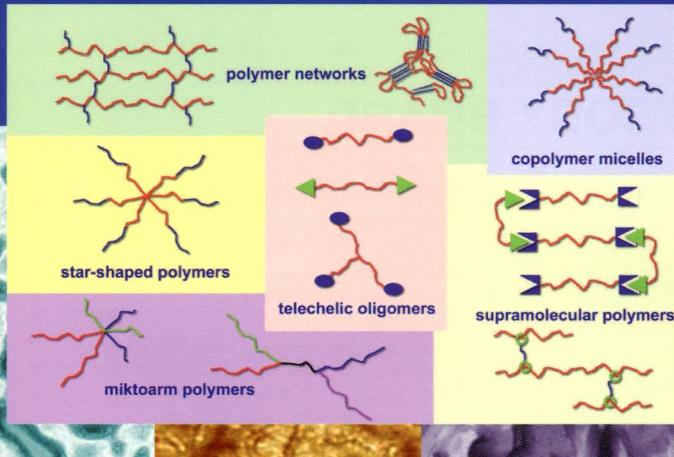
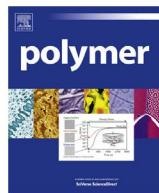


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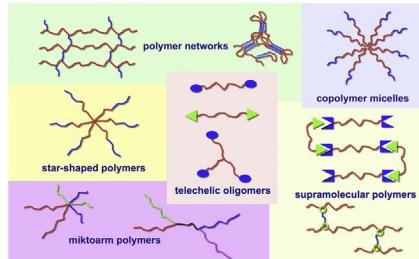
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Adam L. Sisson, Duygu Ekinci, Andreas Lendlein\*

*Institute of Biomaterial Science and Berlin Brandenburg Centre for Regenerative Therapies,  
Helmholtz-Zentrum Geesthacht, Kantstrasse 55, 14513 Teltow, Germany*

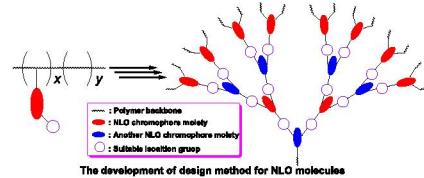


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Wenbo Wu, Jingui Jin, Zhen Li\*

*Department of Chemistry, Hubei Key Lab on Organic and Polymeric Opto-Electronic Materials,  
Wuhan University, Wuhan 430072, China*

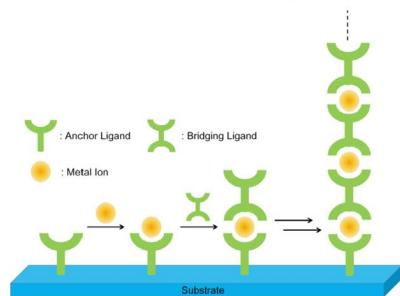


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Hiroaki Maeda, Ryota Sakamoto, Hiroshi Nishihara\*

Department of Chemistry, Graduate School of Science, The University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033, Japan

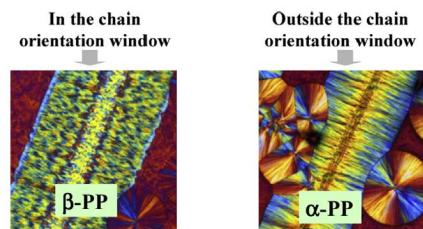


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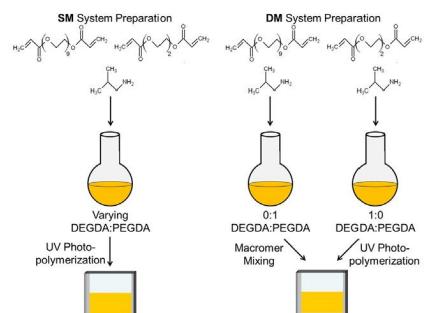
State Key Laboratory of Chemical Resource Engineering, Beijing University of Chemical Technology, Beijing 100029, China



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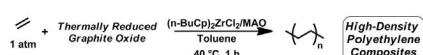
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**Thermally reduced graphite oxide reinforced polyethylene composites: A mild synthetic approach**

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Alexander D. Todd<sup>a</sup>, Christopher W. Bielawski<sup>a,b,\*</sup><sup>a</sup> Department of Chemistry and Biochemistry, The University of Texas at Austin, 1 University Station, A1590, Austin, TX 78712, USA<sup>b</sup> The World Class University (WCU) Program of Chemical Convergence for Energy & Environment (C2E2), Seoul National University, Seoul 151-742, Republic of Korea

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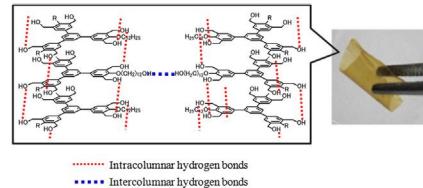
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<sup>a</sup> Department of Chemistry and Chemical Engineering, Graduate School of Science and Technology, Niigata University, Ikarashi 2-8050, Nishi-ku, Niigata 950-2181, Japan

<sup>b</sup> Material Science and Engineering, Kitami Institute of Technology, 165 Koen-cho, Kitami, Hokkaido 090-8507, Japan

<sup>c</sup> Key Laboratory of Superlight Materials and Surface Technology, Ministry of Education and Polymer Materials Research Center, Harbin Engineering University, Harbin 150001, China



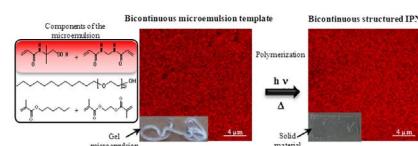
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Laboratoire de Physicochimie des Polymères et des Interfaces (LPPI), Université de Cergy-Pontoise, Institut des matériaux, 5, mail Gay-Lussac, Neuville-sur-Oise, 95031 Cergy-Pontoise Cedex, France



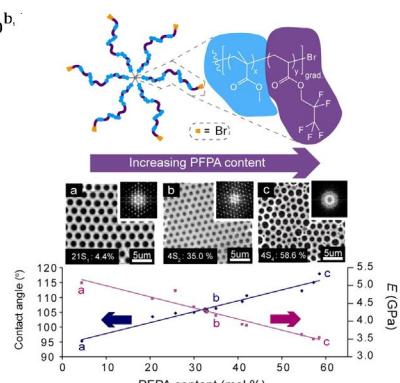
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<sup>a</sup> Department of Chemical and Biomolecular Engineering, University of Melbourne, Parkville, VIC 3010, Australia

<sup>b</sup> Materials Science and Engineering, Commonwealth Scientific and Industrial Research Organization (CSIRO), Clayton, VIC 3168, Australia



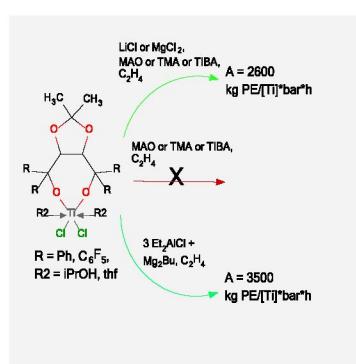
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<sup>a</sup> Department of Chemistry, M. V. Lomonosov Moscow State University, 1 Leninskie Gory, 119992 Moscow, Russian Federation

<sup>b</sup> A. N. Nesmeyanov Institute of Organoelement Compounds, Russian Academy of Sciences, 28 ul. Vavilova, 119991 Moscow, Russian Federation



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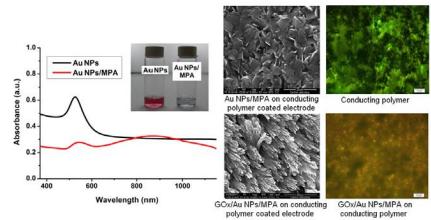
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<sup>a</sup> Department of Chemistry, Middle East Technical University, 06800 Ankara, Turkey

<sup>b</sup> Department of Biotechnology, Middle East Technical University, 06800 Ankara, Turkey

<sup>c</sup> Department of Polymer Science and Technology, Middle East Technical University, 06800 Ankara, Turkey

<sup>d</sup> The Center for Solar Energy Research and Applications (GUNAM), Middle East Technical University, 06800 Ankara, Turkey



## UV-cured transparent magnetic polymer nanocomposites

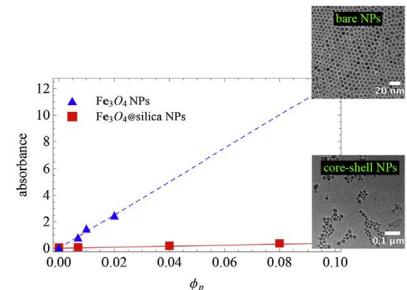
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<sup>a</sup> Laboratoire de Technologie des Composites et Polymères (LTC), Ecole Polytechnique Fédérale de Lausanne (EPFL), CH-1015 Lausanne, Switzerland

<sup>b</sup> Politecnico di Torino, DISAT, Corso Duca degli Abruzzi 24, Torino 10129, Italy

<sup>c</sup> INRIM, Electromagnetism Division, Strada delle Cacce 91, Torino 10135, Italy



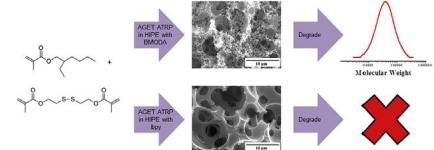
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<sup>a</sup> Department of Chemistry, Carnegie Mellon University, Pittsburgh, PA 15213-3890, USA

<sup>b</sup> Department of Materials Science and Engineering, Technion – Israel Institute of Technology, Haifa 32000, Israel



## Differences in molecular structure in cross-linked polycationic nanoparticles synthesized using ARGET ATRP or UV-initiated polymerization

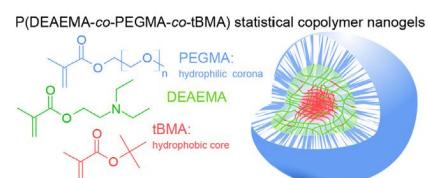
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D.C. Forbes<sup>a</sup>, N.A. Peppas<sup>a,b,c,\*</sup>

<sup>a</sup> Department of Chemical Engineering, The University of Texas at Austin, Austin, TX, USA

<sup>b</sup> Department of Biomedical Engineering, The University of Texas at Austin, Austin, TX, USA

<sup>c</sup> College of Pharmacy, The University of Texas at Austin, Austin, TX, USA

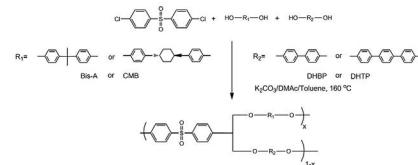


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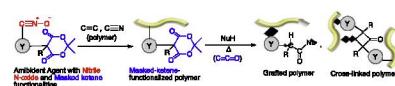
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Bin Zhang, S. Richard Turner\*

Department of Chemistry, Macromolecules and Interfaces Institute (MII), Virginia Tech, Blacksburg, VA 24061-0344, USA

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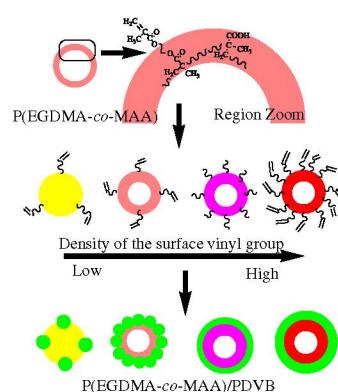
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Sumitra Cheawchan<sup>a</sup>, Yasuhito Koyama<sup>b,\*</sup>, Satoshi Uchida<sup>a</sup>, Toshikazu Takata<sup>a,\*\*</sup><sup>a</sup>Department of Organic and Polymeric Materials, Tokyo Institute of Technology, 2-12-1-(H-126), Ookayama, Meguro, Tokyo 152-8552, Japan<sup>b</sup>Catalysis Research Center, Hokkaido University, N21 W10, Kita-ku, Sapporo 001-0021, Japan**A controlled morphology of polymeric nanocapsules via the density of surface vinyl group for the precipitation polymerization**

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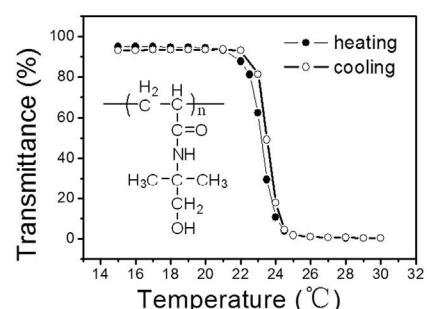
Key Laboratory of Functional Polymer Materials, Ministry of Education, Institute of Polymer Chemistry, Nankai University, Tianjin 300071, PR China

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Qianling Cui, Yajie Wang, Feipeng Wu\*, Erjian Wang

Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, Beijing 100190, PR China



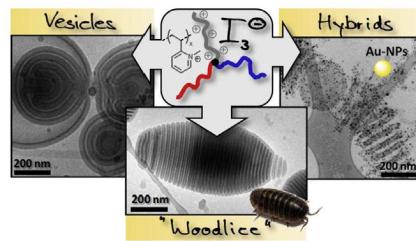
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<sup>a</sup> Makromolekulare Chemie II, Universität Bayreuth, D-95440 Bayreuth, Germany

<sup>b</sup> Institut für Organische Chemie und Makromolekulare Chemie (IOMC) and Jena Center for Soft Matter (JCSM), Friedrich-Schiller-Universität Jena, Humboldtstraße 10, D-07743 Jena, Germany



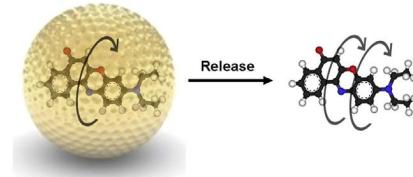
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<sup>a</sup> University of Warsaw, Department of Chemistry, Pasteura 1, 02-093 Warsaw, Poland

<sup>b</sup> Michigan State University, Department of Chemistry, East Lansing, MI 48824-1322, USA



**The effect of comonomer content on structure and property relationship of propylene-1-octene copolymer during uniaxial stretching**

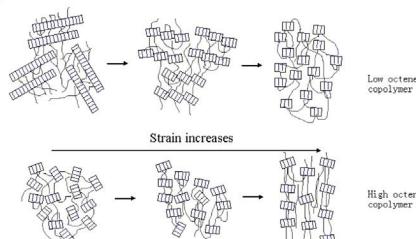
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<sup>a</sup> Department of Chemistry, Stony Brook University, Stony Brook, NY 11794-3400, USA

<sup>b</sup> ExxonMobil Chemical Company, 5200 Bayway Drive, Baytown, TX 77520, USA

<sup>c</sup> ExxonMobil Research and Engineering Company, Annandale, NJ 08801, USA



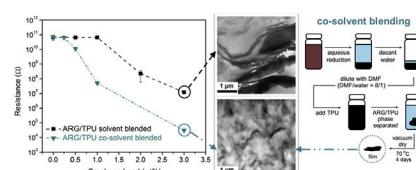
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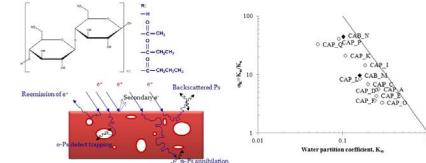
<sup>a</sup> Department of Chemical Engineering and Material Science, University of Minnesota, 421 Washington Ave. SE, Minneapolis, MN 55455, USA

<sup>b</sup> Department of Chemical Engineering, The Petroleum Institute, Abu Dhabi, United Arab Emirates

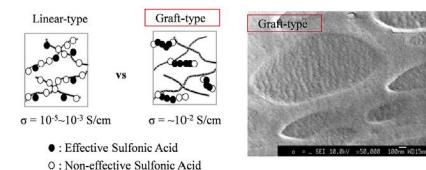


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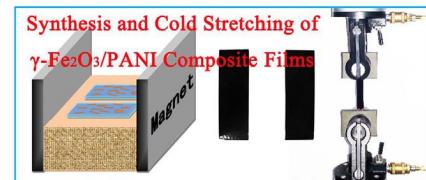
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Rui Chin Ong<sup>a</sup>, Tai-Shung Chung<sup>a,\*</sup>, Bradley J. Helmer<sup>b</sup>, Jos. S. de Wit<sup>b</sup><sup>a</sup> Department of Chemical and Biomolecular Engineering, National University of Singapore,  
4 Engineering Drive 4, Singapore 117576, Singapore<sup>b</sup> Eastman Chemical Company, P.O. Box 1972, Kingsport, TN 37662, USA
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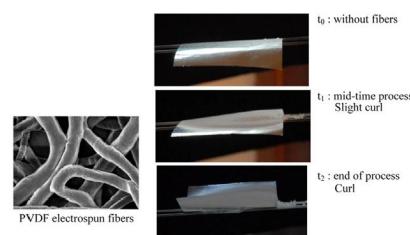
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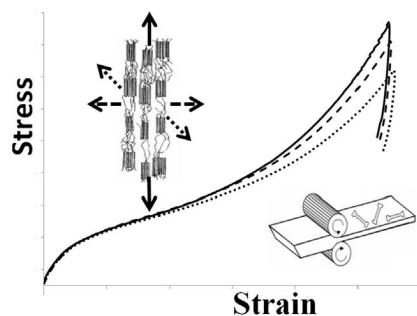
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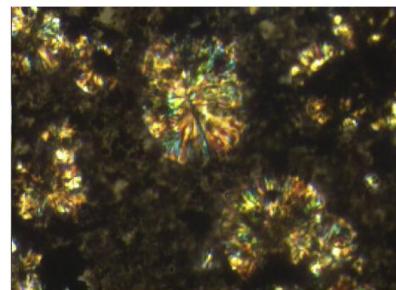
A.S. Caro-Bretelle\*, P. Lenny, R. Leger

C2MA, Ecole des Mines d'Alès, 6 Avenue de Clavières, 30319 Alès, France



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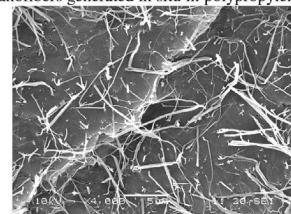
George Z. Papageorgiou<sup>a,b,\*</sup>, Zoe Terzopoulou<sup>a</sup>, Dimitris S. Achilias<sup>a</sup>, Dimitrios N. Bikaris<sup>a</sup>, Maria Kapnistī<sup>b</sup>, Dimitrios Gournis<sup>c</sup><sup>a</sup>Laboratory of Organic Chemical Technology, Department of Chemistry, Aristotle University of Thessaloniki, Thessaloniki GR-541 24, Greece<sup>b</sup>Technological Educational Institute of Thessaloniki, Sindos GR -574 00, Thessaloniki, Greece<sup>c</sup>Department of Materials Science and Engineering, University of Ioannina, Ioannina GR-45110, Greece

**All-polymer nanocomposites with nanofibrillar inclusions generated *in situ* during compounding**

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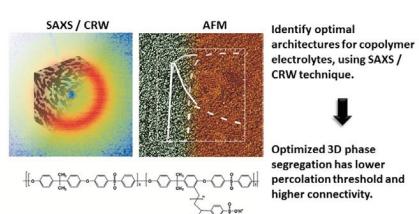
K. Jurczuk, A. Galeski\*, E. Piorkowska

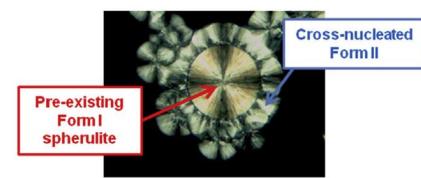
Centre of Molecular and Macromolecular Studies, Polish Academy of Sciences, Sienkiewicza 112, 90363 Lodz, Poland

PTFE nanofibers generated *in situ* in polypropylene matrix

**Optimal phase segregation in graft copolymers**

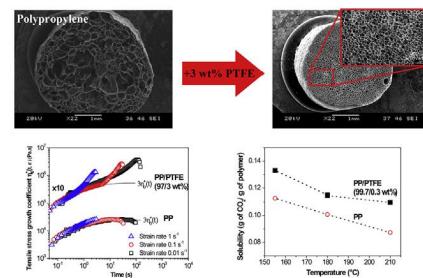
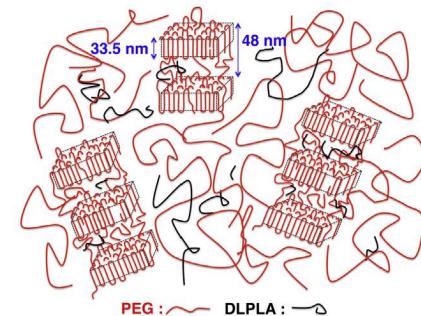
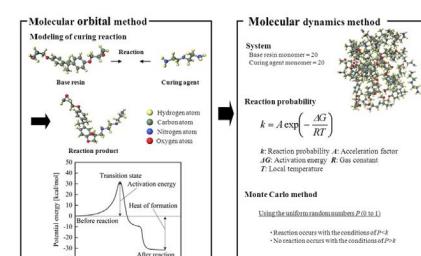
pp 4629–4636

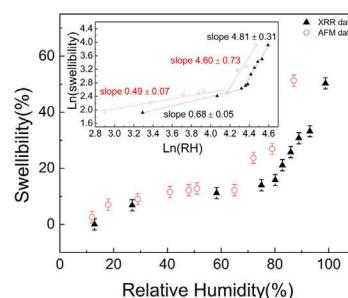
Sandor Balog<sup>a,\*</sup>, Jozef Adamcik<sup>b</sup>, Raffaele Mezzenga<sup>b</sup>, Chang Gi Cho<sup>c</sup><sup>a</sup>Adolphe Merkle Institute, University of Fribourg, 1723 Marly 1, Switzerland<sup>b</sup>Food and Soft Materials Science, Institute of Food, Nutrition and Health, ETH Zurich, Schmelzbergstrasse 9, CH-8092 Zürich, Switzerland<sup>c</sup>Department of Organic & Nano Engineering, Hanyang University, Seoul 133-791, Republic of Korea

**On cross- and self-nucleation in seeded crystallization of isotactic poly(1-butene)****pp 4637–4644**Dario Cavallo<sup>a,\*</sup>, Lorenza Gardella<sup>b</sup>, Giuseppe Portale<sup>c</sup>, Alejandro J. Müller<sup>d</sup>, Giovanni C. Alfonso<sup>b</sup><sup>a</sup> Department of Mechanical Engineering, Eindhoven University of Technology, P.O. Box 513, 5600 MB Eindhoven, The Netherlands<sup>b</sup> University of Genova, Department of Chemistry and Industrial Chemistry, Via Dodecaneso 31, 16146 Genova, Italy<sup>c</sup> Netherlands Organization for Scientific Research (NWO), DUBBLE CRG, European Synchrotron Radiation Facility, BP 220, F-38043 Grenoble Cedex, France<sup>d</sup> Grupo de Polímeros USB, Departamento de Ciencia de los Materiales, Universidad Simón Bolívar, Apartado 89000, Caracas 1080-A, Venezuela**Isotactic Poly(1-butene) optical micrograph****In situ fibrillation of CO<sub>2</sub>-philic polymers: Sustainable route to polymer foams in a continuous process****pp 4645–4652**

Ali Rizvi, Alireza Tabatabaei, M. Reza Barzegari, S. Hassan Mahmood, Chul B. Park\*

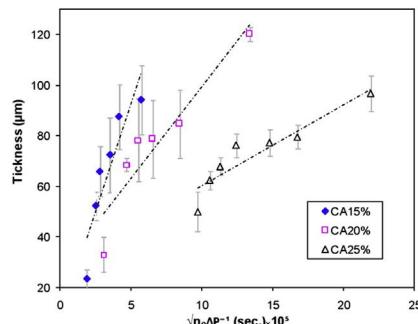
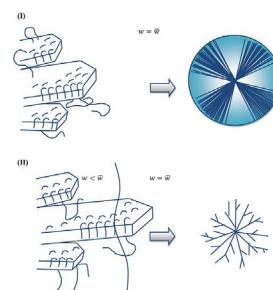
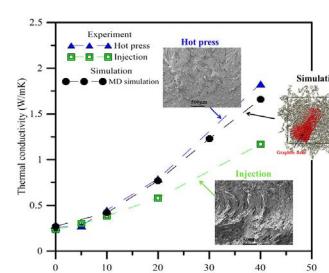
Microcellular Plastics Manufacturing Laboratory, Department of Mechanical and Industrial Engineering, University of Toronto, 5 King's College Road, Toronto, Ontario M5S 3G8, Canada

**Higher-order crystalline structures of poly(oxyethylene) in poly(D,L-lactide)/poly(oxyethylene) blends****pp 4653–4659**Nguyen-Dung Tien<sup>a</sup>, Ta-Phuong Hoa<sup>b</sup>, Masatsugu Mochizuki<sup>c</sup>, Kenji Saito<sup>d</sup>, Hirokazu Hasegawa<sup>d</sup>, Sono Sasaki<sup>a,c</sup>, Shinichi Sakurai<sup>a,c,\*</sup><sup>a</sup> Department of Biobased Materials Science, Kyoto Institute of Technology, Matsugasaki, Sakyo-ku, Kyoto 606-8585, Japan<sup>b</sup> Polymer Centre, Hanoi University of Science and Technology, Viet Nam<sup>c</sup> Center for Fiber and Textile Science, Kyoto Institute of Technology, Japan<sup>d</sup> Department of Polymer Chemistry, Kyoto University, Japan**Curing reaction of epoxy resin composed of mixed base resin and curing agent: Experiments and molecular simulation****pp 4660–4668**Tomonaga Okabe<sup>a,\*</sup>, Tomohiro Takehara<sup>a</sup>, Keisuke Inose<sup>b</sup>, Noriyuki Hirano<sup>b</sup>, Masaaki Nishikawa<sup>c</sup>, Takuya Uehara<sup>d</sup><sup>a</sup> Department of Aerospace Engineering, Tohoku University, 6-6-01, Aoba-yama, Aoba-ku, Sendai, Miyagi 980-8579, Japan<sup>b</sup> Composite Materials Research Laboratories (CMRL), Toray Industries, Inc., 1515 Tsutsui Masaki-cho, Iyogun, Ehime 791-3120, Japan<sup>c</sup> Department of Mechanical Engineering and Science, Kyoto University, C3 Kyoto Daigaku-Katsura, Nishikyo-ku, Kyoto 615-8540, Japan<sup>d</sup> Department of Mechanical Systems Engineering, Yamagata University, 4-3-16, Jonan, Yonezawa, Yamagata 992-8510, Japan

**Power law in swelling of ultra-thin polymer films****pp 4669–4674**M. Mukherjee<sup>a,\*</sup>, M. Souheib Chebil<sup>b</sup>, Nicolas Delorme<sup>b</sup>, Alain Gibaud<sup>b</sup><sup>a</sup> Surface Physics Division, Saha Institute of Nuclear Physics, 1/AF, Bidhannagar, Kolkata 700064, India<sup>b</sup> LUNAM Université, IMM, Faculté de Sciences, Université du Maine, UMR 6283 CNRS, Le Mans Cedex 9 72000, France**The prediction of polymeric membrane characteristics prepared via nonsolvent induced phase separation by the apparent coagulation time****pp 4675–4685**

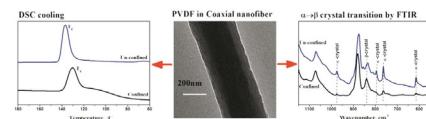
Seyed Morteza Ghasemi, Naser Mohammadi\*

Loghman Fundamental Research Group, Department of Polymer Engineering and Color Technology, Amirkabir University of Technology, P.O. Box 15875-4413, Tehran, Iran

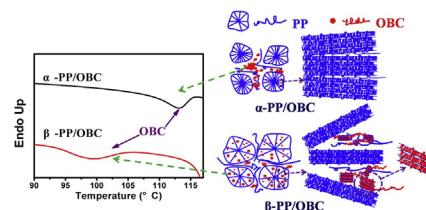
**Poly(vinylidene fluoride)-acrylic rubber partially miscible blends: Crystallization within conjugated phases induce dual lamellar crystalline structure****pp 4686–4701**M.M. Abolhasani<sup>a,\*</sup>, A. Jalali-Arani<sup>a, \*\*</sup>, H. Nazockdast<sup>a</sup>, Qipeng Guo<sup>b</sup><sup>a</sup> Department of Polymer Engineering and Color Technology, Amirkabir University of Technology, Tehran, Iran<sup>b</sup> Polymers Research Group, Institute for Frontier Materials, Deakin University, Locked Bag 2000, Geelong, Victoria 3220, Australia**Investigation of thermal conductivity of graphite flake/poly(p-phenylene sulfide) composite by experimental measurement and non-equilibrium molecular dynamics simulation****pp 4702–4709**Shin-Pon Ju<sup>a,\*</sup>, Tien-Jung Haung<sup>b,c</sup>, Chun-Hsiung Liao<sup>b</sup>, Jie-Wei Chang<sup>a</sup><sup>a</sup> Department of Mechanical and Electro-Mechanical Engineering, National Sun Yat-Sen University, Kaohsiung 804, Taiwan<sup>b</sup> Material & Chemical Research laboratories, Industrial Technology Research Institute, Taiwan<sup>c</sup> Department of Chemical Engineering, National Tsing Hua University, Hsinchu 300, Taiwan

**The crystallization and crystal transition of PVDF in PAN nano-tube**

pp 4710–4718

Hongjun Luo<sup>b,c</sup>, Yong Huang<sup>a,b,d,\*</sup>, Dongshan Wang<sup>b</sup><sup>a</sup> National Engineering Research Center for Engineering Plastics, Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, Beijing 100190, China<sup>b</sup> Guangzhou Institute of Chemistry, Chinese Academy of Sciences, Guangzhou 510650, China<sup>c</sup> University of Chinese Academy of Sciences, Beijing 100049, China<sup>d</sup> Beijing National Laboratory for Molecular Sciences, Institute of Chemistry, Chinese Academy of Sciences, Beijing 100190, China**Different crystallization behavior of olefin block copolymer in  $\alpha$ - and  $\beta$ -polypropylene matrix**

pp 4719–4727

Xiang Zhou<sup>a</sup>, Jiachun Feng<sup>a,\*</sup>, Dong Cheng<sup>a</sup>, Jianjun Yi<sup>b</sup>, Li Wang<sup>b</sup><sup>a</sup> State Key Laboratory of Molecular Engineering of Polymers, Department of Macromolecular Science, Fudan University, Shanghai 200433, PR China<sup>b</sup> Laboratory for Synthetic Resin Research, Institution of Petrochemical Technology, China National Petroleum Corporation, Beijing 100083, PR China**OTHER CONTENT****Calendar**

\*Corresponding author

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