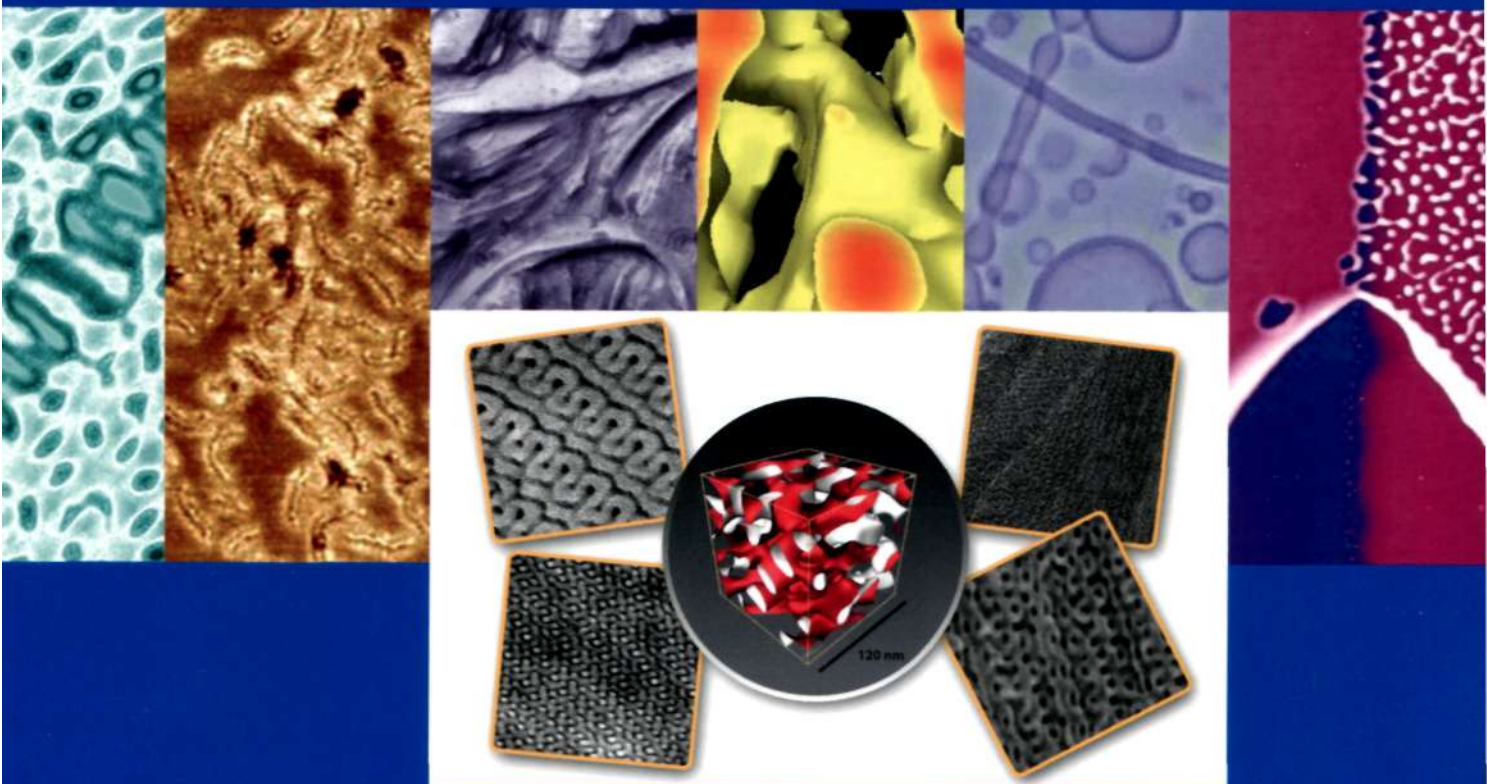




polymer





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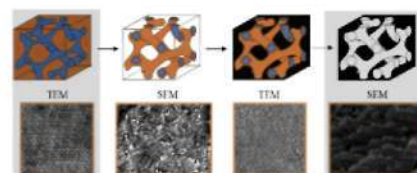
FEATURE ARTICLE

Block copolymer template-directed synthesis of well-ordered metallic nanostructures

pp 2591–2605

Ivana Vukovic, Gerrit ten Brinke*, Katja Loos*

Department of Polymer Chemistry, Zernike Institute for Advanced Materials, University of Groningen, Nijenborgh 4, 9747 AG Groningen, The Netherlands



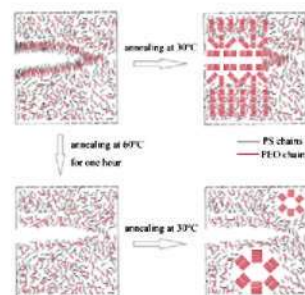
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Jian Yang, Xia Dong*, Weichao Shi, Fasheng Zou, Wei Liu, Dujin Wang, Charles C. Han*

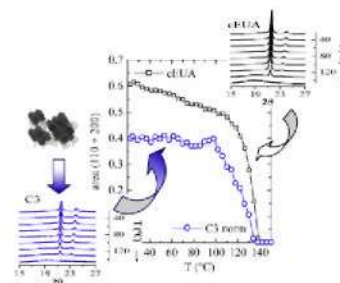
State Key Laboratory of Polymer Physics and Chemistry and CAS Key Laboratory of Engineering Plastics, Joint Laboratory of Polymer Science and Materials, Beijing National Laboratory for Molecular Science, Institute of Chemistry, Chinese Academy of Sciences, Beijing 100190, China



POLYMER PAPERS

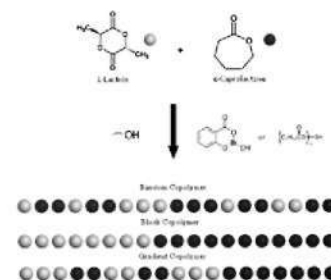
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María L. Cerrada^{a,*}, Ernesto Pérez^a, João P. Lourenço^b, Artur Bento^c, M. Rosário Ribeiro^{c,**}^aInstituto de Ciencia y Tecnología de Polímeros (ICTP-CSIC), Juan de la Cierva 3, 28006 Madrid, Spain^bCentro de Investigação em Química do Algarve (CIQA), Faculdade de Ciências e Tecnologia-Universidade do Algarve, Campus de Gambelas, 8005-139 Faro, Portugal^cInstituto de Ciência e Engenharia de Materiais e Superfícies (ICEMS) & Departamento de Engenharia Química, Instituto Superior Técnico, Universidade Técnica de Lisboa, Av. Rovisco Pais 1, 1049-001 Lisboa, Portugal

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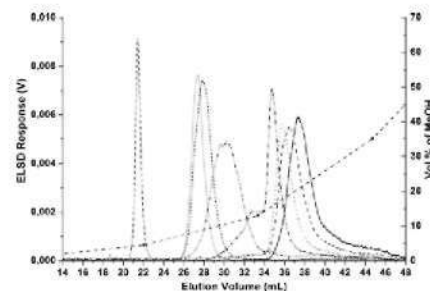
J. Fernández^a, E. Meaurio^a, A. Chaos^b, A. Etxeberria^b, A. Alonso-Varona^c, J.R. Sarasua^{a,*}^aUniversity of the Basque Country (UPV/EHU), Department of Mining-Metallurgy Engineering and Materials Science and Basque Excellence Research Center for Macromolecular Design and Engineering POLYMAT, School of Engineering, Alameda de Urquijo s/n, 48013 Bilbao, Spain^bDepartment of Polymer Science and Technology, Institute of Polymer Materials, University of Basque Country (EHU-UPV), M. de Lardizabal, 3, 20018 Donostia, Spain^cFaculty of Medicine and Odontology, University of the Basque Country (UPV/EHU), Bilbao, Spain

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Hewa Othman Ghareeb, Wolfgang Radke*

Fraunhofer-Institut für Betriebsfestigkeit und Systemzuverlässigkeit LBF, Bereich Kunststoffe, Schlossgartenstraße 6, D-64289 Darmstadt, Germany



The influence of the metal (Al, Cr and Co) and the substituents of the porphyrin in controlling the reactions involved in the copolymerization of propylene oxide and cyclic anhydrides by porphyrin metal(III) complexes

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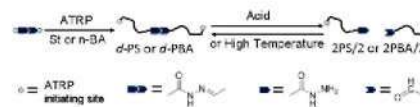
Alexandre Bernard, Chandrani Chatterjee, Malcolm H. Chisholm*

Department of Chemistry and Biochemistry, The Ohio State University, Columbus, OH 43210, USA



Dynamic polymers containing one acylhydrazone linkage and dynamic behavior thereof

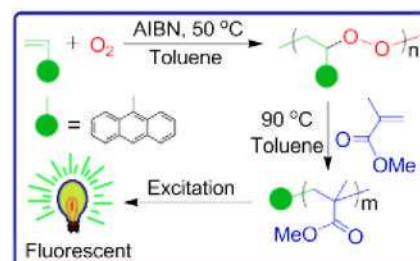
pp 2647–2651

Zizhen Xu^a, Peng Zhao^a, Yongming Chen^{a,*}, Guohua Deng^b^aState Key Laboratory of Polymer Physics and Chemistry, Institute of Chemistry, The Chinese Academy of Sciences, Beijing 100190, PR China^bSchool of Chemistry and Chemical Engineering, South China University of Technology, Guangzhou 510640, PR China**Poly(9-vinyl anthracene peroxide): Synthesis, characterization, degradation and application as macroinitiator for the polymerization of methyl methacrylate**

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Sunirmal Pal, Priyadarsi De^{*}

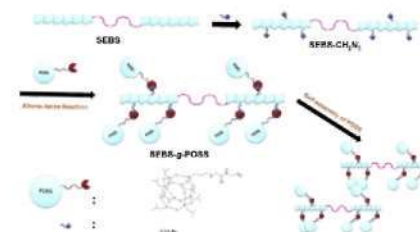
Polymer Research Centre, Department of Chemical Sciences, Indian Institute of Science Education and Research – Kolkata, PO: BCKV Campus, Mohanpur 741252, Nadia, India

**Novel hybrid copolymer by incorporating POSS into hard segments of thermoplastic elastomer SEBS via click coupling reaction**

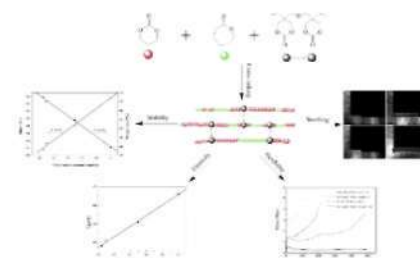
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Maoshan Niu, Riwei Xu^{*}, Pei Dai, Yixian Wu^{*}

State Key Laboratory of Chemical Resource Engineering, Key Laboratory of Carbon Fiber and Functional polymers (Ministry of Education), Beijing University of Chemical Technology, Beijing 100029, China

**Biodegradable cross-linked poly(trimethylene carbonate) networks for implant applications: Synthesis and properties**

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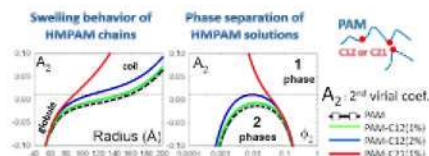
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Dominique Hourdet^{a,*}, Guylaine Ducouret^a, Sony Varghese^b, Manohar V. Badiger^b, Prakash P. Wadgaonkar^b

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^bPolymer Science and Engineering Division, National Chemical Laboratory, Pune 411 008, India



Polyethylene and poly(ethylene-co-1-octadecene) composites with TiO₂ based nanoparticles by metalocenic “in situ” polymerization

pp 2690–2698

Paula A. Zapata^{a,*}, Humberto Palza^b, Luis S. Cruz^b, Ingo Lieberwirth^c, Fernando Catalina^d, Teresa Corrales^d, Franco M. Rabagliati^{a,e}

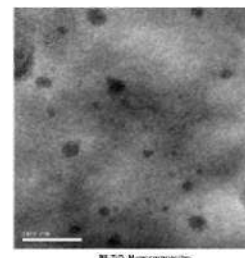
^aGrupo Polímeros, Facultad de Química y Biología, Universidad de Santiago de Chile, USACH, Casilla 40, Correo 33, Santiago, Chile

^bDepartamento de Ingeniería Química y Biotecnología, Facultad de Ciencias Físicas y Matemáticas, Universidad de Chile, Beauchef 850, Santiago, Chile

^cMax Planck Institute Polymer Research, 55128 Mainz, German

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^eCentro para el Desarrollo de Nanociencia y Nanotecnología, CEDENNA, USACH, Av. Lib. Bernardo O'Higgins 2229, Santiago, Chile



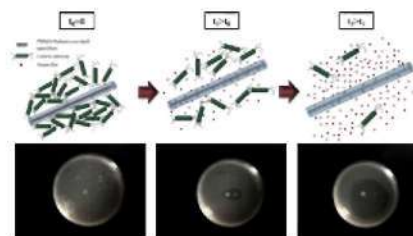
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A. Sohrabi^{a,*}, P.M. Shaibani^a, H. Etayash^b, K. Kaur^b, T. Thundat^a

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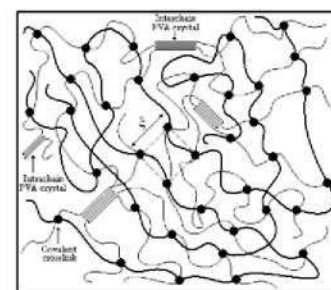


Microstructure characterization through mechanical, electrokinetic and spectroscopic methods of polyampholyte gelatin hydrogels crosslinked with poly(vinyl alcohol)

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Andrea Porcaro, Mariel L. Ottone, Julio A. Deiber^{*}

Instituto de Desarrollo Tecnológico para la Industria Química (INTEC), Universidad Nacional del Litoral (UNL), Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET), Güemes 3450, 3000 Santa Fe, Argentina

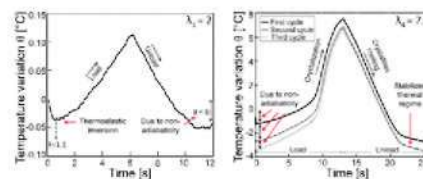


Mechanisms of deformation in crystallizable natural rubber. Part 1: Thermal characterization

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J.R. Samaca Martinez^{a,b,c}, J.-B. Le Cam^{d,*}, X. Balandraud^{b,e}, E. Toussaint^{a,b}, J. Caillard^c

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- ^d Université de Rennes 1, Larmaur ERL CNRS 6274, Campus de Beaulieu, 35042 Rennes, France
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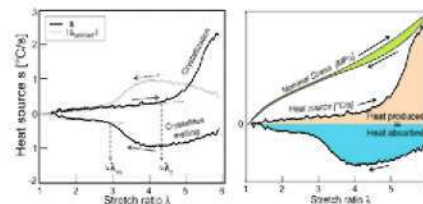


Mechanisms of deformation in crystallizable natural rubber. Part 2: Quantitative calorimetric analysis

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J.R. Samaca Martinez^{a,b,c}, J.-B. Le Cam^{d,*}, X. Balandraud^{b,e}, E. Toussaint^{a,b}, J. Caillard^c

- ^a Clermont Université, Université Blaise Pascal, Institut Pascal, BP 10448, 63000 Clermont-Ferrand, France
- ^b CNRS, UMR 6602, Institut Pascal, 63171 Aubière, France
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- ^e Clermont Université, Institut Français de Mécanique Avancée, Institut Pascal, BP 10448, 63000 Clermont-Ferrand, France

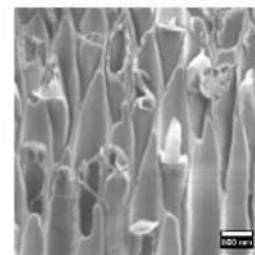


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Nitin Shingne^{a,b}, Markus Geuss^b, Brigitte Hartmann-Azanza^c, Martin Steinhart^{c,*}, Thomas Thurn-Albrecht^{a,b}

- ^a Martin-Luther-Universität Halle Wittenberg, Institut für Physik, 06099 Halle, Germany
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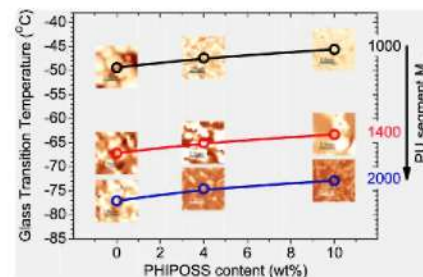
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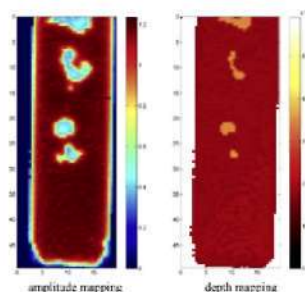
Konstantinos N. Raftopoulos^{a,*}, Bartłomiej Janowski^b, Lazaros Apekis^a, Polycarpos Pissis^a, Krzysztof Pielichowski^b

- ^a Department of Physics, National Technical University of Athens, Zografou Campus, 157 80 Athens, Greece
- ^b Department of Chemistry and Technology of Polymers, Cracow University of Technology, ul. Warszawska 24, 31-155 Kraków, Poland

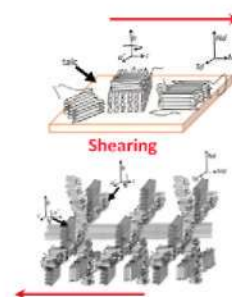


Kinetics of the non-isothermal fusion-welding of unlike ethylene copolymers over a wide crystallinity range

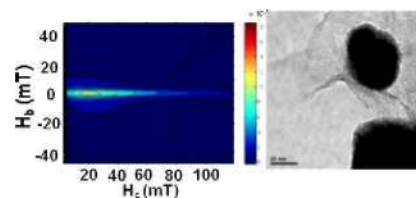
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C. Frederix^a, P. Beauchene^b, R. Seguela^{a,*}, J.M. Lefebvre^a^aUnité Matériaux et Transformations, UMR CNRS 8207, Batiment C6, Cité Scientifique, 59655 Villeneuve d'Ascq, France^bDépartement Matériaux et Composites, ONERA, 29 Avenue de la Division Leclerc, 92322 Châtillon, France**Controlled shear-induced molecular orientation and crystallization in polypropylene/talc microcomposites – Effects of the talc nature**

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Brice Fiorentino^a, René Fulchiron^{a,*}, Jannick Duchet-Rumeau^b, Véronique Bounor-Legaré^a, Jean-Charles Majesté^c^aIngénierie des Matériaux Polymères, Université Lyon 1, Bat Polytech, 15 bd Latarjet, 69622 Villeurbanne, France^bIngénierie des Matériaux Polymères, INSA Lyon, Bâtiment Jules Verne, 17 avenue Jean Capelle, 69621 Villeurbanne, France^cIngénierie des Matériaux Polymères, Université Jean Monnet, 23 rue Paul Michelon, 42023 Saint-Étienne, France**High-temperature multifunctional magnetoactive nickel graphene polyimide nanocomposites**

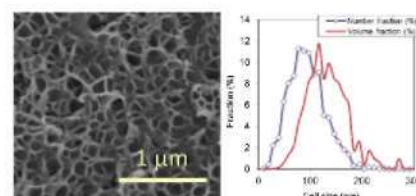
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Mitra Yoonessi^{a,*}, Daniel A. Scheiman^b, Matthew Dittler^c, John A. Peck^d, Jan Ilavsky^e, James R. Gaier^c, Michael A. Meador^c^aOhio Aerospace Institute, 22800 Cedar Point Road, Cleveland, OH 44142, USA^bASRC, 21000 Brookpark Rd., Cleveland, OH 44135, USA^cNASA Glenn Research Center, 21000 Brookpark Rd., Cleveland, OH 44135, USA^dDepartment of Polymer Engineering, University of Akron, Akron, OH 44325, USA^eArgonne National Laboratory, Argonne, IL 60439, USA**Low density thermoplastic nanofoams nucleated by nanoparticles**

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Stéphane Costeux^{*}, Lingbo Zhu

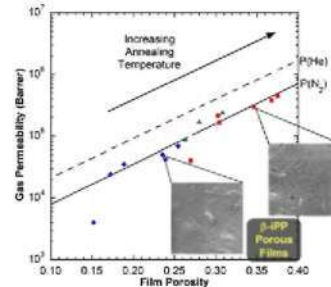
The Dow Chemical Company, Midland, MI, USA



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Grant T. Offord^a, Shannon R. Armstrong^b, Benny D. Freeman^a, Eric Baer^b, Anne Hiltner^b, Donald R. Paul^{a,*}

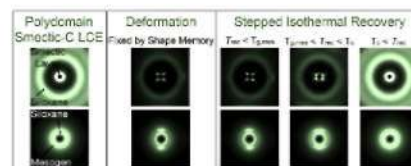
^a University of Texas at Austin, Center for Energy and Environmental Resources, Department of Chemical Engineering, and Texas Materials Institute, 10100 Burnet Road, Building 133, Austin, TX 78758, USA
^b Case Western Reserve University, Department of Macromolecular Science and Engineering, Cleveland, OH 44106-7202, USA



Evolution of microstructure during shape memory cycling of a main-chain liquid crystalline elastomer pp 2808–2820

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^b Syracuse Biomaterials Institute, Syracuse University, 121 Link Hall, Syracuse, NY 13244, USA
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Observation of yield in triaxial deformation of glassy polymers pp 2821–2833

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