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BRIEF GUIDE

A Brief Guide to Polymer Nomenclature 10

MACROMOLECULAR NANOTECHNOLOGY**ARTICLES**

PEO–PPO based star-block copolymer T904 as pH responsive nanocarriers for quercetin: Solubilization and release study

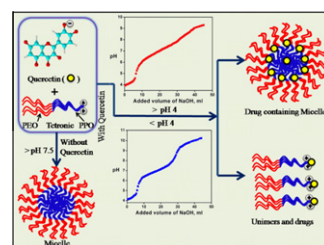
Arpan V. Parmar^a, Anita Bahadur^b, Ketan Kuperkar^a, Pratap Bahadur^a

^aDepartment of Chemistry, Veer Narmad South Gujarat University, Surat 395 007, Gujarat, India

^bDepartment of Zoology, Sir P. T. Sarvajani College of Science, Surat 395 001, Gujarat, India

Solubilization of QN (anionic drug) in T904 core-shell aggregates possessing nonpolar PPO interior and relatively polar PEO shells is well presented as a function of pH.

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Maleic acid incorporated poly-(N-isopropylacrylamide) polymer nanogels for dual-responsive delivery of doxorubicin hydrochloride

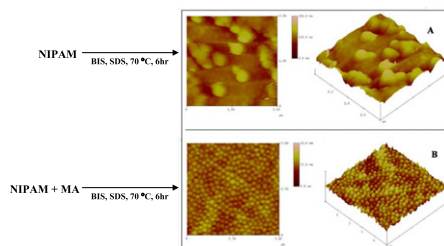
S. Dhanya^a, D. Bahadur^b, G.C. Kundu^c, R. Srivastava^a

^aDepartment of Biosciences and Bioengineering, Indian Institute of Technology Bombay, Mumbai 400076, India

^bDepartment of Metallurgical Engineering and Materials Science, Indian Institute of Technology Bombay, Mumbai 400076, India

^cNational Centre for Cell Science, Pune 411007, India

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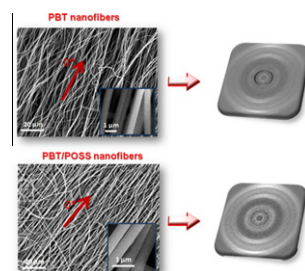
Nanostructured nanofibers based on PBT and POSS: Effect of POSS on the alignment and macromolecular orientation of the nanofibers

Erika Simona Cozza^a, Qian Ma^b, Orietta Monticelli^a, Peggy Cebe^b

^aDipartimento di Chimica e Chimica Industriale, Università di Genova, Via Dodecaneso 31, 16146 Genova, Italy

^bDepartment of Physics and Astronomy, Center for Nanoscopic Physics, Tufts University, 4 Colby Street, Medford, MA 02155, USA

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Synthesis of poly(methyl methacrylate) nanoparticles via differential microemulsion polymerization

Liang Yuan^a, Yun Wang^b, Maozhi Pan^b, Garry L. Rempel^{a,c}, Qinmin Pan^a

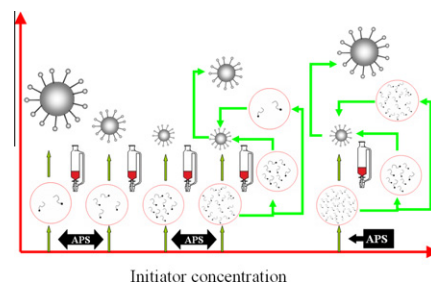
^aCollege of Chemistry, Chemical Engineering and Materials Science, Soochow University, Suzhou 215123, Jiangsu, PR China

^bZhejiang Fangyuan Reflective Materials Co., Taizhou 318000, Zhejiang, PR China

^cDepartment of Chemical Engineering, University of Waterloo, Waterloo, ON, Canada N2L 3G1

With the increase in the initiator concentration, more active sites could be formed, therefore, the monomer amount that each active site could share becomes less and small particles would result; when initiator concentration is high enough, free radical number one particle could share would increase and then some dead polymer particles could be initiated more than one time resulting in a higher particle size.

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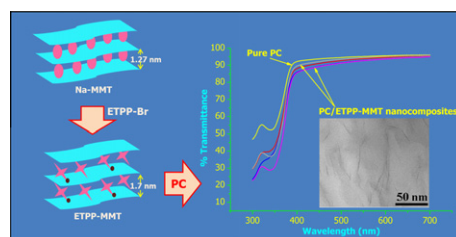


Phosphonium modified organoclay as potential nanofiller for the development of exfoliated and optically transparent polycarbonate/clay nanocomposites: Preparation and characterizations

Supratim Suin, Nilesh K. Shrivastava, Sandip Maiti, B.B. Khatua

Materials Science Centre, Indian Institute of Technology Kharagpur, Kharagpur 721302, India

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Improvement of interaction in and properties of PMMA-MWNT nanocomposites through microwave assisted acid treatment of MWNT

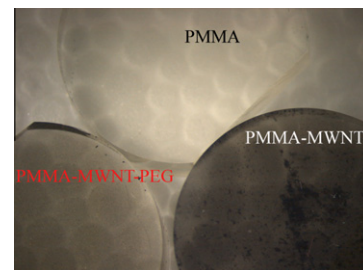
A. Zanotto^a, A.S. Luyt^b, A. Spinella^a, E. Caponetti^{a,c}

^aCentro Grandi Apparecchiature-UniNetLab, University of Palermo, Via F. Marini 14, Palermo I-90128, Italy

^bDepartment of Chemistry, University of the Free State (Qwaqwa Campus), Private Bag X13, Phuthaditjhaba 9866, South Africa

^cDepartment of Chemistry "S.Cannizzaro", University of Palermo, Parco d'Orleans II-Viale delle Scienze pad.17, Palermo I-90128, Italy

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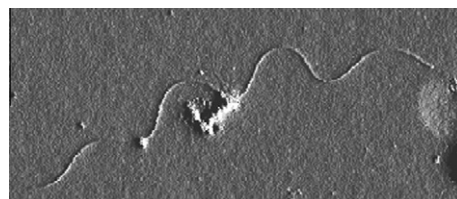


Cation induced conformation changes in hyaluronate solution

Anna-Maria Zeller mann, Dirk Bergmann, Christian Mayer

Institute of Physical Chemistry, CeNIDE, University Duisburg-Essen, 45117 Essen, Germany

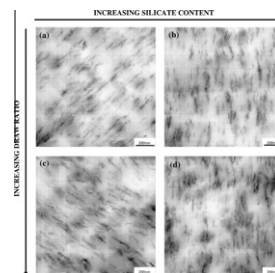
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Effect of biaxial drawing on morphology and properties of copolyamide nanocomposites produced by film blowing

Emilia Garofalo, Maria Letizia Fariello, Luciano Di Maio, Loredana Incarnato
 Department of Industrial Engineering, University of Salerno, Fisciano (SA) 84084, Italy

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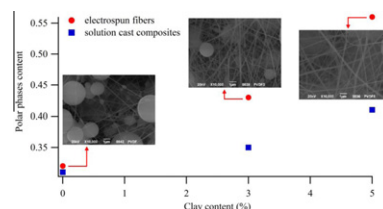


The effect of clay and of electrospinning on the polymorphism, structure and morphology of poly(vinylidene fluoride)

Ramesh Neppalli^a, Santosh Wanjale^b, Mallinath Birajdar^b, Valerio Causin^a

^aDipartimento di Scienze Chimiche, Università di Padova, via Marzolo 1, 35131 Padova, Italy
^bPolymer Science and Engineering Division, National Chemical Laboratory, Pashan Road, Pune 411008 Maharashtra, India

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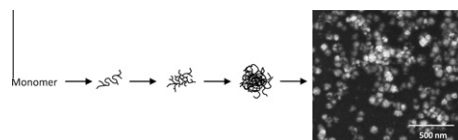


Optimisation of experimental conditions for synthesis of high affinity MIP nanoparticles

Sreenath Subrahmanyam, Antonio Guerreiro, Alessandro Poma, Ewa Moczko, Elena Piletska, Sergey Piletsky

Cranfield Biotechnology Centre, Cranfield University, Bedfordshire MK43 0AL, UK

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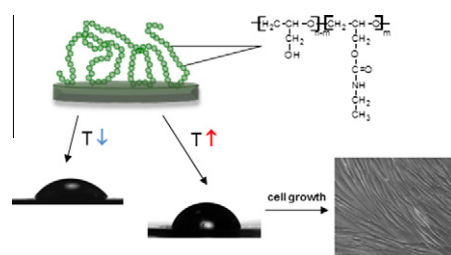


Modified polyglycidol based nanolayers of switchable philicity and their interactions with skin cells

Alicja Utrata-Wesołek^a, Natalia Oleszko^a, Barbara Trzebicka^a, Jacek Anioł^b, Maria Zagdańska^b, Marta Lesiak^b, Aleksander Sieroń^b, Andrzej Dworak^a

^aCentre of Polymer and Carbon Materials, Polish Academy of Sciences, M. Curie-Skłodowskiej 34, Zabrze 41-819, Poland
^bDepartment of General, Molecular Biology and Genetics, Medical University of Silesia, Medyków 18, Katowice 40-752, Poland

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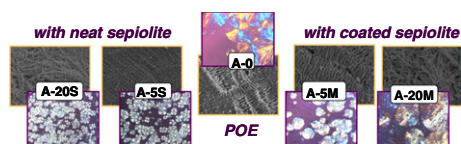


Confinement and nucleation effects in poly(ethylene oxide) melt-compounded with neat and coated sepiolite nanofibers: Modulation of the structure and semicrystalline morphology

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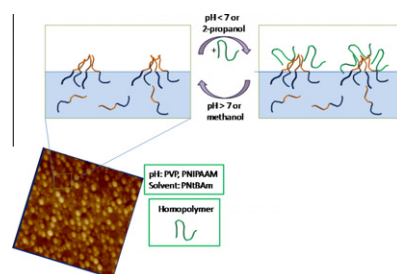
Alberto Mejía, Nuria García, Julio Guzmán, Pilar Tiemblo

Instituto de Ciencia y Tecnología de Polímeros, ICTP-CSIC, Juan de la Cierva 3, 28006 Madrid, Spain



Reversible functionalization of nanostructured polymer surfaces via stimuli-responsive interpolymer complexes

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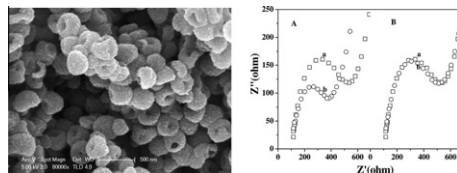
Leire Ruiz^a, María T. Garay^a, José M. Laza^a, José L. Vilas^a, Juan Rodriguez-Hernandez^b, Christine Labrugere^c, Luis M. León^a^aLaboratorio de Química Macromolecular (Labquimac), Dpto. Química-Física, Facultad de Ciencia y Tecnología, Universidad del País Vasco (UPV/EHU), 48940 Leioa, Vizcaya, Spain^bInstituto de Ciencia y Tecnología de Polímeros (ICTP-CSIC) C/ Juan de la Cierva n°3 28006 Madrid, Spain^cInstitut de Chimie de la Matière Condensée de Bordeaux (ICMCB-CNRS), 87, Av. Albert Schweitzer, 33600 Pessac, France

Label-free DNA sensor construction using self-assembled poly(o-methoxyaniline) hollow nanospheres

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Jing Sui^{a,b}, Lijuan Zhang^a, Hui Peng^{a,c}^aPolymer Electronics Research Centre, School of Chemical Sciences, The University of Auckland, Private Bag 92019, Auckland, New Zealand^bKey Laboratory of Rubber and Plastic, Ministry of Education, Qingdao University of Science and Technology, Qingdao 266042, China^cKey Laboratory of Polar Materials and Devices, Ministry of Education, East China Normal University, 500 Dong-Chuan Road, Shanghai 200241, China

Poly(o-methoxyaniline) hollow nanospheres were prepared in a solution of poly(methyl vinyl etheralt-maleic acid).

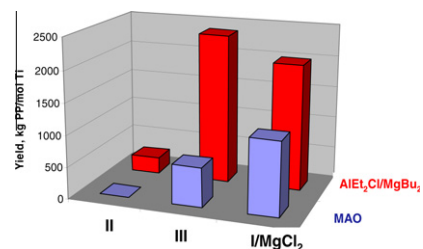


REGULAR ARTICLES

ARTICLES

Cocatalyst effect in propylene polymerization reactions with post-metallocene catalysts

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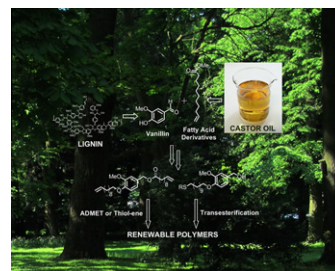
L.A. Rishina^a, N.M. Galashina^a, S.C. Gagieva^b, V.A. Tuskaev^b, Y.V. Kissin^c^aSemenov Institute of Chemical Physics, Russian Academy of Science, 4 Kosygin St., 119991 Moscow, Russia^bMoscow State University, Department of Chemistry, Leninskie Gory, Moscow 119992, Russia^cRutgers, The State University of New Jersey, Department of Chemistry and Chemical Biology, 610 Taylor Rd., Piscataway, NJ 08854-8087, USAReplacement of a cocatalyst from methylalumoxane to a combination of AlEt₂Cl and MgBu₂ in three post-metallocene catalysts based on complexes I-III (Scheme 1) leads to much higher activity in propylene polymerization reactions and to the formation of new isospecific active centers operating according to the enantiomeric stereocontrol mechanism.

Renewable co-polymers derived from vanillin and fatty acid derivatives

Maulidan Firdaus, Michael A.R. Meier

Karlsruhe Institute of Technology (KIT), Institute of Organic Chemistry, Fritz-Haber-Weg 6, 76131 Karlsruhe, Germany

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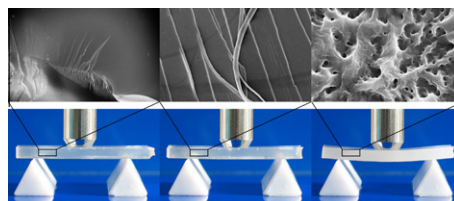
Partially crystalline polyols lead to morphology changes and improved mechanical properties of cationically polymerized epoxy resins

Hendrik Lützen^a, Peter Bitomsky^a, Kurosch Rezwan^b, Andreas Hartwig^a

^aFraunhofer Institute for Manufacturing Technology and Advanced Materials, Wiener Str., 12, 28359 Bremen, Germany

^bUniversity of Bremen, Advanced Ceramics (IW3), Am Biologischen Garten 2, 28359 Bremen, Germany

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Bi-axially aligned crystallites of a fluorene–bithiophene co-polymer

O. Werzer^{a,b}, W. Porzio^c, G. Trimmel^{d,e}, H. Plank^f, R. Resel^b

^aInstitute of Pharmaceutical Sciences, Department of Pharmaceutical Technology, Karl-Franzens University, Graz, Austria

^bInstitute of Solid State Physics, Graz University of Technology, Austria

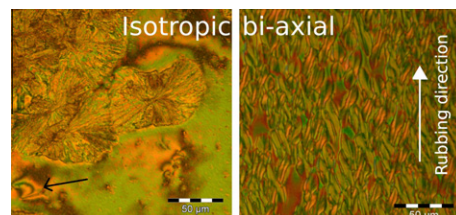
^cInstituto per lo Studio delle Macromolecole, Consiglio Nazionale delle Ricerche, Milano, Italy

^dInstitute for Chemistry and Technology of Materials, Graz University of Technology, Austria

^eChristian Doppler Laboratory for Nanocomposite Solar Cells, Graz University of Technology, Austria

^fInstitute for Electron Microscopy, Graz University of Technology, Austria

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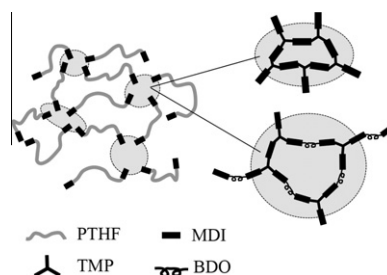


Influence of molecular architecture on the isothermal time-dependent response of amorphous shape memory polyurethanes

Charly Azra, Yaobo Ding, Christopher J.G. Plummer, Jan-Anders E. Månson

Laboratoire de Technologie des Composites et Polymères (LTC), Ecole Polytechnique Fédérale de Lausanne (EPFL), Station 12, CH-1015 Lausanne, Switzerland

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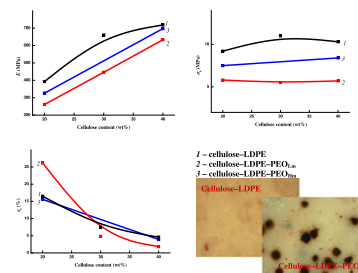


Biodegradable blends of cellulose with synthetic polymers and some other polysaccharides

Svetlana Rogovina, Kristine Aleksanyan, Eduard Prut, Arkadii Gorenberg

Semenov Institute of Chemical Physics, Russian Academy of Sciences, ul. Kosygina 4, Moscow 119991, Russia

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Inkjet printing as a possible route to study confined crystal structures

N. Sanandaji^a, A. Oko^b, D.B. Haviland^c, E.A. Tholén^d, M.S. Hedenqvist^a, U.W. Gedde^a

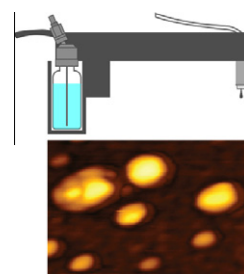
^aKTH Royal Institute of Technology, School of Chemical Science and Engineering, Fibre and Polymer Technology, SE-100 44 Stockholm, Sweden

^bYKI, Ytkemiska Institutet AB/Institute for Surface Chemistry, SE-114 86 Stockholm, Sweden

^cKTH Royal Institute of Technology, School of Engineering Sciences, Nanostructure Physics, Albanova, SE-106 91 Stockholm, Sweden

^dIntermodulation Products AB, SE-169 58 Solna, Sweden

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Synthesis of stimuli responsive PEG₄₇-*b*-PAA₁₂₆-*b*-PSt₃₂ triblock copolymer and its self-assembly in aqueous solutions

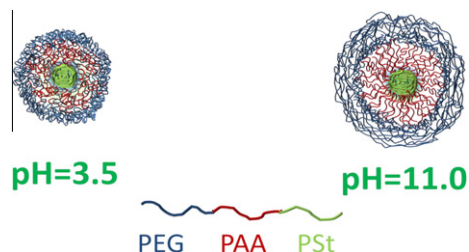
S. Chavda^a, S. Yusa^b, M. Inoue^b, L. Abezgauz^c, E. Kesselman^c, D. Danino^c, P. Bahadur^a

^aDepartment of Chemistry, Veer Narmad South Gujarat University, Surat 395 007, India

^bDepartment of Materials Science and Chemistry, University of Hyogo, 2167 Shosha, Himeji 671-2280, Japan

^cDepartment of Biotechnology and Food Engineering, Technion-Israel Institute of Technology, Haifa 32000, Israel

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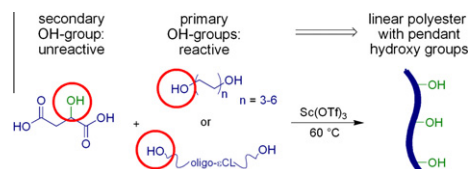


OH-functional polyesters based on malic acid: Influence of the OH-groups onto the thermal properties

Christian Hahn, Sebastian Wesselbaum, Helmut Keul, Martin Möller

DWI an der RWTH Aachen e.V. and Institute of Technical and Macromolecular Chemistry, RWTH Aachen University, Forckenbeckstr. 50, D-52056 Aachen, Germany

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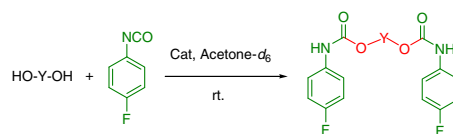


Quantification of hydroxyl group in polymers containing trace water by ^{19}F NMR spectroscopy

Abolghasem Moghimi^a, Ismail Omrani^a, Mohammad Reza Nabid^b, Mehrdad Mahmoodi^a

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^bDepartment of Chemistry, Shahid Beheshti University, G.C., 1983963113 Tehran, Iran



Synthesis of α,ω -isocyanate-telechelic poly(methyl methacrylate-co-allyl methacrylate) soft segments

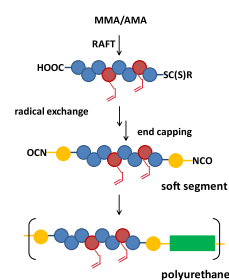
Nebia Greving^a, Helmut Keul^a, Marta Millaruelo^b, Ralf Weberskirch^c, Martin Moeller^a

^aDWI an der RWTH Aachen e.V. and Institute of Technical and Macromolecular Chemistry, RWTH Aachen, Forckenbeckstraße 50, D-52056 Aachen, Germany

^bBayer MaterialScience AG, BMS-CD-NB-NT, Kaiser-Wilhelm-Allee, Geb K13, D51368 Leverkusen, Germany

^cTU Dortmund, Fakultät Chemie, Otto-Hahn-Weg 6, D-44227 Dortmund, Germany

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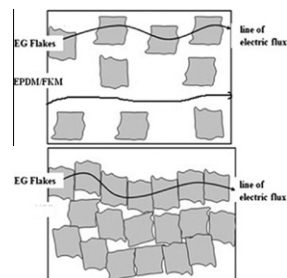


Effect of expanded graphite on thermal, mechanical and dielectric properties of ethylene-propylene-diene terpolymer/hexa fluoropropylene-vinylidene fluoride dipolymer rubber blends

Ajalesh Balachandran, Nair Philip, Kurian Rani, Joseph

Department of Polymer Science and Rubber Technology, Cochin University of Science and Technology, Kochi 682 022, India

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Deformation mechanisms in lamellar S-S/B-S triblock copolymers

Stefan Hölzer^a, Martin Ganß^{a,b}, Konrad Schneider^c, Konrad Knoll^d, Roland Weidisch^{a,b}

^aFraunhofer Institute for Mechanics of Materials IWM, Walter-Hülse-Str. 1, D-06120 Halle/S., Germany

^bInstitute of Chemistry, Martin-Luther-University Halle-Wittenberg, Heinrich-Damerow-Str. 4, D-06099 Halle/S., Germany

^cLeibniz Institute of Polymer Research Dresden, Hohe Strasse 6, D-01069 Dresden, Germany

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