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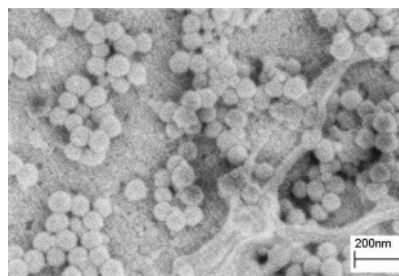
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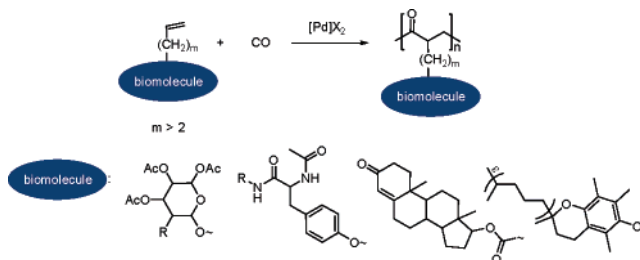
Communications

2927 Enzyme-Initiated Miniemulsion Polymerization

Genggeng Qi, Christopher W. Jones,* and
F. Joseph Schork*



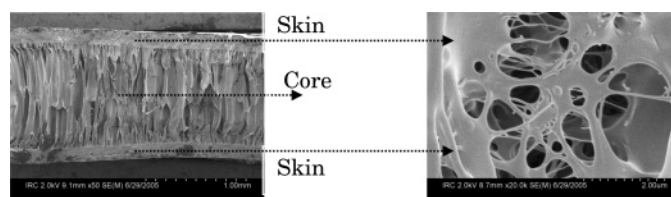
2931 Synthesis of Functional Poly(1,4-ketone)s Bearing Bioactive Moieties by Pd-Catalyzed Insertion Polymerization



Violeta Malinova and Bernhard Rieger*

2937 Layered Open Pore Poly(L-lactic acid) Nanomorphology

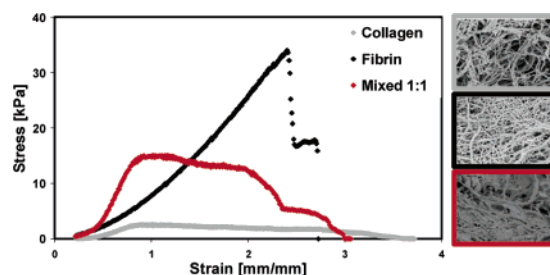
Xia Liao, A. Victoria Nawaby,*
Pamela Whitfield, Michael Day,
Michel Champagne, and Johanne Denault



Articles

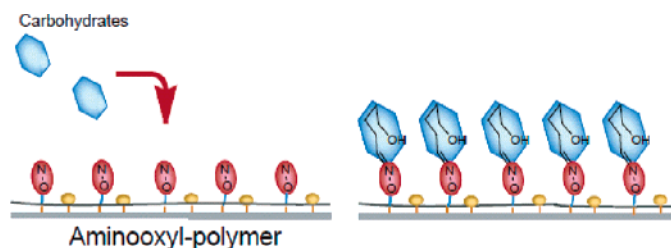
2942 Interpenetrating Collagen-Fibrin Composite Matrices with Varying Protein Contents and Ratios

Shaneen L. Rowe and Jan P. Stegemann*



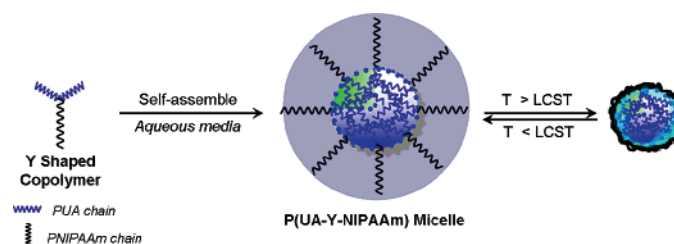
2949 Specific Cell Behavior of Human Fibroblast onto Carbohydrate Surface Detected by Glycoblotting Films

Tomohiro Onodera, Kenichi Niikura, Norimasa Iwasaki, Noriko Nagahori, Hideyuki Shimaoka, Ryusuke Kamitani, Tokifumi Majima, Akio Minami,* and Shin-ichiro Nishimura*



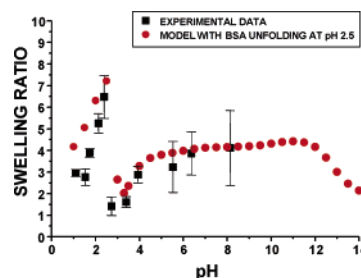
2956 Novel Stimuli-Responsive Micelle Self-Assembled from Y-Shaped P(UA-Y-NIPAAm) Copolymer for Drug Delivery

Yong-Yong Li, Xian-Zheng Zhang,* Han Cheng, Gwang-Chol Kim, Si-Xue Cheng, and Ren-Xi Zhuo



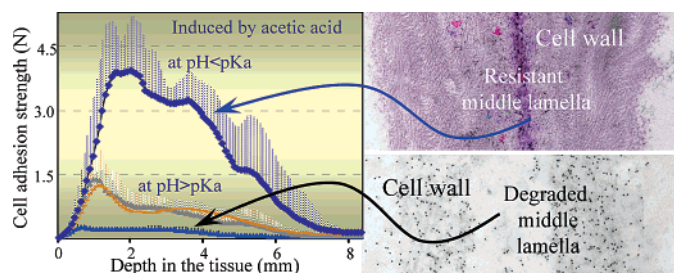
2961 Swelling and Mechanical Properties of Biopolymer Hydrogels Containing Chitosan and Bovine Serum Albumin

Michael F. Butler,* Allan H. Clark, and Sarah Adams



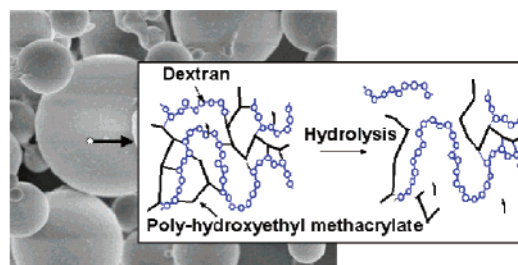
2971 Intercellular Adhesion Strengthening As Studied through Simulated Stress by Organic Acid Molecules in Potato (*Solanum tuberosum* L.) Tuber Parenchyma

Ilan Shomer* and Lene Kaaber



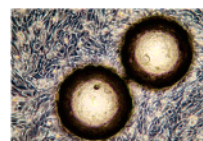
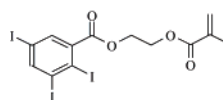
2983 In Vitro Degradation Behavior of Microspheres Based on Cross-Linked Dextran

Karin D. F. Vlucht-Wensink,* Xulin Jiang, Geert Schotman, Govert Kruijtzter, Arjen Vredenberg, Jin T. Chung, Zhibing Zhang, Cees Versluis, Delphine Ramos, Ruud Verrijck, Wim Jiskoot, Daan J. A. Crommelin, and Wim E. Hennink



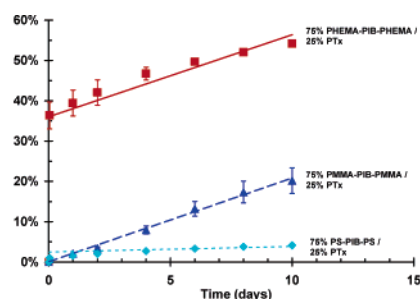
2991 Radio-Opaque and Surface-Functionalized Polymer Microparticles: Potentially Safer Biomaterials for Different Injection Therapies

Ketie Saralidze, Menno L. W. Knetsch, Catharina S. J. van Hooy-Corstjens, and Leo H. Koole*



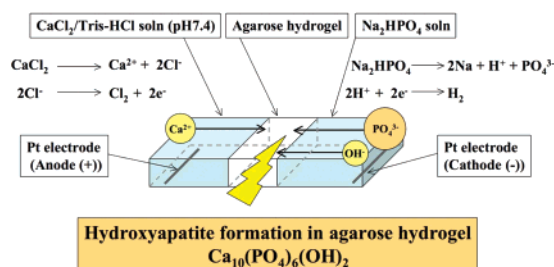
2997 Synthesis, Characterization, Properties, and Drug Release of Poly(alkyl methacrylate-*b*-isobutylene-*b*-alkyl methacrylate)

Jae Cheol Cho, Guanglou Cheng, Dingsong Feng, Rudolf Faust,* Robert Richard, Marlene Schwarz, Ken Chan, and Mark Boden*



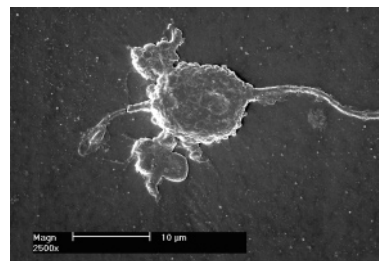
3008 Novel Biomineralization for Hydrogels: Electrophoresis Approach Accelerates Hydroxyapatite Formation in Hydrogels

Junji Watanabe and Mitsuru Akashi*



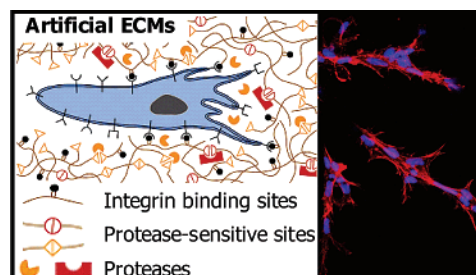
3012 Modulation of Chondrocyte Phenotype for Tissue Engineering by Designing the Biologic–Polymer Carrier Interface

Tahir A. Mahmood,* Sylvie Miot, Oliver Frank, Ivan Martin, Jens Riesle, Robert Langer, and Clemens A. van Blitterswijk



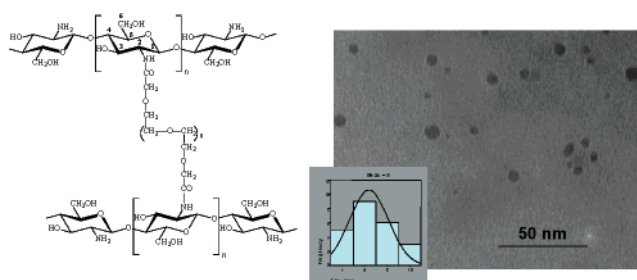
3019 Recombinant Protein-co-PEG Networks as Cell-Adhesive and Proteolytically Degradable Hydrogel Matrixes. Part II: Biofunctional Characteristics

Simone C. Rizzi, Martin Ehrbar, Sven Halstenberg, George P. Raeber, Hugo G. Schmoekel, Henri Hagenmüller, Ralph Müller, Franz E. Weber, and Jeffrey A. Hubbell*



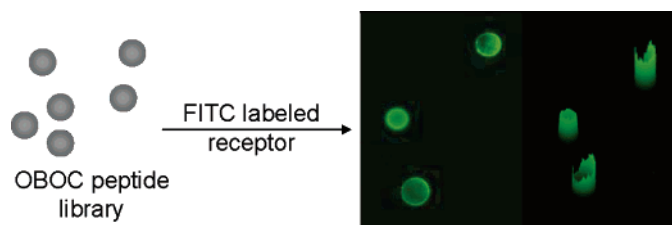
3030 Synthesis and Study of Cross-Linked Chitosan-*N*-Poly(ethylene glycol) Nanoparticles

Magdolna Bodnar, John F. Hartmann, and Janos Borbely*



3037 Two-Step Fluorescence Screening of CD21-Binding Peptides with One-Bead One-Compound Library and Investigation of Binding Properties of *N*-(2-Hydroxypropyl)methacrylamide Copolymer–Peptide Conjugates

Hui Ding, Wolfgang M. Prodinger, and Jindřich Kopeček*



3047 Efficient Manipulation of Nanoparticle-Bound DNA via Restriction Endonuclease

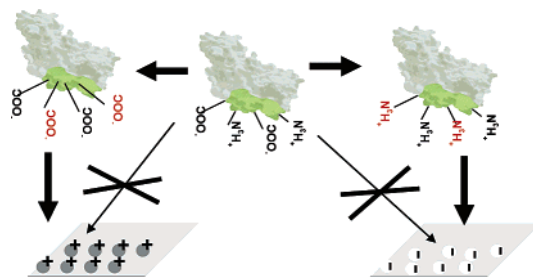
Wei Jie Qin and Lin Yue Lanry Yung*



Same degree of digestion between nanoparticle-bound DNAs (*) and free DNAs (#)

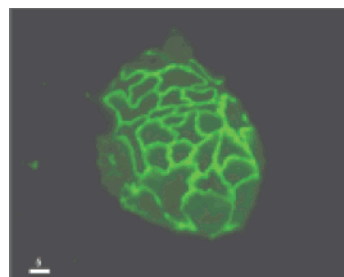
3052 Chemical Modification of Protein Surfaces To Improve Their Reversible Enzyme Immobilization on Ionic Exchangers

Tamara Montes, Valeria Grazu, Fernando López-Gallego, Juan A. Hermoso, José M. Guisán,* and Roberto Fernández-Lafuente*



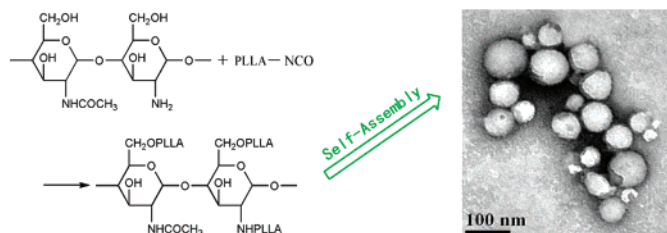
3059 Enzymatic Cross-Linking versus Radical Polymerization in the Preparation of Gelatin PolyHIPEs and Their Performance as Scaffolds in the Culture of Hepatocytes

Andrea Barbetta,* Mara Massimi,* Laura Conti Devirgiliis, and Mariella Dentini



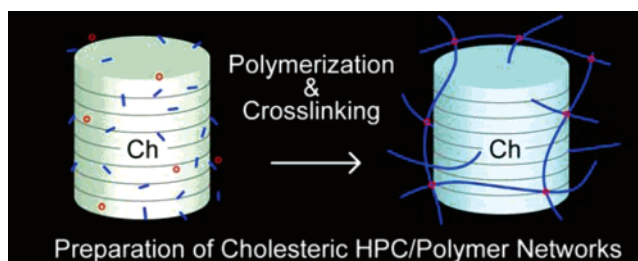
3069 Preparation, Characterization, and Self-Assembled Properties of Biodegradable Chitosan–Poly(L-lactide) Hybrid Amphiphiles

Hao Feng and Chang-Ming Dong*



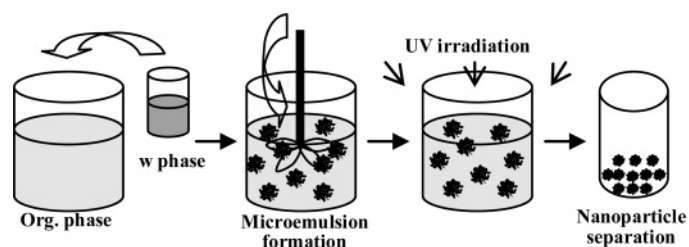
3076 Preparation of Cholesteric (Hydroxypropyl)cellulose/Polymer Networks and Ion-Mediated Control of Their Optical Properties

Ryotaro Chiba, Yoshiyuki Nishio,* Yuka Sato, Manabu Ohtaki, and Yoshiharu Miyashita

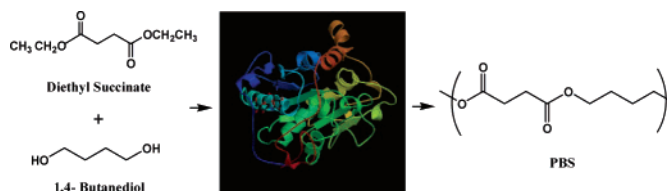


3083 PEGylated Nanoparticles Based on a Polyaspartamide. Preparation, Physico-Chemical Characterization, and Intracellular Uptake

Emanuela F. Craparo, Gennara Cavallaro, Maria L. Bondi, Delia Mandracchia, and Gaetano Giammona*

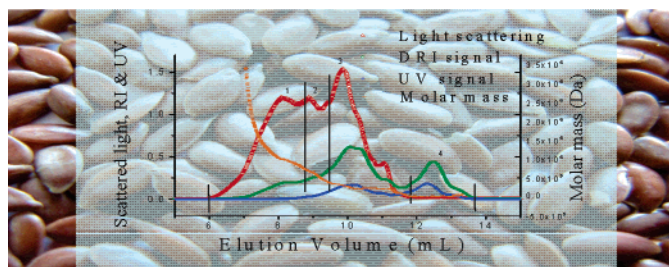


**3093 *Candida antarctica* Lipase B-Catalyzed
■ Synthesis of Poly(butylene succinate):
Shorter Chain Building Blocks Also Work**



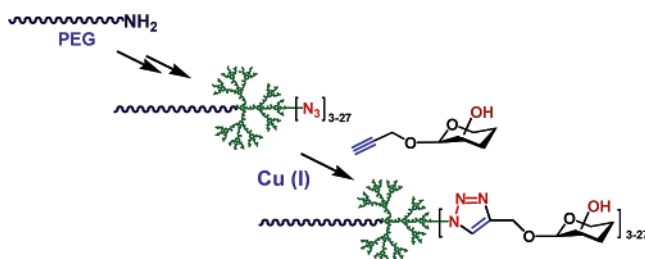
Himanshu Azim, Alex Dekhterman,
Zhaozhong Jiang, and Richard A. Gross*

**3098 Rheological and Light Scattering Properties
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Kelvin K. T. Goh,* D. Neil Pinder,
Christopher E. Hall, and Yacine Hemar

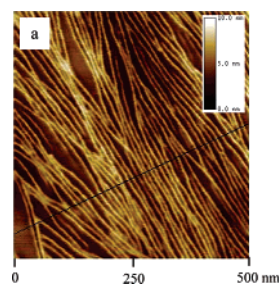
**3104 “Clickable” PEG–Dendritic Block
Copolymers**



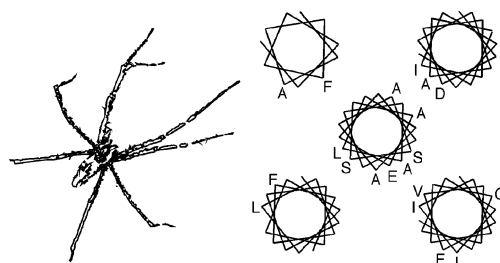
Eduardo Fernandez-Megia, Juan Correa, and
Ricardo Riguera*

**3112 Synthesis, Characterization, and
■ Morphology Studies of Biodegradable
Amphiphilic
Poly[(*R*)-3-hydroxybutyrate]-*alt*-Poly(ethylene
glycol) Multiblock Copolymers**

Xu Li, Kerh Li Liu, Jun Li,*
Eunice Phay Shing Tan, Lee Meng Chan,
Chwee Teck Lim, and Suat Hong Goh



**3120 N-Terminal Nonrepetitive Domain Common
■ to Dragline, Flagelliform, and Cylindriform
Spider Silk Proteins**



Anna Rising, Göran Hjälrm,
Wilhelm Engström, and Jan Johansson*

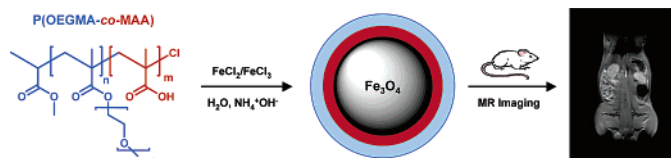
3125 Environmental Degradation of Polyester Blends Containing Atactic Poly(3-hydroxybutyrate). Biodegradation in Soil and Ecotoxicological Impact

Piotr Rychter, Robert Biczak, Barbara Herman, Aleksandra Smyła, Piotr Kurcok, Grazyna Adamus, and Marek Kowalczyk*



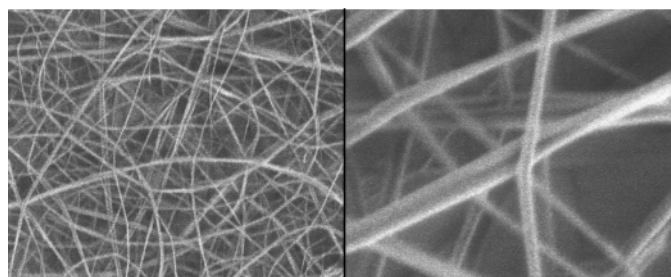
3132 One-Pot Synthesis of PEGylated Ultrasmall Iron-Oxide Nanoparticles and Their in Vivo Evaluation as Magnetic Resonance Imaging Contrast Agents

Jean-François Lutz,* Sabrina Stiller, Ann Hoth, Lutz Kaufner, Ulrich Pison, and Régis Cartier*



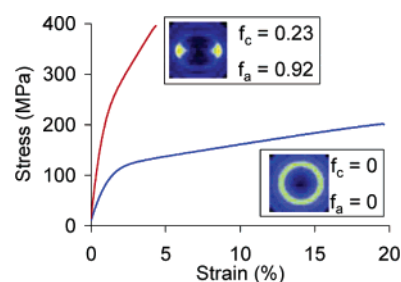
3139 RGD-Functionalized Bioengineered Spider Dragline Silk Biomaterial

Elisabetta Bini, Cheryl Wong Po Foo, Jia Huang, Vassilis Karageorgiou, Brandon Kitchel, and David L. Kaplan*



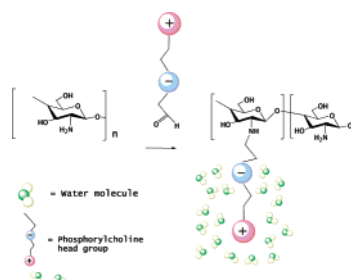
3146 Changes in the Molecular Orientation and Tensile Properties of Uniaxially Drawn Cellulose Films

Wolfgang Gindl,* Klaus J. Martinschitz, Peter Boesecke, and Jozef Keckes



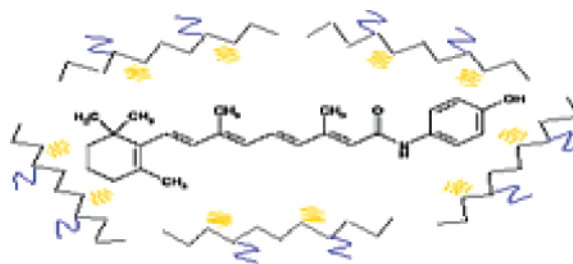
3151 Synthesis and Characterization of Phosphorylcholine-Substituted Chitosans Soluble in Physiological pH Conditions

Marcio J. Tiera, Xing-Ping Qiu, Sofiane Bechaouch, Qin Shi, Júlio C. Fernandes, and Françoise M. Winnik*

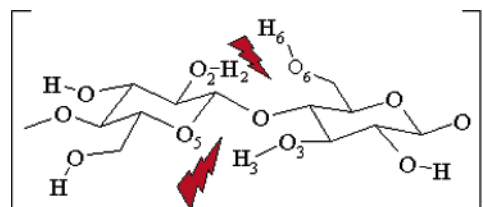


3157 Amphiphilic Poly(vinyl alcohol) Derivatives as Complexing Agents for Ferretinide

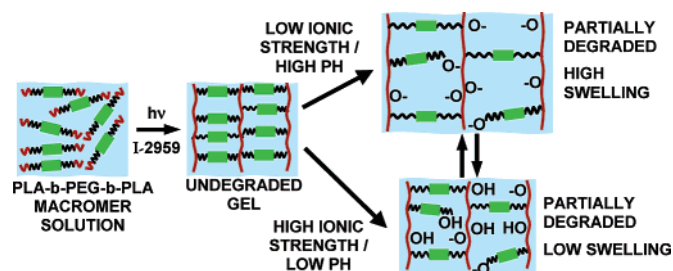
I. Orienti,* G. Zuccari, V. Bergamante, E. Mileo, M. Lucarini, R. Carosio, and P. G. Montaldo

**3164 Study on Temperature-Dependent Changes in Hydrogen Bonds in Cellulose I β by Infrared Spectroscopy with Perturbation-Correlation Moving-Window Two-Dimensional Correlation Spectroscopy**

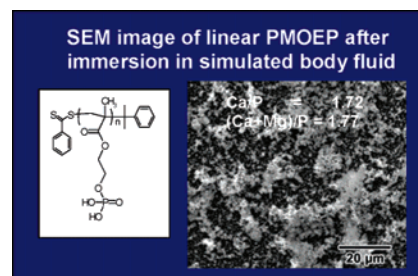
Akihiko Watanabe, Shigeaki Morita, and Yukihiro Ozaki*

**3171 Influence of Network Structure on the Degradation of Photo-Cross-Linked PLA-*b*-PEG-*b*-PLA Hydrogels**

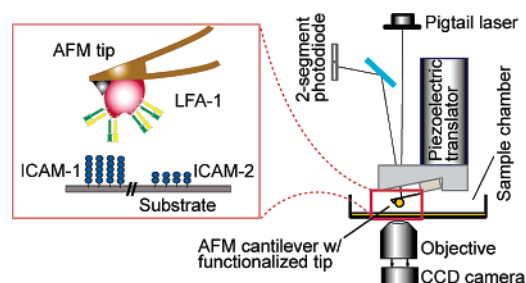
Nihar M. Shah, Michael D. Pool, and Andrew T. Metters*

**3178 Synthesis of Soluble Phosphate Polymers by RAFT and Their in Vitro Mineralization**

Shuko Suzuki, Michael R. Whittaker, Lisbeth Grøndahl,* Michael J. Monteiro,* and Edeline Wentrup-Byrne*

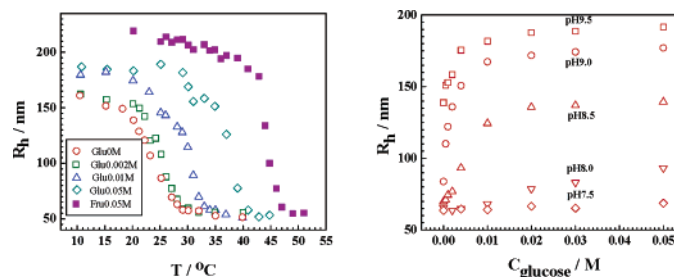
**3188 Force Spectroscopy of LFA-1 and Its Ligands, ICAM-1 and ICAM-2**

Ewa P. Wojcikiewicz,* Midhat H. Abdulreda, Xiaohui Zhang, and Vincent T. Moy



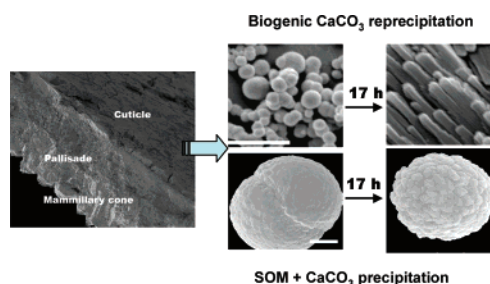
3196 Synthesis and Volume Phase Transitions of Glucose-Sensitive Microgels

Yongjun Zhang, Ying Guan, and Shuiqin Zhou*



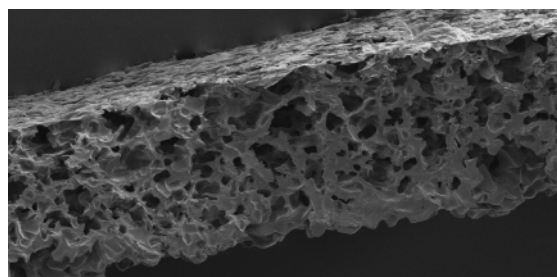
3202 Formation of Transient Amorphous Calcium Carbonate Precursor in Quail Eggshell Mineralization: An In Vitro Study

Rajamani Lakshminarayanan, Xian Jun Loh, Subramanyam Gayathri, Swaminathan Sindhu, Yajnavalka Banerjee, R. Manjunatha Kini, and Suresh Valiyaveetil*



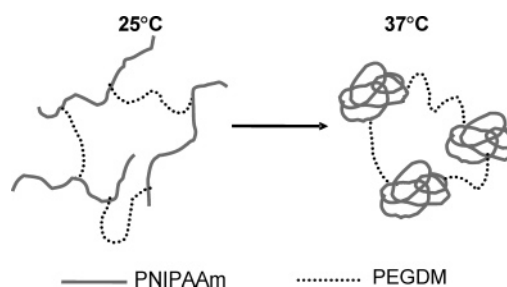
3210 Formation and Characterization of Chitosan Membranes

C. Clasen,* T. Wilhelms, and W.-M. Kulicke



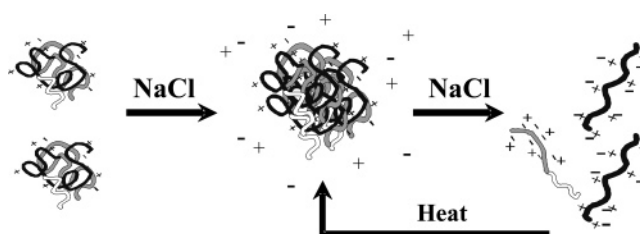
3223 Synthesis and Characterization of an Injectable Hydrogel with Tunable Mechanical Properties for Soft Tissue Repair

Emily Ho, Anthony Lowman, and Michele Marcolongo*



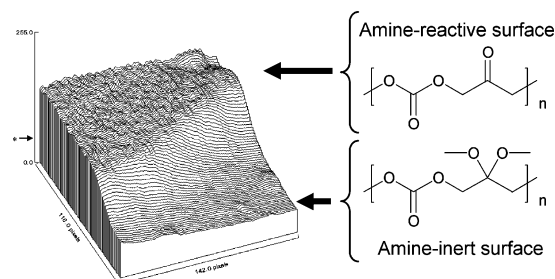
3229 Effect of Polycation Length on Its Complexation with DNA and with Poly(oxyethylene-*block*-sodium methacrylate)

Toni Andersson, Susanna Holappa, Vladimir Aseyev,* and Heikki Tenhu



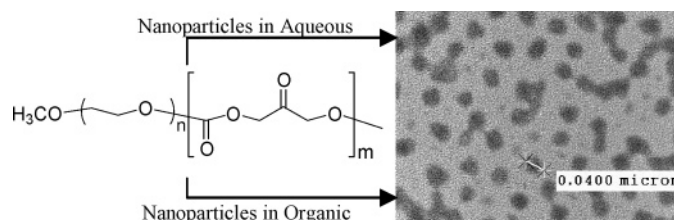
3239 A Functionalizable Biomaterial Based on Dihydroxyacetone, an Intermediate of Glucose Metabolism

Alexander N. Zelikin, Peter N. Zawaneh, and David Putnam*



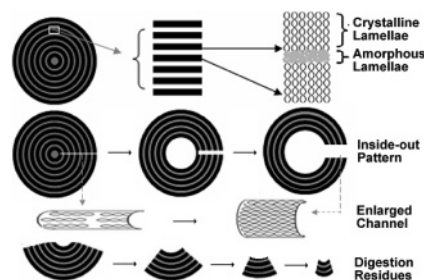
3245 Diblock Copolymers Based on Dihydroxyacetone and Ethylene Glycol: Synthesis, Characterization, and Nanoparticle Formulation

Peter N. Zawaneh, Anne M. Doody, Alexander N. Zelikin, and David Putnam*



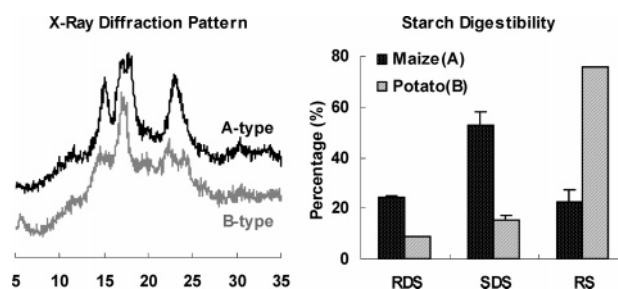
3252 Slow Digestion Property of Native Cereal Starches

Genyi Zhang, Zihua Ao, and Bruce R. Hamaker*



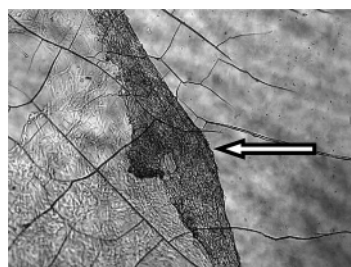
3259 Structural Basis for the Slow Digestion Property of Native Cereal Starches

Genyi Zhang, Mahesh Venkatachalam, and Bruce R. Hamaker*



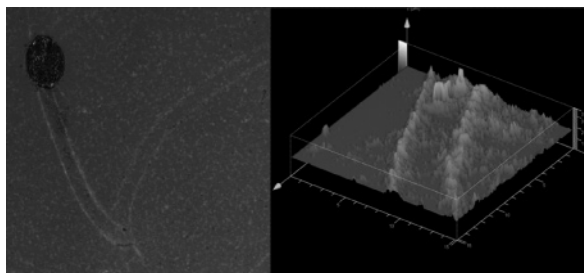
3267 Control of Cell Cultivation and Cell Sheet Detachment on the Surface of Polymer/Clay Nanocomposite Hydrogels

Kazutoshi Haraguchi,* Toru Takehisa, and Makiko Ebato



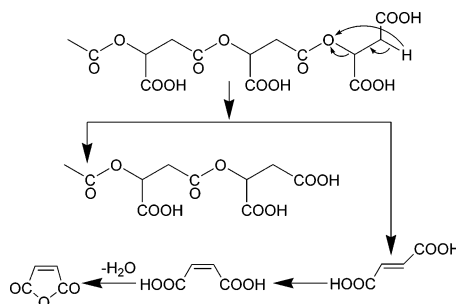
3276 Utilizing QCM-D To Characterize the Adhesive Mucilage Secreted by Two Marine Diatom Species in-Situ and in Real-Time

Paul J. Molino, Oliver M. Hodson,
John F. Quinn, and Richard Wetherbee*



3283 Thermal Decomposition of Fungal Poly(β ,L-malic acid) and Poly(β ,L-malate)s

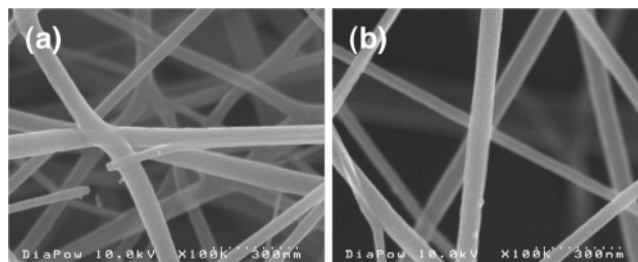
José A. Portilla-Arias,
Montserrat García-Alvarez,
Antxon Martínez de Ilarduya, E. Holler, and
Sebastián Muñoz-Guerra*



Notes

3291 Chitosan Nanofiber

Kousaku Ohkawa,* Ken-Ichi Minato,
Go Kumagai, Shinya Hayashi, and
Hiroyuki Yamamoto



■ Supporting Information is available free of charge via the Internet at <http://pubs.acs.org>.

* In papers with more than one author, the asterisk indicates the name of the author to whom inquiries about the paper should be addressed.