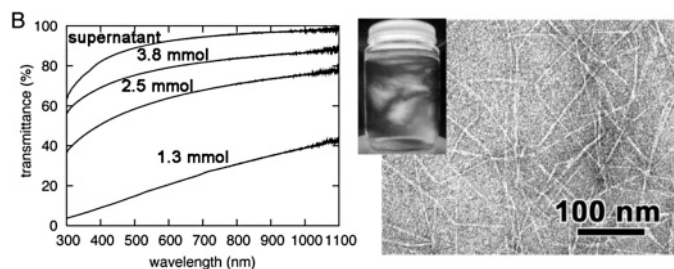


## Communications

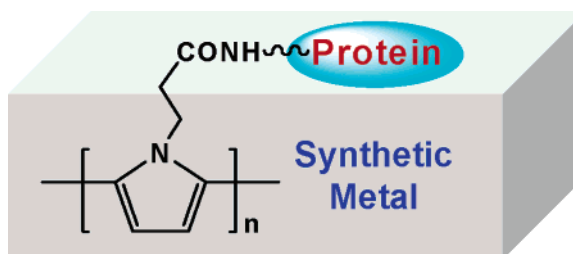
### 1687 Homogeneous Suspensions of Individualized Microfibrils from TEMPO-Catalyzed Oxidation of Native Cellulose

Tsuguyuki Saito, Yoshiharu Nishiyama,\*  
Jean-Luc Putaux, Michel Vignon, and  
Akira Isogai



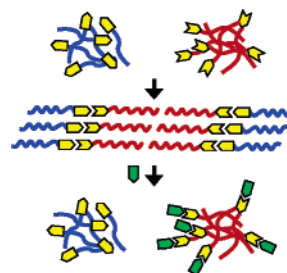
### 1692 Carboxylic Acid-Functionalized Conductive Polypyrrole as a Bioactive Platform for Cell Adhesion

Joo-Woon Lee,\* Francisco Serna,  
Jonathan Nickels, and Christine E. Schmidt\*



### 1696 Diblock-Type Supramacromolecule via Biocomplementary Hydrogen Bonding

Atsushi Noro,\* Yutaka Nagata,  
Atsushi Takano, and Yushu Matsushita\*

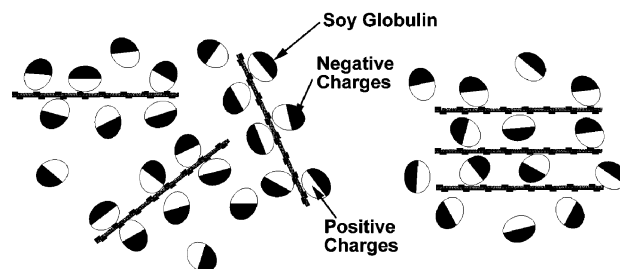




## Articles

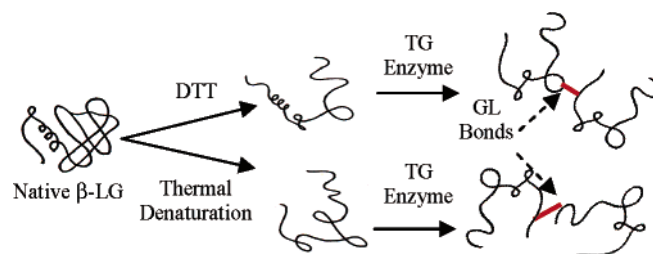
### 1700 Interaction and Properties of Highly Exfoliated Soy Protein/Montmorillonite Nanocomposites

Pu Chen and Lina Zhang\*



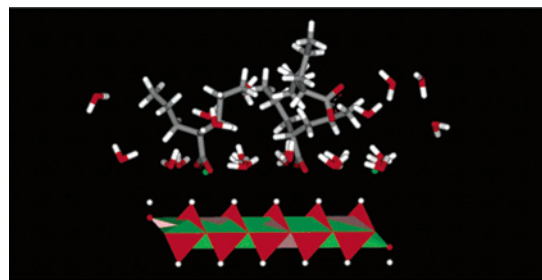
### 1707 Enzymatic Cross-Linking of $\beta$ -Lactoglobulin: Conformational Properties Using FTIR Spectroscopy

Ahmed S. Eissa, Christa Puhl, John F. Kadla, and Saad A. Khan\*



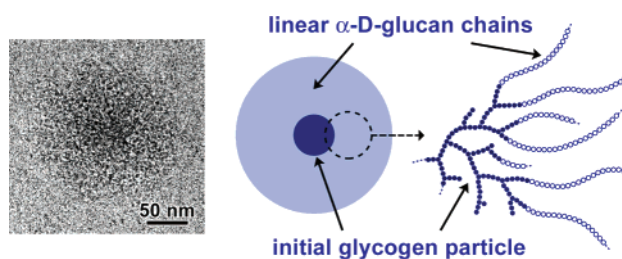
### 1714 Structure and Energetics of Biocompatible Polymer Nanocomposite Systems: A Molecular Dynamics Study

Radovan Toth, Marco Ferrone, Stanislav Miertus, Emo Chiellini, Maurizio Fermeglia, and Sabrina Pricl\*



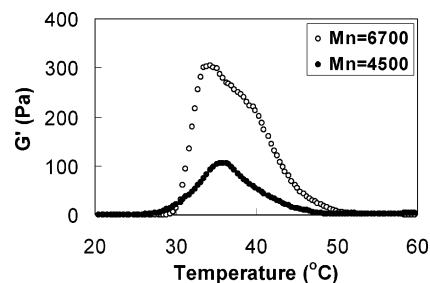
### 1720 $\alpha$ -D-Glucan-Based Dendritic Nanoparticles Prepared by in Vitro Enzymatic Chain Extension of Glycogen

Jean-Luc Putaux, Gabrielle Potocki-Véronèse, Magali Remaud-Simeon, and Alain Buleon\*

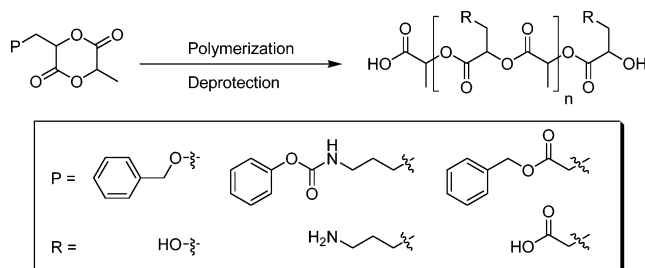


**1729 Thermogelling Aqueous Solutions of Alternating Multiblock Copolymers of Poly(L-lactic acid) and Poly(ethylene glycol)**

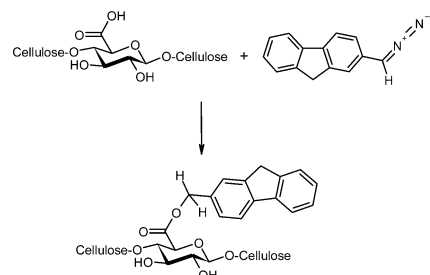
Jisun Lee, You Han Bae, Youn Soo Sohn, and Byeongmoon Jeong\*


**1735 Functional Lactide Monomers: Methodology and Polymerization**

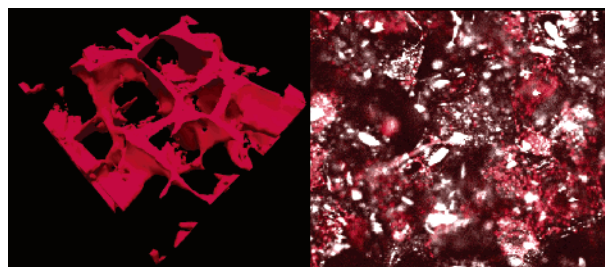
Warren W. Gerhardt, David E. Noga, Kenneth I. Hardcastle, Andrés J. García, David M. Collard,\* and Marcus Weck\*


**1743 The FDAM Method: Determination of Carboxyl Profiles in Cellulosic Materials by Combining Group-Selective Fluorescence Labeling with GPC**

R. Bohrn, A. Potthast,\* S. Schiehser, T. Rosenau, H. Sixta, and P. Kosma


**1751 Tissue Engineering Scaffolds Based on Photocured Dimethacrylate Polymers for in Vitro Optical Imaging**

Forrest A. Landis,\* Jean S. Stephens, James A. Cooper, Marcus T. Cicerone, and Sheng Lin-Gibson\*

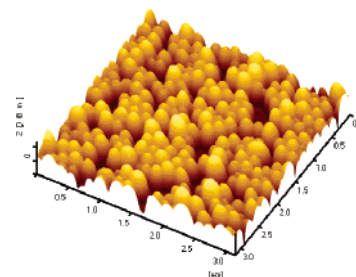

**1758 Experimental Calcification of HEMA-Based Hydrogels in the Presence of Albumin and a Comparison to the in Vivo Calcification**

Zainuddin, David J. T. Hill, Traian V. Chirila,\* Andrew K. Whittaker, and Anne Kemp



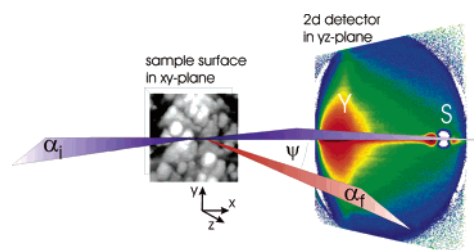
# 1766 Synthesis and Magnetic Properties of Biocompatible Hybrid Hollow Spheres

Yin Ding, Yong Hu, Leyang Zhang,  
Ying Chen, and Xiqun Jiang\*



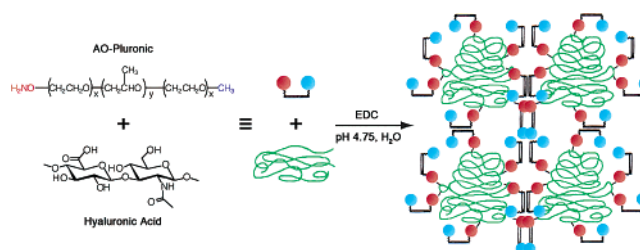
# 1773 Thin Casein Films as Prepared by Spin-Coating: Influence of Film Thickness and of pH

P. Müller-Buschbaum,\* R. Gebhardt,  
E. Maurer, E. Bauer, R. Gehrke, and W. Doster



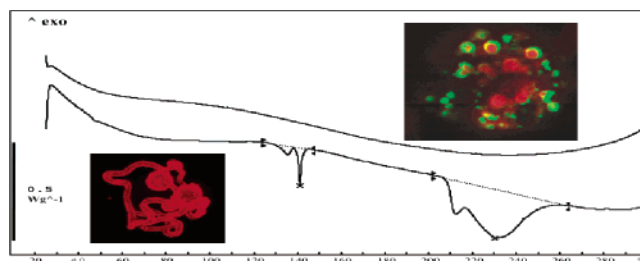
# 1781 Aminooxy Pluronic: Synthesis and Preparation of Glycosaminoglycan Adducts

Joanna Gajewiak, Shenshen Cai,  
Xiao Zheng Shu, and Glenn D. Prestwich\*



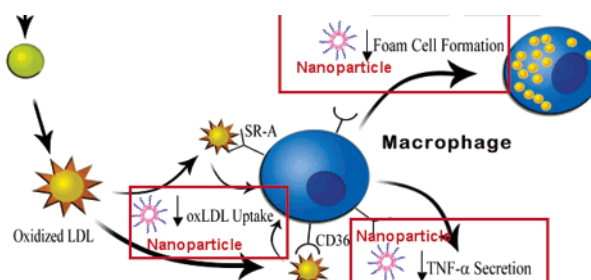
# 1790 An Essential Role for the C-Terminal Domain of A Dragline Spider Silk Protein in Directing Fiber Formation

Shmulik Ittah, Shulamit Cohen, Shai Garty,  
Daniel Cohn, and Uri Gat\*



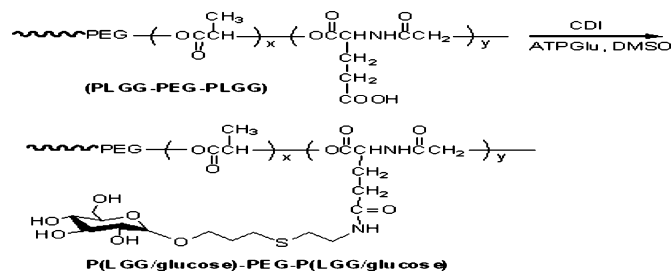
# 1796 Engineered Polymeric Nanoparticles for Receptor-Targeted Blockage of Oxidized Low Density Lipoprotein Uptake and Atherogenesis in Macrophages

Evangelia Chnari, Jessica S. Nikitczuk,  
Jinzhong Wang, Kathryn E. Uhrich, and  
Prabhas V. Moghe\*

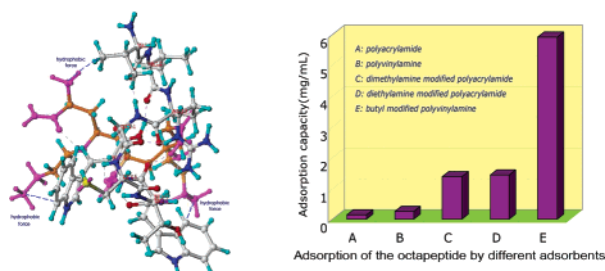


**1806 Biodegradable Amphiphilic Triblock Copolymer Bearing Pendant Glucose Residues: Preparation and Specific Interaction with Concanavalin A Molecules**

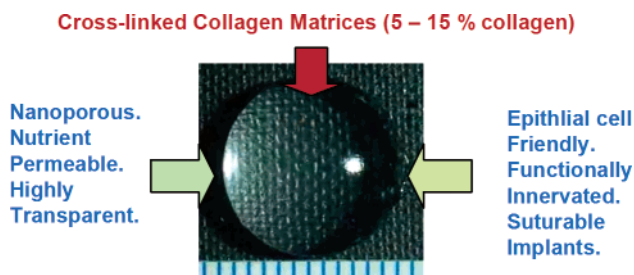
Changhai Lu, Xuesi Chen, Zhigang Xie, Tiancheng Lu, Xin Wang, Jia Ma, and Xiabin Jing\*


**1811 Adsorption Mechanism at the Molecular Level between Polymers and Uremic Octapeptide by the 2D  $^1\text{H}$  NMR Technique**

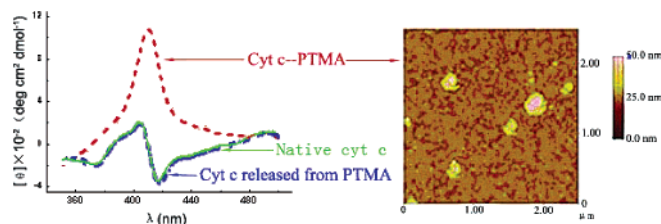
Guohua Li, Jihong Li, Wei Wang, MeiYang, Yuanwei Zhang, Pingchuan Sun, Zhi Yuan,\* Binglin He, and Yaoting Yu


**1819 Properties of Porcine and Recombinant Human Collagen Matrices for Optically Clear Tissue Engineering Applications**

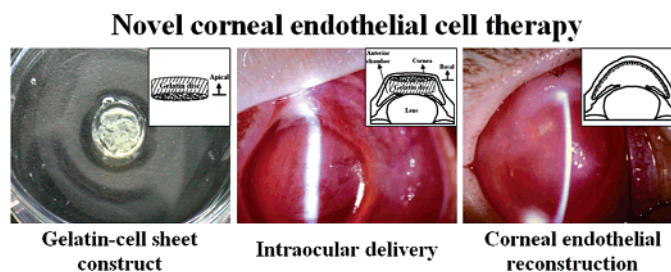
Y. Liu, M. Griffith, M. A. Watsky, J. V. Forrester, L. Kuffová, D. Grant, K. Merrett, and D. J. Carlsson\*


**1829 Reversibility of Structural Transition of Cytochrome c on Interacting with and Releasing from Alternating Copolymers of Maleic Acid and Alkene**

Li Liang, Ping Yao,\* and Ming Jiang


**1836 Effect of Charge and Molecular Weight on the Functionality of Gelatin Carriers for Corneal Endothelial Cell Therapy**

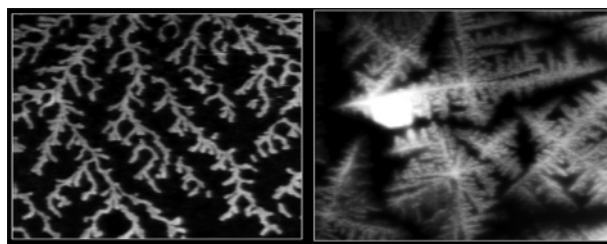
Jui-Yang Lai, Pei-Lin Lu, Ko-Hua Chen, Yasuhiko Tabata, and Ging-Ho Hsiue\*





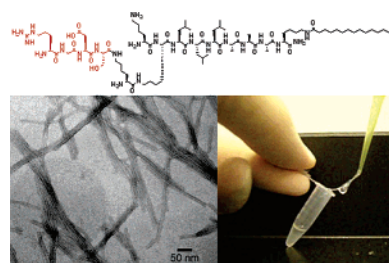
# 1845 Enzymatic Polymerization of Phenolic Compounds Using Laccase and Tyrosinase from *Ustilago maydis*

Rosa Martha Desentis-Mendoza,  
Humberto Hernández-Sánchez, Abel Moreno,  
Emilio Rojas del C., Luis Chel-Guerrero,  
Joaquín Tamariz, and  
María Eugenia Jaramillo-Flores\*



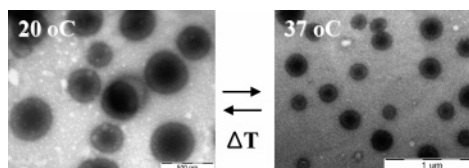
# 1855 Presentation of RGDS Epitopes on ■ Self-Assembled Nanofibers of Branched Peptide Amphiphiles

Mustafa O. Guler, Lorraine Hsu,  
Stephen Soukasene, Daniel A. Harrington,  
James F. Hulvat, and Samuel I. Stupp\*



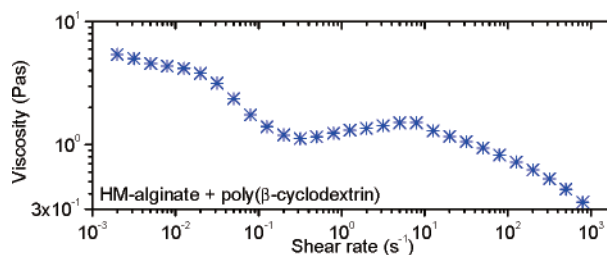
# 1864 Temperature-Sensitive Pluronic/ Poly(ethylenimine) Nanocapsules for Thermally Triggered Disruption of Intracellular Endosomal Compartment

Seung Ho Choi, Soo Hyeon Lee, and  
Tae Gwan Park\*



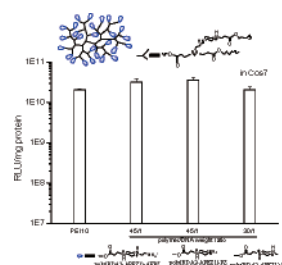
# 1871 Rheological and Structural Characterization of the Interactions between Cyclodextrin Compounds and Hydrophobically Modified Alginate

Virginie Burckbuchler, Anna-Lena Kjøniksen,  
Céline Galant, Reidar Lund, Catherine Amiel,  
Kenneth D. Knudsen, and Bo Nyström\*



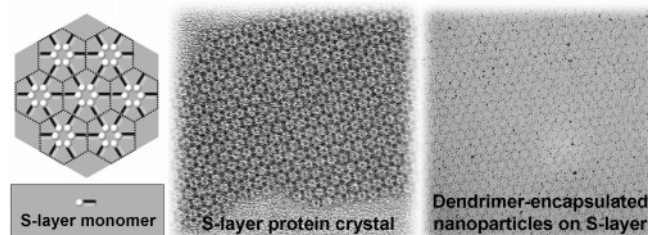
# 1879 Hyperbranched Poly(amino ester)s with Different Terminal Amine Groups for DNA Delivery

Decheng Wu, Ye Liu,\* Xuan Jiang,  
Chaobin He, Suat Hong Goh, and  
Kam W. Leong



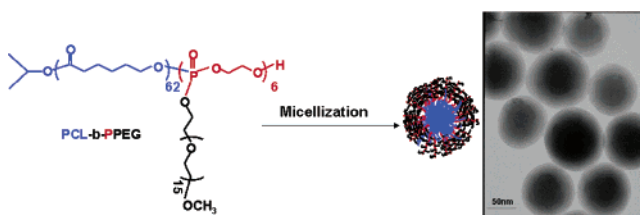
# 1884 Self-Assembly of Dendrimer-Encapsulated Nanoparticle Arrays Using 2-D Microbial S-Layer Protein Biotemplates

Sonny. S. Mark,\* Magnus Bergkvist, Xin Yang, Esther R. Angert, and Carl A. Batt



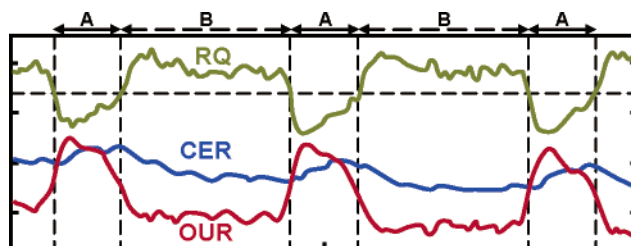
# 1898 Synthesis and Micellization of Amphiphilic Brush-Coil Block Copolymer Based on Poly( $\epsilon$ -caprolactone) and PEGylated Polyphosphoester

Jin-Zhi Du, Dong-Ping Chen, Yu-Cai Wang, Chun-Sheng Xiao, Yi-Jie Lu, Jun Wang,\* and Guang-Zhao Zhang



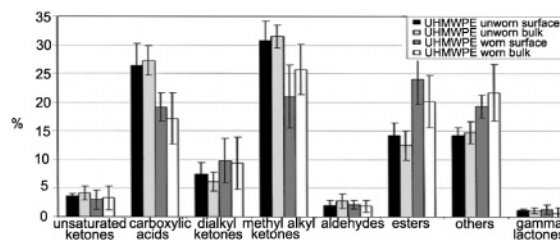
# 1904 Bacterial Synthesis of PHA Block Copolymers

Erik N. Pederson, Christopher W. J. McChalicher, and Friedrich Srienc\*



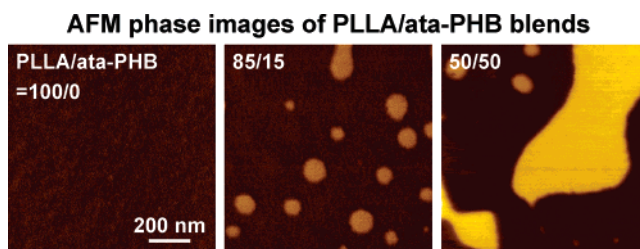
# 1912 Oxidation in Ultrahigh Molecular Weight Polyethylene and Cross-Linked Polyethylene Acetabular Cups Tested against Roughened Femoral Heads in a Hip Joint Simulator

Paola Taddei,\* Saverio Affatato, Concezio Fagnano, and Aldo Toni



# 1921 Phase Structure and Enzymatic Degradation of Poly(L-lactide)/Atactic Poly(3-hydroxybutyrate) Blends: An Atomic Force Microscopy Study

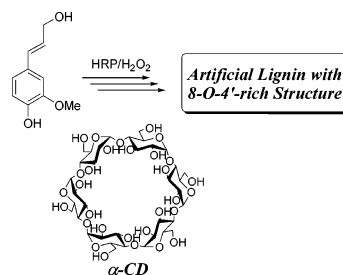
Yoshihiro Kikkawa,\* Takayuki Suzuki, Takeharu Tsuge, Masatoshi Kanesato, Yoshiharu Doi, and Hideki Abe\*





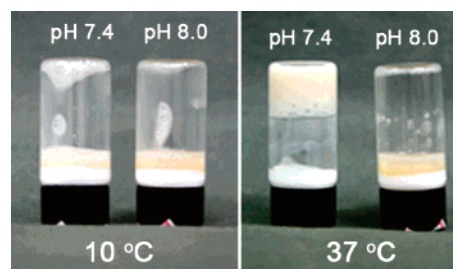
**1929 Enzymatic Polymerization of Coniferyl Alcohol in the Presence of Cyclodextrins**

Rikiya Nakamura, Yasuyuki Matsushita, Kazuhiko Umemoto, Arimitsu Usuki, and Kazuhiko Fukushima\*



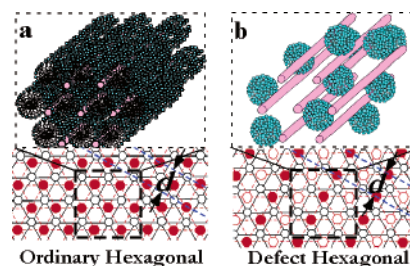
**1935 Sulfonamide-Based pH- and Temperature-Sensitive Biodegradable Block Copolymer Hydrogels**

Woo Sun Shim, Sung Wan Kim, and Doo Sung Lee\*



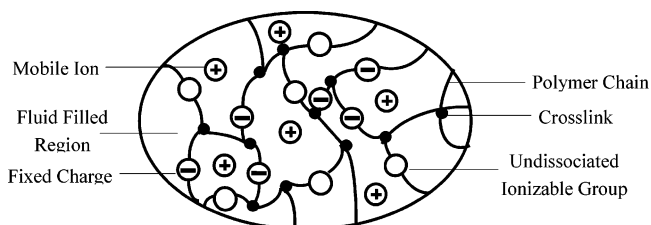
**1942 Transition of Nanostructure in DNA–Cationic Surfactant Complexes with the Added Salt**

Tatsuya Kawashima, Akihiko Sasaki, and Shigeo Sasaki\*



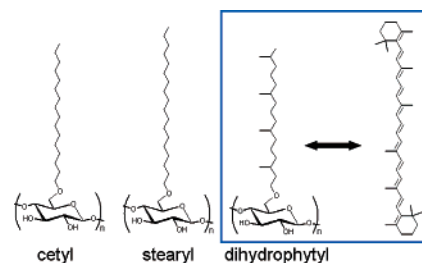
**1951 A Transient Simulation to Predict the Kinetic Behavior of Hydrogels Responsive to Electric Stimulus**

Hua Li,\* Jun Chen, and K. Y. Lam



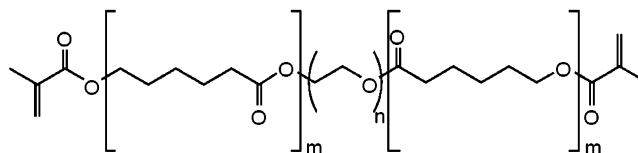
**1960 Langmuir–Blodgett Films of a Novel Cellulose Derivative with Dihydrophytyl Group: The Ability to Anchor  $\beta$ -Carotene Molecules**

Keita Sakakibara,\* Shinsuke Ifuku, Yoshinobu Tsujii, Hiroshi Kamitakahara, Toshiyuki Takano, and Fumiaki Nakatsubo



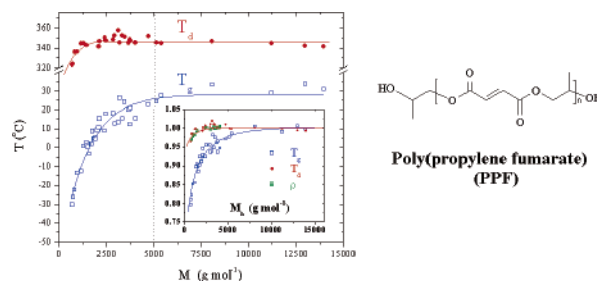
**1968 Exogenously Triggered, Enzymatic Degradation of Photopolymerized Hydrogels with Polycaprolactone Subunits: Experimental Observation and Modeling of Mass Loss Behavior**

Mark A. Rice, Johannah Sanchez-Adams, and Kristi S. Anseth\*



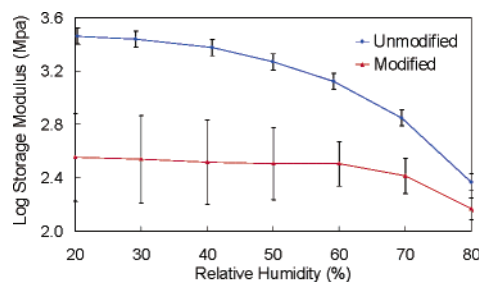
**1976 Bone-Tissue-Engineering Material Poly(propylene fumarate): Correlation between Molecular Weight, Chain Dimensions, and Physical Properties**

Shanfeng Wang, Lichun Lu, and Michael J. Yaszemski\*



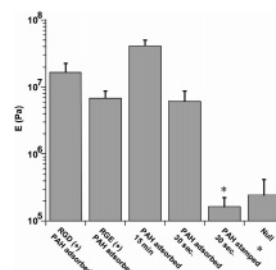
**1983 Surface- and Bulk-Modified Galactoglucomannan Hemicellulose Films and Film Laminates for Versatile Oxygen Barriers**

Jonas Hartman, Ann-Christine Albertsson,\* and John Sjöberg



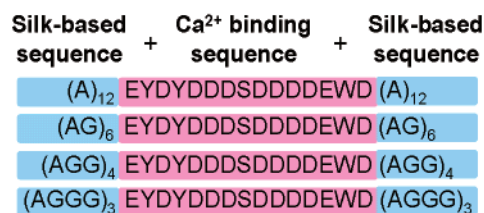
**1990 Biochemical Functionalization of Polymeric Cell Substrata Can Alter Mechanical Compliance**

M. Todd Thompson, Michael C. Berg, Irene S. Tobias, Jenny A. Lichter, Michael F. Rubner, and Krystyn J. Van Vliet\*

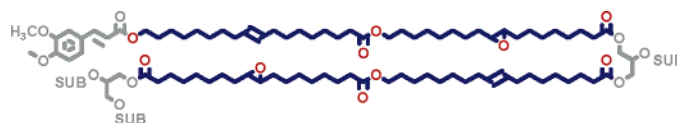


**1996 Conformational Study of Silklike Peptides Modified by the Addition of the Calcium-Binding Sequence from the Shell Nacreous Matrix Protein MSI60 Using <sup>13</sup>C CP/MAS NMR Spectroscopy**

Tetsuo Asakura,\* Megumi Hamada, Sung-Won Ha, and David P. Knight

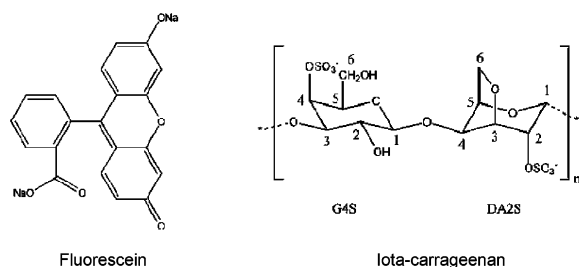


### 2003 Linear Aliphatic Dimeric Esters from Cork Suberin



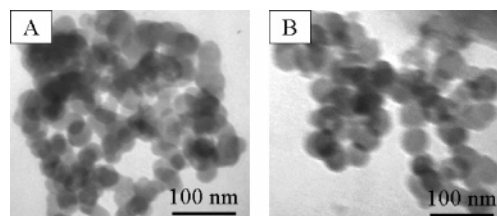
José Graça\* and Sara Santos

### 2011 Effect of Plasticizers (Water and Glycerol) on the Diffusion of a Small Molecule in Iota-Carrageenan Biopolymer Films for Edible Coating Application



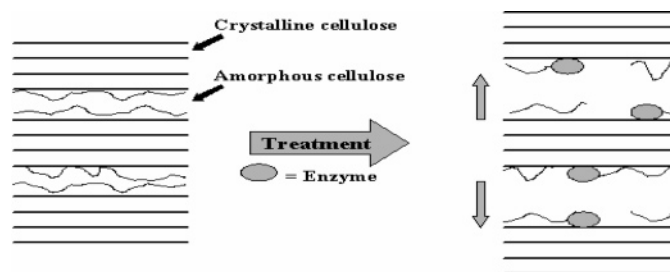
Thomas Karbowski, Hubert Herve, Liliane Léger, Dominique Champion, Frédéric Debeaufort,\* and Andrée Voilley

### 2020 Study on Drug Release Behaviors of Poly- $\alpha,\beta$ -[N-(2-hydroxyethyl)-L-aspartamide]-*g*-poly( $\epsilon$ -caprolactone) Nano- and Microparticles



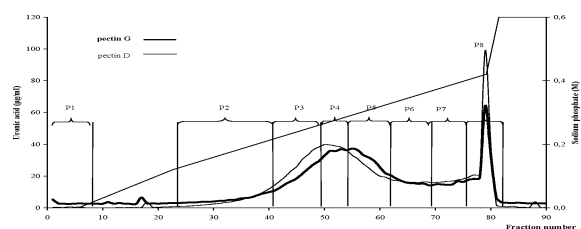
Zhi-Mei Miao, Si-Xue Cheng,\* Xian-Zheng Zhang, and Ren-Xi Zhuo\*

### 2027 Improved Accessibility and Reactivity of Dissolving Pulp for the Viscose Process: Pretreatment with Monocomponent Endoglucanase



Ann-Charlott Engström, Monica Ek,\* and Gunnar Henriksson

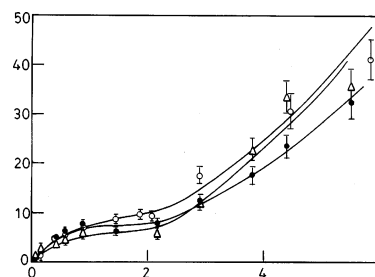
### 2032 Chromatographic and Enzymatic Strategies To Reveal Differences between Amidated Pectins on a Molecular Level



Stéphanie E. Guillotin, Nicolas Mey, Edna Ananta, Patrick Boulenger, Henk A. Schols, and Alphons G. J. Voragen\*

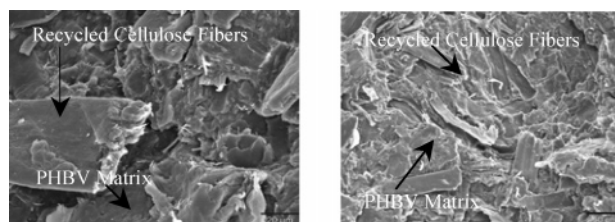
### 2038 Thermodynamics of the Interaction of Globular Proteins with Powdered Stearic Acid in Acid pH

Atanu Mitra, D. K. Chattoraj,\* and P. Chakraborty



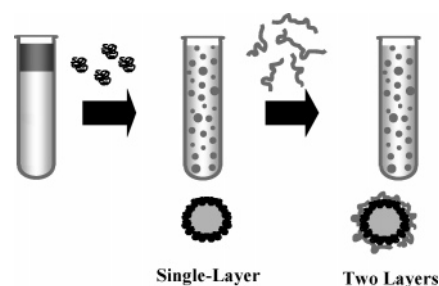
### 2044 Renewable Resource-Based Green Composites from Recycled Cellulose Fiber and Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) Bioplastic

Rahul Bhardwaj, Amar K. Mohanty,\* L. T. Drzal, F. Pourboghrat, and M. Misra



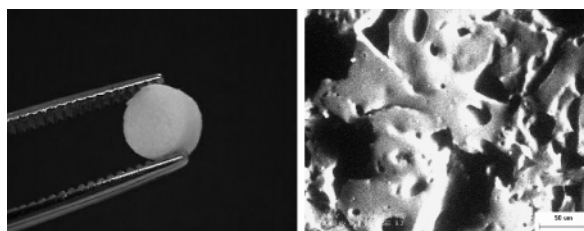
### 2052 Influence of pH and Ionic Strength on Formation and Stability of Emulsions Containing Oil Droplets Coated by $\beta$ -Lactoglobulin-Alginate Interfaces

Thepkunya Harnsilawat, Rungnaphar Pongsawatmanit, and David J. McClements\*



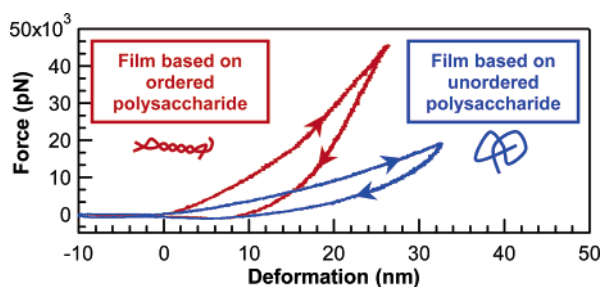
### 2059 In-Situ Injectable Physically and Chemically Gelling NIPAAm-Based Copolymer System for Embolization

Bae Hoon Lee, Bianca West, Ryan McLemore, Christine Pauken, and Brent L. Vernon\*



### 2065 Polyelectrolyte Films Based on Polysaccharides of Different Conformations: Effects on Multilayer Structure and Mechanical Properties

Bjoern Schoeler, Nicolas Delorme, Ingo Doench, Gleb B. Sukhorukov, Andreas Fery, and Karine Glinel\*

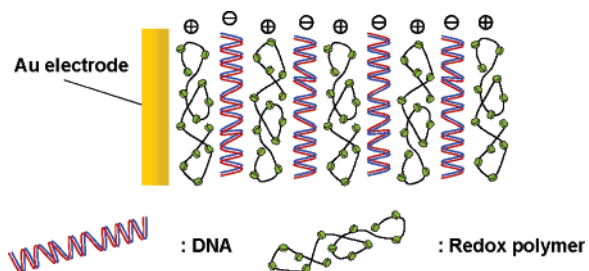


## Notes

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### 2072 Preparation of Layer-by-Layer Thin Films ■ Composed of DNA and Ferrocene-Bearing Poly(amine)s and Their Redox Properties

Hiroshi Sato and Jun-ichi Anzai\*



■ 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.