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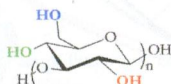
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Reviews

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Properties, Chemistry, and Applications of the Bioactive Polysaccharide Curdlan
Ruoran Zhang and Kevin J. Edgar*

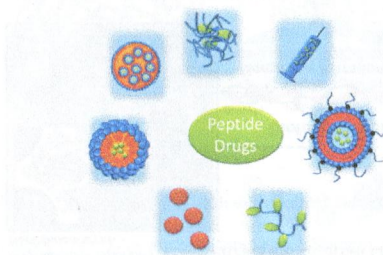
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Drug Carriers for the Delivery of Therapeutic Peptides
Alice W. Du and Martina H. Stenzel*

[dx.doi.org/10.1021/bm500169p](https://doi.org/10.1021/bm500169p)

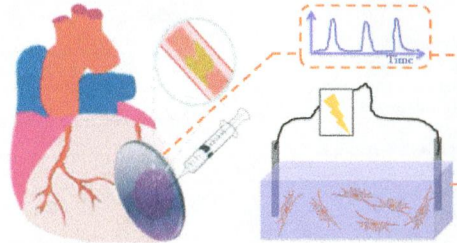


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dx.doi.org/10.1021/bm4018963

In Vitro Study of Electroactive Tetraaniline-Containing Thermosensitive Hydrogels for Cardiac Tissue Engineering

Haitao Cui, Yadong Liu, Yilong Cheng, Zhe Zhang, Peibiao Zhang, Xuesi Chen,* and Yen Wei*



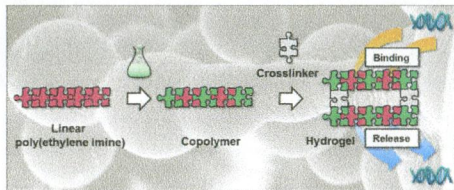
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dx.doi.org/10.1021/bm401572Z

Linear Poly(ethylene imine)-Based Hydrogels for Effective Binding and Release of DNA

Christoph Englert, Lutz Tauhardt, Matthias Hartlieb, Kristian Kempe, Michael Gottschaldt, and Ulrich S. Schubert*



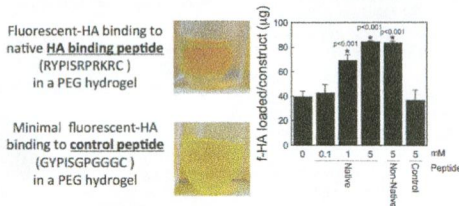
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dx.doi.org/10.1021/bm401524h

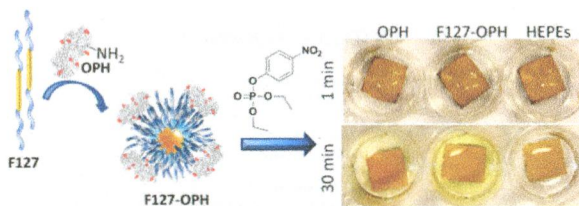
Interaction of Hyaluronan Binding Peptides with Glycosaminoglycans in Poly(ethylene glycol) Hydrogels

Justine J. Roberts, Robert M. Elder, Alexander J. Neumann, Arthi Jayaraman, and Stephanie J. Bryant*



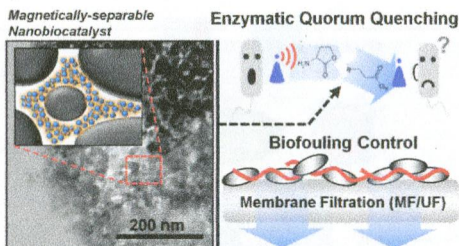
Enhancing Enzyme Stability by Construction of Polymer–Enzyme Conjugate Micelles for Decontamination of Organophosphate Agents

Nisaroporn Suthiwangcharoen and Ramanathan Nagarajan*



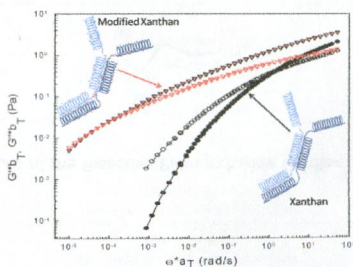
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Byoungsoo Lee, Kyung-Min Yeon, Jongmin Shim, Sang-Ryoung Kim, Chung-Hak Lee, Jinwoo Lee, and Jungbae Kim*



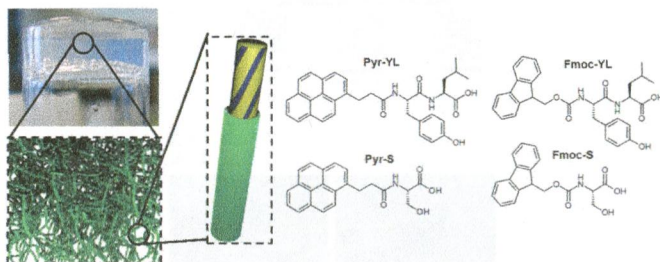
Hydrophobically Modified Xanthan: An Amphiphilic but Not Associative Polymer

Audrey Roy, Sébastien Comesse, Michel Grisel, Nicolas Hucher, Zied Souguir, and Frédéric Renou*



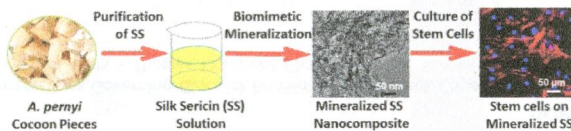
Insights into the Coassembly of Hydrogelators and Surfactants Based on Aromatic Peptide Amphiphiles

Scott Fleming,* Sisir Debnath, Pim W. J. M. Frederix, Neil T. Hunt, and Rein V. Uljijn*



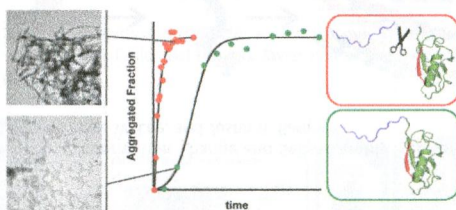
Biomimetic Nucleation of Hydroxyapatite Crystals Mediated by *Antheraea pernyi* Silk Sericin Promotes Osteogenic Differentiation of Human Bone Marrow Derived Mesenchymal Stem Cells

Mingying Yang, Yajun Shuai, Can Zhang, Yuyin Chen, Liangjun Zhu, Chuanbin Mao,* and Hongwei Ouyang



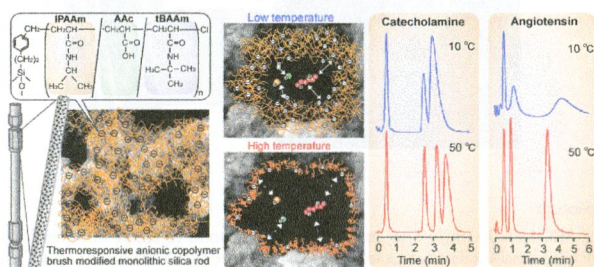
N-Terminal Protein Tails Act as Aggregation Protective Entropic Bristles: The SUMO Case

Ricardo Graña-Montes, Patrizia Marinelli, David Reverter, and Salvador Ventura*



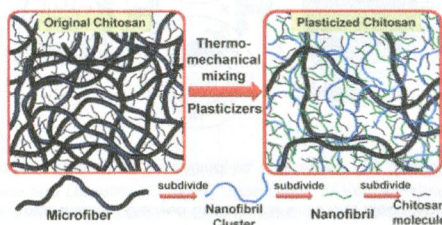
Monolithic Silica Rods Grafted with Thermoresponsive Anionic Polymer Brushes for High-Speed Separation of Basic Biomolecules and Peptides

Kenichi Nagase, Jun Kobayashi, Akihiko Kikuchi, Yoshikatsu Akiyama, Hideko Kanazawa, and Teruo Okano*



Hierarchical Structure and Physicochemical Properties of Plasticized Chitosan

Qingkai Meng, Marie-Claude Heuzey,* and Pierre J. Carreau



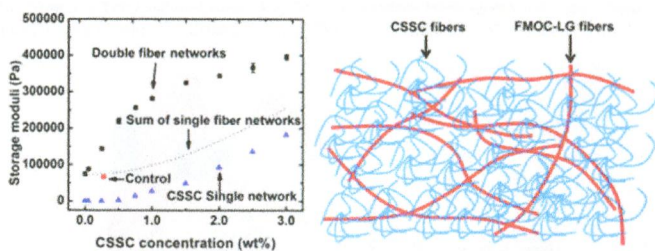
Direct Solvation of Glycoproteins by Salts in Spider Silk Glues Enhances Adhesion and Helps To Explain the Evolution of Modern Spider Orb Webs

Vasav Sahni, Toshikazu Miyoshi, Kelley Chen, Dharamdeep Jain, Sean J. Blamires, Todd A. Blackledge, and Ali Dhinojwala*



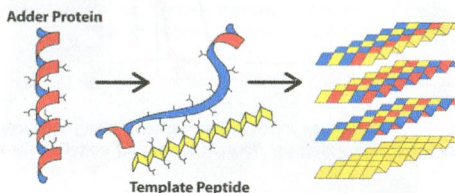
Synergistic Stiffening in Double-Fiber Networks

Wolf H. Rombouts,* Marcel Giesbers, Jan van Lent, Frits A. de Wolf, and Jasper van der Gucht



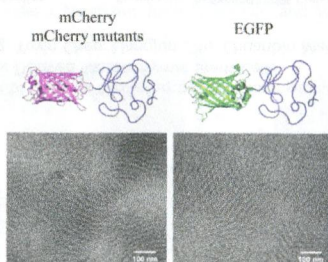
The Role of Protein Hydrophobicity in Conformation Change and Self-Assembly into Large Amyloid Fibrils

Devin M. Ridgley, Elizabeth C. Claunch, Parker W. Lee, and Justin R. Barone*



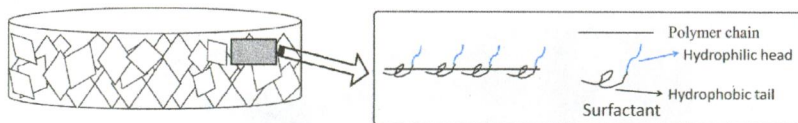
The Nature of Protein Interactions Governing Globular Protein–Polymer Block Copolymer Self-Assembly

Christopher N. Lam, Minkyu Kim, Carla S. Thomas, Dongsook Chang, Gabriel E. Sanoja, Chindimma U. Okwara, and Bradley D. Olsen*



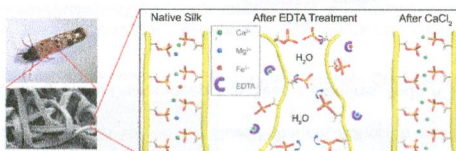
Surfactant as a Critical Factor When Tuning the Hydrophilicity in Three-Dimensional Polyester-Based Scaffolds: Impact of Hydrophilicity on Their Mechanical Properties and the Cellular Response of Human Osteoblast-Like Cells

Yang Sun, Zhe Xing, Ying Xue, Kamal Mustafa, Anna Finne-Wistrand, and Ann-Christine Albertsson*



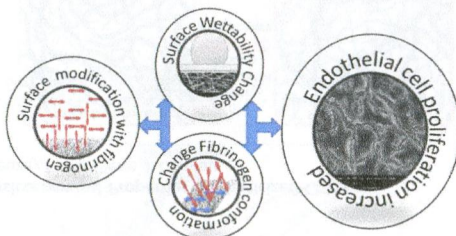
Reversible Assembly of β -Sheet Nanocrystals within Caddisfly Silk

J. Bennett Addison, Warner S. Weber, Qiushi Mou, Nicholas N. Ashton, Russell J. Stewart, Gregory P. Holland, and Jeffery L. Yarger*



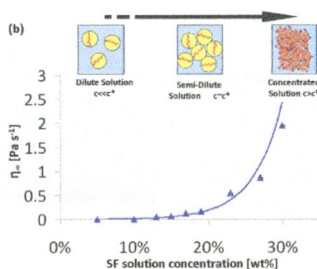
Engineering Interaction between Bone Marrow Derived Endothelial Cells and Electrospun Surfaces for Artificial Vascular Graft Applications

Furqan Ahmed, Naba K. Dutta, Andrew Zannettino, Kate Vandyke, and Namita Roy Choudhury*



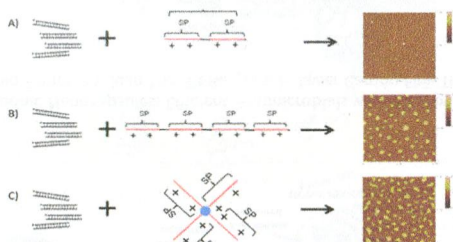
Rheology and Electrospinning of Regenerated *Bombyx mori* Silk Fibroin Aqueous Solutions

Tom Hodgkinson, Ying Chen, Ardeshir Bayat, and Xue-Feng Yuan*



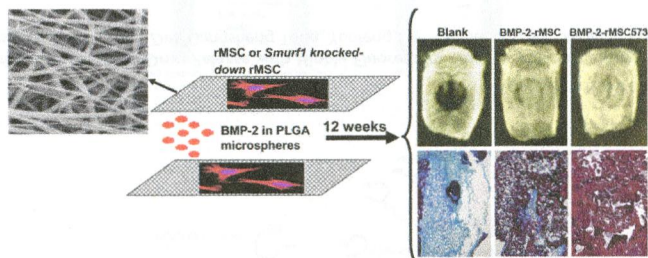
Influence of Oligospermines Architecture on Their Suitability for siRNA Delivery

Maha Elsayed, Vincent Corrand, Vidula Kolhatkar, Yuran Xie, Na Hyung Kim, Rohit Kolhatkar, and Olivia M. Merkel*



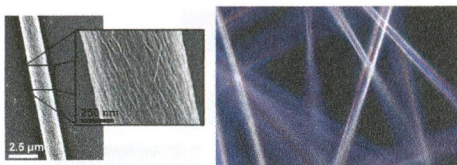
Smurf1 Knocked-Down, Mesenchymal Stem Cells and BMP-2 in an Electrospun System for Bone Regeneration

María Rodríguez-Évora, Emiliano García-Pizarro, Carlos del Rosario, Javier Pérez-López, Ricardo Reyes, Araceli Delgado, José C Rodríguez-Rey, and Carmen Évora*



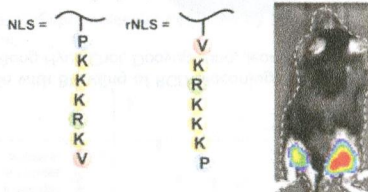
Electrospinning Bioactive Supramolecular Polymers from Water

Alok S. Tayi, E. Thomas Pashuck, Christina J. Newcomb, Mark T. McClendon, and Samuel I. Stupp*

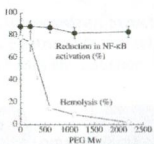
**Polymer–Peptide Delivery Platforms: Effect of Oligopeptide Orientation on Polymer-Based DNA Delivery**

Sangram S. Parekar, Rachel Letteri, Delphine Chan-Seng, Olga Zolocheska, Jayne Ellis, Marxa Figueiredo, and Todd Emrick*

Nuclear localization signal (NLS)-enhanced transfection using comb polymers

**Effects of PEGylation on Membrane and Lipopolysaccharide Interactions of Host Defense Peptides**

Shalini Singh, Praveen Papareddy, Matthias Mörgelin, Artur Schmidtchen, and Martin Malmsten*



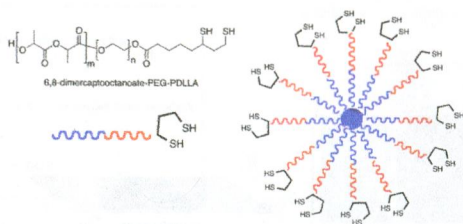
AMP PEGylation



- ↓ Antimicrobial effect
- ↓ Toxicity
- ↑ Selectivity
- ↓ Anti-endotoxic effect

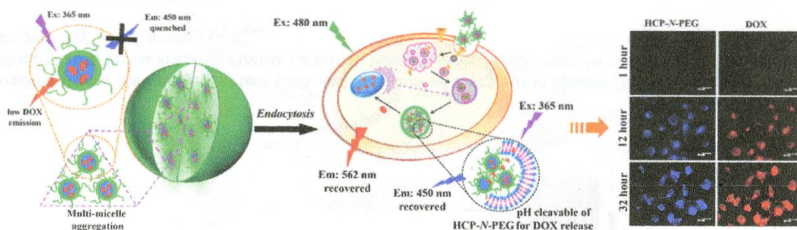
Dithiol-PEG-PDLLA Micelles: Preparation and Evaluation as Potential Topical Ocular Delivery Vehicle

Jian Yang, Jing Yan, Zhihan Zhou, and Brian G. Amsden*



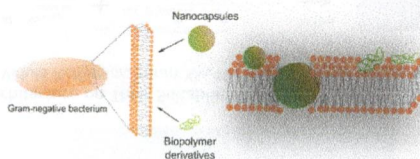
Real-Time Monitoring of Anticancer Drug Release with Highly Fluorescent Star-Conjugated Copolymer as a Drug Carrier

Feng Qiu, Dali Wang, Qi Zhu,* Lijuan Zhu, Gangsheng Tong, Yunfeng Lu,* Deyue Yan, and Xinyuan Zhu*



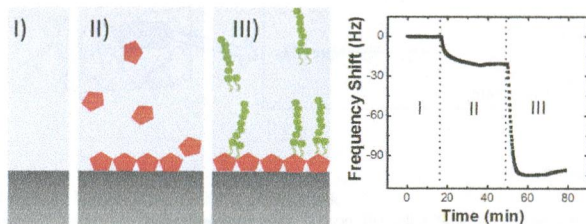
Sonochemically Processed Cationic Nanocapsules: Efficient Antimicrobials with Membrane Disturbing Capacity

Margarida M. Fernandes, Antonio Francesco, Juan Torrent-Burgués, F. Javier Carrión-Fité, Thomas Heinze, and Tzanko Tzanov*



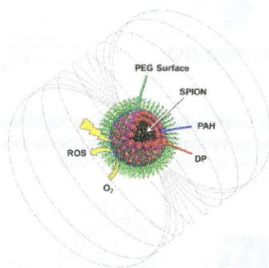
Evaluating the Binding of Selected Biomolecules to Cranberry Derived Proanthocyanidins Using the Quartz Crystal Microbalance

Nicole E. Weckman, Adam L. J. Olsson, and Nathalie Tufenkji*



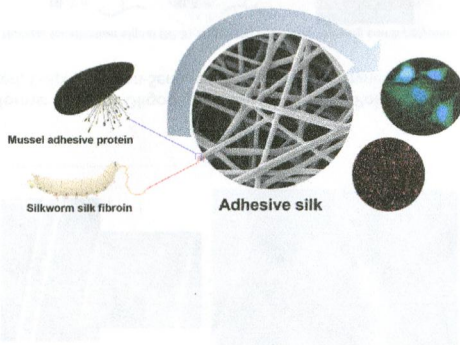
Fabrication of Multifunctional Layer-by-Layer Nanocapsules toward the Design of Theragnostic Nanoplatform

Hee-Jae Yoon, Tae Geuk Lim, Joo-Ho Kim, Young Min Cho, Yong Seok Kim, Ui Seok Chung, Jung Hyun Kim, Byoung Wook Choi, Won-Gun Koh,* and Woo-Dong Jang*



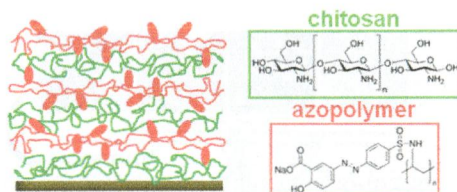
Multifunctional Adhesive Silk Fibroin with Blending of RGD-Bioconjugated Mussel Adhesive Protein

Yun Jung Yang, Yunkyeoung Kwon, Bong-Hyuk Choi, Dooyup Jung, Jeong Hyun Seo, Ki Hoon Lee, and Hyung Joon Cha*



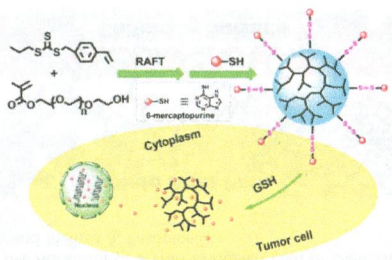
Optically Active Multilayer Films Based on Chitosan and an Azopolymer

Raquel Fernández, Connie Ocando, Susana C. M. Fernandes, Arantxa Eceiza, and Agnieszka Tercjak*



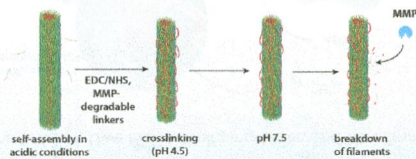
Facile Fabrication of Redox-Responsive Thiol-Containing Drug Delivery System via RAFT Polymerization

Yuan Yuan Zhuang, Yue Su,* Yu Peng, Dali Wang, Hongping Deng, Xiaodong Xi, Xinyuan Zhu,* and Yunfeng Lu



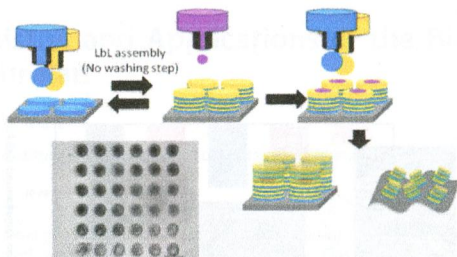
Rational Design of MMP Degradable Peptide-Based Supramolecular Filaments

Yi-An Lin, Yu-Chuan Ou, Andrew G. Cheetham, and Honggang Cui*

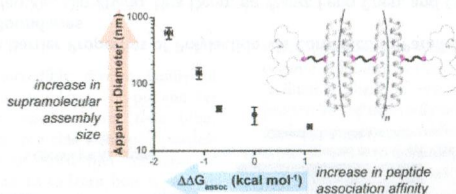


Inkjet Printing of Silk Nest Arrays for Cell Hosting

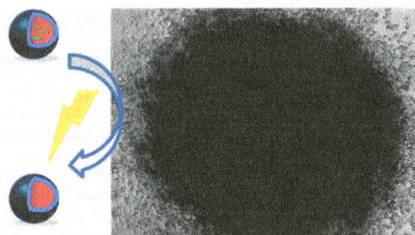
Rattanon Suntivich, Irina Drachuk, Rossella Calabrese, David L. Kaplan, and Vladimir V. Tsukruk*

**Tuning Assembly Size in Peptide-Based Supramolecular Polymers by Modulation of Subunit Association Affinity**

Kaylyn M. Oshaben and W. Seth Horne*

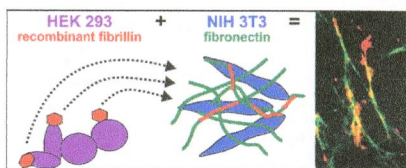
**Polymeric Micelles Encapsulating Photosensitizer: Structure/Photodynamic Therapy Efficiency Relation**

Laure Gibot, Arnaud Lemelle, Ugo Till, Béatrice Moukarzel, Anne-Françoise Mingotaud,* Véronique Pimienta, Pascale Saint-Aguet, Marie-Pierre Rols,* Mireille Gaucher, Frédéric Violleau, Christophe Chassenieux, and Patricia Vicendo*



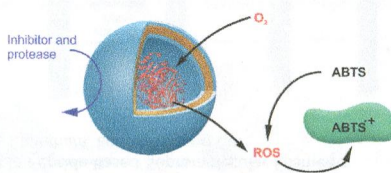
Early Fibrillin-1 Assembly Monitored through a Modifiable Recombinant Cell Approach

Dirk Hubmacher, Eric Bergeron, Christine Fagotto-Kaufmann, Lynn Y. Sakai, and Dieter P. Reinhardt*



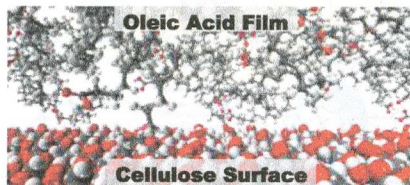
Poly(*N*-vinylpyrrolidone)-Poly(dimethylsiloxane)-Based Polymersome Nanoreactors for Laccase-Catalyzed Biotransformations

Mariana Spulber, Patric Baumann, Sina S. Saxer, Uwe Piele, Wolfgang Meier, and Nico Bruns*



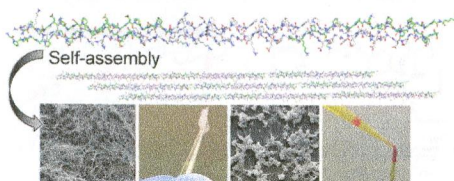
Molecular Dynamics Simulations of the Adhesion of a Thin Annealed Film of Oleic Acid onto Crystalline Cellulose

Mir A. A. R. Quddus, Orlando J. Rojas, and Melissa A. Pasquini*



A Nanostructured Synthetic Collagen Mimic for Hemostasis

Vivek A. Kumar, Nichole L. Taylor, Abhishek A. Jalan, Lyahn K. Hwang, Benjamin K. Wang, and Jeffery D. Hartgerink*

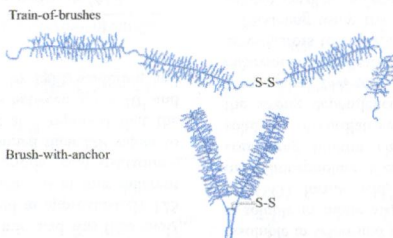


1515 **S**

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Comparison of a Brush-with-Anchor and a Train-of-Brushes Mucin on Poly(methyl methacrylate) Surfaces: Adsorption, Surface Forces, and Friction

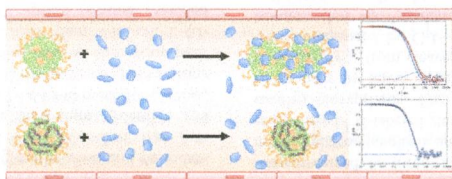
Junxue An, Andra Dédinaïté,* Anki Nilsson, Jan Holgersson, and Per M. Claesson

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dx.doi.org/10.1021/bm500199h

Aggregation Behavior of Cationic Nanohydrogel Particles in Human Blood Serum

Lutz Nuhn, Sabine Gietzen, Kristin Mohr, Karl Fischer, Kazuko Toh, Kanjiro Miyata, Yu Matsumoto, Kazunori Kataoka, Manfred Schmidt, and Rudolf Zentel*

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dx.doi.org/10.1021/bm500229d

Synthesis of Cellulose Nanocrystals Carrying Tyrosine Sulfate Mimetic Ligands and Inhibition of Alphavirus Infection

Justin O. Zoppe,* Ville Ruottinen, Janne Ruotsalainen, Seppo Rönkkö, Leena-Sisko Johansson, Ari Hinkkanen, Kristiina Järvinen, and Jukka Seppälä*

