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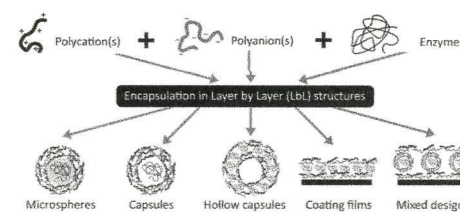
Reviews

2117

dx.doi.org/10.1021/bm400198p

Encapsulation of Enzymes in Layer-by-Layer (LbL) Structures: Latest Advances and Applications

Omar. S. Sakr and Gerrit Borchard*



Articles

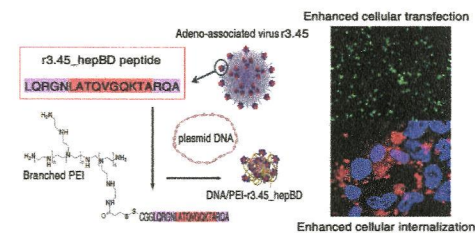
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dx.doi.org/10.1021/bm4005854

Integration of Adeno-Associated Virus-Derived Peptides into Nonviral Vectors to Synergistically Enhance Cellular Transfection

Jung-Suk Kim, Eunmi Kim, Ji-Seon Oh, and Jae-Hyung Jang*

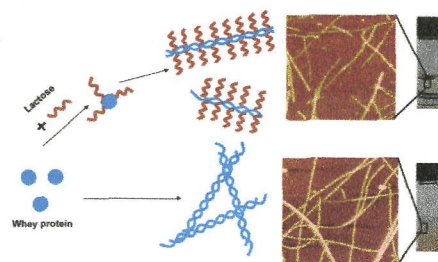


2146

Dispersible and Thermal Stable Nanofibrils Derived from Glycated Whey Protein

Gang Liu and Qixin Zhong*

dx.doi.org/10.1021/bm400521b

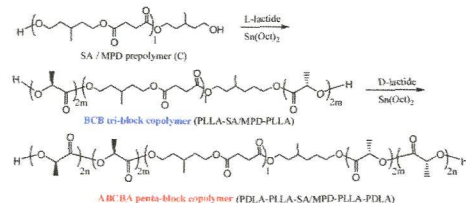


2154

Synthesis of ABCBA Penta Stereoblock Polylactide Copolymers by Two-Step Ring-Opening Polymerization of L- and d-Lactides with Poly(3-methyl-1,5-pentylene succinate) as Macroinitiator (C): Development of Flexible Stereocomplexed Polylactide Materials

Masayuki Hirata, Kazunari Masutani, and Yoshiharu Kimura*

dx.doi.org/10.1021/bm400228x

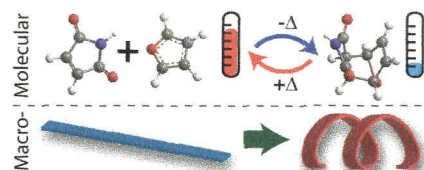


2162

Reconfigurable Biodegradable Shape-Memory Elastomers via Diels–Alder Coupling

Chi Ninh and Christopher J Bettinger*

dx.doi.org/10.1021/bm400260z



6A

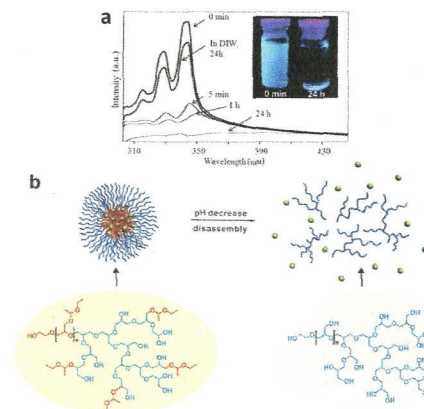
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2171

One-Pot Synthesis of Linear-Hyperbranched Amphiphilic Block Copolymers Based on Polyglycerol Derivatives and Their Micelles

Yurie Oikawa, Sueun Lee, Do Hyung Kim, Dae Hwan Kang, Byeong-Su Kim,* Kyohei Saito, Shigeko Sasaki, Yoshiyuki Oishi, and Yuji Shibasaki*

dx.doi.org/10.1021/bm400275w

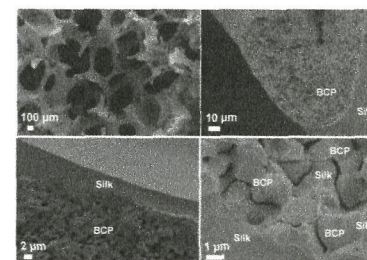


2179

Multiple Silk Coatings on Biphasic Calcium Phosphate Scaffolds: Effect on Physical and Mechanical Properties and In Vitro Osteogenic Response of Human Mesenchymal Stem Cells

Jiao Jiao Li, Eun Seok Gil, Rebecca S. Hayden, Chunmei Li, Seyed-Iman Roohani-Esfahani, David L. Kaplan, and Hala Zreiqat*

dx.doi.org/10.1021/bm400303w

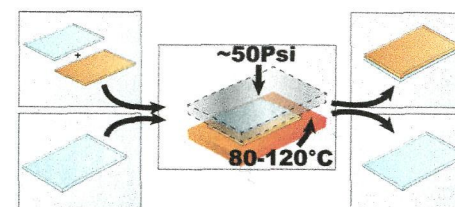


2189

Interface Control of Semicrystalline Biopolymer Films through Thermal Reflow

Mark A. Brenckle, Benjamin Partlow, Hu Tao, David L. Kaplan, and Fiorenzo G. Omenetto*

dx.doi.org/10.1021/bm400305r



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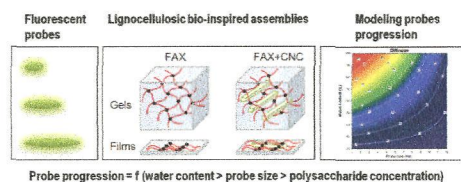
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Modeling Progression of Fluorescent Probes in Bioinspired Lignocellulosic Assemblies

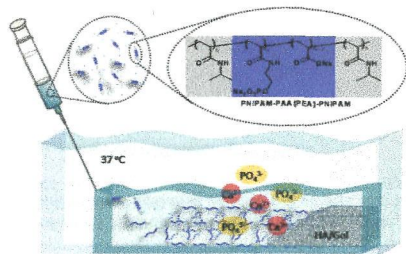
Gabriel Paës,* Sally Burr, Marie-Belle Saab, Michaël Molinari, Véronique Aguié-Béghin, and Brigitte Chabbert

2206 

dx.doi.org/10.1021/bm400344z

Thermoresponsive Hydrogels from Phosphorylated ABA Triblock Copolymers: A Potential Scaffold for Bone Tissue Engineering

Zaifu Lin, Shuqin Cao, Xingyu Chen, Wei Wu, and Jianshu Li*

2215 

dx.doi.org/10.1021/bm400354y

Conformational Preferences of the O-Antigen Polysaccharides of *Escherichia coli* O5ac and O5ab Using NMR Spectroscopy and Molecular Modeling

Anita Sarkar, Carolina Fontana, Anne Imberty, Serge Pérez,* and Göran Widmalm*

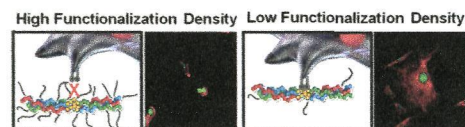


2225

dx.doi.org/10.1021/bm400634j

Bioactive Hydrogels with Enhanced Initial and Sustained Cell Interactions

Mary Beth Browning, Brooke Russell, Jose Rivera, Magnus Höök, and Elizabeth M. Cosgriff-Hernandez*

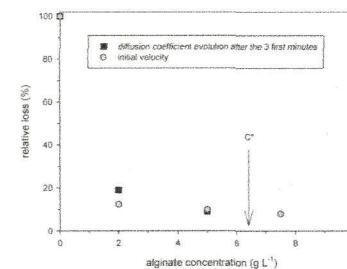


2234

dx.doi.org/10.1021/bm400371r

Molecular Size Characterization and Kinetics Studies on Hydrolysis of Pullulan by Pullulanase in an Entangled Alginate Medium

Ghina Ali, Christophe Rihouey, Véronique Larreta-Garde, Didier Le Cerf,* and Luc Picton

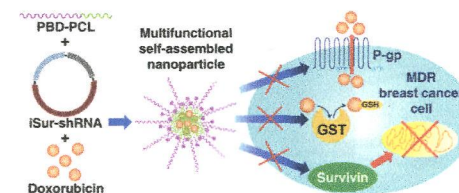


2242

dx.doi.org/10.1021/bm400378x

Multifunctional Nanoparticles Improve Therapeutic Effect for Breast Cancer by Simultaneously Antagonizing Multiple Mechanisms of Multidrug Resistance

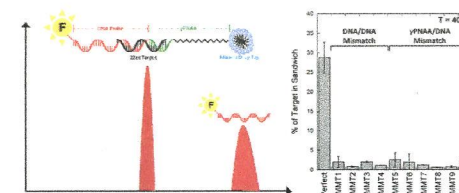
Qi Yin, Jianan Shen, Zhiwen Zhang, Haijun Yu, Lingli Chen, Wangwen Gu, and Yaping Li*

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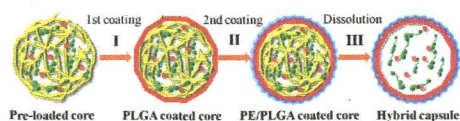
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High Affinity γ PNA Sandwich Hybridization Assay for Rapid Detection of Short Nucleic Acid Targets with Single Mismatch Discrimination

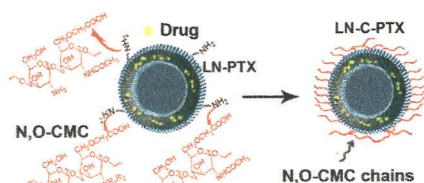
Johnathan M. Goldman, Li Ang Zhang, Arunava Manna, Bruce A. Armitage, Danith H. Ly, and James W. Schneider*



2262 **S** dx.doi.org/10.1021/bm4003915
Layer-by-Layer Polyelectrolyte–Polyester Hybrid Microcapsules for Encapsulation and Delivery of Hydrophobic Drugs
 Rongcong Luo, Sübba S. Venkatraman,* and Björn Neu

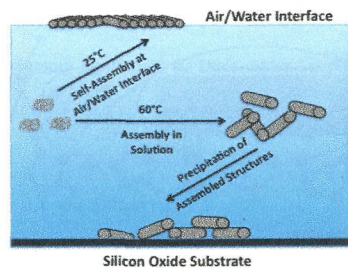


2272 **S** dx.doi.org/10.1021/bm400406x
Carboxymethyl-Chitosan-Tethered Lipid Vesicles: Hybrid Nanoblanket for Oral Delivery of Paclitaxel
 Nitin Joshi, Rama Saha, Thanigaivel Shanmugam, Biji Balakrishnan, Prachi More, and Rinti Banerjee*

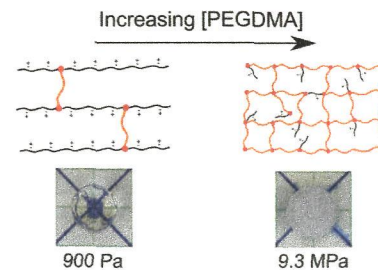


Hybrid nanovesicles for oral delivery of paclitaxel

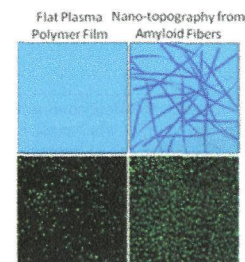
2283 **S** dx.doi.org/10.1021/bm400407c
Kinetics and Control of Self-Assembly of ABH1 Hydrophobin from the Edible White Button Mushroom
 Lea C. Paslay, Leo Falgout, Daniel A. Savin, Sabine Heinhorst, Gordon C. Cannon, and Sarah E. Morgan*



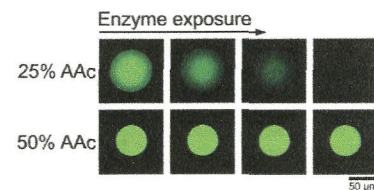
2294 **S** dx.doi.org/10.1021/bm400418g
PEG-Phosphorylcholine Hydrogels As Tunable and Versatile Platforms for Mechanobiology
 William G. Herrick, Thuy V. Nguyen, Marianne Sleiman, Samantha McRae, Todd S. Emrick, and Shelly R. Peyton*



2305 **S** dx.doi.org/10.1021/bm400430t
Nanotopographic Surfaces with Defined Surface Chemistries from Amyloid Fibril Networks Can Control Cell Attachment
 Nicholas P. Reynolds,* Katie E. Styan, Christopher D. Easton, Yali Li, Lynne Waddington, Cecile Lara, John S. Forsythe, Raffaele Mezzenga, Patrick G. Hartley, and Benjamin W. Muir



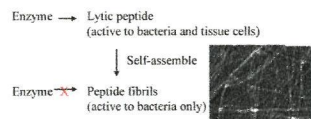
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Factors Affecting Enzymatic Degradation of Microgel-Bound Peptides
 Ronja Månsson,* Göran Frenning, and Martin Malmsten



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Peptide Fibrils with Altered Stability, Activity, And Cell Selectivity

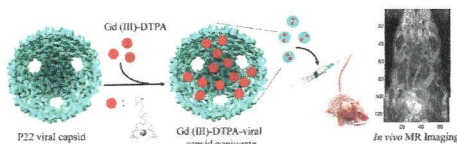
Long Chen and Jun F. Liang*



2332 dx.doi.org/10.1021/bm400461j

Implementation of P22 Viral Capsids As Intravascular Magnetic Resonance T₁ Contrast Conjugates via Site-Selective Attachment of Gd(III)-Chelating Agents

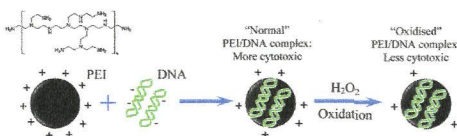
Junseon Min, Hoesu Jung, Hyun-Hee Shin, Gyunggoo Cho, HyungJoon Cho,* and Sebyung Kang*



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Oxidation as a Facile Strategy To Reduce the Surface Charge and Toxicity of Polyethyleneimine Gene Carriers

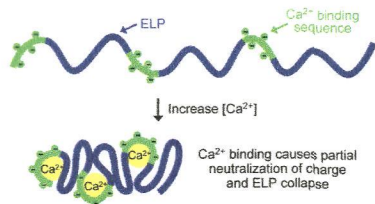
Wei Yang Seow, Kun Liang, Motoichi Kurisawa, and Charlotte A. E. Hauser*



2347 dx.doi.org/10.1021/bm400464s

Calcium Binding Peptide Motifs from Calmodulin Confer Divalent Ion Selectivity to Elastin-Like Polypeptides

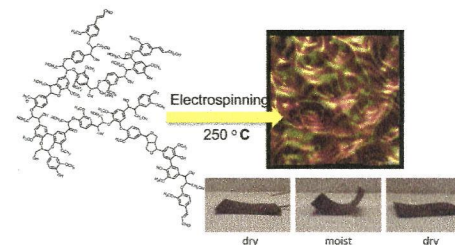
Wafa Hassouneh, Michelle L. Nunalee, M. Coleman Shelton, and Ashutosh Chilkoti*



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Preparation and Characterization of Kraft Lignin-Based Moisture-Responsive Films with Reversible Shape-Change Capability

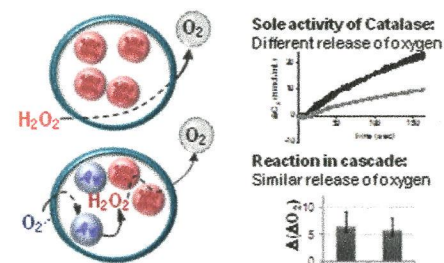
Ian Dallmeyer, Sudip Chowdhury, and John F. Kadla*



2364 dx.doi.org/10.1021/bm400493b

Permeability Effects on the Efficiency of Antioxidant Nanoreactors

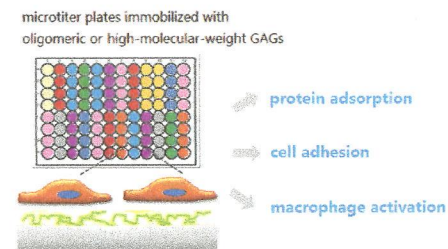
Iria Louzao and Jan C. M. van Hest*



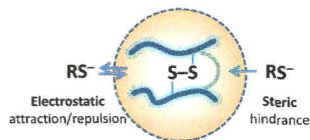
2373 dx.doi.org/10.1021/bm400494z

Defined Surface Immobilization of Glycosaminoglycan Molecules for Probing and Modulation of Cell–Material Interactions

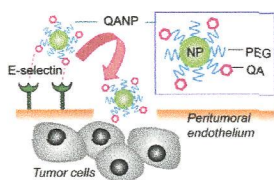
Kai Wang and Ying Luo*



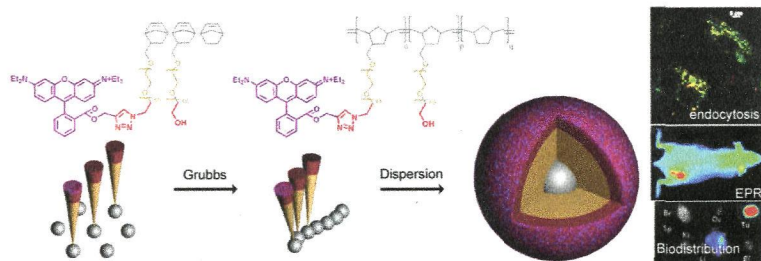
2383 **S** dx.doi.org/10.1021/bm400501c
Broad Control of Disulfide Stability through Microenvironmental Effects and Analysis in Complex Redox Environments
 Chuanliu Wu, Shuo Wang, Lorine Brülisauer, Jean-Christophe Leroux, and Marc A. Gauthier*



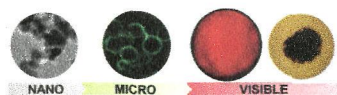
2389 **S** dx.doi.org/10.1021/bm400512g
Development of Quinic Acid-Conjugated Nanoparticles as a Drug Carrier to Solid Tumors
 Zohreh Amoozgar, Joonyoung Park, Qingnuo Lin, Johann H. Weidle III, and Yoon Yeo*



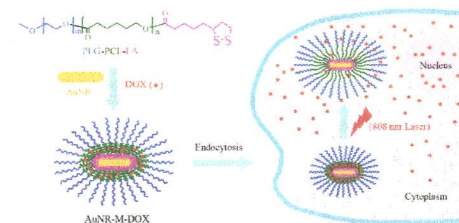
2396 dx.doi.org/10.1021/bm400516h
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 Fabien Gueugnon, Iza Denis, Daniel Pouliquen, Floraine Collette, Régis Delatouche, Valérie Héroguez, Marc Grégoire, Philippe Bertrand,* and Christophe Blanquart*



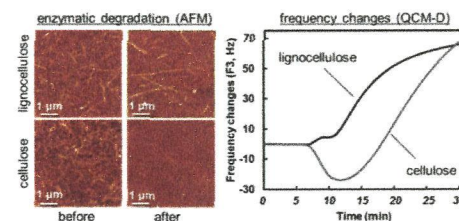
2403 **S** dx.doi.org/10.1021/bm400527y
Multifunctional Compartmentalized Capsules with a Hierarchical Organization from the Nano to the Macro Scales
 Rui R. Costa, Emilio Castro, F. Javier Arias, J. Carlos Rodríguez-Cabello, and João F. Mano*



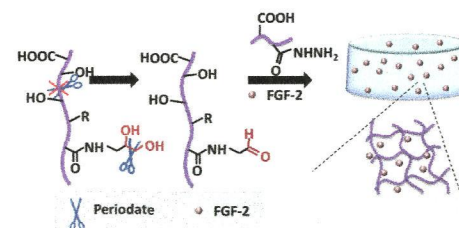
2411 **S** dx.doi.org/10.1021/bm400530d
Gold Nanorod-Cored Biodegradable Micelles as a Robust and Remotely Controllable Doxorubicin Release System for Potent Inhibition of Drug-Sensitive and -Resistant Cancer Cells
 Yinan Zhong, Chao Wang, Liang Cheng, Fenghua Meng, Zhiyuan Zhong,* and Zhuang Liu*



2420 dx.doi.org/10.1021/bm400553s
Thin Film of Lignocellulosic Nanofibrils with Different Chemical Composition for QCM-D Study
 Akio Kumagai, Seung-Hwan Lee,* and Takashi Endo*



2427 **S** dx.doi.org/10.1021/bm400612h
Mild and Efficient Strategy for Site-Selective Aldehyde Modification of Glycosaminoglycans: Tailoring Hydrogels with Tunable Release of Growth Factor
 Shuijiang Wang, Oommen P. Oommen, Hongji Yan, and Oommen P. Varghese*



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