

- 7 Thrombospondins 1 and 2 Affect Angiogenesis and the Foreign Body Response in Mouse Implanted PVA Sponge Granulomas
Erin Anderson, Azin Agah, Paul Bornstein
- 11 Protein Effects on Cellular Adhesion for Esophageal Tissue Engineering
Andrés Bratt-Leal, Michael Linnes, Benjamin Beckstead, Cecilia Giachelli
- 15 Non-fouling Behavior of Oligo(ethylene glycol) Self-Assembled Monolayers at 37°C
Ivy Butler, Jon Ladd, Lingyan Li, Shaoyi Jiang
- 18 Interactions Between Fibrin and SPARC Analyzed by Surface Plasmon Resonance Biosensor
Rachel Evans, Hua Wang, Shaoyi Jiang
- 23 Real Time Capacitance Monitoring of a Cell Based Biosensor
David Fang, Gabriel Gray, Lynn LaRussa, Kiran Potluri, Matt Scholz, Joseph Bahl, Raymond Runyan, David Mathine
- 28 Factors that Affect Poly(vinyl Alcohol) Amino Acid Hydrogels
Frederick Gella, Maxi Boeckl, Buddy Ratner
- 36 MSX-1 in Human Fetal Digits After Amputation
Alicia Gutiérrez, Christopher Allan
- 41 Protein Adsorption Studies on Hydroxyapatite Using Secondary Ion Mass Spectrometry and Electron Spectroscopy for Chemical Analysis
Elizabeth Hager, Heather Canavan, David Castner
- 50 Development and Characterization of a Novel Synthesis Method of Producing Iron Oxide Nanoparticles
Jeremy Hanson, Nathan Kohler, Narayan Bhattarai, Neil Golke, Miqin Zhang
- 54 Chitosan and Chitosan/Alginate Composite Scaffolds for Cartilage Tissue Engineering
Dieu-Hien Huynh, Zhensheng Li, Miqin Zhang
- 59 "Smart" PDSA Polymeric Carriers for Enhanced Delivery of Therapeutic Antisense Oligodeoxynucleotides
Jennifer James, Mohamed El-Sayed, Rachel Johns, Patrick Stayton, Allan Hoffman
- 64 Comparison of Bovine Serum Albumin and Casein as Blocking Agents on Different Self-Assembled Monolayer Surfaces Using a Surface Plasmon Resonance (SPR) Sensor
Christin Lai, Allen Taylor, Shaoyi Jiang
- 69 Interactions Between Secreted Protein, Acidic and Rich in Cysteine (SPARC), and Type I Collagen Identified by Surface Plasmon Resonance Biosensor
Victoria Lockhart, Lingyun Liu, Shaoyi Jiang
- 75 Genesis of Site-Directed Mutants in the Streptavidin Water Channel
Bryan McFadden, Richard To
- 81 Development of Improved Proteomic Methods for Biomaterials
Pamela McKnight, Thomas Horbett, Lan Cao, Lizzy Mayorga, Donald Elbert, Jinku Kim

- 84 Matrix-Metalloproteinase (MMP) 9 and Its Role in Wound Healing and the Foreign Body Response
Norman Meznarich, Themis Kyriakides, Elizabeth Donaldson, Matt Foster, Brett Schrom, Buddy Ratner, Kip Hauch, Paul Bornstein
- 90 An Electro-Optic Cell-Based Biosensor Chamber Design
Adam Moretti, Ruth Crawford, Gabriel Gray, Lynn LaRussa, David Mathine, Matt Scholz, Ray Runyan
- 94 Development of an Experimental Model for Temperature Measurement of Spinal Nerve Tissue
Nick Quinn, Darryl James, Theodore Wiesner
- 99 Temperature Dependence of Electrical Resistivity and Thermal Conductivity for a Gel Model of Nerve Tissue
Nick Quinn, Anita Kallepalli, Theodore Wiesner
- 105 Synthesis of Amino Acids N-Carboxyanhydrides as Valuable Building Blocks of Oligopeptide Segments for Copolymers
Gregory Reid, Felix Simonovsky, Buddy Ratner
- 111 Characterization of the Gels Formed by Amino Acids and Polyvinyl Alcohol: A Comparison of Amine vs. Carboxylic Acid Functional Groups
Zuotian Tatum, Liz Donaldson, Buddy Ratner
- 116 Regeneration and Tissue Engineering of Human Fetal Digits
Zudtky Wisecarver, Jennifer James, Christopher Allan
- 125 Controlled and Sustained Release of BSA from Chitosan and Chitosan-Lactic Acid Nanoparticles
Xin (Cynthia) Wu, Hassna Ramay, Miqin Zhang