

MATERIALS RESEARCH SOCIETY
SYMPOSIUM PROCEEDINGS VOLUME 1685

Soft Nanomaterials

April 21-25, 2014
San Francisco, California, USA

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571
www.proceedings.com

ISBN: 978-1-5108-0544-6

Some format issues inherent in the e-media version may also appear in this print version.

©Materials Research Society 2014

This reprint is produced with the permission of the Materials Research Society and Cambridge University Press.

This publication is in copyright, subject to statutory exception and to the provisions of relevant collective licensing agreements. No reproduction of any part may take place without the written permission of Cambridge University Press.

Cambridge University Press
Cambridge, New York, Melbourne, Madrid, Cape Town,
Singapore, São Paulo, Delhi, Tokyo, Mexico City

Cambridge University Press
32 Avenue of the Americas, New York, NY 10013-2473, USA
www.cambridge.org

Materials Research Society
506 Keystone Drive, Warrendale, PA 15086
www.mrs.org

CODEN: MRSPDH

ISBN: 978-1-5108-0544-6

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-part Internet Web sites referred to in this publication and does not guarantee that any content on such Web sites is, or will remain, accurate or appropriate.

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

TABLE OF CONTENTS

Size-Controlled Synthesis Of Chitosan Nanoparticles And Their Structural Characterization	1
<i>A. Quinones-Mendez, O. Perales-Perez, Y. Cedeno-Mattei</i>	
Electro-Chemo-Mechanical Modeling of the Artery Myogenic Response	7
<i>Y. Li, N. Goulbourne</i>	
Bioinspired Functionally Graded Nanocomposites Synthesized Through Magnetophoretic Processes for Tailored Stress Reduction	13
<i>T. Nardi, Y. Leterrier, J. Manson</i>	
Sustained Percolation in Stretched Silver Nanowire Networks for Stretchable Inter-Connection Applications	20
<i>J. Park, W. Kim</i>	
Preparations of Ethosome-like Catanionic Vesicles from Ion-Pair Amphiphiles(IPAs) for Dermal Drug Delivery	26
<i>Y. Yang</i>	
Biopolymer Based Tough and Self-Recovering Ionic-Covalent Entanglement Hydrogels	32
<i>D. Kirchmayer, M. Panhuis</i>	
Fabrication and Characterization of Chitosan/Cellulose-ZnO Nanocomposites for Bactericidal Applications	36
<i>M. Perez-Altamar, O. Perales-Perez</i>	
The Improvement of Dental Composite Properties with Electromagnetically Aligned Nanofiber	42
<i>T. Uyar, D. Cokeliler</i>	
Soft Dry Electrodes for Electrocardiogram with Conductive Silver Nanowires	48
<i>A. Myers, Y. Zhu</i>	
Micropillar Arrays for High Sensitivity Sensors	53
<i>Y. Kim, N. Goulbourne</i>	
Preparation and Characterization of Alginate Electrospun Nanofibers	59
<i>T. Oh, Y. Seo, J. Cha, Y. Im, J. Hwang, J. Nathanael, S. Kim</i>	
Flexible Fibrous Piezo-Electric Sensor on Printed Silver Electrode	64
<i>H. Son, Y. Nam, W. Kim</i>	
Author Index	