

The Electrochemical Society

# Nanotechnology

at the 209<sup>th</sup> ECS Meeting

ECS Transactions Volume 2 No.20

May 7-12, 2006  
Denver, Colorado, USA

Printed from e-media with permission by:

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571  
[www.proceedings.com](http://www.proceedings.com)

ISBN: 978-1-56677-531-1

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



## Table of Contents

Preface

Electrochemically Induced Self-organized Nanostructures on Silicon for Realization of a Novel Nanoemitter Solar Cell Concept <i>K. Skorupska, M. Aggour, M. Kanis, M. Lublow, H. Jungblut and H. J. Lewerenz</i>	1
SAXS/DSC Study of Polymer Electrolyte for Zn Rechargeable Nanostructured Galvanic Cells <i>A. Turkovic, M. Pavlovic, P. Dubcek, M. Lucic-Lavcevic, B. Etlinger and S. Bernstorff</i>	11
Hot-wire Chemical Vapor Deposition of WO <sub>3</sub> and MoO <sub>3</sub> Nanoparticles and the Performance of Nanostructured WO <sub>3</sub> Electrochromic Films <i>A. Dillon, R. Deshpande, S. Lee, P. A. Parilla, K. Jones, H. Mahan, B. To and S. Mitra</i>	25
Effect of Organic Additives on Magnetic Properties of Electroplated Cu/Co Thin Films <i>K. Hong, J. Bae, W. Bang and J. Kim</i>	33
The Mechanical, Thermal and Electronic Properties of Nanoscale Materials by Statistical Moment and Ab Initio Molecular Dynamics Methods <i>K. M. Jindo, V. Hung and M. Menon</i>	39
Characterization and Luminescent Properties of YPO <sub>4</sub> :Eu <sup>3+</sup> Nanocrystals Prepared by Combustion Method <i>G. Sharma, S. Han, S. Khatkar and Y. Rhee</i>	59
Electrochemical Synthesis of Silver and Gold Nanoparticles <i>P. Cojocar, A. Vincenzo and P. Cavallotti</i>	67
A new Approach for the Preparation of High Quality CdTe Nanocrystals and their Optical Characterization <i>R. Osovsky, V. Kloper, J. Kolny-Olesiak, A. Sashchiuk and E. Lifshitz</i>	79
Synthesis and Durability of Improved Fuel Cell Catalysts <i>J. W. Van Zee, K. D. Beard and J. R. Monnier</i>	87

The Visible Photocatalysis Properties of Nitrogen-doped TiO <sub>2</sub> Thin Film <i>Y. Lu, C. Liu and C. Huang</i>	101
---	-----

Author Index	109
--------------	-----