

Nanostructured Materials and Nanotechnology—2012

**MATERIALS RESEARCH SOCIETY
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Nanostructured Materials and Nanotechnology—2012

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PREFACE

The emerging field of Nanotechnology has envisioned a great impact in basic and applied research in different areas, leading to the production of materials with novel properties and devices with new or improved performance. Studies on nanostructured materials and phenomena occurring at the nanoscale are fundamental elements for the development of nanotechnology. Findings in this field have opened new opportunities for active research in different areas such as biomedicine, catalysis, electronics, and cosmetics, among others.

With the continuous aim of providing a forum where the latest developments in nanoscience and nanotechnology can be presented and discussed, the XXI International Materials Research Congress held in Cancún, México in August 2012, hosted the Nanostructured Materials and Nanotechnology Symposium. As in previous editions of the congress, this symposium has served as a stage for the presentation of oral and poster contributions in the field, where we can learn of the advancement of Nanoscience and Nanotechnology considering experimental and theoretical approaches. Participants from different countries and a great amount of contributions from México have taken part of the development of this congress, covering a number of topics which include the synthesis of nanostructures and nanocomposites; optical, electrical and structural characterization techniques; modeling of structures and theoretical analysis of properties; carbon based nanostructures and different applications of nanomaterials as in catalysis, biomedicine and sensors development.

In this volume, we have compiled a number of interesting contributions which represent some of the many topics presented in the symposium. We thank the authors of the papers presented here and the important support of those who made possible the preparation of this volume.

Sincerely,

The Editors

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