

MRS SYMPOSIUM PROCEEDINGS

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Nanocarbon Materials and Devices

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**MATERIALS RESEARCH SOCIETY
SYMPOSIUM PROCEEDINGS VOLUME 1451**

Nanocarbon Materials and Devices

Symposium held April 9–13, 2012, San Francisco, California, U.S.A.

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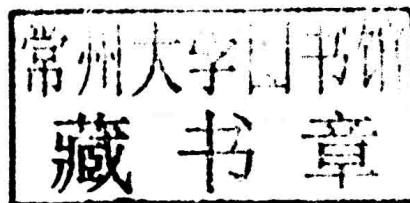
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Nanocarbon Materials and Devices

PREFACE

Symposium DD, “*De Novo* Carbon Nanomaterials” and Symposium EE, “New Functional Nanocarbon Devices” were held April 9–13 at the 2012 MRS Spring Meeting in San Francisco, California.

A variety of electronic, mechanical, optical, and chemical properties of carbon nanomaterials derive from its different allotropes including nanotubes, fullerenes, diamond, amorphous carbon, and graphene. Applications of such multiscale-engineered materials are diverse and range from nano-electronics to novel construction materials, and could have wide-ranging implications to facilitate new technological innovations at the interface of materials science, engineering, and biology. This symposium proceedings volume represents the recent advances in the manufacturing, synthesis, modeling of carbon nanomaterials with applications in novel devices. We hope that these papers convey the breadth of exciting advancements happening in the area of nanocarbon materials.

Markus J. Buehler
Yoshikazu Homma

September 2012



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*Invited Paper

Theory and Modeling

