
Carbon Nanostructures: From Fundamental Studies to Applications and Devices

Editors:

R. B. Weisman

S. V. Rotkin

H. Imahori

P. B. Atanassov

Sponsoring Divisions:



Nanocarbons



Physical and Analytical Electrochemistry



Published by

The Electrochemical Society

65 South Main Street, Building D
Pennington, NJ 08534-2839, USA

tel 609 737 1902

fax 609 737 2743

www.electrochem.org

ecstransactions™

Vol. 75, No. 25

Copyright 2017 by The Electrochemical Society.
All rights reserved.

This book has been registered with Copyright Clearance Center.
For further information, please contact the Copyright Clearance Center,
Salem, Massachusetts.

Published by:

The Electrochemical Society
65 South Main Street
Pennington, New Jersey 08534-2839, USA

Telephone 609.737.1902
Fax 609.737.2743
e-mail: ecs@electrochem.org
Web: www.electrochem.org

ISSN 1938-6737 (online)
ISSN 1938-5862 (print)
ISSN 2151-2051 (cd-rom)

ISBN 978-1-62332-416-2 (CD-ROM)
ISBN 978-1-60768-774-0 (PDF)

Printed in the United States of America.

Table of Contents

<i>Preface</i>	<i>iii</i>
Nanotubes via Vacuum-Supported Suction-System <i>M. Rastedt, D. Hoogestraat</i>	1
SWCNT-TiO ₂ Nanocomposite Photo-Anode for Improved Thermal Performances of Dye-Sensitized Solar Cells <i>R. Agarwal, S. Sahoo, C. Venkateswara Rao, R. S. Katiyar</i>	11
Thermal Conductivity of Ultrananocrystalline Diamond/Hydrogenated Amorphous Carbon Composite Films Prepared by Coaxial Arc Plasma Deposition <i>S. Takeichi, T. Nishiyama, M. Tabara, S. Kawawaki, M. Kohno, K. Takahashi, T. Yoshitake</i>	27
Comparison of Sonicated Versus Stirred Gold Nanoparticle Functionalized Carbon Nanotubes towards Hydrogen Evolution Reaction <i>C. Huff, T. Dushatinski, A. Aran Barzanji, N. Abdel-Fattah, K. Barzanji, T. M. Abdel-Fattah</i>	33
N-type Conduction in Ultrananocrystalline Diamond/Hydrogenated Amorphous Carbon Composite Films Prepared by Coaxial Arc Plasma Deposition Using Li ₃ PO ₄ -Blended Graphite Targets <i>H. Gima, I. Suzuki, T. Yoshitake</i>	37
Study on Defects in Ultrananocrystalline Diamond/Amorphous Carbon Composite Films Prepared by Physical Vapor Deposition <i>Y. Katamune, S. Al-Riyami, S. Takeichi, T. Yoshitake</i>	45

Enhanced Formation of Carbon Microcoils with Different-Sized Ni Catalyst by Different Injection Gas Sequence <i>G. H. Kang, S. H. Kim, S. Park</i>	53
Author Index	63