## Contents

1. **Study of Nanowire Growth Mechanisms: VLS and Si Assisted**  
   Hyun D. Park and S.M. Prokes

2. **One-Dimensional SiC Nanostructures: Synthesis and Properties**  
   Weimin Zhou, Yafei Zhang, Xiaoming Niu, and Guoquan Min

3. **Self-Organized Nanowire Formation of Si-Based Materials**  
   Hideo Kohno

4. **Controlled Formation of Individually Addressable Si Nanowire Arrays for Device Integration**  
   Ying-Lan Chang and Sung Soo Yi

5. **Physical Properties of GaN Nanotubes as Revealed by Computer Simulation**  
   Zhiguo Wang, Fei Gao, Xiaotao Zu, and William J. Weber

6. **Optical Anisotropy of Semiconductor Nanowires**  
   Jaime Gómez Rivas, Otto L. Muskens, Magnus T. Borgström, Silke L. Diedenhofen, and Erik P.A.M. Bakkers

7. **FDTD Spectroscopic Study of Metallic Nanostructures: On the Pertinent Employment of Tabulated Permittivities**  
   Thierry Laroche and Alexandre Vial

8. **Electromagnetic Nanowire Resonances for Field-Enhanced Spectroscopy**  
   Annemarie Pucci, Frank Neubrech, Javier Aizpurua, Thomas Cornelius, and Marc Lamy de la Chapelle

9. **Designing the Carbon Nanotube Field Effect Transistor Through Contact Barrier Engineering**  
   Byoung-Kye Kim, Hyo-Suk Kim, Hye-Mi So, Noejung Park, Suklyun Hong, Ju-Jin Kim, and Jeong-O Lee
## Contents

### 10 Low Dimensional Nanomaterials for Spintronics

Jinlong Yang and Hongjun Xiang

#### 11 One-Dimensional Phase-Change Nanomaterials for Information Storage Applications

Xuhui Sun, Bin Yu, Garrick Ng, and M. Meyyappan

### 12 Ordering of Self-Assembled Quantum Wires on InP(001) Surfaces

W. Lei, Y. H. Chen, and Z. G. Wang

### Index

323
One-Dimensional Nanostructures
Wang, Z.M. (Ed.)
2008, XII, 330 p., Hardcover
ISBN: 978-0-387-74131-4