Handbook of Research on Nanoelectronic Sensor Modeling and Applications

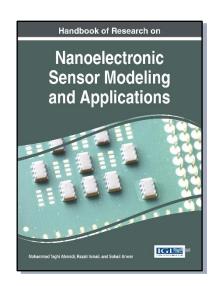
Part of the Advances in Computer and Electrical Engineering Book Series

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Description:

Nanoelectronics are a diverse set of materials and devices that are so small that quantum mechanics need to be applied to their function. The possibilities these devices present outweigh the difficulties associated with their development, as biosensors and similar devices have the potential to vastly improve our technological reach.

The Handbook of Research on Nanoelectronic Sensor Modeling and Applications begins with an introduction of the fundamental concepts of nanoelectronic sensors, then proceeds to outline in great detail the concepts of nanoscale device modeling and nanoquantum fundamentals. Recent advances in the field such as graphene technology are discussed at length in this comprehensive handbook.



Readers:

Ideal for electrical engineers, advanced engineering students, researchers, and academics.

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Topics Covered:

- Biosensors
- Chemiresistive Gas Sensors
- Gas Sensors
- Nanopores
- Neutron Detection
- Sensor Platform
- Silicene Nanoribbons
- Surface Plasmon Resonance
- Trilayer Graphene-based FET
- Wireless Nanosensor Networks

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