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## Advanced RFID Systems, Security, and Applications

Nemai Chandra Karmakar (Monash University, Australia)

As modern technologies continue to transform and impact our society, Radio Frequency Identification has emerged as one of the top areas of study to do just that. Using its wireless data capturing technique and incredible capabilities such as automatic identification, tracking, handling large amounts of data, and flexibility in operation, RFID aims to revamp the new millennium.

**Advanced RFID Systems, Security, and Applications** features a comprehensive collection of research provided by leading experts in both academia and industries. This leading reference source provides state-of-the-art development on RFID and its contents will be of the upmost use to students and researchers at all levels as well as technologists, planners, and policy makers. RFID technology is progressing into a new phase of development.

### Topics Covered:

- Back-Scatter Chipless RFID Tag
- Chipless RFID
- Microwave Transceiver
- Multi-Bit RFID Tags
- Multi-Resonator Circuits
- Polymer Tags
- Printing Techniques
- RFID Antennas
- RFID Reader
- Security Risks
- Security and Privacy in RFID System
- Spectral Signature



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It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.

**Nemai Chandra Karmakar** obtained his PhD in Information Technology and Electrical Engineering from the University of Queensland, St. Lucia, Australia, in 1999. He has about twenty years of teaching, design, and research experience in smart antennas, microwave active and passive circuits, and chipless RFIDs in both industry and academia in Australia, Canada, Singapore, and Bangladesh. He has published more than 180 refereed journal and conference papers and many book chapters. He holds two patents in the field. Currently, he is an Associate Professor in the Department of Electrical and Computer Systems Engineering at Monash University.



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## Section 1: Security

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Ray Biplob R. (Melbourne Institute of Technology, Australia)

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Azad A. K. M. (Monash University, Australia)

Karmakar Nemai Chandra (Monash University, Australia)

Karmakar Gour C. (Monash University, Australia)

Srinivasan Bala (Monash University, Australia)

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Darcy Peter (Institute of Integrated and Intelligent Systems, Griffith University, Australia)

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Sattar Abdul (Institute of Integrated and Intelligent Systems, Griffith University, Australia)

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