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# Handbook of Research on Progressive Trends in Wireless Communications and Networking

Handbook of Research on

Progressive Trends in Wireless Communications and Networking



Part of the Advances in Wireless Technologies and Telecommunication Book Series

## M.A. Matin

## (Institut Teknologi Brunei, Brunei Darussalam)

Wireless communications and networks are developing at an accelerated rate. This rapid development has provided individuals with new opportunities for ubiquitous communication accessibility as well as enabled real-time multimedia technologies and their supporting applications.

Wireless Communications and Networking: Theory and Practice brings together advanced research on diverse topics in wireless communications and networking, including the latest developments in broadband technologies, mobile communications, wireless sensor networks, network security, and cognitive radio networks. This book serves as a comprehensive reference for upper-level students, academicians, and industry professionals interested in uncovering recent advancements in wireless communications and networking.

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**Dr. Mohammad A. Matin** is currently working in the Department of Electrical and Electronic Engineering, at Institut Teknologi Brunei (ITB), Brunei Darussalam as an Associate Professor. Before joining ITB, he was with the Department of Electrical Engineering and Computer Science, North South University as an Associate Professor. He obtained his BSc. degree in Electrical and Electronic Engineering from BUET (Bangladesh), MSc degree in digital communication from Loughborough University, UK and PhD degree in wireless communication from Newcastle University, UK. He has taught several courses in communications, electronics and signal processing at KUET, Khulna University, and BRAC University during his career. Dr. Matin was a member of the visiting academic staff at the National University of Malaysia (UKM), University of Malaya (UM). He has published over 60 refereed journals and conference papers. He is the author of six academic books and seven book chapters. He has presented invited talks in Bangladesh, and Malaysia and has served as a member of the program committee for more than 50 international conferences like ICCSIT'09, IDCS'09, ICCS'04, ICCSN'10, ICCSN'11, etc. He also serves as a referee of a few renowned journals, keynote speaker and technical session chair of few international conferences like MIC-CPE 2008, ICCIT 2008, ICCMVT 2010, ICCIT 2010, IEEE GLOBECOM 2010, etc. He is currently serving as a member of editorial board of several international journals such as, *IET Wireless Sensor Systems (IET-WSS), Journal of Electrical and Computer Engineering (IECE), Hindawi Publishing Corporation, IJCTE*, etc. and Guest Editor of special issue of *IJCNIS*. Dr. Matin is a member of IEEE, IEEE Communication Society, Bangladesh Chapter (2010-2011). He has received a number of Prizes and Scholarships including the Best student prize (Loughborough University), Commonwealth Scholarship and Overseas Research Scholarship (ORS). He has been fortunate enough to work in WFS Project with Wireless Fibre Sytems Ltd, UK as an



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#### Chapter 2

Sistainable Growth for Cellular Wireless Networks Siyi Wang (University of South Australia, Australia) Weisi Guo (University of Warwick, UK)

#### Chapter 3

IP-Based Virtual Private Network Implementations in Future Cellular Networks Madhusanka Liyanage (University of Oulu, Finland) Mika Ylianttila (University of Oulu, Finland) Andrei Gurtov (Aalto University, Finland)

#### Chapter 4

Self-Organization Activities in LTE-Advanced Networks Ali Diab (Al-Baath University, Syria) Andreas Mitschele-Thiel (Ilmenau University of Technology, Germany)

#### Chapter 5

Mobility Prediction in Long Term Evolution (LTE) Femtocell Network Nurul 'Ain Amirrudin (Universiti Teknologi Malaysia, Malaysia) Sharifah H. S. Ariffin (Universiti Teknologi Malaysia, Malaysia) N. N. N. Abd Malik (Universiti Teknologi Malaysia, Malaysia) N. Effiyana Ghazali (Universiti Teknologi Malaysia, Malaysia)

#### Chapter 6

Software in Amateur "Packet Radio" Communications and Networking Miroslav Škorić (IEEE Section, Austria & National Institute of Amateur Radio, India)

#### Chapter 7

The Access of Things: Peter J. Hawrylak (University of Tulsa, USA) Steven Reed (University of Tulsa, USA) Matthew Butler (University of Tulsa, USA) John Hale (University of Tulsa, USA)

#### Chapter 8

A Study of Research Trends and Issues in Wireless Ad Hoc Networks Noman Islam (Technology Promotion International, Pakistan) Zubair A. Shaikh (National University of Computer and Emerging Sciences, Pakistan)

#### Chapter 9

Algorithms to Determine Stable Connected Dominating Sets for Mobile Ad Hoc Networks Natarajan Meghanathan (Jackson State University, USA)

#### Chapter 10

Incidence of the Improvement of the Interactions between MAC and Transport Protocols on MANET Performance Sofiane Hamrioui (UHA University, France & UMMTO University, Algeria, & USTHB University, Algeria) Pascal Lorenz (UHA University, France) Jaime Lloret (Universidad Politecnica de Valencia, Spain) Mustapha Lalam (UMMTO University, Algeria)

#### Chapter 11 A Novel Secure Routing Protocol in MANET

Ditipriya Sinha (CIEM, India) Uma Bhattacharya (Bengal Engineering and Science University, India) Rituparna Chaki (University of Calcutta, India)

#### Chapter 12

An Overview of Wireless Sensor Networks: Thomas D. Lagkas (International Faculty of The University of Sheffield, CITY College, Greece) George Eleftherakis (International Faculty of The University of Sheffield, CITY College, Greece)

#### Chapter 13

Clustering in Wireless Sensor Network: Basma M. Mohammad El-Basioni (Electronics Research Institute, Egypt) Sherine M. Abd El-Kader (Electronics Research Institute, Egypt) Hussein S. Eissa (Electronics Research Institute, Egypt) Mohammed M. Zahra (Al-Azhar University, Egypt)

#### Chapter 14

Performance Improvement of Clustered WSN by Using Multi-Tier Clustering Yogesh Kumar Meena (Hindustan Institute of Technology and Management, India) Aditya Trivedi (ABV-Indian Institute of Information Technology and Management, India)

#### Chapter 15

Transport Protocol Performance for Multi-Hop Transmission in Wireless Sensor Network (WSN) Farizah Yunus (Universiti Teknologi Malaysia, Malaysia) Sharifah H. S. Ariffin (Universiti Teknologi Malaysia, Malaysia) S. K. Syed-Yusof (Universiti Teknologi Malaysia, Malaysia) Nor-Syahidatul N. Ismail (Universiti Teknologi Malaysia, Malaysia) Norsheila Fisal (Universiti Teknologi Malaysia, Malaysia)

#### Chapter 16

Hybrid MAC Layer Design for MPEG-4 Video Transmission in WSN Nor-Syahidatul N. Ismail (Universiti Teknologi Malaysia, Malaysia) Sharifah H. S. Ariffin (Universiti Teknologi Malaysia, Malaysia) N. M. Abdul Latiff (Universiti Teknologi Malaysia, Malaysia) Farizah Yunus (Universiti Teknologi Malaysia, Malaysia) Norshiela Fisal (Universiti Teknologi Malaysia, Malaysia)

#### Chapter 17

Graph Intersection-Based Benchmarking Algorithm for Maximum Stability Data Gathering Trees in Wireless Mobile Sensor Networks Natarajan Meghanathan (Jackson State University, USA) Philip Mumford (Air Force Research Lab (RYWC), USA)

#### Chapter 18

Comparative Study of Adaptive Multiuser Detections in Hybrid Direct-Sequence Time-Hopping Ultrawide Bandwidth Systems Qasim Zeeshan Ahmed (King Abdullah University of Science and Technology (KAUST), Saudi Arabia) Lie-Liang Yang (University of Southampton, UK)

#### Chapter 19

A Survey of MAC Layer Protocols to Avoid Deafness in Wireless Networks Using Directional Antenna Rinki Sharma (M. S. Ramaiah School of Advanced Studies, India) Govind Kadambi (M. S. Ramaiah School of Advanced Studies, India) Yuri A. Vershinin (Coventry University, UK) K. N. Mukundan (Broadcom Communication Technologies, India)

#### Chapter 20 Metamaterial-Based Wearable Microstrip Patch Antennas J. G. Joshi (Government Polytechnic, India) Shyam S. Pattnaik (National Institute of Technical Teachers Training and Research, India)

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