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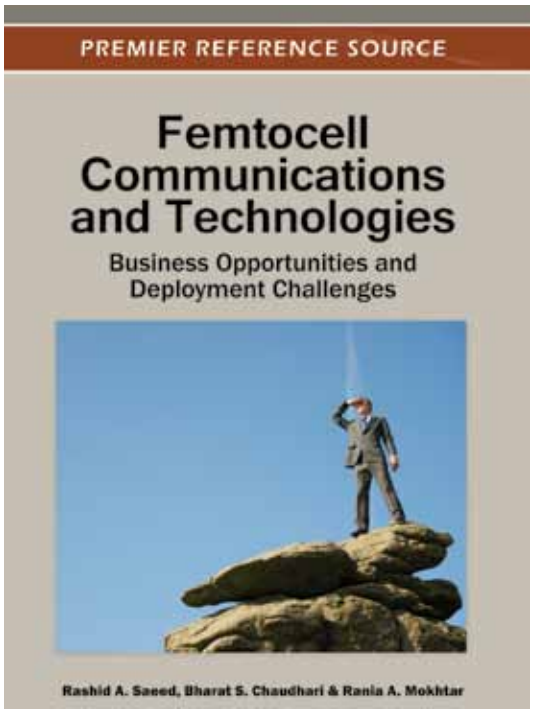
Released: January 2012

Femtocell Communications and Technologies: Business Opportunities and Deployment Challenges



ISBN: 9781466600928; © 2012; 295 pp.
Print: US $190.00 | Perpetual: US $285.00 | Print + Perpetual: US $380.00

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Femtocell is currently the most promising technology for supporting the increasing demand of data traffic in wireless networks. Femtocells provide an opportunity for enabling innovative mobile applications and services in home and office environments.

Femtocell Communications and Technologies: Business Opportunities and Deployment Challenges is an extensive and thoroughly revised version of a collection of review and research based chapters on femtocell technology. This work focuses on mobility and security in femtocell, cognitive femtocell, and standardization and deployment scenarios. Several crucial topics addressed in this book are interference mitigation techniques, network integration option, cognitive optimization, and economic incentives to install femtocells that may have a larger impact on their ultimate success. The book is optimized for use by graduate researchers who are familiar with the fundamentals of wireless communication and cellular concepts.

Topics Covered:

- Cognitive Femtocell Networks
- Femtocell Network Synchronization
- Femtocell Standardization
- Femtocells for Public Safety Communication
- Handover Procedures in Femtocells
- Interference Mitigation in Femtocell
- LTE Femtocells
- OFDMA Femtocells
- Security and Mobility Aspects of Femtocell Networks

Market: This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.

Rashid A. Saeed received his PhD in wireless communication from UPM in 2007. He served as senior researcher in MIMOS Berhad and then in Telekom Malaysia R&D where he was awarded the "platinum badge" as one of the best researchers. He is currently in electrical engineering, IIUM. He has published over 80 research papers, tutorials, talks, books, and book chapters on UWB, Femtocell, cognitive radio, and radio resources management. He also holds 2 U.S. patents and has filed 8 more. Saeed is a certified WiMAX engineer (RF and core network). He is also Six Sigma™, certified Black Belt based on DMAIC++ from Motorola University. He is a senior IEEE, IEM Malaysia, and Sigma Xi member. He is one of the contributors to the IEEE-WCET wireless certification, in its earlier stages.

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