

Miao, Guowang and Song, Guocong. *Energy and Spectrum Efficient Wireless Network Design*. Cambridge CB2 8BS, United Kingdom: Cambridge University Press, 2015, 368 pp. \$120.00 (Hardbound).

Covering the fundamental principles and state-of-the art cross-layer techniques, this practical guide provides the tools needed to design MIMO- and OFDM-based wireless networks that are both energy- and spectrum-efficient. Technologies are introduced in parallel for both centralized and distributed wireless networks to give you a clear understanding of the similarities and differences between their energy- and spectrum-efficient designs, which is essential for achieving the highest network energy saving without losing performance. Cutting-edge green cellular network design technologies, enabling you to master resource management for next-generation wireless networks based on MIMO and OFDM, and detailed real-world implementation examples are provided to guide your engineering design in both theory and practice. Whether you are a graduate student, a researcher, or a practitioner in industry, this is an invaluable guide.

Guowang Miao is an Assistant Professor in the Department of Communications Systems at KTH Royal Institute of Technology, Sweden. After receiving his Ph.D. in electrical and computer engineering from Georgia Institute of Technology, USA, in 2009, he spent two years working in industry as a Senior Standard Engineer at Samsung Telecom America. His current research interests are in the design and optimization of wireless communications and networking.

Guocong Song is currently the Principal Research Engineering at ShareThis, Palo Alto, California. He has been working in wireless communications and networks for a decade, since receiving his PH.D. in electrical and computer engineering from Georgia Institute of Technology. He received the 2010 IEEE Stephen O. Rice Prize for the best paper in the field of communication theory, and he is recently active in the area of data science and machine learning.