
Written by the pioneers of Flash-OFDM, arguably the first commercially developed OFDMA-based mobile broadband system in the world, this book teaches OFDMA from first principles, enabling readers to understand mobile broadband as a whole.

The book examines the key requirements for data-centric mobile; how OFDMA fits well with data networks; why mobile broadband needs to be IP-based; and how to bridge communications theory to real-world air interface design and make a good system choice between performance and complexity. It also explores the future of wireless technologies beyond conventional cellular architecture.

One of the key challenges faced by newcomers to this field is how to apply the wireless communications theory and principles to the real world and how to understand sophisticated commercial systems such as LTE. The authors use their first-hand experience to help graduate students, researchers, and professionals working on 4G to bridge the gap between theory and practice.

Junyi Li is Vice President of Engineering at Qualcomm, responsible for conceptualizing and developing next-generation wireless networking solutions. He was a key inventor of Flash-OFDM and a founding member of Flarion Technologies. He is a Fellow of the IEEE.

Xinzhou Wu is Principal Engineer/Manager at Qualcomm. He is well known for his research and innovation in the area of wireless communications and networking.

Rajiv Laroia is Senior Vice President of Engineering and CTO at Sonus Networks. He was the founder and CTO of Flarion Technologies and then Senior Vice President of Engineering at Qualcomm. He is widely recognized as a pioneer of OFDMA-based cellular technologies. He is a Fellow of the IEEE.