

June 2024

Communications:

An online reading list from the IET Library



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eJournals

eBooks

5g/6g



5G Backhaul and Fronthaul, Esa Markus Metsälä and Juha T. T. Salmelin. (2023). In-depth coverage of all technologies required for deployment and further evolution of 5G mobile network backhaul and fronthaul.



5G Radio Access Network Architecture : The Dark Side of 5G, Sasha Sirotkin. (2020). Explores foundational and advanced topics in RAN architecture and why a re-thinking of that architecture is necessary to support new 5G requirements.



5G/5G-Advanced : The New Generation Wireless Access Technology, Erik Dahlman et al. (2024). Includes requirements, spectrum aspects and the standardization timeline, all technology features of the first phase of NR are described in detail.



Mobile Communication Networks: 5G and a Vision of 6G, Mladen Božanić and Saurabh Sinha. (2021). Covers research topics such as communication via millimeter-waves, terahertz waves and visible light to enable faster speeds, as well as research into achieving other basic requirements of 6G networks.



LTE Advanced Pro : Towards the 5G Mobile Network, Frédéric Launay and André Perez. (2019). This book presents LTE evolution towards 5G mobile communication and the emergence of new requirements for MBB, MTC and LLC services.



5G Physical Layer Technologies, Mosa Ali Abu-Rgheff. (2019) This book presents readers with an in-depth discussion of the 5G technologies that will help move society beyond its current capabilities.



5G Technology : 3GPP Evolution to 5G-Advanced, Harri Holma et al. (2024). Presents the main components in 5G and describes the physical layer, radio protocols, and network performance indicators associated with them.



Future Fixed and Mobile Broadband Internet, Clouds, and IoT/AI, Toni Janevski. (2024). An all-in-one resource on the development of Internet and telecoms worldwide, based on various technological frameworks.



Security and Privacy Vision in 6G : A Comprehensive Guide, Pawani Porambage and Madhusanka Liyanage. (2023). Detailed coverage of topics including edge intelligence and cloudification, industrial automation, collaborative robots, and more.

Antennas



Antenna and Array Technologies for Future Wireless Ecosystems, Yingjie Jay Guo and Richard W. Ziolkowski. (2022). A timely and accessible resource on the latest antenna research driving new developments in the field.



Wearable Antennas and Electronics, Asimina Kiourti and John L. Volakis. (2022). This book presents a practical and comprehensive guide to game changing and state-of-the-art wearable antennas and RF electronics.

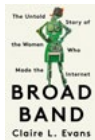


Low-Visibility Antennas for Communication Systems, Albert Sabban. (2016). This book offers valuable insight into emerging antenna technologies.



Enabling Technologies for Next Generation Wireless Communications, Mohammed Usman. (2021). This book includes the latest trends and developments toward next generation wireless communications.

History



[Broad Band : The Untold Story of the Women Who Made the Internet, Claire L. Evans. \(2018\).](#)

A breakthrough book on the women who pioneered the development of the internet and online technologies.

Radar and Satellite



[An Introduction to Passive Radar, Hugh D. Griffiths and Christopher J. Baker. \(2022\).](#)

Introduces the basic principles of passive radar technology and provides a comprehensive overview of the recent developments and advances in this field.



[Deep Learning for Radar and Communications Automatic Target Recognition, Uttam K. Majumder. \(2020\).](#)

Presents a comprehensive illustration of modern Artificial Intelligence / Machine Learning technology for radio frequency data exploitation.



[Radar Networks, Hai Deng and Zhe Geng. \(2020\).](#)

Reader-friendly and self-contained, this book provides a comprehensive overview of the latest radar networking technologies.



[Satellite Communication Engineering, Michael Olorunfunmi Kolawole. \(2014\).](#)

Presents the fundamentals of information communications systems in a simple and succinct way.

eJournals

[Wireless Communications and Mobile Computing](#) (Covers computer networks, networking, and wireless communication.)

[Wireless Networks](#) (Includes articles about research, experience and management issues of data networking, telecommunication, and integrated networks.)

[Journal of High Speed Networks](#) (Papers on original research, survey papers on topics of current interest, technical notes and more.)

[Mobile Networks and Applications](#) (Includes information about the convergence of mobility, computing and information organization, access and management.)

[Telecommunication Systems](#) (Covers all aspects of modeling, analysis, design and management of telecommunication systems.)

[IUP Journal of Telecommunications](#) (Topics covered include broadband communication systems, wireless communication networks, optical and satellite communications, digital signal and image processing.)

[International Journal of Communication Systems](#) (Provides a forum for research and development in the fast-growing area of communication networks.)