

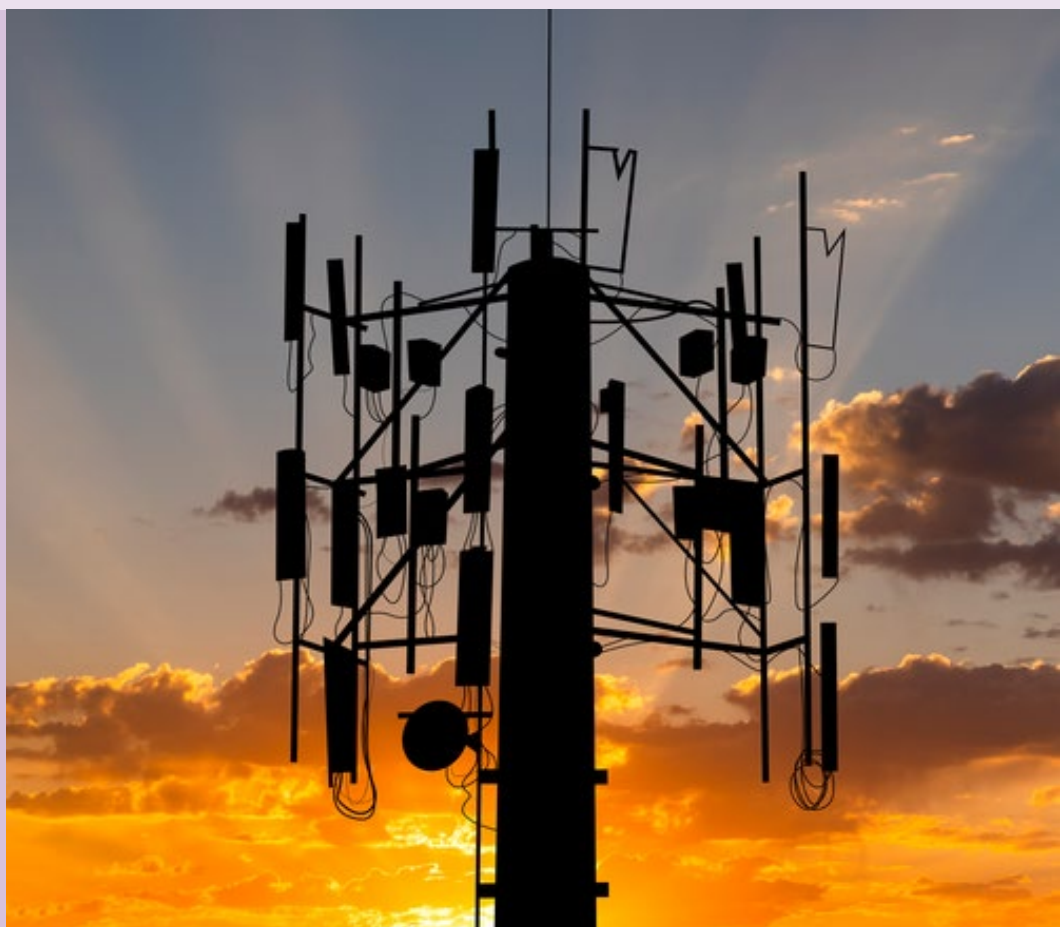
June 2025

Communications:

An online reading list from the IET Library



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eBooks

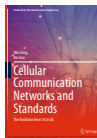
– [5G/6G/telecommunications networks](#)

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eJournals

eBooks

5G/6G/telecommunications networks



[Cellular Communication Networks and Standards: The Evolution From 1G to 6G, Wei Jiang and Bin Han. \(2024\).](#) This textbook provides a thorough historical and technical overview of mobile network evolution from 1G to 6G.



[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.



[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.



[The Changing World of Mobile Communications: 5G, 6G and the Future of Digital Services, Petri Ahokangas and Annabeth Aagaard. \(2024\).](#) This book offers a multidisciplinary examination of 5G and 6G technologies and explores their societal impact.



[5G/5G-Advanced, Wi-Fi 6/7, and Bluetooth 5/6 : A Primer on Smartphone Wireless Technologies, Douglas H Morais. \(2025\).](#) Offers an accessible explanation of how smartphones utilize 5G/5G-Advanced, Wi-Fi 6/7, and Bluetooth 5/6 technologies.



[Fundamentals of 6G Communications and Networking, Xingqin Lin et al. \(2024\).](#) This book provides a comprehensive overview of 6G technologies, exploring its vision, key technical enablers, and the societal needs driving its development.



[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.



[6G-Enabled Technologies for Next Generation: Fundamentals, Applications, Analysis and Challenges, Amit Kumar Tyagi et al. \(2024\).](#) This book offers an in-depth exploration of 6G technologies, addressing technical foundations, applications, security issues, and challenges.



[5G Wireless Network Security and Privacy, DongFeng Fang et al. \(2024\).](#) This book provides an expert overview of 5G network security and privacy, focusing on solutions, vulnerabilities, and advancements in securing 5G wireless networks across various applications.



[Hybrid Communication Systems for Future 6G and Beyond : Visible Light Communication & Radio Over Fiber Technology, Rao Kashif. \(2025\).](#) This book explores hybrid communication systems using VLC, RoF technology, and auto channel switching to improve wireless communication efficiency and support 6G and beyond.



[Multiple Access Systems for Next-generation Communications : Theory and Practice of Multiple Access Systems, Kyung Sup Kwak. \(2025\).](#) This book explores traditional and emerging multiple access systems, with a focus on NOMA and RSMA, crucial for enhancing 5G networks and advancing 6G multiple access technologies.



[Foundations of Semantic Communication Networks, Walid Saad et al. \(2025\).](#) Provides a comprehensive overview of building end-to-end semantic communication systems, covering theoretical foundations, AI techniques, and real-world applications for the future of 6G.

Antennas

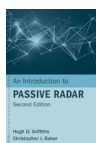


Antenna and Array Technologies for Future Wireless Ecosystems, Yingjie Jay Guo and Richard W. Ziolkowski. (2022). A timely and accessible resource on the latest antenna research driving new developments in the field.



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.

Radar and Satellite

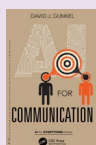


An Introduction to Passive Radar, Hugh D. Griffiths, and Christopher J. Baker. (2022). Introduces the basic principles of passive radar technology and provides a comprehensive overview of the recent developments and advances in this field



Deep Learning for Radar and Communications Automatic Target Recognition, Uttam K. Majumder et al. (2020). Presents a comprehensive illustration of modern Artificial Intelligence / Machine Learning technology for radio frequency data exploitation.

AI



AI for Communication, David J. Gunkel. (2025). Explores the role of artificial intelligence in communication, covering advancements like machine translation, natural language processing, and social robotics, and examines how AI is transforming human communication.



Future of Networks : Modern Communication Infrastructure, Dhiman Deb Chowdhury. (2025). This book explores the trends and advancements shaping the future of communication infrastructure, focusing on intelligent networks, AI, and cloud networking.



6G and Next-Generation Internet: Under Blockchain Web3 Economy, Abdeljalil Beniiche. (2024). This book explores the integration of blockchain, AI, and robotics within the 6G era, focusing on human-centred advancements and the future of mobile technology.

eJournals

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

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.)

Wireless Personal Communications (Includes information about theoretical, engineering, and experimental aspects of radio communications, voice, data, images, and multimedia.)

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

International Journal of Antennas & Propagation (Focuses on the physical link from antenna to antenna including antenna hardware and associated electronics.)