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IET Library Reading List:
Communications

These ebooks and ejournals, available via the IET Virtual Library, have been selected to provide an introduction to the topic of communications. They cover topics such as radio, 5G and wireless communications.

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Ebooks (provided by EBSCO)

Optical and Wireless Convergence for 5G Networks, Abdelgader M. Abdalla et al (2020). This book aims to provide an inclusive survey of 5G optical-wireless requirements, architecture developments, and technological solutions.

Public Safety Networks From LTE to 5G, Abdulrahman Yarali (2020). This book provides an overview of technologies for Public Safety Networks (PSNs).

5G Technology : 3GPP New Radio, Harri Holma et al (2020). A comprehensive guide to 5G technology, applications and potential for the future 5G brings new technology solutions to the 5G mobile networks including new spectrum options, new antenna structures, new physical layer and protocols designs and new network architectures.

Design and Optimization for 5G Wireless Communications, Haesik Kim (2020). This book offers a technical background to the design and optimization of wireless communication systems, covering optimization algorithms for wireless and 5G communication systems design.

5G Verticals : Customizing Applications, Technologies and Deployment Techniques, Rath Vannithamby & Anthony Soong (2020). A comprehensive text to an understanding the next generation mobile broadband and wireless Internet of Things (IoT) technologies 5G Verticals brings together in one comprehensive volume a group of visionaries and technical experts from academia and industry.

Software Networks : Virtualization, SDN, 5G, and Security, Guy Pujolle (2020). For this second edition, the author addresses in five new chapters the importance of open source software for networks, mobile edge computing, fog networking, tactile internet – a network environment allowing remote access, and security – the use of Cloud of security, secure elements and the emergence of the blockchain.

5G Physical Layer Technologies, Mosa Ali Abu-Rgheff (2019). Topics covered include: the evolution of wireless communications; full duplex communications and full dimension MIMO technologies; network virtualization and wireless energy harvesting; Internet of Things and smart cities; and millimeter wave massive MIMO technology.

Low-Visibility Antennas for Communication Systems, Albert Sabban (2016). Low-visibility antennas have many attractive features, such as being low-profile, flexible, lightweight, small-volume, and low-cost. Low-Visibility Antennas for Communication Systems provides explicit guidelines for the development of these antennas.

Broadband Matching: Theory And Implementations (3rd Edition), Wai-kai Chen (2015). The third edition presents a unified, up-to-date and detailed account of broadband matching theory and its applications to the design of broadband matching networks and amplifiers.

Ejournals (provided by EBSCO)

Journal of Information and Communication Technology (Covers all aspects of information and communication technology, its theories and applications.)

Advances in Radio Science (Collections of short, self-contained communications including papers presented at scientific meetings or articles on a well-defined topic compiled by individual editors or organizations.)

Wireless Communications and Mobile Computing (Covers a broad range of topics within the fields of mobile and wireless technology).

Wireless Networks (Covers research and practical guidance on the topic of wireless networks.)

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

2.5G-5G (Covers wireless communication, telecommunications industry and next generation networks.)

IUP Journal of Telecommunications (Topics covered include broadband communication systems, wireless communication networks, optical & satellite communications, and target detection & tracking.)

Security and Communication Networks (Covers research on security and cryptographic mechanisms applied to all types of information and communication networks, including wired, wireless and optical transmission platforms.)

Telecommunications Reports (Provides thorough coverage and in-depth analysis of the communications business.)

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

Further resources from the IET

- **Communities and Networks**
- **Factfiles**
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- **Technical Webinars**

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