



Li-Fi for Next Generation Wireless Communication: Technical Insights and Innovations ☒

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Source Title: RFID, Microwave Circuit, and Wireless Power Transfer Enabling 5/6G Communication (/gateway/book/352522)

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Pages: 22

ISBN13: 9798369387993 ISBN13 Softcover: 9798369388006 EISBN13: 9798369388013

DOI: 10.4018/979-8-3693-8799-3.ch014

Cite Chapter ▼

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Abstract

Li-Fi technology uses visible light communication for data transmission and has the potential to transform wireless communication. The benefits offered by this technology have the potential to transform wireless communication, many industries, and improve communication in both indoor and outdoor environment. It provides significantly faster speeds and has better security standards compared to Wi-Fi. In this chapter, the authors discuss significant developments in Li-Fi, such as compatibility with 5G networks, support of IoT, security and privacy concerns. They have also presented an in-depth analysis of Li-Fi, including its potential benefits and drawbacks, as well as its range limitations, interoperability issues, and cost implications. This study aims to provide a comprehensive overview and contribute to the understanding and advancement of the technology by examining the