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Sommario/riassunto

The sixth generation of wireless communication (6G), succeeding 5G cellular technology, opens up several possibilities in terms of technology and its offered services. 6G is expected to allow usage of available higher frequency spectrums to cater to increased capacity, throughput, and low latency (<1 s). 6G will witness the unification of various technologies, such as artificial intelligence (AI), machine learning (ML), augmented/virtual reality (AR/VR), etc., to provide an immersive user experience. It is foreseen as the accelerator of transformation and innovation globally. To make this book a fundamental resource, we have invited world-renowned experts in 6G from the industry and academia to pen down their ideas on different aspects of 6G research. The chapters in this book cover a broader scope and various related and unrelated verticals. Specifically, this book covers the following topics: 6G use cases, requirements, and enabling technologies new spectrums and their challenges for 6G privacy preservation in 6G networks aerial infrastructure for 6G networks economic challenges associated with 6G wireless networks. The encompassing intent of this book is to explore the evolution from current 5G networks towards the future 6G networks from a service, air interface, and network perspective, thereby laying out a vision for 6G networks.