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	Nota di contenuto	Content -- PREFACE -- Chapter 1: The "transitioning" from 5G to 6G -- Andrea Detti: First Glance on use-cases and requirements of 6G systems -- Michele Nitti: Internet of Things Technology -- Andrea Detti: 5G technology and its evolution towards 6G -- Chapter 2: Principles of 6G Wireless Networks -- Qinghe Du, Houbing Song, Xiao Tang, Zixiao Zhao, Chunge Xu, Yuquan Xiao, Zhongmin Ma: Principles of 6G Wireless Networks -- Chapter 3: 6G Wireless Technologies -- Carmen D'Andrea: Cell-free massive MIMO -- Josep Miquel Jornet, Arjun Singh and Priyangshu Sen: Terahertz Communications for 6G Networks: How Far Are We? -- Zabih Ghassemlooy1, Stanislav Zvanovec2, Shivani Rajendra Teli2, and Asghar Gholami: Free Space Optical (FSO) in 6G -- Chapter 4: 6G Wireless Architectures -- Giacomo Oliveri, Francesco Zardi, Arianna Benoni, Marco Salucci, and Andrea Massa: EM Static and Reconfigurable Passive Skins within the Smart

ElectroMagnetic Environment Paradigm -- Ernestina Cianca: LEO Constellations -- Debashisha Mishra, Evgenii Vinogradov, and Enrico Natalizio: On the role of Non-terrestrial Networks in 6G -- Chapter 5: Artificial Intelligence and Machine Learning in 6G -- Shashwat Mishra, Muhammad Karam S., Chung Shue Chen, and Luca Rose: Artificial Intelligence and Machine Learning in 6G -- Chapter 6: 6G Cyber Security -- Valeria Loscri: Cyber Security in 6G Networks -- Chapter 7: 6G EM Exposure -- Jack Rowley: 6G EM Exposure.

| Sommario/riassunto | The proposed book will provide a comprehensive picture of the journey from 5G networks towards 6G. Different aspects, ranging from theoretical foundations to existing platforms and technologies will be presented and analysed, by critically highlighting the real opportunities and the challenges. The first chapters are to describe the general "transitioning" aspects from 5G to 6G. After that, an overview on the different technologies is provided, to present at the end the security aspects, the new applications and an analysis of the electromagnetic exposure, above all in terms of comparative in respect of 5G. Security and Application will be straightforward better explained after the big picture on the different technologies is detailed in the previous chapters. 6G is an emerging complex paradigm, with some important new concepts, that would enable an extremely high reliability and low latency. The main purpose is to provide the reader a thorough vision of the enabling technologies, their potential and what is still needed to fill the gap in terms of sustainability and coexistence of the different technologies. Since different emerging technologies will be considered and detailed in the book, it will be interesting for the reader to infer the major opportunities of each and the main limitations. This kind of information will mainly boost the potential interactions of different technologies to provide a more reliable system. |