1. Record Nr. UNINA9910878987803321

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Titolo	Handbook of Optical Wireless Communication / / by Xizheng Ke
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	9789819715220 9789819715213
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (1881 pages)
Disciplina	621.3827
Soggetti	Telecommunication Optical communications Microwaves, RF Engineering and Optical Communications Optical Communications
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Optical Communication: From Wired to Wireless -- 2. Wireless-Optical Communication -- 3. Research Progress on Satellite Laser-Communication Networks -- 4. Pulse-Like Position-Modulation Technology -- 5. Communication Lasers and Their Modulation Technology -- 6. Research Progress on Passive Modulation in Free-Space Optical Communication -- 7. Detectors and Their Noise Models -- 8. Adaptive-Threshold Detection Technology -- 9. Four-Quadrant Detector Light-Spot Detection Principle -- 10. Optical-Antenna Technologies -- 11. Research progress on one-to-many transmitting antennas for optical-wireless communication -- 12. Acquisition, Pointing, and Tracking -- 13. Spatial optical-fiber coupling technology -- 14. Atmospheric-turbulence models -- 15. Propagation of Partially Coherent Beams in Atmospheric Turbulence -- 16. Progress in Research on Channel Equalization in Wireless-Optical Communication -- 17. Error-correction coding -- 18. Wireless-Optical MIMO Technology and Space–Time Coding -- 19. Space–Time Coding -- 20. Experimental study on wireless-optical coherent communication -- 21. Adaptive-Optics Technology -- 22. Mode Methods in Adaptive Optics -- 23. Optical Phase-Locked Loops -- 24. Deformable Mirrors and Their Control Algorithms -- 25. Liquid-Crystal Spatial Light Modulators

and Their Applications -- 26. Mixers -- 27. Principles and Development of Optical Amplifiers -- 28. Key Technologies in Underwater Wireless-Optical Communication -- 29. Principles and Research Progress on LEDs -- 30. Indoor Visible-Light Communication and Its Heterogeneous Fusion Networks -- 31. Indoor Visible-Light Positioning Technology -- 32. Research Progress on Visible-Light Communication Uplinks -- 33. Research Progress on Indoor Visible Light-Source Layouts -- 34. Ultraviolet Non-Line-of-Sight Communication -- 35. Research Progress on OWC/RF Hybrid Communication Systems -- 36. Orbital-Angular-Momentum Beam Techniques -- 37. Research Progress on Aircraft-Relay Wireless-Optical Communications -- 38. Research Progresson Optical-Wireless Communication in Industrial Internets.

Sommario/riassunto

The book focuses on optical wireless communication systems. It summarises the author's work on optical wireless communication during the implementation of relevant scientific research plans. The main contents include the research status and progress of optical wireless communication, including the author's own work in this field and the research progress of domestic and foreign scholars in related fields. The key technologies, key components, modulation and coding methods, influencing factors of coherent optical communication, underwater optical communication, visible light communication, and orbital angular momentum involved in wireless optical communication are analysed, and their research progress and development trends are presented. It is particularly suitable for readers interested in the field of wireless optical communications. This book can benefit researchers, engineers and graduate students in the field of telecommunications. Suitable for engineering and technical personnel involved in optical communications, university teachers, postgraduate students and advanced undergraduates.