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Autore	Ke Xizheng
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Nota di contenuto	1 Wireless optical coherence detection: An overview -- 2 Coherent optical communication -- 3 Space optical-fiber coupling and beam control -- 4 Beam polarization control technology -- 5 Double-balanced Detection -- 6 Wavefront correction system -- 7 Adaptive optical correction without wavefront detection -- 8 LC-SLM-R Spatial Coherent Optical Communication Wavefront Correction Technology -- 9 Impact of beam pattern on performance of coherent beam detection systems.
Sommario/riassunto	This book presents the key technologies of coherent optical wireless communication, covers topics such as beam coupling, signal optical polarization control and distorted wavefront correction. It discusses the principle of coherent optical communication and heterodyne detection conditions. In this book, the array coupling receiving technology and large aperture coupling technology are introduced to realize the spatial optical fiber coupling; simulated annealing algorithm, particle swarm optimization algorithm and SPO algorithm are used to control the polarization state of the signal beam; and the correction of distorted

wavefront of the signal beam by adaptive optics technology and wavefront sensorless adaptive optics technology are analyzed, and the influence of beam mode on coherent detection performance is elaborated. Both theoretical deduction and experimental results are included in this book, which can help readers further understand the theoretical knowledge.
