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Sommario/riassunto	This graduate textbook unifies the presentation of new and well-established basic theory and experiments for the quantum properties of light. Quantum optics has become a major field of theoretical and experimental physics. Many of the key tests of unique quantum phenomena, such as entanglement, have been demonstrated in quantum optics experiments. It forms the basis of many quantum technologies from sensing to computation. This completely revised third edition enables graduate students to acquire a deep knowledge of contemporary quantum optics and its relevance for quantum

technology. New experimental developments are discussed, alongside the relevant theory. New chapters on quantum control, quantum opto-mechanics, quantum communication and computation have been added. Numerous exercises help readers test their understanding and provide practice in quantitative problem solving.