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Sommario/riassunto	The role of nanotechnologies in personalized medicine is rising remarkably in the last decade because of the ability of these new sensing systems to diagnose diseases from early stages and the availability of continuous screenings to characterize the efficiency of drugs and therapies for each single patient. Recent technological advancements are allowing the development of biosensors in low-cost and user-friendly platforms, thereby overcoming the last obstacle for these systems, represented by limiting costs and low yield, until now. In this context, photonic biosensors represent one of the main emerging sensing modalities because of their ability to combine high sensitivity and selectivity together with real-time operation, integrability, and compatibility with microfluidics and electric circuitry for the readout, which is fundamental for the realization of lab-on-chip systems. This book, “Photonic Biosensors: Detection, Analysis and Medical Diagnostics”, has been published thanks to the contributions of the authors and collects research articles, the content of which is expected to assume an important role in the outbreak of biosensors in the biomedical field, considering the variety of the topics that it covers, from the improvement of sensors’ performance to new, emerging applications and strategies for on-chip integrability, aiming at providing a general overview for readers on the current advancements in the biosensing field.