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## Sommario/riassunto

This book, edited by Jiang Wu and Hao Xu, explores the latest advancements in optical imaging and sensing technologies. It covers a range of topics, including the development and application of materials such as silicon, graphene, perovskites, and 2D materials in optoelectronic devices. The book also addresses the integration of these materials with existing technologies, challenges in device fabrication, and innovations in enhancing device performance. It discusses the role of optical sensors, lasers, and other devices in applications like healthcare and telecommunications, emphasizing the importance of high detectivity and low noise in infrared regions. The text is intended for researchers, engineers, and professionals interested in the fields of optical imaging and sensing.

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