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Altri autori (Persone)	FangYuxi GengWenpu BaoChangjing
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Sommario/riassunto	This book highlights the physics, research advances, and applications of integrated optical supercontinuum generation (SCG). The authors provide a roadmap of SCG in various nonlinear media and its historical perspective. The commonly used materials of integrated platforms are discussed, which could provide the references for platform choices in various nonlinear applications. The book introduces the fundamental light-guiding mechanisms, explains the typical dispersion engineering

approaches, and summarizes various types of integrated waveguides. The authors present an overview of the physical mechanisms and fundamental equations involved in the SCG. They conduct an in-depth discussion on different types of nonlinear Schrödinger equation (NLSE) to adapt to various circumstances. Through these equations, readers can numerically model the SCG processes. In particular, the book reviews recent representative SCG reports in the integrated waveguides. Moreover, because of the close relationship between the frequency combs and SC, the book discusses some basic concepts of a frequency comb. Finally, the authors raise future prospects on SCG in the integrated waveguides. The book is a comprehensive reference for graduate students and researchers interested in the subject and a handy manual for professionals engaged in related work.

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