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Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Preface -- Silicon wire waveguiding system: Fundamental characteristics and applications -- Polarization issues in silicon waveguide components and their control using cladding stress -- Photonics and electronics integration -- Germanium-on-silicon light emitters -- Grating couplers and polarization diversity in silicon photonics -- Erbium-doped nanocrystalline silicon for light amplification -- Efficient silicon MOSLEDs -- Germanium as a material to enable silicon photonics -- Ultralow power silicon microdisk modulators for on-chip optical interconnects -- Hybrid silicon photonic integrated circuits for optical networking -- Silicon photonics front-end integration in high-speed SiGe BiCMOS.
Sommario/riassunto	This book is volume II of a series of books on silicon photonics. It gives a fascinating picture of the state-of-the-art in silicon photonics from a component perspective. It presents a perspective on what can be expected in the near future. It is formed from a selected number of reviews authored by world leaders in the field, and is written from both academic and industrial viewpoints. An in-depth discussion of the route towards fully integrated silicon photonics is presented. This book will be useful not only to physicists, chemists, materials scientists, and

engineers but also to graduate students who are interested in the fields of micro- and nanophotonics and optoelectronics.
