Record Nr. UNINA9910817255903321 High-speed photonics interconnects / / edited by Lukas Chrostowski, **Titolo** Krzysztof Iniewski Pubbl/distr/stampa Boca Raton, Fla.:,: Taylor & Francis,, 2013 **ISBN** 1-351-83226-3 1-315-21637-X 1-4665-1604-6 Edizione [1st edition] Descrizione fisica 1 online resource (217 p.) Collana Devices, Circuits, and Systems Classificazione COM043000TEC008010TEC019000 Altri autori (Persone) ChrostowskiLukas IniewskiKrzysztof Disciplina 621.36/5 Soggetti Interconnects (Integrated circuit technology) Optical interconnects **Photonics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Nota di contenuto Front Cover; Contents; Preface; Editors; Contributors; Chapter 1 -Energy-Efficient Photonic Interconnects for Computing Platforms: Chapter 2 - Low-Loss, High-Performance Chip-to-Chip Electrical Connectivity Using Air-Clad Copper Interconnects; Chapter 3 - Silicon Photonic Bragg Gratings: Chapter 4 - Lasers for Optical Interconnects: Chapter 5 - Vertical-Cavity Surface-Emitting Lasers for Interconnects; Chapter 6 - High-Speed Photodiodes and Laser Power Converters for the Applications of Green Optical Interconnect; Chapter 7 - Quantum-Dot Nanophotonics for Photodetection Chapter 8 - Rolled-Up Semiconductor Tube Optical CavitiesBack Cover The book is designed to achieve two goals. It assembles the latest Sommario/riassunto research in the field of photonics interconnects technology and exposes the reader to the myriad applications that this technology has enabled. The book is mean for advanced graduate researchers, as well as for academicians and professional researchers. Composed of work from experts at leading academic institutions and semiconductor companies, such as Intel, PMC-Sierra, and Vittesse, this resource will have a widespread appeal, as it requires minimal math and contains