Record Nr. UNINA9910346777303321 Autore Korn Dietmar Titolo Silicon-Organic Hybrid Platform for Photonic Integrated Circuits KIT Scientific Publishing, 2015 Pubbl/distr/stampa 1000048792 **ISBN** Descrizione fisica 1 online resource (XVIII, 177 S, p.) Karlsruhe Series in Photonics and Communications / Karlsruhe Institute Collana of Technology, Institute of Photonics and Quantum Electronics (IPQ) Technology: general issues Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto We study the potential of the silicon-organic hybrid (SOH) platform for integrated optics. The unique properties of selected organic materials are added to silicon devices made with CMOS-based processes. We investigate the feasibility of this approach by making prototypes of key components in form of photonic integrated circuits: SOH lasers and SOH modulators are designed, fabricated, post-processed, and characterized. Application scenarios are identified.