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Sommario/riassunto

Silicon photonics is currently a very active and progressive area of research, as silicon optical circuits have emerged as the replacement technology for copper-based circuits in communication and broadband networks. The demand for ever improving communications and computing performance continues, and this in turn means that photonic circuits are finding ever increasing application areas. This text provides an important and timely overview of the 'hot topics' in the field, covering the various aspects of the technology that form the research area of silicon photonics. With contributions fro