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Sommario/riassunto	Semiconductor components based on silicon have been used in a wide range of applications for some time now. These elemental semiconductors are now well researched and technologically well developed. In the meantime the focus has switched to a new group of materials: ceramic semiconductors based on nitrides are currently the subject of research due to their optical and electronic characteristics. They open up new industrial possibilities in the field of photosensors, as light sources or as electronic components. This collection of review articles provides a systematic and in-depth overview o