1. Record Nr. UNINA9910346685703321 Autore Diamanti Maria Vittoria **Titolo Novel Photoactive Materials** MDPI - Multidisciplinary Digital Publishing Institute, 2019 Pubbl/distr/stampa **ISBN** 3-03897-651-2 Descrizione fisica 1 electronic resource (166 p.) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Photoactivity represents the ability of a material, generally speaking a semiconductor, to become active when interacting with light. It can be declined in many ways, and several functionalities arising from this behavior of materials can be exploited, all leading to positive repercussions on our environment. There are several classes of effects of photoactivity, all of which have been deeply investigated in the last few decades, allowing to develop more and more efficient materials and devices. All of them share a common point, that is, the interaction of a material with light, although many different materials are taken into account depending on the effect desired—from elemental semiconductors like silicon, to more complex compounds like CdTe or GaAs, to metal oxides like TiO2 and ZnO. Given the broadness of the field, a huge number of works fall within this topic, and new areas of discovery are constantly explored. The special issue "Novel Photoactive Materials" has been proposed as a means to present recent developments in the field, and for this reason the articles included touch different aspects of photoactivity, from photocatalysis to photovoltaics to light emitting materials.