Record Nr. UNINA9910317698203321 Autore Wenbin Cao Titolo Semiconductor photocatalysis: materials, mechanisms and applications // edited by Wenbin Cao Pubbl/distr/stampa IntechOpen, 2016 Rijeka, Croatia:,: IntechOpen,, [2016] ©2016 **ISBN** 953-51-4189-9 953-51-2483-8 Edizione [1st ed.] Descrizione fisica 1 online resource (676 pages): illustrations Disciplina 541.395 **Photocatalysis** Soggetti Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Photocatalysis is a hot topic because it is an environmentally friendly Sommario/riassunto approach toward the conversion of light energy into chemical energy at mild reaction environments. Also, it is well applied in several major areas such as water splitting, bacterial inactivation, and pollutants elimination, which is a possible solution to energy shortage and environmental issues. The fundamental knowledge and the frontier research progress in typical photocatalytic materials, such as TiO2based and non-TiO2-based photocatalysts, are included in this book.

Methods to improve the photocatalytic efficiency and to provide a hint

for the rational design of the new photocatalysts are covered.