1. Record Nr. UNINA9910367564703321 Autore Comparelli Roberto Titolo Application of Photoactive Nanomaterials in Degradation of Pollutants / Roberto Comparelli Pubbl/distr/stampa MDPI - Multidisciplinary Digital Publishing Institute, 2019 Basel, Switzerland:,: MDPI,, 2019 **ISBN** 9783039213825 3039213822 Descrizione fisica 1 electronic resource (134 p.) Soggetti Chemistry Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto Photoactive nanomaterials have been receiving increasing attention due to their potential application in the light-driven degradation of water and gas-phase pollutants. However, to exploit the great potential of photoactive materials and access their properties requires fine-tuning of their size/shape-dependent chemical-physical properties, and on the ability to integrate them in photoreactors or to deposit them onto large surfaces. Therefore, the synthetic approach as well as postsynthesis manipulation could strongly affect the final photocatalytic properties of the nanomaterial. The aim of the present Special Issue is to report on the most recent progress towards the application of photoactive nanomaterials and nanomaterial-based coatings in pollutant degradation, paying particular attention to cases close to real application: scalable synthetic approaches to nanocatalysts, preparation of nanocatalyst-based coatings, degradation of real pollutants and

bacterial inactivation, and application in building materials.