1.	Record Nr. Autore Titolo Pubbl/distr/stampa Descrizione fisica	UNINA9910576877403321 Lombraña José Ignacio Environmental Friendly Catalysts for Energy and Pollution Control Applications MDPI - Multidisciplinary Digital Publishing Institute, 2022 1 electronic resource (216 p.)
	Soggetti	Technology: general issues Environmental science, engineering & technology
	Lingua di pubblicazione Formato Livello bibliografico	Inglese Materiale a stampa Monografia
	Sommario/riassunto	Catalysts are widely used in a great variety of technologies, providing remarkable efficiency in order to address sustainable energy production, climate change challenges, and to reduce industrial emissions. In the framework of the Environmental Catalysis section promoted by the Catalysts Editorial Office, this Special Issue, entitled "Environmental Friendly Catalysts for Energy and Pollution Control Applications", comprises novel studies representing the state-of-the-art research for efficient energy generation and industrial emission control based on new environmentally friendly catalyst materials (EFCs). In particular, in this Special Issue (SI), different kinds of catalysts are presented for catalytic solutions, including the reduction of NOx emissions (new zeolite catalyst modified with Pt), the elimination of volatile organic compounds (Co3O4@SiO2 and acidic surface transformed natural zeolite) and the removal of SO2 emissions (through adsorption processes with sodium citrate). Moreover, novel biocatalysts for bioanodes and new functional nanostructured catalysts based on metal–organic framework (MOFs) for different applications are also included. Additionally, articles compiled in this SI are also focused on the improvement of catalytic processes. Thus, selected processes based on activated carbons (modified with titanium dioxide) and optimized Fenton processes for the removal of aqueous organic