



Special Issue Reprint

Environmental Friendly Catalysts for Energy and Pollution Control Applications

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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 NO_x 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 pollutants or for the inactivation of bacteria are also presented.



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