Special Issue

Synthesis and Applications of ZSM-5 Catalysts in Energy Conversion and the Environment

Message from the Guest Editor

Zeolite-based solid acid catalysts have high-density acid sites on their surfaces and their own shape selectivity: thus, they have been used as not only adsorbate but also catalytic materials. Among the many types of zeolite materials, ZSM-5 zeolites have been wildly utilized as catalytic materials in petrochemicals, gas purification, water sewage, energy storage, sensor materials, etc.; therefore, a variety of advanced methods have also been proposed in environmentally friendly and economic ways. This Special Issue focuses on but is not limited to advanced methods for the synthesis of ZSM-5 zeolites, modifications, and their applications in various fields. Furthermore, reports on the unique properties based on ion exchange, substitution with T-site metals, and metal doping and further potential applications are also welcome. I believe that this collection will further contribute to the development and commercialization of the ZSM-5 zeolite and trigger a source of new ideas for the design, research, and use of this material.

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