

Special Issue

Noble Metal Nanoparticles and Nanoclusters: Synthesis and Applications

Message from the Guest Editor

Noble metal-based materials are involved in many industrial applications, such as automotive, aerospace, catalytic, as well as in the corrosion field and that of sensors. Despite the high cost of these materials, their exceptional properties make them extremely attractive for a wide range of applications. Today, the synthesis of nanoparticles as well as nanoclusters is a particularly attractive topic, and the physical and chemical properties at nanometric and subnanometric scale are significantly different from those of bulk material owing to the quantum size effect. This Special Issue is devoted to the synthesis, characterization, and application of noble and supported noble metal nanoparticles and nanoclusters. Original research papers, reviews, and short communications are welcome. Topics include new synthetic routes to noble metal nanoparticles and nanoclusters, theoretical studies, and applications in catalysis, photocatalysis, corrosion protection, water-splitting, fuel cell, coating, sensors, and related fields.

Guest Editor

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About the Journal

Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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