Nanomaterials

an Open Access Journal by MDPI

CiteScore: 9.2
Indexed in PubMed
Impact Factor: 4.3

Special Issue Reprint

Preparation, Characterization, Properties, Simulation, and Applications of Nanostructured Materials

Edited by: Thomas Dippong

The Special Issue aimed to present original research focused on the development, preparation, chemical synthesis, structural design, material selection, characterization and application of advanced nanocomposites. New syntheses and design principles for nanocomposites (clays, nanoparticles, ferrite incorporated into SiO_2/PVA matrix, catalysts, dyes, drugs, etc.), formation mechanisms, their physicochemical and morphological characterization and applications of nanocomposites incorporated into SiO_2 were addressed. Also, progress in the characterization of the structure and properties of nanocomposites, the processing and simulation of nanocomposite deterioration and failures were followed. In the Special Issue, new applications of functional nanocomposites in biomedicine, healthcare, green energy, coatings, magnetic materials, optoelectronics and sensors, as well as industrial implementations and technological innovations using nanocomposites, were presented.

https://www.mdpi.com/books/reprint/12630