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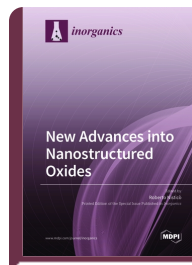
New Advances into Nanostructured Oxides

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In recent years, inorganic oxidic nanomaterials have been extensively investigated for their outstanding properties that allow their use within a large variety of raising fields of interest, ranging from (photo)catalysis to the development of functional nanocomposites. Nanoscopic metal (eventually mixed) oxides are often fabricated following soft-chemistry approaches, characterized by the possibility of favouring specific morphologies, particles dimensions, and surface porosities through different synthetic methods and templating processes. In this context, surface functionalities and reactivity play a major role in the determination of nanomaterials final properties. For this reason, further surface functionalization with specific chemical moieties is often recommended to extend their field of application. This Special Issue aimed at extending the comprehension of the mechanisms involved in the synthesis and templating of inorganic oxidic nanomaterials, as well as in their surface functionalization and reactivity. Additionally, this Special Issue aimed at increasing the knowledge on the latest advances of these systems in (photo)catalysis, environmental clean-up processes, energy storage, controlled transport and/or release, biomedicine, sensing, development of smart-materials, stimuli-responsive materials, and nanocomposites. Nanomaterials of interest included: silica, alumina, titania, zirconia, zinc oxide, aluminosilicates, iron oxides, perovskites and titanates, rare earth oxides, and composites. Furthermore, particular attention was dedicated toward studies describing alternative ecofriendly preparation methods.



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