



Metal Oxide Nanoparticles and Nanowires: Synthesis, Characterization, and Applications

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Message from the Guest Editors

Dear Colleagues,

Metal oxide nanomaterials are versatile materials. As semiconductors, they are utilized as active materials for various kinds of chemical and physical sensors for detecting gases, chemical species, light, temperature, and bio-species, while reduced or doped metal oxides are applied to electrical and thermal conductors. On the other hand, as metal oxides show either n- or p-type behavior, depending on their own defect structure or doping elements, they are used as active layers of field effect transistors, and carrier transport layers in various types of optoelectronic devices. Furthermore, some metal oxides, such as iron oxides, have magnetic characteristics, and some metal oxides are utilized for battery electrodes. Depending on the synthesis routes, metal oxide nanomaterials have various kinds of morphologies (i.e., nanoparticles, nanowires, and nanoparticle-nanowire hybrid structures), are hence utilized for diverse applications [...]

For further reading, please follow the link to the Special Issue website at: <https://www.mdpi.com/si/35842>

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Message from the Editor-in-Chief

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