

Editorial

Nanocrystalline Materials: Preparation, Structural, Magnetic, Dielectric, Electrical, Optical, and Thermal Properties and Applications (Volume II)

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In this current Special Issue, “Nanocrystalline Materials: Preparation, Structural, Magnetic, Dielectric, Electrical, Optical, Thermal Properties and Applications (Volume II)”, eight original research articles have been published. M. S. Alotaibi et al. [1] investigated the optical and mechanical properties of silica gel and MWCNT composites. A. Zubkov et al. [2] discussed the influence of Cr/Zr ratio on the physical–chemical and catalytic characteristics of Cr–Zr oxide catalysts. Furthermore, H. Klym et al. [3] found that the evolution of defect-related extended free volumes in BaGa₂O₄ ceramics is associated with an increase in the concentration of Eu³⁺ ions. M. V. Zdorovets et al. [4] reported the phase formation mechanisms in Li₂ZrO₃ ceramics prepared by mechanochemical approach. Moreover, F. Yang et al. [5] proposed, designed, and simulated a vertical silicon nitride strip-loaded grating coupler on a lithium niobate thin film. J. You et al. [6] explored an approach that combines one-dimensional (1D) ZnO nanowires (NWs) and zero-dimensional (0D) solution-processed Ge quantum dots (QDs) nanostructures, which can be potential candidates for flexible and broadband photodetectors. Furthermore, J. Dadashi et al. [7] prepared copper(II)-coated magnetic core–shell Fe₃O₄@SiO₂ nanoparticles, which can be applied as an effective and recoverable catalyst for the reduction/degradation of environmental pollutants. In addition, A. K. Tiwari et al. [8] studied zinc oxide nanoparticles, which have applications in dentistry.

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