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Revisiting the Fundamentals: Synthesis of Metal Oxides

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Deadline for manuscript submissions:

20 April 2025

Message from the Guest Editor

Dear Colleagues,

This Special Issue is dedicated to re-examining the synthesis techniques of metal oxides, essential in a wide range of applications, including energy storage, catalysis, electronics, and health. With a focus on review-type articles, this collection aims to provide a comprehensive understanding of both traditional and emerging techniques for metal oxide synthesis, offering insights into their mechanisms, scalability, and applications. By revisiting the fundamentals, critical discussions on the limitations, advancements, and potential of various methods are encouraged. Themes of interest include, but are not limited to, the following:

- vapor condensation synthesis
- vapor reaction synthesis
- aerosol synthesis
- chemical precipitation and coprecipitation
- hydrothermal and solvothermal
- sol-gel
- pechini process
- synthesis in microemulsions
- sonochemical synthesis
- solution combustion synthesis
- electrochemical synthesis
- synthesis in supercritical fluids
- mechanical milling
- mechanochemical processing
- cryochemical processing



mdpi.com/si/217785

Special Issue



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Message from the Editor-in-Chief

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