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Solid State Chemistry Enabling Clean Technologies

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Deadline for manuscript submissions:
closed (31 August 2021)

Message from the Guest Editor

This Special Issue is focused on solid state chemistry and its role as an enabler of new clean technologies. The main topics are:

A. Materials for clean energy storage and conversion: (i) design and modeling of electrode and electrolyte materials for post-lithium-ion batteries; (ii) oxide/hydroxide composites for supercapacitors; (iii) nanocomposite materials for H_2 storage; (iv) new thermoelectric materials.

B. Materials and thin films for environmental protection: (i) new adsorbents for CO_2 capture and gas fuel purification; (ii) new approaches to the catalytic neutralization of waste gases; (iii) new oxide thin films and nanopowders for photocatalysis.

C. Ceramics/bioceramics and glasses for a better life: (i) smart optical systems based on glasses and ceramics; (ii) modeling of systems with optical properties; (iii) nanocomposite phosphate-based materials for medical applications.

Current concepts, trends, limitations, and emerging new technologies in solid state chemistry will also be presented.

Keywords

- materials for energy storage and conversion
- catalysts/sorbents
- optics
- phosphate-based materials

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Message from the Editor-in-Chief

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