



Dielectric Materials: Challenges and Prospects

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Message from the Guest Editor

Dielectrics or dielectric materials are non-conductive materials which can be polarized by an exerted electric field. The role of dielectrics in emerging technologies is crucial, since the current and potential applications of dielectrics include, but are not limited to, integrated capacitors, solar cells, batteries, to name but a few. Moreover, in the era of nanomaterials, new perspectives are offered concerning dielectrics. Studying the interactions between polar molecules or groups, induced dipoles, and interfacial phenomena could lead to controlling and tailoring the electric performance of nanodielectrics, thus creating “personalized” materials for each application. The challenges and prospects of research in the field of dielectrics appear to be wide open and require, but also attract, scientific attention.

This Special Issue on “Dielectric Materials: Challenges and Prospects” welcomes original research and reviews on experimental or theoretical/computational studies of all kind of dielectrics.





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Message from the Editor-in-Chief

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