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New Insights into Dielectric and Conductive Materials

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

In the era of highly thin, multi-functional and integrated electronic devices, this will inevitably lead to heat accumulation inside the composite material. The development of new polyimide dielectric film materials with high thermal conductivity has become the focus of research. Electromagnetic (EM) wave-absorbing materials play an increasingly important role in modern society for their multiple functions in military stealth and the approaching 5G smart era. Dielectric loss EM wave absorbers and underlying loss mechanism investigation are of great significance to unveiling EM wave attenuation behaviours of materials and guiding novel dielectric loss materials design. New possibilities in antenna and microwave manufacturing are opening through the exploitation of additive manufacturing 3D printing techniques. Despite being used primarily for the fabrication of dielectric structures, these procedures may also be able to print conductive parts. Microstructure models are developed to computationally analyse the interactions between the constituents in heterogeneous materials and electromagnetic pulses (EMPs).



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Special Issue



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Message from the Editor-in-Chief

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