Special Issue

Radio-Frequency/Microwave Characteristics of Conducting Polymers and Their Applications

Message from the Guest Editor

This Special Issue will address RF/microwave characterization of organic CP materials, the model and design of CP-RF/microwave devices and circuits, and the processing, technology development, and system of various types for RF/microwave applications.Conducting polymers (CPs) are organic polymers that conduct electricity or can be semiconductors. The most significant advantage of conducting polymers is their processability, mainly by dispersion. Initially, the primary drivers of development for applications of the microwave region and conductivity properties of CPs were the following: electromagnetic impulse (EMI) shielding; conductive coating and composites for electromagnetic charge dissipation (ESD) or antistatic applications; and passive absorbers for microwave region radiation for radar cross-section (RCS) reduction. However, CPs suffered from low electric conductivity for diverse RF/microwave applications. In recent years, owing to the proposal of diverse synthesis methods for high-conductive CPs, the CPs have received new interest as sensing and industrial materials in the RF/microwave region.

Guest Editor

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. Materials provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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