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Carbon Based Functional Microwave Shields

Guest Editor:

Prof. Dr. Yuri Svirko
Institute of Photonics, University of Eastern Finland, FI-80100 Joensuu, Finland

Deadline for manuscript submissions:
closed (30 September 2019)

Message from the Guest Editor

Dear Colleagues,

Overcrowding of the spectral bands allocated for different communication channels has made Electromagnetic Compatibility (EMC) crucial, especially for satellite and airplane communication systems, in which footprint and weight are critical issues.

Compared to conventional metal-based EMI shielding materials, using carbon-based conducting composites is advantageous for satellite applications because of their low weight, small thickness, and flexibility. These include polymer composites containing exfoliated graphite, graphene nanoplatelets, carbon black, carbon fibers and nanofibers, carbon nanotubes (CNT), and carbon onions.

This Special Issue will address the physics and technology of the carbon-based microwave and THz shields, problems related to interaction of the EM waves graphene, CNT and relevant composites, and also physical mechanisms responsible for attenuation of the EM waves in carbon-based materials.

Thank you very much for your consideration.

Prof. Dr. Yuri Svirko
Guest Editor

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Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

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Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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materials@mdpi.com
𝕏@Materials_Mdpi