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Special Issue Reprint

Fabrication of Carbon and Related Materials/Metal Hybrids and Composites

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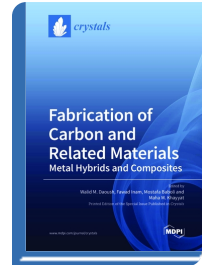
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This Special Issue on “Fabrication of Carbon and related materials/ Metal Hybrids and Composites” presents the importance of the development of new composite and hybrid materials in different fields. It consists of 17 articles contributed by authors from different countries all over the world. The articles can be categorized into four classes. The first class of includes articles focusing on the synthesis of carbon fibers, carbon nanotubes, and graphene hybrid and composite materials. The results include the developments of the methodology and know-how of the synthesis and functionalization of the graphene surface of fibers and nanotubes and their effects on binding with the metal matrix. The second class focuses on the synthesis of new polymeric materials based on pitch/polyethylene composites and their electrical and mechanical properties, including the correlations with its microstructures. Additionally, the second class presents the results of articles, including the synthesis of new biocompatible and eco-friendly metal oxide/polymer materials with antibacterial and antimicrobial activities. The third class includes articles focused on the applications of ceramic metal oxides, such as silica and clays in the development of solar cells and in the fabrications of membranes of water treatments and desalinations. The last part of this Special Issue presents results of the articles focused on high-entropy alloys and metal matrix composites and their weldability.



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