Special Issue

Design, Fabrication and Application of Diamond-Based Coatings

Message from the Guest Editor

Diamond-related materials present properties, giving them great potential in various applications. Different types of diamond-based coatings can be deposited on a variety of substrates. The most common techniques for depositing diamond-based coatings include different CVD techniques, as well as PVD and other special techniques. Characterization methods related to diamond-based coatings are particularly crucial for the further application of these coatings, especially characterizations of the coating-substrate adhesion, the diamond impurity, etc. Conventional characterization methods can be directly used or modified to obtain better characterization, or some special characterization methods can be developed. In any application, the corresponding performance of the diamond-based coating or the coating-substrate system should be well studied and regulated. As a guest editor of Materials, I am pleased to announce this new Special Issue. It welcomes original submissions in the form of reviews and articles. The topics of interest include but are not limited to: single-layer diamond coatings; doped diamond coatings and multi-layer diamond coatings.

Guest Editor

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Deadline for manuscript submissions

closed (20 August 2023)



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About the Journal

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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