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# Advances in Diamond-Like Carbon (DLC) Films

Guest Editor:

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# **Message from the Guest Editor**

Diamond-like carbon (DLC) is a metastable amorphous allotrope of carbon. It consists of carbon atoms bonded by sp3-type bonds (like in diamond) and sp2-type bonds (like in graphite).

DLC films have received considerable interest from researchers because of the intriguing combination of the mechanical, optical, electrical, and piezoresistive properties and biocompatibility. Properties of the films can be additionally controlled by doping them with different chemical elements. The range of DLC applications is very broad—from car engines to PC hard disks and beer bottles.

The aim of this Special Issue is to present the most recent and most significant research related with this important area. Topics covered include but are not limited to:

- Novel deposition methods of diamond-like carbon films and related nanocomposites, such as highpower impulse magnetron sputtering;
- Deposition effects on the structure and composition of different DLC films and nanocomposites;
- Mechanical, optical, electrical, piezoresistive, biomedical properties of DLC;
- DLC films and DLC nanocomposites for sensor and electronic, as well as optoelectronic device applications.











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### **Editor-in-Chief**

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