

Recent Advances in Conducting Polymer Films and Coatings: Applications in Optoelectronics, Solar Cells, Electrochromics, and Biosensors

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Message from the Guest Editors

Dear Colleagues,

Conducting polymers (CPs) are a class of polymers with innate electrical conductivity coupled with exceptional electrical and mechanical properties. With their low cost, low density, mechanical flexibility, and ease of processing, conjugated polymers are promising for electronic applications, electro-optical and -chemical applications. Finding new, essential lines of inquiry in this research area requires novel polymer synthesis methods, chiral-based systems, and streamlined device fabrication strategies. Additionally, using peptide modifications in organic materials offers a new viable strategy to enhance their biocompatibility and promote bioreceptor targeting behavior. The combination of peptides with conducting polymers (CPs) has gained considerable attention in this regard.

- Conducting polymers;
- Novel methods of their synthesis and development;
- The theoretical and computational modeling of the properties of conducting polymers;
- Characterization techniques for their electronic applications;
- Chiral polymer photonics;
- Chiral sidechain or peptide-integrated conducting polymers;



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We look forward to receiving your contributions.

Special Issue

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Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

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