



Recent Advances in sp-Carbon-Based Materials and Nanostructures

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Message from the Guest Editors

Dear Colleagues,

Sp-carbon-based materials are of potential interest for future applications in molecular electronics, optoelectronics, energy conversion and storage, catalysis, as a possible alternative to overcome the limitations of the presently employed materials.

The aim of this Special Issue is to present the last achievements obtained in the research on sp-carbon-based materials (polyynes, cumulenes, linear carbon chains, carbon atomic wires) and related systems (hybrid sp–sp² or sp–sp³ systems). Both experimental (synthesis, preparation, characterization, applications) and theoretical contributions (molecular modeling and design) are welcome and, in particular, studies presenting a multidisciplinary approach are encouraged.

Keywords:

- Carbyne
- Polyynes, cumulenes, and related structures
- sp-carbon nanostructures
- 2D sp-carbon based materials: Graphyne and Graphdiyne
- Hybrid sp–sp² and sp–sp³ carbon systems





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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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