



an Open Access Journal by MDPI

Fluorescent Carbon Dots: Emerging Materials in Nanoscience

Guest Editors:

Dr. Marinella Striccoli

Institute for Physical and Chemical Processes, IPCF-National Research Council, CNR, Bari Division, c/o Chemistry Department, University of Bari "Aldo Moro", 70125 Bari, Italy

Dr. Annamaria Panniello

Institute for Physical and Chemical Processes, IPCF -National Research Council, CNR, Bari Division, c/o Chemistry Department, University of Bari "Aldo Moro", Bari, 70125, Italy

Deadline for manuscript submissions: closed (30 June 2023)



mdpi.com/si/103750

Message from the Guest Editors

Dear Colleagues,

In the last years, fluorescent carbon dots (CDots) have been revealed as an intriguing novel class of nanomaterials. This Special Issue's key interests include advances on novel chemical synthetic approaches to obtain luminescent CDots, revealing the intimate correlation among structural, physical, and chemical properties, with particular attention to the emission mechanisms. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Chemical and green approaches for the synthesis of fluorescent carbon dots;
- CDot properties as solvation and structural and optical correlation;
- Polymeric nanocomposites and hybrids of carbon dots in host matrices;
- Nanoformulations based on carbon dots in biological systems;
- Modeling and simulations of carbon dots-based systems;
- Carbon dots applications for sensing, energyrelated and optoelectronic devices, white emission sources, (bio)imaging and (bio)detection, (photo)catalysis, anticounterfeiting, and forensics.

Dr. Marinella Striccoli Dr. Annamaria Panniello Guest Editors **Specials**ue





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Shirley Chiang

Department of Physics, University of California Davis, One Shields Avenue, Davis, CA 95616-5270, USA

Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call "nanomaterials". These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metalorganic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, Nanomaterials, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q1 (*Physics, Applied*) / CiteScore - Q1 (*General Chemical Engineering*)

Contact Us

Nanomaterials Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/nanomaterials nanomaterials@mdpi.com X@nano_mdpi