Special Issue

Design, Synthesis and Mechanisms of Fluorescent Materials

Message from the Guest Editor

Fluorescent materials are a tool for solving a wide range of tasks in the field of molecular sensing, optical transformation, and, in general, the design of new functional devices and systems. Among the promising mechanisms for the implementation of the spectral response, in addition to direct covalent binding of the luminophore to the target molecule, one can also single out homo- and heteromolecular associative interactions, effects of intramolecular rotation, and molecular complexation. These mechanisms impose special conditions on the luminophore structure but make it possible to realize more sensitive and selective responses. This Special Issue seeks manuscript submissions that further our understanding of the mechanisms of fluorescence changes; approaches to the synthesis of new fluorophores and molecular systems that make it possible to implement various intra- and intermolecular effects; and understanding of the "structure-fluorescent properties" relationship, including those obtained by computer modeling and analysis of big data on the characteristics of luminophores and materials.

Guest Editor

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Deadline for manuscript submissions

closed (30 September 2023)



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Message from the Editor-in-Chief

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