

## Special Issue

# Fluorescence Spectroscopy for Materials Characterization

### Message from the Guest Editors

The objective of this Special Issue is to spotlight all fields of single-molecule fluorescence optics, fluorescence molecule spectroscopy and super resolution fluorescence imaging, ranging from fundamental physics and technical and methodological questions, to their applications in chemical, biological and biomedical research, as well as in medical diagnostics. Contributions are welcome in the form of original scientific manuscripts, reviews or perspectives, in all the above, relevant areas, but especially:

- Techniques and methods for single molecule (SM) detection;
- Techniques and methods for SM spectroscopy (such as FCS, FLCS, FLIM, FRET);
- Techniques and methods for fluorescence lifetime imaging (FLIM) with one, two, or three photon excitations;
- Techniques for single molecule manipulation;
- Super-resolution fluorescence imaging (STED, PALM, (d)STORM, GSD-IM, SOFI, SIM and related techniques);
- Advanced fluorescence imaging, including (time-resolved) two- and three-photon fluorescence microscopy or (time-resolved) Raman spectroscopy;
- Medical applications of fluorescence spectroscopy and imaging;
- Ultrasensitive biomedical diagnostics.

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### Guest Editors

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### Deadline for manuscript submissions

20 September 2026



## Materials

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## About the Journal

### Message from the Editor-in-Chief

*Materials* (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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### Editor-in-Chief

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