Special Issue

Infrared Microscopic Imaging Technologies in Materials Science

Message from the Guest Editors

Advanced infrared sensing technologies in materials science play a crucial role in various fields such as materials characterization, analysis, and quality control. By utilizing infrared radiation, researchers can gain valuable insights into the structure, composition, and properties of materials. The current research in this area focuses on improving the sensitivity, accuracy, and resolution of infrared sensing technologies to better capture and analyze the complex properties of materials. However, researchers are facing challenges such as improving signal-to-noise ratios, enhancing spatial resolution, and reducing measurement artifacts. Overcoming these hurdles is essential for advancing our understanding of materials at a molecular level and developing innovative materials with tailored properties for a wide range of applications. By addressing these challenges, scientists can unlock new opportunities in materials science and pave the way for groundbreaking discoveries in various industries.

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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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