

Special Issue

Nanoscale Microscopy Techniques for Energy Materials

Message from the Guest Editors

Nanoscale microscopy techniques such as transmission electron microscopy (TEM), scanning electron microscopy (SEM), scanning probe microscopy (SPM), and synchrotron-based beam microscopy represent increasingly powerful methods with which to understand the structure and chemistry of materials at the nanoscale. Based on the concept that the development of advanced energy materials can contribute to building a sustainable society, various kinds of materials for countermeasures against worldwide issues such as carbon emissions, environmental pollution, and limited resources have been developed by materials researchers and industries. Thus, research employing the above nanoscale microscopy techniques, especially for advanced energy materials, has become increasingly popular. This Special Issue covers nanoscale microscopy techniques for energy materials and other relevant topics. Original research articles, review articles, and short communications concerning these are welcome. We look forward to receiving your contributions.

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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, metal–organic 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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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