



Advanced Diffraction Techniques (X-ray, Electron, Neutron) in Materials Science

Guest Editor:

Dr. Yan Wu

Oak Ridge National Laboratory,
Oak Ridge, TN, USA

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Message from the Guest Editor

Leading with the rapidly advanced techniques in neutron, synchrotron and electron diffraction, materials-probing techniques have gone through many developments that contribute to fruitful new discoveries in material science. Higher-power beams, larger-area detectors, better resolution in situ characterization capabilities, developments in multi-extreme sample environments and other advances in the diffraction instruments have allowed for a more in-depth probing of crystal and magnetic structures, including in disordered materials, nanostructure systems, macromolecular systems, heterostructure systems, spacial-resolved and timely-resolved changes in structures under various sample environments, including extreme conditions. This Special Issue is focused on the advances in advanced diffraction techniques (X-ray, electron, neutron) in materials science, to recognize the achievements in this field.

- Diffraction study in materials systems
 - Films, surface interactions
 - Spacial-resolved and timely-resolved measurements
 - Nanostructure materials, complex structure and disordered materials
 - Diffuse scattering
 - Materials under extremes
 - Macromolecular systems





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Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

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Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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