

Special Issue

Analysis of Strain, Stress and Texture with Quantum Beams, 2nd Edition

Message from the Guest Editor

In recent years, the development of material behavior simulation has been remarkable. When we look at realistic deformations and stress maps based on simulation analysis results, we feel that we have understood the behavior of a material. From the viewpoint of stress analysis, when the simulation and the actual stress coincide, the material evaluation is correct. Therefore, the progress of experimental stress analysis and evaluation is very important, but has been faced with many challenges. Synchrotron radiation and neutrons as quantum beams are excellent means of experimental stress analysis, and the research and industrial application of this technology are important. By utilizing quantum beams, it is now possible to know the stresses and strains of coarse grains and welded metals, which were previously difficult to measure. Following on from the previous Special Issue, "Analysis of Strain, Stress and Texture with Quantum Beams", I hope that new research on material evaluation using quantum beams will be contributed to this Special Issue.

Guest Editor

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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

Quantum Beam Science focuses on application of quantum beams for the study and characterization of materials in their widest sense, and developments of quantum beam sources, instrumentation and facilities. Quantum beams include synchrotron radiation, neutron beams, electrons, lasers, muons, positrons, ions. The journal covers disciplines including, solid state physics, chemistry, crystallography, materials science, biology, geology, earth- and planetary materials, and engineering. Articles presenting multiple quantum beams for complementary studies are welcome.

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