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Modification of Materials with Ion/Plasma Beams

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Message from the Guest Editors

The use of continuous or pulsed beams of ions or plasmas has become general practice in many different areas of industry. They are used, for example, in the modification of material properties by the annealing of crystal lattice defects, quenching, remelting, the synthesis of new phases or new materials, the synthesis of non-equilibrium structures, the formation of surface morphology, and the improvement of materials' features. They are also used to improve the properties of ready-made tools. This Special Issue will present current investigations and applications of ion and/or plasma beams in the material engineering field. It will provide an opportunity to present new, often unconventional, applications of these methods in the different fields of our life.

Keywords:

- ion implantation
- plasma treatment
- modification of material surfaces by ion and/or plasma beams
- improving material/tool features
- synthesis of new materials
- synthesis of non-equilibrium structures
- new applications
- perspectives of the using ion and/or plasma beams



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Special Issue



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Message from the Editor-in-Chief

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