Special Issue

Low Energy, Focused Beam Ion Implantation for Semiconducting Materials and Devices

Message from the Guest Editor

Ion implantation is a key capability for the semiconductor industry. As devices shrink, novel materials enter the manufacturing line, and quantum technologies transition to being more mainstream, traditional implantation methods fall short in terms of energy, ion species, and positional precision. This is especially relevant for functionalization of 2D materials, as implanting into a single atomic layer with high spatial resolution combines multiple challenges in ion sources, optics, and material processing. This Special Issue seeks to highlight recent advanced in ion implantation, ion optics, and theoretical simulations via research papers, and review articles that describe the most salient physics, methodologies, and outstanding issues in the ion beam community, for directly implanting ions into 2D materials. We look forward to receiving your submissions!

Guest Editor

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Deadline for manuscript submissions

closed (24 January 2025)

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Editor-in-Chief

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