

Hydrogen Implantation-Induced Layer Transfer

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This talk will introduce the processes leading to layer transfer following ion implantation of hydrogen into diverse crystalline materials. We will discuss fundamental aspects of the process, some recent results from co-implantation experiments that help illuminate the different roles that hydrogen plays during layer transfer, and the importance of H-defect interactions and elastic strain. Finally, we will assess the needs for further understanding of these effects to advance the development of hydrogen implantation toward the goal of enabling universal materials integration.

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