

Molecular Beam Epitaxy of Materials Interfaces with Atomic Precision

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In this contribution a few selected examples to engineer material interfaces in nanostructured solids with atomic precision by means of molecular beam epitaxy (MBE) are presented. The examples include 2D electron gas systems for quantum transport and mesoscopic physics, quantum cascade lasers, Sb-based materials, ferromagnet-semiconductor heterostructures, as well as oxide materials for electronics and quantum physics. Finally, the prospects to fabricate novel van-der-Waals heterostructures are briefly discussed.