



Nanoimprint lithography (NIL) and related techniques for electronics applications

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Abstract

This chapter provides a review of nanoimprint lithography techniques, highlighting their potential to surpass photolithography in resolution, and, at the same time, to allow mass fabrication at a lower cost. The current and potential uses of nanoimprint lithography are discussed in fields such as data storage, optical components, image sensors, and phase change random access memory devices. Challenges faced by nanoimprint lithography in becoming a standard fabrication technique are considered in connection with recent technology developments to extend existing optical lithography processes for semiconductor fabrication.