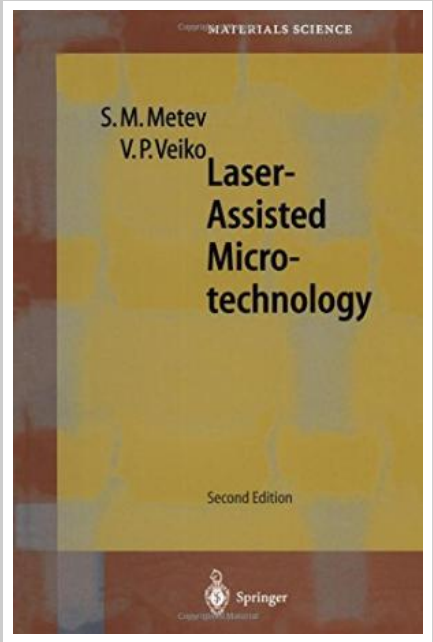

Laser-Assisted Microtechnology

By Metev, Simeon M. / Veiko, Vadim P.

Book Condition: New. Publisher/Verlag: Springer, Berlin | Laser-Assisted Microtechnology introduces the principles and techniques of laser-assisted microtechnology with emphasis on micromachining of thin films, microprocessing of materials, maskless laser micropatterning and laser-assisted synthesis of thin-film systems. The experimental and theoretical physico-chemical basis of every technological process is presented in detail. On the basis of some characteristic examples of applications, the capabilities of the technological methods as well as the optimum conditions for their realization are discussed. In this second edition, besides the actualization of the literature, a new chapter concerning the laser-assisted wet chemical micro etching, has been added. This is a new method for direct 3D-micro structuring of solids, with a number of potential applications. | 1. Introduction.- 1.1 Laser-Assisted Thin-Film Micromachining.- 1.2 Laser-Assisted Microprocessing and Modification of Materials.- 1.3 Laser Micropatterning.- 1.4 Pulsed Laser-Plasma Deposition of Thin Films.- 2. Laser-Based Equipment for Microtechnology.- 2.1 Principal Design of Laser-Based Microtechnological Equipment.- 2.2 Lasers Used in Microtechnological Systems.- 2.2.1 Lasers for Thin-Film Machining.- 2.2.2 Lasers for Microwelding and Microshaping.- 2.2.3 Lasers for Microlithography (Micropatterning).- 2.3 Optical Arrangement of the Energy Beam Line.- 2.3.1 The Beam-Contour (Focusing) Technique.- 2.3.2 The Projection Technique.- 2.3.3 The Contour-Projection Technique.- 2.3.4 The Active Projection Technique.-...

Reviews

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Very useful to all of group of people. I actually have read through and so i am certain that i will planning to study yet again once again down the road. I am just very easily can get a satisfaction of looking at a created book.

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