

Title: Laser-assisted deposition of thin films from photoexcited vapour phases

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Source: Applied Physics A-Materials Science & Processing

Volume: 79 **Issue:** 3 **Pages:** 489-497

DOI: 10.1007/s00339-004-2566-5 **Published:** Aug 2004

Abstract: Laser-assisted chemical vapour deposition (LCVD) has been extensively studied in the last two decades. A vast range of applications encompass various areas such as microelectronics, micromechanics, microelectromechanics and integrated optics, and a variety of metals, semiconductors and insulators have been grown by LCVD. In this article, we review briefly the LCVD process and present two case studies of thin film deposition related to laser thermal excitation (e.g., boron carbide) and non-thermal excitation (e.g., CrO(2)) of the gas phase.

Document Type: Article

Language: English

KeyWords Plus: Chromium-Oxide Films; Dioxide CRO2 Films; Boron-Carbide; Spin Polarization; Carbon Precursor; Infrared-Spectra; Point-Contact; Growth; CR(CO)6; Metal

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Publisher: Springer 233 SPRING ST, NEW YORK, NY 10013 USA

Address Publisher: 233 Spring ST, New York, NY 10013 USA

IDS Number: 824GR

ISSN: 0947-8396

Citation: Conde O, Silvestre, A J. Laser-assisted deposition of thin films from photoexcited vapour phases. Applied Physics A-Materials Science & Processing. 2004: 79 (3), 489-497.