

Book reviews

Defect Recognition and Image Processing in Semiconductors and Devices

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This is the proceedings of the Fifth International Conference on "Defect recognition and image processing in semiconductors and devices" which was held in Santander, Spain, 6-10 September 1993. About one hundred participants gave 11 invited lectures and 70 contributions.

This collection is a good review of characterization methods of semiconductor materials and devices. It is organized with eleven chapters discussing the materials (Silicon, III-V and II-VI compounds), the technological process of materials transformation (epitaxy, thermal treatments,...) and the methods of characterization based on images using either the crystalline data given by TEM, STM, SEM, Raman and the electronic data such as photo- and cathodo-luminescence, and Beam Induced Current.

These methods of investigation are in constant evolution due to both the progress of the tools and the imagination of researchers. New approaches for studying the behaviour of devices in greater details continue to emerge. This proceeding volume shows that if many problems have been solved, many others need to be understood in order to improve still further semiconductor technology both in bulk materials and in low dimensional structures.

A particular interest of this book comes from the double viewpoint developed by those contributors who are concerned with the development of both the technological process and the study of semiconductor properties.

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Request PDF | On Feb 1, 2006, Zhanguo Wang published 11th International Conference on Defects - Recognition Imaging and Physics in Semiconductors (DRIP-XI) Sept. 13-19 in Beijing - Preface | Find, read and cite all the research you need on ResearchGate. Defect Recognition and Image Processing in Semiconductors 1995 A.R. Mickelson Ed. Institute of Physics January 1996 Microscopy Microanalysis Microstructures. Brigitte Sieber. (1998). 31, 976. Defect recognition and image processing in semiconductors 1997, Institute of Physics Conference Series, No. 160. Edited by J. DONECKER and I. RECHENBERG. Pp. xx + 524. Bristol and Philadelphia: Institute of Physics Publishing, 1998. Price £135, US \$270. ISBN 0 7503 0500 2. The book is number 160 in the Institute of Physics Conference Series. It contains the refereed collected proceedings of the Seventh International Conference on the title topic (DRIP VII), held in Templin, Germany, 7-10 September 1997. DRIP conferences consider defects from the atomic scale up to inhom The open access Journal of Physics: Conference Series (JPCS) provides a fast, versatile and cost-effective proceedings publication service. Homepage. How to publish in this journal. The purpose is to have a forum in which general doubts about the processes of publication in the journal, experiences and other issues derived from the publication of papers are resolved. For topics on particular articles, maintain the dialogue through the usual channels with your editor. Developed by: Powered by Tenth International Conference on Defects: Recognition, Imaging and Physics in Semiconductors (DRIP X). Volume 27 - Issue 1-3 - July 2004. Page/Article number: low to high Page/Article number: high to low Title Type Online publication date. The current status of SiC bulk growth is reviewed, while specific attention is given to the effect of defects in SiC substrates and epitaxial layers on device performance and yield. The progress in SiC wafer quality is reflected in the achievement of micropipe densities as low as 0.92 cm^{-2} for a 3-inch n-type 4H-SiC wafer, which provides the basis for a high yielding fabrication process of large area SiC power devices.