

SYMPOSIUM PROCEEDINGS OF C-MRS



'96中国材料研讨会

功 能 材 料

Functional Materials

中国材料研究学会

C-MRS

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'96 中国材料研讨会论文集

I

功能材料

Functional Materials

3

半导体与磁性材料以及材料的表面与界面

Semiconductor and Magnetic Material & Surface and Intersurface
of Materials

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Preface

This volume is the proceedings of first C-MRS/MRS-K joint meeting held in Beijing, China, November 17-21, 1996, and also one of the seven-volume proceedings of Chinese Materials Conference of 1996 held in same same period. The C-MRS/MRS-K joint symposia were proposed by Chinese Materials Research Society (C-MRS) and Materials Research Society of Korea (MRS-K). The object of C-MRS/MRS-K joint meetings is to exchange the information of the achievements and results on advanced materials research and development and promote the cooperation between two society and two countries in the field of materials research. The first C-MRS/MRS-K joint meeting consists of three symposia, i.e.,

1. Semiconductor Magnetic and Epitaxial Thin films
2. Magnetic Materials
3. Surface and Intersurface of Materials

More than 200 scientists, engineers and students attended this meeting, including 20 scientists and students from Korea. 245 papers were presented at the meeting by either oral and post. 193 papers have been collected in this volume after peer review process.

In order to improve the quality of the publication, all the papers in this volume were all re-edited. Due to the limit of the time the final manuscripts of the papers didn't delivered to authors for final check therefore, some mistakes may be exists. The editorial board hopes the understanding and comments from both authors and readers of this volume.

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内 容 提 要

《功能材料》卷包含的内容主要有：光学、光电子材料，智能材料，人工晶体，超导材料，金刚石膜及相关材料，半导体材料，磁性材料，纳米材料及材料的表面与界面问题等。其中讨论了纳米硅、多孔硅等半导体材料的发光机理，发光现象的稳定性和可靠性，量子点激光器材料的研制，激光及上转换晶体的研究；形状记忆合金，压电材料，机敏凝胶，电流变体；闪烁晶体，新型激光晶体；柔性金属基带上YBCO厚膜的制备，高、低温超导材料，磁通钉扎，超导薄膜等；纳米材料的制备方法，如采用碳纳米管制备碳化硅纳米晶须、低温固相热解法和冲击波法制备纳米材料等，纳米晶复合第四代稀土永磁合金的实验研究，纳米微粒的表面修饰；金刚石膜的生长及机理研究，类金刚石膜的制备、性能及应用；新型半导体材料和外延膜，量子点的制备及其结构与光学特性，纳米晶交换耦合复合永磁材料，超磁致伸缩材料，巨磁阻材料，新型稀土化合物永磁材料及高性能NdFeB系永磁材料；材料表面和界面的分析技术，离子束增强沉积技术，表面层结构与性能研究等。

'96 中国材料研讨会论文集分卷及各分册名称

第Ⅰ卷 功能材料 Functional Materials

第一分册 光、电材料与智能材料

第二分册 低维材料

第三分册 Semiconductor and Magnetic Materials & Surface and Interface of Materials

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