

先进材料和力学进展

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PROGRESS IN ADVANCED MATERIALS AND MECHANICS

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王 自 强 *Tsu-Wei Chou*



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内 容 简 介

本书为 1996 年 8 月 12—15 日在北京召开的“国际先进材料学术会议”论文集,共汇集了 196 篇论文,其中国外作者文章 129 篇。

材料是高新技术发展和现代文明的物质基础;也是力学与材料科学互相结合、互相渗透的最重要的领域。本书内容新颖,覆盖面广。内容包括:聚合物与聚合物基复合材料,陶瓷与陶瓷基复合材料,合金与金属基复合材料,智能材料与智能结构,超塑性材料,力学分析、模型,断裂与损伤,疲劳与蠕变,界面现象,材料力学与物理性能,材料测试、设计与应用,以及材料老化与寿命等。本书集中反映了先进材料科学研究和技术进步的最新成果,具有丰富的学术内容和重要的参考价值。

本书可供从事材料、机械、力学、工艺等方面的科研人员、工程技术人员,以及高等学校有关专业的师生参考。

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FOREWORD

The International Conference on Advanced Materials (ICAM-96) was held from August 12-15, 1996 in Beijing, China. The Conference provided a forum for the exchange of research findings in the science and technology of advanced materials. It successfully promoted interactions among researchers and technologists world-wide in the fields of materials, mechanics, physics, chemistry, and engineering science. Furthermore, the Conference addressed the challenges and opportunities in advanced materials for the 21st century. This volume of the Proceedings contains 196 papers by authors from 20 countries and regions.

ICAM-96 was organized by the Chinese Society of Theoretical and Applied Mechanics and co-sponsored by the American Ceramic Society (ACerS), the American Society for Composites (ASC), the Chinese Materials Research Society, The Chinese Society for Composite Materials, the Chinese Society of Theoretical and Applied Mechanics, the European Association for Composite Materials (EACM), the Institute of Ceramics Research, CAS, the Society for the Advancement of Materials and Processing Engineering (SAMPE), USA, and The Minerals, Metals and Materials Society (TMS), USA. Financial support for ICAM-96 was received from the Chinese Association for Science and Technology, the National Natural Science Foundation of China, and the U.S. Army Research Office.

The Editors express their sincere gratitude to the many individuals who contributed to the planning and execution of ICAM-96, in particular to members of the International Advisory Committee and the Organizing Committee as well as Professor T. X. Mao, Professor N. G. Liang, and Dr. Xueli Han. We also acknowledge the able assistance of Ms. Diane Kukich, Ms. Nancy Potts, and Ms. Marie Kreck of the University of Delaware. Finally, the advice and encouragement of Dr. Andrew Crowson and Dr. Julian J. Wu are greatly appreciated.

Wang Tzuchiang
Tsu-Wei Chou

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