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Advanced Metallizations In Microelectronics

Editors: Avishay Katz, Shyam P. Murarka and Ami Appelbaum

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Advanced Metallizations In Microelectronics

Symposium held April 16-20, 1990, San Francisco, California, U.S.A.

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Preface

The Symposium on Advanced Metallizations in Microelectronics was held on April 16-20, 1990, in San Francisco, U.S.A., as Symposium B of the 1990 Spring Meeting of the Materials Research Society. This symposium focused on the material and processing issues of metallization in conjunction with microelectronics applications. The purpose of the symposium was to provide a forum for the discussion of the recent advances and processes associated with the metallization of Si, InP and GaAs based electronic, optic and optoelectronic devices and IC's.

More than 150 papers from 19 countries (Australia, Belgium, Canada, China, Czechoslovakia, France, Hungary, India, Israel, Japan, Korea, Poland, Spain, Sweden, The Netherlands, United Kingdom, USA, USSR, West Germany) were presented on fundamental and applied aspects of metallization issues for microelectronics.

The symposium included sessions on overview and concerns of metallization, diffusion barriers, metallization schemes for interconnects, wiring and packaging, silicides, silicides-polysilicon systems, Au-based and non Au-based ohmic contacts for GaAs technology, contacts to InP and related materials, general aspects of variety of deposition techniques, and the special application of W and W-alloys. More than 90 papers, which are included in this proceedings, illustrate both the present state of knowledge in metallization processing and contacts for microelectronic materials and technology and the thrust of current research and development in the field.

The editors wish to thank the sponsors, invited and contributing authors, session chairmen, reviewers, and MRS staff and program officials for their help in organizing this successful symposium and publishing this volume.

Avishay Katz
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