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Thin Films: Stresses and Mechanical Properties IX

Editors: Cengiz S. Ozkan, L. Ben Freund, Robert C. Cammarata and Huajian Gao

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Thin Films: Stresses and Mechanical Properties IX

Symposium held November 26–30, 2001, Boston, Massachusetts, U.S.A.

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PREFACE

This volume is the ninth in a series of proceedings from the Materials Research Society on "Thin Films: Stresses and Mechanical Properties". This symposium, held November 26-30, was part of the 2001 Fall MRS Meeting held in Boston, Massachusetts.

While the symposium continued the series theme of materials science related to modeling and characterization of mechanical properties of materials, it focused on the following several areas: strain relaxation and strengthening mechanisms; defects formation; mechanical properties and nanoscale testing; adhesion and fracture; thin film applications in MEMS; computational modeling and experiments; and film deposition, microstructure evolution and intrinsic stress. There was a significant increase in the number of participants and papers presented at this symposium. This manifests the recent increase in research and development activities in both university and industry, making the thin films area an exciting and ever growing field of research for future years.

The symposium was strengthened by the invited and contributed papers covering various subjects ranging from processing-microstructure-mechanical property relationships, strain effects and self-organization in thin films, nanoscale defects and thermomechanical behavior of materials, to novel nanoscale materials testing. We thank all of the invited speakers for their participation, excellent overviews and in-depth expositions on the various topics.

Finally, we gratefully acknowledge financial support from k-Space Associates, Inc. and Microphotonics, Inc. for their financial contribution to our symposium.

Cengiz S. Ozkan
L. Ben Freund
Robert C. Cammarata
Huajian Gao

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