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Oxide Semiconductors

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Oxide Semiconductors

**MATERIALS RESEARCH SOCIETY
SYMPOSIUM PROCEEDINGS VOLUME 1633**

Oxide Semiconductors

Symposium held December 1–6, 2013, Boston, Massachusetts, U.S.A.

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PREFACE

Symposium R, "Oxide Semiconductors" was held Dec. 1–Dec. 6 at the 2013 MRS Fall Meeting in Boston, Massachusetts.

Oxide semiconductors are poised to take a more active role in modern electronics, particularly in the field of thin film transistors. While many advances have been made in terms of our understanding of fundamental optical and electronic characteristics, there remain many questions in terms of defects, doping and optimal growth/synthesis conditions.

This symposium proceedings volume represents recent advances in growth and characterization of a number of different oxide semiconductors, as well as device fabrication. The papers are divided into three sections: (1) Synthesis (2) Optical and Electrical Characterization and (3) Device Issues. In selecting these papers, it is our hope that readers get a sense of the many interesting discussions that were held during the symposium, and the excitement in the community about this class of materials. We would also like to take this opportunity to thank the Army Research Office for financial support. The views, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other documentation.

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March 2014

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