Progress in Semiconductor Materials V—Novel Materials and Electronic and Optoelectronic Applications

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*Invited Paper
PREFACE

In Symposium EE, "Progress in Semiconductor Materials V—Novel Materials and Electronic and Optoelectronic Applications," held November 28-December 1 at the 2005 MRS Fall Meeting in Boston, Massachusetts, authors reviewed the status of our understanding of interband and intersubband transitions in semiconductors including III-V, IV, and II-VI materials and quantum structures as well as advances in the development of light sources, detectors, modulators, and electronic materials and devices. Brought to maturity, such devices will likely see widespread use in applications as diverse as infrared imaging, chemical and biological sensing, surveillance, short-links, space-based applications, solar cells, high bandwidth communications, and many other applications. Invited speakers as well as contributing authors did a fine job sharing recent results and achievements in this exciting research area.

This collection of proceedings papers provides a very nice cross-section of the oral and poster presentations made at the 2005 MRS Fall Meeting. This volume should provide readers with a good picture of the current state of optoelectronic semiconductor materials.

We would like to thank the authors who contributed to this volume as well as those who provided careful review of all these proceedings papers. We are grateful to the MRS editorial staff in assembling this volume. We would also like to thank AIXTRON Inc., Epichem Inc., NREL, and Veeco TurboDisc for sponsoring this symposium.

Linda J. Olafsen
Robert M. Biefeld
Michael C. Wanke
Adam W. Saxler

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MATERIALS RESEARCH SOCIETY SYMPOSIUM PROCEEDINGS


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