

Preface

The Third European Conference on Silicon Carbide and Related Materials (ECSCRM2000), held September 3-7, 2000 in Kloster Banz, Germany, developed into a truly important forum in the field of wide bandgap semiconductors. All continents – some 320 participants from 21 different countries - were represented and 15 exhibitors maintained booths and demonstrated the increasingly industrial interest in and the economic impact of the wide bandgap semiconductors. Scientists from Universities and Industry discussed the exciting progress in the fields of SiC and III-Nitrides. Many young scientists have been among the participants; they are regarded as the guarantee to successfully solve the forthcoming tasks.

These proceedings reveal the present experimental and theoretical knowledge on the growth of bulk crystals and epitaxial layers, the mechanical, thermal and electronic properties of the grown material, the development of suitable processes and electronic devices, which will have a profound effect on society's ability to better utilize its strategic resources in the future.

Contained in these proceedings are 184 contributed and 10 invited papers. The Program Committee recommended to avoiding parallel sessions, to put emphasis on plenary sessions and to make the poster sessions as comfortable as possible. Based on these recommendations, three plenary sessions and two extended poster sessions, which attracted intensive discussions, were organized. In addition, emphasis on the strengthening of the interaction between scientists from Universities and Industry has been facilitated by organizing events like the "Defect Forum" and the session on "Special Industrial Contributions". Social events (the Opening and Get-Together, the Conference Banquet in the wine cellar of the Staatliche Hofkellerei in Würzburg and the Barbecue Party) provided good opportunities to trigger and to strengthen personal ties amongst this international group of researchers.

The success of ECSCRM2000 was due to a smooth team work by many committed people. The Steering Committee made many valuable proposals regarding the scientific content of the conference, the Program Committee has carefully reviewed and selected the scientific contributions and put together the technical program. The session chairmen took care that the oral presentations ran smoothly and on time. All the reviewers deserve great appreciation for carefully reading the manuscripts during the conference to guarantee a high scientific standard of the proceedings.

An outstanding portion of the success was due to the careful assistance and the enthusiasm of the members of the local Organizing Team; we wish to thank Michel Bockstedte, Kai Christiansen, Florin Ciobanu, Thomas Frank, Jürgen Gajowski, Hans Heißenstein, Oliver Klettke, Michael Krieger, Michael Laube, Gabi Loy, Alrun Pensl, Horst Sadowski, Konrad Schneider, Norbert Schulze, Kurt Semmelroth, Achim Seubert, Ulrich Starke and Michael Weidner. We would especially like to express to Gabi Loy our deepest appreciation for her expert leadership in all the financial affairs and in organizing the registration and accommodation for the participants. In many hopeless situations, Gabi never lost track of things and always discovered an optimal solution. We are very grateful to Michael Krieger, who developed the computer program for the complete organization of the conference, to Michael Laube, who designed and took care of the outstanding home page on the internet, to Thomas Frank, Oliver Klettke and Michael Weidner for their dedicated help in preparing the manuscripts for the Conference Proceedings. Last but not least we would like to thank Michael Möslein and Lucia Gieß of the Hanns-Seidel-Stiftung for their professional

commitment to creating an elevating atmosphere and for taking care of all the organizational matters at Kloster Banz.

The generous support of the many industrial and government sponsors enabled the organizers to provide funding for young scientists and for participants from Eastern European countries and to keep the conference fee at an affordable level.

The next conference in this series will move to the northern part of Europe. It will be held in Linköping, Sweden in 2002. General Chairman will be Prof. Erik Janzén. We wish the organizers of the next conference much success.

Erlangen, November 2000

Gerhard Pensl
Dietrich Stephani
Martin Hundhausen

Reklame

Wide bandgap semiconductors such as SiC, III-V nitrides and related compounds are currently attracting more and more attention due to their very interesting physical properties, which are different from those of conventional semiconductors. Steady improvement of the crystal quality and improved knowledge of the physical properties of these materials are leading to rapid developments in high-power, high-temperature, high-frequency electronics and blue light emitters.

This volume presents the present experimental and theoretical knowledge on the growth of bulk crystals and epitaxial layers, the mechanical, thermal and electronic properties of the grown materials, as well as the development of suitable processes and electronic devices that will have a profound effect on society's ability to better utilize its strategic resources in the future.

Dr. M. Hundhausen
Institut für Technische Physik
Universität Erlangen-Nürnberg,
Erwin-Rommel-Str. 1
D-91058 Erlangen
Deutschland

Dr. M. Hundhausen
Institut für Technische Physik
Universität Erlangen-Nürnberg,
Erwin-Rommel-Str. 1
D-91058 Erlangen

Dr. D. Stephani
SiCED Electronics Development Ltd.
Paul-Gossen-Str. 100
D-91052 Erlangen
Deutschland