PROCEEDINGS OF THE FIFTH INTERNATIONAL SYMPOSIUM ON QUANTUM CONFINEMENT: NANOSTRUCTURES

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PREFACE

This book is a collection of the some of the papers presented at the Fifth International Symposium on Quantum Confinement: Nanostructures, held November 2-5 in Boston, USA, as part of the 194th Meeting of the Electrochemical Society. This symposium was a follow-up of previous meetings held in St Louis (Spring '92), San Francisco (Spring '94), Chicago (Fall '95), and Montreal (Spring '97). Forthcoming meetings will be held in Honolulu (Fall '99) and in Washington (Fall '01).

The symposium was sponsored by the Dielectric Science and Technology, the Electronics, and the Luminescence and Display Materials Divisions of the Electrochemical Society. There was a one day session organized jointly with the EXCON' 98 (Excitonic Processes in Condensed Matter) meeting.

The symposium was organized to address recent developments in the area of nanoscale semiconducting and metallic structures with emphasis on ultrasmall clusters and their potential for device applications. Papers were presented on silicon nanostructures, porous silicon, quantum dot structures, excitons in nanostructures, self-ordered nanostructures and clusters, quantum devices, architectures, and circuits.

This Proceedings Volume includes 55 of the 68 papers presented at the meeting. The symposium was organized into oral presentations that spanned four days including one day organized jointly with the EXCON' 98 (Excitonic Processes in Condensed Matter) meeting. Posters were also presented during an evening session. Invited papers are indicated by an asterisk in the Table of Contents.

The editors thank all the speakers and session chairpersons for their contributions to the success of the symposium. We also thank the Electrochemical Society staff for their constant support and for their help in preparing the volume for publication.

Finally, we would like to conclude by expressing our appreciation for the financial support provided by the U.S. Army Research Office and the Electrochemical Society.

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