Foreword Thermal Investigations of IC's and Microstructures (THERMINIC)

MICROELECTRONICS thermal experts from four continents gathered in the Fall of 1997 at the Third THERMINIC Workshop, Cannes, France. A formal Workshop Proceedings is not published, but it is now a tradition that the most valuable papers of the Workshop appear in special issues or special sections of leading, international journals. Because of the nature and scope of the Workshop, two journals were chosen in which to have papers published, *Sensors and Actuators*, and the IEEE TRANSACTIONS ON COMPONENTS, PACKAGING, AND MANUFACTURING TECHNOLOGY—PART A.

The topics of the THERMINIC Workshops involve all of the thermal aspects related to integrated circuits, packages, microelectromechanical systems (MEMS), and the materials used in them including measurement, modeling, simulation, and application of thermal and electro-thermal effects. There were two dominant themes at the 1997 Workshop. A large number of papers discussed thermal mapping and temperature measurement methods as well as evaluation of temperature measurements. There were also many papers devoted to thermal and electro-thermal simulation and modeling of integrated circuits and packages. In addition, methods for measuring thermal material parameters were also a highlight of the scientific program. From this rich choice, the papers that follow in this special section were selected for their value and interest to the IEEE TRANSACTIONS ON COMPONENTS, PACKAGING, AND MANUFACTURING TECHNOLOGY—PART A.

The papers published here represent only a small portion of the total number of papers presented at the THERMINIC Workshop. Of the many within the scope of IEEE TRANSACTIONS ON COMPONENTS, PACKAGING, AND MANUFACTURING TECHNOLOGY—PART A, these are felt to be the best. Many of the papers presented at the Workshop dealt with thermal sensors and actuators and related measurement issues. The best with this scope are published in *Sensors and Actuators*.

It is an honor and a pleasure for us to act as Guest Editors of this special section and to be able to collect a number of valuable articles in these topics of special interest.

We thank all of the authors for their wonderful work and their cooperation. We sincerely hope that this special section meets with the expectations of the readers as well.

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