
FOREWORD

Special Section on Frontier of Thin-Film Transistor Technology

Thin film transistor (TFT) made of silicon thin film has greatly contributed to creating flat panel displays. While Si TFT technology is growing for extended applications such as system-on-panel, new materials such as printable organic semiconductors and transparent oxide semiconductors have been brought into TFT material and attracting a great deal of attention because they are expected to open new application fields such as printable electronics and flexible electronics. The purpose of this Special Section is to bring together information and knowledge of advanced TFT technology of various materials and applications. This special section contains 6 papers which cover silicon, oxide and organic materials for application to TFTs.

The guest editor would like to express sincere thank to all the authors for their contributions and to all the reviewers for their help. He is also grateful to the editorial committee members for their dedicated efforts in organizing this special section.

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Tanemasa Asano, Guest Editor

Tanemasa Asano (Member) was born in Ibaraki, Japan, in 1953. He received his B.Eng. from Ibaraki University, and M.Eng. and Dr.Eng. degrees from Tokyo Institute of Technology. In 1979, he became a research associate of Tokyo Institute of Technology, where he carried out research on hetero-epitaxial growth to produce silicon-on-insulator, germanium-on-insulator and gallium-arsenide-on-insulator on Si wafers. He moved to Kyushu Institute of Technology in 1989 where he extended his research to quasi-single-crystal thin-film transistors, Er-salicided Schottky MOSFET, and MEMS devices. In 2006, he joined with Faculty of Information Science and Electrical Engineering, Kyushu University where he added 3D integration technology to his major research and demonstrated a novel back-side illuminated CMOS image sensor. He served chairman of the Technical Committee of Silicon Devices and Materials (SDM) of IEICE from 2007 to 2008.

