

Report on the 29th IUVSTA Workshop

The 29th IUVSTA Workshop on Selective and Functional Deposition Technologies as Applied to ULSI Technology was held on November 19-24, 2000 in Ise-Shima Royal Hotel, Mie, Japan, which was sponsored by the Electronic Materials and Processing Division and cosponsored by the Thin Film Division. The Workshop was jointed with the 2nd International Workshop on Development of Thin Films for Future ULSI's and Nano-Scale Process Integration, which is sponsored by the 'Research for the Future' Research Project of the Japan Society for the Promotion of Science (JSPS). The chairperson of the Workshop was Prof. Y. Yasuda (Nagoya Univ., Japan), and the program chair was Dr. G. E. McGuire (MCNC,USA). The synergy of the Joint Workshop could provide the participants with a broader forum of topics around a central theme. The workshops had no parallel sessions and, therefore, provided a forum for detailed discussions on the central themes of the workshop.

The purpose of the Workshop was to discuss important problems of the development of new materials and growth techniques for various ULSI thin films in order to realize the future nano-scale ULSIs. The subjects addressed were all of the thin films necessary to produce future ULSIs, that is, semiconductor films for contacts and nano-scale devices, metal films for contacts and interconnections, dielectric films with high-k for memory cells and with low-k for interconnections and gate oxide/nitride films for nano-scale MOS devices.

The number of papers presented in the Workshop amounted to 79, consisting of 15 invited and 64 contributed papers. The total number of participants was 94, including 13 persons from USA and Europe, and 1 person from Korea. The advanced results with respect to the materials and growth techniques for ULSI thin films were presented, and fruitful discussions were actively performed at the workshop. We could successfully perform the Workshop.

Finally, we would like to express our sincere thanks to IUVSTA for the sponsorship.

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