

Editorial

This Special Issue of the IEEK JOURNAL OF SEMICONDUCTOR TECHNOLOGY AND SCIENCE contains extended versions of a selection of outstanding papers presented at the 11th Korean Conference on Semiconductors (KCS2004) which was held at Muju, Feb. 19-20, 2004. Among 522 papers presented, 7 papers have finally been solicited based on the recommendation of 13 technical committees. The first paper by J. Cho et al. describes an on-chip differential inductor and its application in a SiGe BiCMOS 2GHz LC VCO. In the second paper by Y. Kim et al., an accurate extraction of crosstalk-induced dynamic variation of coupling capacitance is demonstrated using novel test patterns and on-chip data. The third paper by M. Jang et al. discusses several novel properties of erbium-silicided 50nm n-type Schottky barrier MOSFETs with 5nm gate oxide thickness. The fourth paper by Y. Jang et al. analyzes the optical proximity correction process to reduce the on-chip linewidth variations. In the fifth paper, by H. Cha et al., a 3T one-time programmable ROM array based on thin gate oxide antifusing is demonstrated. The sixth paper by S. Lee et al. suggests a new reference cell with a novel sensing scheme for 1T-1MTJ MRAM. The seventh paper authored by D. Kim et al. addresses the fabrication of a 421GHz, 30nm triple-gate In_{0.7}GaAs HEMTs using the damage-free sidewall process and BCB planarization.

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