

Editorial

It is a pleasure for us to present this special issue of the JSTS.

The nine papers of this volume provide a comprehensive review of recent research and development in the field of MEMS. RF MEMS, Optical MEMS, Bio MEMS applications, as well as process technologies are subjects of this issue.

H. Nam *et al.* report newly designed two different cantilevers integrated with sensor and actuator.

K-C Lee *et al.* present a novel 3D fabrication method with single X-ray process utilizing a micro-actuator integrated X-ray mask and demonstrate three-dimensional microstructures.

K.J. Ma *et al.* introduce the active dissolved wafer process step (ADWP) through fabrication of a CMOS op. amp. Integrated accelerometer.

J. Park *et al.* report 3-D inductors and transformers, which have been fabricated by using electroplating techniques, wire bonding techniques, multi-layer thick photo-resist, and low temperature processes.

T. Sim *et al.* present passive micro-valves, which are applicable to glaucoma implants. The authors examine the influences of chamber size; channel length and the shape of channel cross section.

J-B Lee reports electroplated 32x32 micro-mirror array for generic optical applications, which was fabricated on a glass substrate. The author investigates the results of theoretical modeling and the measurement.

Y-H Cho *et al.* present technical issues involved in the development of actuators and sensors for applications to high-precision MEMS. The technical issues include fabrication uncertainty and noise disturbance, causing major difficulties for MEMS to achieve high-precision actuation and detection functions.

M. Han *et al.* present a novel micro-fabrication technology of 3D microstructures with inclined/rotated UV lithography using negative photo-resist, SU-8.

B. Schauwecker *et al.* report a RF MEMS switch for low voltage actuation and they describe the fabrication process and measurement results.

For this special issue of JSTS, we would like to thank all of the authors, the editors and the staff involved for their excellent work.

Jong Uk Bu
Editor of this special issue