

IBS Center for Molecular Spectroscopy and Dynamics

Colloquium

SPEAKER

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TITLE

Fabrication of 3D Nanostructures using Multi-Functional Nanoimprint Lithography Technology for Biosensors

ABSTRACT

With the recognition of nanotechnology as one of the future strategic technologies, the R&D efforts have been performed under exclusive supports of governments and private sectors. At present, nanotechnology is at the focus of research and public attention in almost every advanced country including USA, Japan, and many others in EU. Keeping tracks of such technical trends, Center for Nanoscale Mechatronics and Manufacturing (CNMM) and BioNano Health-Guard Research Center are established in Korea as a part of national nanotechnology promotion policy led by Ministry of Science, ICT and Future Planning (MSIP). It will hold widespread potential applications in electronics, optical electronics, biotechnology, micro systems, etc, with the promises of commercial visibility and competitiveness. In this paper, multi-functional nanoimprint lithography technology which is well-known the next generation lithography, roll- and roll-plate-typed nanoimprint lithography (R-NIL) and the key technology for nanomanufacturing and nanoscale measurement technology will be introduced [1-3]. Additionally, some achievements which were obtained in solar cell, biosensor for alzheimer's disease, hard disk drive, and MOSFET using the nanoimprint lithography system are introduced.

DATE AND VENUE

March 29, 2017 (Wednesday, 6:00-7:00 p.m.) Seminar Room 116, KU R&D Center

■ LANGUAGE-Korean