



IBS Center for Multidimensional Carbon Materials



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Alternative semiconductor processing for extending CMOS technologies

May 16 | Bldg. 101
13:00 P.M. | Seminar room on the 1st floor

With increasing demands on smart electronics for future society, multi-functional devices based on nano-scale materials are required for high performance with low power consumption. Various processing techniques and device architecture are used for logic/power transistors, solar cells, and optical interconnection. They enable technical breakthrough to overcome the physical limits of conventional CMOS scaling for smart living with sustainable energy and environment. This talk introduces Yonsei Institute of Convergence Technology and some alternative semiconductor techniques of metal-assisted chemical etching, III-V electronics, and Si photonics.

<Research>

- Semiconductor devices (Ge/IIIIV CMOS transistors, Ge lasers)
- Metalassisted chemical etching (alternative to dry etch)
- Carbon and other 2D materials (graphene and others)
- Renewable energy solar cells (IIIIV Photovoltaics)

You are cordially invited to attend!

Special Guest Speaker