

## YUN Wan Soo

Associate Professor  
Department of Chemistry



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**Key Words** Nanobio sensor, Nanogap, Nanomaterials, SPM, Analytical chemistry

**Research Area** Nano Analytical Chemistry

- Nanobio sensors based on nanodevices and materials, particularly on nanogaps
- Probing and utilizing material properties evolving on scaling
- Development of nanofabrication techniques based on chemical processes
- Research on precision nano analytical means & tools

**Education**

- 2000 PhD Seoul National University, Korea
- 1994 MSc Seoul National University, Korea
- 1992 BSc Seoul National University, Korea

**Experience**

- 2001-2012 Head/Principal Research Scientist/Senior Research Scientist, KRISS
- 2007-2012 Adjunct Professor, Department of Nanobiotechnology, US1
- 2008-2012 Adjunct Professor, Department of Chemistry, KAIST
- 2000-2001 Postdoctoral Fellow, Harvard University

**Position**

- 2013-present Head, Research Institute of Nanobio Convergence
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**Selected Publication**

- Ferroelectric properties of individual barium titanate nanowires investigated by scanned probe microscopy, W. S. Yun, J. J. Urban, Q. Gu, and H. Park, *Nano Letters*, **2**, 447 (2002).
- Size-controlled synthesis of machinable single crystalline gold nanoplates, C. S. Ah, Y. J. Yun, H. J. Park, W.-J. Kim, D. H. Ha, and W. S. Yun, *Chem. Mater.* **17**, 5558 (2005).
- Fabrication of integrated nano-gap electrodes by surface-catalyzed chemical deposition, C. S. Ah, Y. J. Yun, J. S. Lee, H. J. Park, D. H. Ha, and W. S. Yun, *Appl. Phys. Lett.* **88**, 133116 (2006).
- Origin of gate hysteresis in carbon nanotube field-effect transistors, J. S. Lee, S. Ryu, K. Yoo, I. S. Choi, W. S. Yun, and J. Kim, *J. Phys. Chem. C* **111**, 12504 (2007).
- Electric property evolution of structurally defected multilayer graphene, K. Kim, H. J. Park, B.-C. Woo, K. J. Kim, G. T. Kim, and W. S. Yun, *Nano Letters* **8**, 3092 (2008).
- Nanoparticle assembly on nanoplate, J. Heo, Y. W. Lee, M. Kim, W. S. Yun, and S. W. Han, *Chem. Comm.*, 1981 (2009).
- Enhanced protein immobilization efficiency on a TiO<sub>2</sub> surface modified with a hydroxyl functional group, W.-J. Kim, C. Huh, B. S. Lee, C. S. Ah, A. Kim, H.-B. Pyo, G. Y. Sung, and W. S. Yun, *Langmuir* **25**, 11692 (2009).
- High Voltage-Derived Enhancement of Electric Conduction in Nanogap Devices for Detection of Prostate-Specific Antigen, H. J. Park, Y. S. Chi, I. S. Choi, and W. S. Yun, *Appl. Phys. Lett.*, **97**, 033701 (2010).

**Others**

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