NAME Kim, Kyu-Won

Position Professor

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Homepage

Degree

- 1994 KAIST , Chemistry (B.S.)
- 1998 Seoul National University, Chemistry (M.S.)
- 2002 KAIST , Chemistry (Ph.D.)

Experience

- 2006~present Incheon National University, Professor
- 2012~2013 Lawrence Berkeley National Lab. Visiting professor
- 2004~2006 KRISS, Senior Researcher
- 2002~2004 ETRI, Researcher
- 2016~2018 Associate Editor, Journal of Electrochemical Science and Technology

Major

- Electrochemistry, Biosensor, Nanochemistry

Teaching

- Analytical Chemistry, Electrochemistry, Instrumental Analysis,

Representative Research

- M13 Virus-Incorporated Biotemplates on Electrode Surfaces to Nucleate Metal Nanostructures by Electrodeposition, (2017) ACS Appl. Mater. & Interfaces, 9, 32965.
- An Electrochemically Reduced Graphene Oxide-Based Electrochemical Immunosensing Platform for Ultrasensitive Antigen Detection, (2012) Anal. Chem. 84, 4, 1871.

Researches

<Publications>

- Electrochemically Co-deposited Teeth-like Virus-Platinum Nanohybrids as an Electrocatalyst for Methanol Oxidation Reaction, (2018) Electroanalysis, 30, 220.
- One-step Synthesis of AuAg Alloy Nanodots and its Electrochemical Studies towards Nitrobenzene Reduction and Sensing, (2018) Electroanalysis, 30, 57.
- Gold Dendrites Co-deposited with M13 Virus as a Biosensor Platform for Nitrite Ions, (2017) Biosensors & Bioelectronics, 94, 87.
- M13 Virus-Incorporated Biotemplates on Electrode Surfaces to Nucleate Metal Nanostructures by Electrodeposition, (2017) ACS Appl. Mater. & Interfaces, 9, 32965.
- In-Situ Growth of Prussian Blue Nanostructures at Reduced Graphene Oxide as a Modified Platinum Electrode for Synergistic Methanol Oxidation, (2016) Langmuir, 1890
- Aptamer-free electrochemical detection of thrombin based on coagulation reaction of ferrocene-labeled fibrinogen, (2015) J. Electroanal. Chem., 742, 70.
- Electrochemical thrombin detection based on the direct interaction of target proteins and graphene oxide as an indicator Analyst (2014), 139, 1331.

Current Research

- Development of electrocatalytic materials based on metal nanoparticles and viruses
- Development of electrochemical methods for chiral nanomaterials and chiral sensing