

**Full List of Publications** (peer-reviewed journals in chronological order)

- (1) Hasik Yang, Taek Dong Chung, Yun Tae Kim, and Hee-Chan Kim  
“Glucose Sensor Using a Microfabricated Electrode and Electropolymerized Bilayer Films”  
*Biosensors & Bioelectronics* in press (2002).
- (2) Taek Dong Chung, Ran-A Jeong, Sun-Kil Kang and Hee-Chan Kim  
“Reproducible Fabrication of Miniaturized Glucose Sensors: Preparation of Sensing Membranes for Continuous Monitoring”  
*Biosensors & Bioelectronics* 16(9-12), 1079-1087 (2001).
- (3) Hasuck Kim, Jandee Kim, Hyunchang Lim, Mi-Jung Choi, Suk-Kyu Chang, and Taek Dong Chung  
“Electrochemical Recognition of Irons with Self-Assembled Monolayers of Quinone Derivatized Calixarene Disulfide”  
In *Studies in Surface Science and Catalysis* 132, pp. 967-972, Y. Iwasawa, N. Oyama and H. Kunieda (Editors), Elsevier Science B. V., 2001.
- (4) Taek Dong Chung, Jongseo Park, Hyunchang Lim, Hasuck Kim, Mijeong Choi, Joo-Ryon Kim and Suk-Kyu Chang  
“Self-Assembled Monolayer of a Redox-Active Calix[4]arene: Voltammetric Recognition of Ba<sup>2+</sup> Ion in Aqueous Media”  
*Anal. Chem.* 73(16), 3975-3980 (2001).
- (5) Taek Dong Chung and Fred C. Anson  
“Catalysis of the Electroreduction of O<sub>2</sub> by Cobalt 5,10,15,20-tetraphenylporphyrin Dissolved in Thin Layers of Benzonitrile on Graphite Electrodes”  
*J. Electroanal. Chem.* 508, 115-122 (2001).
- (6) Jongseo Park, Sun Kil Kang, Taek Dong Chung, Suk-Kyu Chang and Hasuck Kim  
“Selective Electrochemical Recognition of Ions in Solution and at Self-assembled Monolayers”  
*Microchem. J.* 68(2-3), 109-113 (2001).
- (7) Bong-Hwan Kim, Taek-Dong Chung, Jong-Won Lee, Yong-Jae Lee and Kukjin Chun  
“A New Anti-Stiction Coating Precursor”  
*J. MicroElectroMechanical Syst.* 10, 33-40 (2001).
- (8) Jongwon Kim, Taek Dong Chung and Hasuck Kim  
“Determination of Biologically Active Acids Based on the Electrochemical Reduction of Quinone in Acetonitrile/Water Mixed Solvent”

- J. Electroanal. Chem.* 499(1), 78-84 (2001).
- (9) Hee-soo Kim, Taek Dong Chung and Hasuck Kim  
“Voltammetric Determination of the  $pK_a$  of Various Acids in Polar Aprotic Solvents Using 1,4-Benzoquinone”  
*J. Electroanal. Chem.* 498, 209-215 (2001).
- (10) Taek Dong Chung and Fred C. Anson  
“Electrochemical Monitoring of Proton Transfer across Liquid/Liquid Interfaces on the Surface of Graphite Electrodes”  
*Anal. Chem.* 73(2), 337-342 (2001).
- (11) Sun Kil Kang, Taek Dong Chung and Hasuck Kim  
“Electrochemical Recognition of  $Ca^{2+}$  ion in Basic Aqueous Media Using a Quinone-Derivatized Calix[4]arene”  
*Electrochim. Acta* 45(18), 2939-2943 (2000).
- (12) Hasuck Kim, Sun Kil Kang and Taek Dong Chung  
“Ionic Recognition with Quinone-Derivatized Calixarenes in Solution and at Self-Assembled Monolayers”  
*J. Kor. Electrochem. Soc.* 3, 69-73 (2000).
- (13) Dongsuk Choi, Sang Kwon Lee, Taek Dong Chung, Sun Kil Kang and Hasuck Kim  
“Electrochemical Determination of Adsorption Isotherm of Mordant Red 19 on Mercury and Its Analytical Application for the Indirect Determination of Uranium”  
*Electroanalysis* 12, 477-482 (2000).
- (14) Young-Mok Ham, Ki-Ho Baik, Won-Kyu Lee, Taek Dong Chung and Kukjin Chun  
“Application of New Empirical Model to the Electron Beam Lithography Process with Chemically Amplified Resists”  
*Japan. J. Appl. Phys.* 37, 6761-6766 (1998).
- (15) Bong-Hwan Kim, Taek Dong Chung, Jong-Won Lee, Yong-Jae Lee and Kukjin Chun  
“Amorphous Silicon Direct Bonding (a-Si) with Improved Surface Roughness”  
*J. Kor. Phys. Soc.* 33, s450-s453 (1998).
- (16) Young-Mok Ham, Won-Kyu Lee, Kukjin Chun and Taek-Dong Chung  
“A New Simulation Model of Electron Beam Lithography for Manufacturing”  
*J. Kor. Phys. Soc.* 33, s67-s71 (1998).
- (17) Taek Dong Chung, Sun Kil Kang, Hasuck Kim, Joo Ryn Kim, Weon Seok Oh and Suk Kyu Chang  
“Synthesis and Electrochemical Behavior of a New Water Soluble  $Ca^{2+}$ -selective

- Ionophore Based on Calix[4]arene-triacid-monoquinone”  
*Chem. Lett.* 1225-1226 (1998).
- (18) Taek Dong Chung and Hasuck Kim  
“Electrochemistry of Calixarene and Its Analytical Applications” (Review Article)  
*J. Inclu. Pheno. Mol. Recog.* 32(2-3), 179-193 (1998).
- (19) Weon Seok Oh, Taek Dong Chung, Jongwon Kim, Hee-soo Kim, Hasuck Kim, Dongmok Hwang, Kimoon Kim, Seung Gul Rha, Jong-In Choe and Suk-Kyu Chang  
“Synthesis and Electrochemical Properties of Calix[4]arene-triester-monoquinones”  
*Supramolecular Chemistry* 9, 221-229 (1998).
- (20) Yeon Hee Cho, Seung Gul Rha, Suk Kyu Chang, Taek Dong Chung, Keunchang Cho and Hasuck Kim  
“New Potassium and Cesium Selective Ionophoreic Bis(crown)s Derived from Xanthene-4,5-dicarboxylic Acid”  
*J. Inclu. Pheno. Mol. Recog.* 31(2), 119-129 (1998).
- (21) Taek Dong Chung, Sun Kil Kang, Jongwon Kim, Heesoo Kim and Hasuck Kim  
“Interaction Between Various Alkylammonium Ions and Quinone-Derivatized Calix[4]arenes in Aprotic Media”  
*J. Electroanal. Chem.* 438, 71-78 (1997).
- (22) Taek Dong Jongseo Park, Suk Kyu Chang and Hasuck Kim  
“New Potassium-Selective Electrode Based on an Ionophoreic bis(crown)s Derived from Xanthene-4,5-dicarboxylic Acid”  
*Anal. Sci.* 13(S), 325-328 (1997).
- (23) Sang Kwon Lee, Taek Dong Chung and Hasuck Kim  
“Indirect Voltammetric Determination of Lanthanides in the Presence of Mordant Red 19”  
*Electroanalysis* 9, 527-532 (1997).
- (24) Taek Dong Chung, Dongsuk Choi, Sang Kwon Lee, Sun Kil Kang, Taehoon Kim, Suk-Kyu Chang and Hasuck Kim  
“Electrochemical Behavior of Calix[4]arenediquinones and Their Cation Binding Properties”  
*J. Electroanal. Chem.* 396, 431-439 (1995) (Elsevier).
- (25) Dongsuk Choi, Taek Dong Chung, Sang Kwon Lee, Sun Kil Kang, Tae Hoon Kim, Suk-Kyu Chang and Hasuck Kim  
“Electrochemical Recognition of Ammonium and Alkali Metal Cations with Calix[4]arenediquinone”  
*J. Electroanal. Chem.* 387, 133-134 (1995) (Elsevier).

- (26) Taek Dong Chung, Sang Kwon Lee, Young-Gu Ha, Ki Won Cha, Songju Lee, Kihyoung Cho and Hasuck Kim  
“Electrochemical Behavior of MR19 and Its Complexes with Light-Lanthanides”  
*Bull. Kor. Chem. Soc.* 14(5), 567-574 (1993).

### **Submitted**

- (1) Taek Dong Chung, Ran-A Jeong, Sun Kil Kang and Hee Chan Kim  
“Electropolymerized Bilayer Combining Highly Selective Polymers and Perfluorinated Tetrafluoroethylene: Fabrication of Continuous Monitoring Glucose Sensors without Using Non-aqueous Solvents”  
*Anal. Chem.* (2001)
- (2) Taek Dong Chung, Christopher T. Culbertson, Stephen C. Jacobson, and J. Michael Ramsey  
“A Simple Non-Intrusive Method for Measuring Velocities of Fluorescent Particles in Microchannels Using A Conventional Single Point Setup”  
*Anal. Chem.* (2002)

### **Patent filed**

Inventors: Taek Dong Chung, Ran-A Jeong and Hee-Chan Kim

Assignees: Sooil Inc., Hee-Chan Kim and Soo-Bong Choi

Title: "Method for Fabrication of Biosensors"

Korean patent No. 99-44034

\*The same technology is to be filed for US patent.