

Room A #101 10:30-12:30

[Tu-A1] Big Ideas in Novel Sensors IV**Session Chairs:**Il-Doo Kim (KAIST, Korea),
Dong-Ho Kim (KIMS, Korea)**Tu-A1-1 [Invited]** 10:30-11:00**Molecular Sensing SERS Substrates for Practical Applications**Dong-Ho Kim
KIMS, Korea**Tu-A1-2** 11:00-11:15**Few-Layered WS₂ Confined in Co, N-Doped Hollow Carbon Nanocages Derived from MOF for Superior NO₂ Sensors**Won-Tae Koo¹, Jun-Hwe Cha¹, Ji-Won Jung¹, Seon-Jin Choi², Ji-Soo Jang¹, Dong-Ha Kim¹, and Il-Doo Kim¹
¹KAIST, Korea, ²MIT, USA**Tu-A1-3 [Invited]** 11:15-11:45**A New Active Layer for a Different Level of Organic Electrochemical Transistor**Junwoo Lee^{1,2}, Sang-Il Choi^{1,2}, and Sungsoo Kim¹
¹Pai Chai Univ., Korea, ²Flexolution Corp., Korea**Tu-A1-4** 11:45-12:00**Catalyst Loaded WO₃@SnO₂ Heteronanostructures: Synthesis and their Gas Sensing Performance**Peresi Majura Bulemo and Il-Doo Kim
KAIST, Korea

Room B #102 10:30-12:30

[Tu-B1] Functional Devices using Thin Films and Nanoparticles**Session Chairs:**Alejandro G. Roca
(Catalan Inst. of Nanosci. and Nanotech., Japan),
Takashi Nakajima (Tokyo Univ. of Sci., Japan)**Tu-B1-1 [Keynote]** 10:30-11:00**Magnetoplasmonic Nanodomains as a Novel Structure for Biomedical Applications**Josep Nogues^{1,2}, Z. Li¹, A. Aranda-Ramos³, A. Lopez-Ortega⁴, P. Güell-Grau³, J.L. Tajada¹, L. Pou-Macayo³, F. Pi³, S. Lope Piedrafita³, M.D. Baró³, J. Sort^{2,3}, P. Vavasori⁴, C. Nogues³, and B. Sepúlveda¹
¹Catalan Inst. of Nanosci. and Nanotech., Spain, ²ICREA, Spain, ³Univ. Autònoma de Barcelona, Spain, ⁴CIC nanoGUNE, Spain**Tu-B1-2 [Invited]** 11:00-11:30**Multifunctional Magnetic Plasmonic Nanoparticles for Innovative Biomedical and Sensing Applications**Elvira Fantechi¹, Alejandro Gomez Roca², Claudia Innocenti³, Borja Sepulveda², Francesco Pineider¹, Claudio Sangregorio^{3,4}, Neus Bastus², Victor Puentes^{2,5,6}, and Josep Nogues^{2,6}
¹Univ. of Pisa, Italy, ²ICN², Spain, ³Univ. of Florence, Italy, ⁴CNR-ICCOM, Italy ⁵Vall d'Hebron Institut de Recerca, Spain, ⁶ICREA, Spain**Tu-B1-3 [Invited]** 11:30-12:00**Controlling Charge Transport in Organic Field-Effect Transistors through the Systematic Polarization of Polar Gate Dielectric Layer**Dipak Kumar Goswami
Indian Inst. of Tech., India**Tu-B1-4** 12:00-12:15**Evaluation of Interfacial and Electrical Properties of HfO₂/Ge Stacks Modulated by SiO₂ Interfacial Layer and Post Metallization Annealing**Kumar Mallem¹, Subhajit Dutta¹, Ashwath Rey B.S², Sunhwa Lee¹, Taeyong Kim¹, Yongkuk Kim¹, and Junsin Yi¹
¹Sungkyunkwan Univ., Korea, ²Visvesvaraya Technological Univ., India