

Room A #101 10:30-12:30**[We-A1]** Characterization tools and Anode Materials**Session Chair:**

Hyun-Wook Lee (UNIST, Korea)

We-A1-1 [Invited] 10:30-11:00

Revealing Spatio-Dynamics of Lithium Battery by Synchrotron-based X-Ray Microscopy

Jongwoo Lim
*Seoul Nat'l Univ., Korea***We-A1-2** 11:00-11:15

FeSi4P4: A Superior Anode Material with Exceptionally Reversible Lithium-Ion Storage

Mahboobeh Nazarian-Samani, Safa Haghghat-Shishavan, Masoud Nazarian-Samani, and Kwang-Bum Kim
*Yonsei Univ., Korea***We-A1-3 [Invited]** 11:15-11:45

Direct Visualization of Electrochemical Reactions in Batteries by In-Situ Transmission Electron Microscopy

Hyun-Wook Lee
*UNIST, Korea***Room B #102** 10:30-12:30**[We-B1]** Emerging Advanced Materials I**Session Chair:**

Ross Hatton (Univ. of Warwick, UK)

We-B1-1 [Invited] 10:30-11:00

Modulation of Nanoscale Materials based on Dense Nanopatterns

Yeon Sik Jung
*KAIST, Korea***We-B1-2 [Invited]** 11:00-11:30

Stabilizing Copper Window Electrodes towards Air Oxidation for Optoelectronic Applications

Philip Bellchambers, Jaemin Lee, Silvia Varagnolo, Houari Amari, Steven Huband, Marc Walker, and Ross Hatton
*Univ. of Warwick, UK***We-B1-3** 11:30-11:45

Novel Photon-Excitation Process for Control of C-C Bonds in Nano-carbon Materials by Free Electron Laser Irradiation

Hiroshi Yamamoto
*Nihon Univ., Japan***We-B1-4** 11:45-12:00

Fabrication of Isolated Nanocolumnar-Structured Titanium-Nitride Films by Reactive Sputtering

Yasushi Inoue¹, Ryusei Takamura¹, Daiki Sato¹, Sho Akiyama¹, and Osamu Takai²
¹Chiba Inst. of Tech., Japan, ²Kanto Gakuin Univ., Japan**We-B1-5** 12:00-12:15

A Glass Capillary-Written and then Vapor Phase-Polymerized PEDOT Conductor with Stability in Water

Feng Ma¹, Sangil Choi^{1,2}, and Sungsoo Kim^{1,2}
¹Pai Chai Univ., Korea, ²Flexolution Corp., Korea**We-B1-6** 12:15-12:30

Effect of Addition of Zirconia Particles on Gel Strength and Gelation Induction Time in Acrylamide Polymerization

Yu Ah Son¹, Nahm Sahn², Hang Kyo Jin¹, Young Min Choi¹, Sun Ho Jeong¹, Su Yeon Lee¹, Sung Mook Jung¹, and Beyong Hwan Ryu¹
¹KRICT, Korea, ²Korea Univ., Korea