

## D. Thin Film Process Technology 분과

2020년 2월 14일(금), 10:45-12:30 / Room J (하트 III, 6층)

### ■ [FJ2-D] 2-dimensional System II

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<b>FJ2-D-1</b> <b>10:45-11:15</b>	<b>[초청]</b> <b>Epitaxial Oxide Thin Films for Novel Electronics</b> Seung-Hyub Baek <i>Center for Electronics Materials, KIST</i>
<b>FJ2-D-2</b> <b>11:15-11:30</b>	<b><i>In-situ</i> Observation of Two-Dimensional Electron Gas Creation at the Interface of an Atomic-Layer-Deposited Al<sub>2</sub>O<sub>3</sub>/TiO<sub>2</sub> Thin Film Heterostructure</b> Tae Jun Seok <sup>1</sup> , Yuhang Liu <sup>1</sup> , Ji Hyeon Choi <sup>1</sup> , Hye Ju Kim <sup>2</sup> , Dae Hyun Kim <sup>3</sup> , Seong Hwan Kim <sup>2</sup> , Jae Hyuck Jang <sup>4</sup> , Deok-Yong Cho <sup>5</sup> , Sang Woon Lee <sup>2</sup> , and Tae Joo Park <sup>1,3</sup> <sup>1</sup> <i>Department of Materials Science and Chemical Engineering, Hanyang University,</i> <sup>2</sup> <i>Department of Energy Systems Research and Department of Physics, Ajou University,</i> <sup>3</sup> <i>Department of Advanced Materials Engineering, Hanyang University,</i> <sup>4</sup> <i>Electron Microscopy Research Center, KBSI,</i> <sup>5</sup> <i>IPIT and Department of Physics, Jeonbuk National University</i>
<b>FJ2-D-3</b> <b>11:30-11:45</b>	<b>Tailoring of Two-dimensional Electron Gas Density in Thin Film Oxide Heterostructure and its Application to Electronic Devices</b> Seong Hwan Kim, Hye Ju Kim, Chang Hee Ko, and Sang Woon Lee <i>Department of Energy Systems Research and Department of Physics, Ajou University</i>
<b>FJ2-D-4</b> <b>11:45-12:00</b>	<b>Chemical Mechanism of Formation of the 2-Dimensional Electron Gas at the Al<sub>2</sub>O<sub>3</sub>/TiO<sub>2</sub> Interface by Atomic Layer Deposition</b> Jeongwoo Park <sup>1</sup> , Jae Hyuck Jang <sup>2</sup> , Sang Woon Lee <sup>3</sup> , Tae Joo Park <sup>4</sup> , and Bonggeun Shong <sup>1</sup> <sup>1</sup> <i>Chemical Engineering, Hongik University,</i> <sup>2</sup> <i>Center for Scientific Instruments, KBSI,</i> <sup>3</sup> <i>Department of Energy Systems Research and Department of Physics, Ajou University,</i> <sup>4</sup> <i>Materials Science and Chemical Engineering, Hanyang University</i>
<b>FJ2-D-5</b> <b>12:00-12:15</b>	<b>Two-Dimensional Electron Gas in Thin Film Oxide Heterostructures</b> Hye Ju Kim <sup>1</sup> , Seong Hwan Kim <sup>1</sup> , Tae Jun Seok <sup>1</sup> , Tae Joo Park <sup>2</sup> , and Sang Woon Lee <sup>1</sup> <sup>1</sup> <i>Department of Energy Systems Research and Department of Physics, Ajou University,</i> <sup>2</sup> <i>Department of Materials Science and Chemical Engineering, Hanyang University</i>
<b>FJ2-D-6</b> <b>12:15-12:30</b>	<b>Improved Two-Dimensional Electron Gas at the Interface of ZnO-Based Ultra-Thin Film Heterostructures</b> Tae Jun Seok <sup>1</sup> , Yuhang Liu <sup>1</sup> , Ji Hyeon Choi <sup>1</sup> , Sang Woon Lee <sup>2</sup> , and Tae Joo Park <sup>1</sup> <sup>1</sup> <i>Department of Materials Science and Chemical Engineering, Hanyang University,</i> <sup>2</sup> <i>Department of Energy Systems Research and Department of Physics, Ajou University</i>