

## [TS14W2]

### Nanometric Metrology and Computation I

<b>Date &amp; Time</b>	July 3(Wed.), 2024 / 15:40-17:45
<b>Place</b>	Room 209B
<b>Session Chair(s)</b>	Si-Young Choi (POSTECH)

**TS14W2\_I\_2 \*Invited** 15:40-16:00

#### Automated Nano-Metrology using AI-Assisted AFM for High-Resolution Material Research

Sang-Joon Cho and Seong-Oh Kim

(Parksystems)

**TS14W2\_O\_3** 16:00-16:15

#### Isostructural Metal-Insulator Transition in Ti-Doped VO<sub>2</sub> Thin Film

Hyeji Sim<sup>1</sup>, Yunkyu Park<sup>1</sup>, Won-Woo Park<sup>2</sup>, Kyung Song<sup>3</sup>, Jaejin Hwang<sup>4</sup>, Jaekwang Lee<sup>4</sup>, Oh-Hoon Kwon<sup>2</sup>, Junwoo Son<sup>1,5</sup>, and Si-Young Choi<sup>1,6</sup>

(<sup>1</sup>POSTECH, <sup>2</sup>UNIST, <sup>3</sup>KIMS, <sup>4</sup>Pusan National University, <sup>5</sup>Seoul National University, <sup>6</sup>IBS)

**TS14W2\_O\_4** 16:15-16:30

#### Controlling Phases in Oxygen Sponge SrFe<sub>1-x</sub>Co<sub>x</sub>O<sub>3-δ</sub>

Hyoungjeen Jeen and Joon Hyuk Lee

(Pusan National University)

**TS14W2\_I\_5 \*Invited** 16:30-17:00

#### Breakdown Behavior of PMTJ Investigated via In-Situ Analytical STEM

Hwanhui Yun<sup>1,2</sup>, Deyuan Lyu<sup>1</sup>, Yang Lv<sup>1</sup>, Brandon R. Zink<sup>1</sup>, Pravin Khanal<sup>3</sup>, Bowei Zhou<sup>3</sup>, Wei-Gang Wang<sup>3</sup>, Jian-Ping Wang<sup>1</sup>, and K. Andre Mkhoyan<sup>1</sup>

(<sup>1</sup>University of Minnesota, <sup>2</sup>KRICT, <sup>3</sup>University of Arizona)

**TS14W2\_O\_6** 17:00-17:15

#### Atomic Structural Dynamics of Ferroelastic Switching in Ferroelectric HfO<sub>2</sub> Freestanding Membrane under Corona Poling

Kyoung-June Go<sup>1</sup>, Min-Su Kim<sup>1</sup>, Kyoungjun Lee<sup>2</sup>, Jun Hee Lee<sup>3</sup>, Seung Chul Chae<sup>2</sup>, and Si Young Choi<sup>1,4</sup>

(<sup>1</sup>POSTECH, <sup>2</sup>Seoul National University, <sup>3</sup>UNIST, <sup>4</sup>IBS)

TS14W2\_O\_7

17:15-17:30

**Cathodoluminescence Nanothermometry in Transmission Electron Microscopy**

Won-Woo Park, Pavel K. Olshin, and Oh-Hoon Kwon

*(UNIST)*

TS14W2\_O\_8

17:30-17:45

**Real-Time TEM Analysis of Li-Ion Battery Dynamics using an Innovative Lithium Injection Probe**

Yu-Jeong Yang, So-Yeon Kim, Abin Kim, Byoungwoo Kang, and Si-Young Choi

*(POSTECH)*

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2024  
Symposium