

## [WeA3] Diamond Power Semiconductors: Growth and Devices

**Date / Time** May 25 (Wed.), 2022 / 14:55–16:25  
**Place** Convention Hall A  
**Session Chair** Soon-Ku Hong (Chungnam National University, Korea)

### [WeA3-1] Invited Talk

**Online** 14:55–15:25

#### Two-Inch High Quality Diamond Heteroepitaxial Growth on Sapphire for Power Devices

Seong-Woo Kim<sup>1</sup>, Makoto Kasu<sup>2</sup>

<sup>1</sup>Adamant Namiki Precision Jewel Co., Ltd., Japan, <sup>2</sup>Saga University, Japan

### [WeA3-2] Oral

**Online** 15:25–15:45

#### High Breakdown Voltage of Boron-Doped Diamond Metal Semiconductor Field Effect Transistor Grown on Freestanding Heteroepitaxial Diamond Substrate

Uiho Choi<sup>1</sup>, Taemyung Kwak<sup>1</sup>, Sanghun Han<sup>1</sup>, Seongwoo Kim<sup>2</sup>, Okhyun Nam<sup>1</sup>

<sup>1</sup>Tech University of Korea, Korea, <sup>2</sup>Adamant Namiki Precision Jewel Co., Ltd., Japan

### [WeA3-3] Oral

**Offline** 15:45–16:05

#### Diamond Schottky Barrier Diode Fabricated on High-Quality Misoriented Heteroepitaxial Diamond Substrate Using Microwave Plasma Chemical Vapor Deposition

Taemyung Kwak<sup>1</sup>, Uiho Choi<sup>1</sup>, Sanghun Han<sup>1</sup>, Seong-woo Kim<sup>2</sup>, Okhyun Nam<sup>1</sup>

<sup>1</sup>Tech University of Korea, Korea, <sup>2</sup>Adamant Namiki Precision Jewel Co., Ltd., Japan

### [WeA3-4] Oral

**Offline** 16:05–16:25

#### Phonons, Isotope Effects, and Point Defects in $\beta$ - and $\kappa/\epsilon$ -Ga<sub>2</sub>O<sub>3</sub>

B. M. Janzen<sup>1</sup>, P. Mazzolini<sup>2,3</sup>, R. Gillen<sup>4</sup>, A. Falkenstein<sup>5</sup>, V. F. S. Peltason<sup>1</sup>, H. Tornatzky<sup>1</sup>, L. P. Grote<sup>1</sup>, M. Martin<sup>5</sup>, J. Maultzsch<sup>4</sup>, R. Fornari<sup>3</sup>, Z. Galazka<sup>6</sup>, O. Bierwagen<sup>2</sup>, M. R. Wagner<sup>1</sup>

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