Program of Session D

Thin Films and Epitaxial Growth

D1: August 4 (Monday), 14: 00-15:45
Room: 311
Chair: Jincheng Zhang; Qixin Guo

14:00-14:30	**D01 (Invited)** Development of AlN-based epitaxy and electronic devices **Xiaohang Li, KAUST, KINGDOM OF SAUDI ARABIA**
14:30-15:00	**D02 (Invited)** Epitaxial Growth of Emerging Wurtzite Nitride Ferroelectrics **Ping Wang, Peking University, CHINA**
15:00-15:15	**D03 (Oral)** A study of the initial epitaxial growth behavior of CdTe thin films on GaAs (100), (211), and (111) substrates by molecular dynamics simulations **Shuang Yang, Northwestern Polytechnical University, CHINA**
15:15-15:30	**D04 (Oral)** Van der Waals Epitaxy and Heterostructure Construction of High Quality Nitride Broadband Gap Semiconductor Crystals **Haidi Wu, Xidian University, CHINA**
15:30-15:45	**D05 (Oral)** Advancing high-temperature unexplored frequency GaN-based THz-Quantum Cascade Lasers with novel high-gain structure **Shashank Shekhar Mishra, RIKEN, Centre for Advanced Photonics, JAPAN**

D2: August 4 (Monday), 16:00-17:30
Room: 311
Chair: Ping Wang; Xiaohang Li

16:00-16:30	**D06 (Invited)** Wide bandgap semiconductor van der Waals heterostructures and devices **Jing Ning, Jincheng Zhang, Yue Hao, Xidian University, CHINA**
16:30-17:00	**D07 (invited)** Growth and characterization of magnesium gallate films on silicon substrates **Qixin Guo, Saga University, JAPAN**
17:00-17:15	**D08 (Oral)** Structural and morphological transformations of Bi_2Se_3(0001) surface induced by indium deposition **Dmitry Igorevich Rogilo, Rzhanov Institute of Semiconductor Physics SB RAS, RUSSIA**

17:15-17:30	**D09 (Oral)** Fabrication of Hf-based ferroelectric thin films by sol-gel method **Tingting Jia, Hubei University, CHINA**

D3: August 5 (Tuesday), 11:00-12:30
Room: 311
Chair: Xinqiang Wang, Qixin Guo

11:00-11:30	**D10 (Invited)** Learning-assisted intelligent metasurfaces for detection and beam manipulation **Shah Nawaz Burokur, Université Paris Nanterre, FRANCE**
11:30-12:00	**D11 (Invited)** Recent progress on the epitaxial growth, doping of AlGaN with high Al fraction and the fabrication of Deep UV-LEDs **Fujun Xu, Bo Shen, Peking University, CHINA**
12:00-12:15	**D12 (Oral)** Sn-Mediated Phase-Selective Growth of γ-InSe on Si (100) by Molecular Beam Epitaxy **Abdelmajid Salhi, Qatar Environment and Energy Research Institute- HBKU, QATAR**
12:15-12:30	**D13 (Oral)** Epitaxial growth of alpha-Ta films on Si through interfacial modulation **Jinglong Xie, Nanjing University, CHINA**

D4: August 5 (Tuesday), 14:00-15:00
Room: 311
Chair: Fujun Xu; Jing Ning

14:00-14:15	**D14 (Oral)** Numerical Optimization of Susceptor for Substrate Thermal Uniformity in HVPE-GaN Growth **Wenjia Su, Jiangsu University, CHINA**
14:15-14:30	**D15 (Oral)** Vacuum Evaporation Deposited High-Efficiency Copper Halide Films for High-Resolution X-Ray Imaging **Wang Zhi Hua, Shanghai Institute of Ceramics Chinese Acedemy of Sciences, CHINA**
14:30-14:45	**D16 (Oral)** The influence of growth rate and NH_3 flow on the thermal stability of quantum wells deposited by MOVPE method **Robert Czernecki, Institute of High Pressure Physics PAS UNIPRESS, POLAND**
14:45-15:00	**D17 (Oral)** Controlled Growth of 6-Inch CdZnTe Epitaxial Films via Close-Spaced Sublimation for High-Performance X-Ray Detector Applications **Yiming Mei, Northwestern Polytechnical University, CHINA**

D5: August 5 (Tuesday), 16:00-16:45
Room: 311
Chair: Xingiang Wang; Jing Ning

16:00-16:15	**D18(Oral)** Single-phase κ-Ga_2O_3 films deposited by MOVPE on GaAs substrates and ternary $B_xGa_{(1-x)}As$ templates **Roberto Fornari, University of Parma, ITALY**
16:15-16:30	**D19 (Oral)** MOCVD Growth Mechanisms and Properties of α- Ga_2O_3 **Zhucheng Li, Shandong University, CHINA**
16:30-16:45	**D20 (Oral)** Van der Waals β- Ga_2O_3 Thin Films on High-thermal-conductivity Polycrystalline Diamond Substrate Based on Tow Dimensional Material **zhichun yang, Xidian University, CHINA**

D6: August 6 (Wednesday), 9:00-10:15
Room: 311
Chair: Motoaki Iwaya; Hideto Miyake

9:00-9:30	**D21 (Invited)** Deep-UV LEDs Fabricated on Face-to-Face Annealed AlN Templates **Hideto Miyake, Mie University, JAPAN**
9:30-9:45	**D22 (Oral)** An impact of thin metallic buffer layers on substrate temperature in MBE **Zbigniew R. Zytkiewicz, Polish Academy of Sciences, POLAND**
9:45-10:00	**D23 (Oral)** Effect Of Boron Precursor Flow Rate On Structural Properties Of Sp_2 Boron Nitride Grown By Two Stage MOVPE On Sapphire Substrates **Mateusz Tokarczyk, University of Warsaw, POLAND**
10:00-10:15	**D24 (Oral)** Adsorption behavior of adatoms on AlN(0001) surface with steps and kinks under metal-organic vapor-phase epitaxy condition: ab initio study **Toru Akiyama, Mie University, JAPAN**

D7: August 6 (Wednesday), 11:00-11:45
Room: 311
Chair: Motoaki Iwaya; Hideto Miyake

11:00-11:15	**D25(Oral)** Preparation of High Quality Single Crystal (001) Ir Films on (11-20) Sapphire Substrate **Ma Yuanchen, Xidian University, CHINA**
11:15-11:30	**D26(Oral)** The Role of the Substrate in the Growth of High-Quality Layered Boron Nitride: an Overview of Hetero- and Homoepitaxy **Aleksandra Krystyna Dąbrowska, University of Warsaw, POLAND**
11:30-11:45	**D27 (Oral)** Homoepitaxy of 300-μm ultra-thick 4H-SiC layers and its defect control **Rong Wang, Zhejiang University, CHINA**