

## Program of Session E

### 2D Materials and Technologies

**E1: August 4 (Monday), 14:00-15:30**

**Room:** 306

**Chair:** Lei Liu

14:00-14:30	<b>E01 (Invited)</b> Single crystal growth and properties of layered topological materials <b>Gang Wang, Institute of Physics, Chinese Academy of Sciences, CHINA</b>
14:30 -15:00	<b>E02 (Invited)</b> Phase transition and ferroelectricity in two-dimensional chalcogenides <b>Jiong Zhao, The Hong Kong Polytechnic University, CHINA</b>
15:00-15:15	<b>E03(Oral)</b> Preparation of two-dimensional assembled films <b>Lei Dong, Northwestern Polytechnical University, CHINA</b>
15:15-15:30	<b>E04 (Oral)</b> Special Optical Responses of Twisted Bi <sub>2</sub> O <sub>2</sub> Se Moiré Superlattices <b>Jiaxing Wang, Beijing University of Technology, CHINA</b>

**E2: August 4 (Monday), 16:00-17:30**

**Room:** 306

**Chair:** Jiong Zhao

16:00-16:30	<b>E05 (Invited)</b> 2D Amorphous Materials and Devices <b>Lei Liu, Peking University, CHINA</b>
16:30-17:00	<b>E06 (Invited)</b> Effects of Co Substitution Single Crystals of Fe <sub>3</sub> GaTe <sub>2</sub> grown by the chemical vapor transport method <b>Daniel A Mayoh, Department of Physic, University of Warwick, Coventry, CV4 7AL, UNITED KINGDOM</b>
17:00-17:15	<b>E07 (Oral)</b> Out-of-Plane Ferroelectricity and Piezoelectricity in Few-Layer Tin Disulfide Nanobelts Exfoliated from an Inorganic–Organic Hybrid <b>Shuai Sun, Guangdong University of Technology, CHINA</b>
17:15-17:30	<b>E08 (Oral)</b> SnSe nanosheet arrays for NO <sub>2</sub> sensor and sodium-ion battery anode <b>Jikang Jian, Guangdong University of Technology, CHINA</b>

**E3: August 5 (Tuesday), 11:00-12:30**

**Room:** 306

**Chair:** Zhiwen Shi

<b>11:00-11:30</b>	<b>E09 (Invited)</b> Implementation and Application of on-chip Nonlinear Photodetectors <b>Xiaoqing Chen, Northwestern Polytechnical University, CHINA</b>
<b>11:30-12:00</b>	<b>E10 (Invited)</b> Observation of ferroelectricity in undoped HfO <sub>2</sub> down to 0.5 nm <b>Hui Li, Institute of Physics, CAS, CHINA</b>
<b>12:00-12:30</b>	<b>E11 (Invited)</b> 2D porous organic frameworks for anode-lean sodium metal batteries <b>Fei Xu, Northwestern Polytechnical University, CHINA</b>

**E4: August 5 (Tuesday), 14:00-15:45**

**Room:** 306

**Chair:** Fei Xu

<b>14:00-14:30</b>	<b>E12 (Invited)</b> Roll-to-roll Mechanical Exfoliation for Cost-Effective Production of van der Waals Nanosheets <b>Andres Castellanos-Gomez, Spanish National Research Council, SPAIN</b>
<b>14:30-15:00</b>	<b>E13 (Invited)</b> Homochiral carbon nanotube van der Waals crystals <b>Zhiwen Shi, Shanghai Jiao Tong University, CHINA</b>
<b>15:00-15:30</b>	<b>E14 (Invited)</b> Ionic two-dimensional materials <b>Xing Zhou, Huazhong University of Science and Technology, CHINA</b>
<b>15:30-15:45</b>	<b>E15 (Oral)</b> Modification of 2D graphite-C <sub>3</sub> N <sub>4</sub> and its photocatalytic production of hydrogen peroxide <b>Kun Zheng, Beijing University of Technology, CHINA</b>

**E5: August 5 (Tuesday), 16:00-17:15**

**Room:** 306

**Chair:** Kun Zheng

<b>16:00-16:30</b>	<b>E16(Invited)</b> Space-Confined Chemical Vapor Transport Synthesis of Multicomponent 2D Atomic Crystals for Future Electronic and Optoelectronic Devices <b>Chengyan Xu, Harbin Institute of Technology (Shenzhen), CHINA</b>
<b>16:30-17:00</b>	<b>E17 (Invited)</b> New carbon materials created by high pressure <b>Mingguang Yao, Jilin University, CHINA</b>
<b>17:00-17:15</b>	<b>E18 (Oral)</b> Epitaxial hBN growth on Al <sub>2</sub> O <sub>3</sub> : unveiling the hidden role of g-C <sub>3</sub> N <sub>4</sub> as a buffer layer <b>Jakub Iwański, Faculty of Physics, University of Warsaw, POLAND</b>

**E6: August 6 (Wednesday), 9:00-10:30**

**Room:** 306

**Chair:** Bo Song

<b>9:00-9:30</b>	<b>E19 (Invited)</b> Van der Waals ferroelectrics with octahedral structure and their tunability <b>Yang Li, Harbin Institute of Technology, CHINA</b>
<b>9:30-10:00</b>	<b>E20 (Invited)</b> Defect Engineering for Constructing Stable Cathode of Rechargeable Magnesium Batteries <b>Shiqi Ding, Qingdao University of Science and Technology, CHINA</b>
<b>10:00-10:30</b>	<b>E21 (Invited)</b> Design, fabrication and deviceization of two-dimensional transition metal chalcogenide electronic materials <b>Zhijia Zhang, Dalian Jiaotong University, CHINA</b>

**E7: August 6 (Wednesday), 11:00-12:00**

**Room:** 306

**Chair:** Zhijia Zhang

<b>11:00-11:30</b>	<b>E22 (Invited)</b> Defects Engineering on Thin Indium Selenide Film <b>Qinghua Zhao, Northwestern Polytechnical University, CHINA</b>
<b>11:30-11:45</b>	<b>E23 (Oral)</b> Pseudo-Symmetric Epitaxy for Scalable Growth of Uniform Two-Dimensional Ferroelectric $\alpha$ -In <sub>2</sub> Se <sub>3</sub> Monolayer <b>Xiaotian Zhang, Shanghai Jiao Tong University, CHINA</b>
<b>11:45-12:00</b>	<b>E24 (Oral)</b> Magnetic Compensation Modulation and Multifunctional Magneto-Optical Film Construction in Bi: RIG Systems <b>Hanxu Zhang, Harbin Institute of Technology, CHINA</b>