

## Program of Session P

### New Methods and Techniques for Crystal Growth

**P1: August 6 (Wednesday), 9:00-10:00**

**Room:** 207

**Chair:** Christiane Frank-Rotsch

**9:00-9:30**

**P01 (Invited)**

Thermophysical Properties and Rapid Solidification of Refractory Alloys aboard the China Space Station

**Haipeng Wang, Hui Liao, Liang Hu, Bingbo Wei, Northwestern Polytechnical University, CHINA**

**09:30 –09:45**

**P02 (Oral)**

Micro-XRF for assessing structural crystal quality: bulk crystal growth of Sr<sub>2</sub>DyNbO<sub>6</sub>

**Christian Hirsche<sup>1</sup>, Christo Guguschev<sup>2</sup>, Darrell Schlom<sup>2</sup>, Roald Tagle<sup>1</sup>, 1. Bruker Nano GmbH, 2. Leibniz-Institut für Kristallzüchtung, GERMANY**

**09:45 – 10:00**

**P03 (Oral)**

X-ray topography by means of laboratory scale micro-XRF devices

**Christo Guguschev<sup>1</sup>, Christian Hirsche<sup>2</sup>, Kaspars Dadzis<sup>1</sup>, Albert Kwasniewski<sup>1</sup>, Michael Schulze<sup>1</sup>, Leonard Schellkopf<sup>2</sup>, Carsten Richter<sup>1</sup>, 1. Leibniz-Institut für Kristallzüchtung, 2. Bruker Nano GmbH, GERMANY**

**P2: August 6 (Wednesday), 11:00-12:00**

**Room:** 207

**Chair:** Shigeya Naritsuka

**11:00 – 11:30**

**P04 (Invited)**

In-situ visualization of crystallization interface in vertical Bridgman growth of fluoride crystals

**Zhonghan Zhang, Liangbi Su, Shanghai Institute of Ceramics, CAS, CHINA**

**11:30-- 11:45**

**P05 (Oral)**

Crystal Casting Method Enabled by Iodine Doping and Melt-Aging Procedures

**Shohei Kodama, Shogo Omiya, Gaito Shimura, Ikuo Yanase, Hiroaki Takeda, Saitama University, JAPAN**

**11:45-- 12:00**

**P06 (Oral)**

Crystal orientation quantification in 10 seconds

**Plex Lee, Dirk Kok, Malvern Panalytical, CHINA**

**P3: August 7 (Thursday), 11:00-12:15****Room:** 207**Chair:** Rukang Li**11:00-11: 30****P07 (Invited)**

Growth of ~15μm Diameter Ultra-fine Single Crystal Fiber by LHPG for Extreme Environment Sensor Application

**Zhitai Jia, State Key Laboratory of Crystal Materials, Shandong University, CHINA**

**11: 30-12: 00****P08 (Invited)**

Modern application of travelling magnet fields for semiconductor materials

**Christiane Frank-Rotsch, Natasha Dropka, Uta Juda, Oleg Root, Lenka Smejkalova, Gagan Kumar Chappa, Frank Michael Kießling, Leibniz-Institut für Kristallzüchtung (IKZ), GERMANY**

**12:00-12:15****P09 (Oral)**

GaAs nanochannel epitaxy on Si substrate using patterned graphene as a mask

**Shigeya Naritsuka, Ayaka Osumi, Wataru Ohta, Takahiro Maruyama, Meijo University, JAPAN**

**P4: August 7 (Thursday), 14:00-14:45****Room:** 207**Chair:** Anhua Wu**14:00-14:30****P10 (Invited)**

Research on the Growth and Microstructure of InSe Semiconductor Crystal on China Space Station

**Min Jin, Shanghai Dianji University, CHINA**

**14:30-14:45****P11 (Oral)**

Crystal growth and optical properties of KBe<sub>2</sub>BO<sub>3</sub>F<sub>2</sub> by horizontal Bridgman method

**Tianhong Huang, Tong Wu, Shuangyue Shang, Lijuan Liu, Xiaoyang Wang, Technical Institute of Physics and Chemistry CAS, CHINA**