

Program of Session I

Optical and Laser Crystals

I1: August 4 (Monday), 14:15-15:30

Room: 205+206

Chair: Daniel Vizman

14:15-14:45	I01 (Invited) From growth to applications of a-GeO ₂ single crystals Alexandra Peña Revellez, Corinne Félix, Jérôme Debray, Patricia Segonds, Jean-Michel Friedt, William Daniau, Pascale Armand, Philippe Papet, Benoit Boulanger, Bertrand Ménaert, Institut Néel, FRANCE
14:45-15:15	I02 (Invited) Electron-phonon coupling and laser wavelength extension in rare-earth crystals Haohai Yu, Shandong University, CHINA
15:15-15:30	I03 (Oral) Centimeter sized organic single crystal BNA with high quality for broadband THz generation Zixuan Jia, Yadong Xu, Northwestern Polytechnical University, CHINA

I2: August 4 (Monday), 16:00-17:30

Room: 205+206

Chair: Alexandra Peña Revellez

16:00-16:30	I04 (Invited) Growth and characterization of rare-earth doped fluorides crystals for UV applications Daniel Vizman, Marius Stef, Gabriel Buse, Maria Poienar, Philippe Veber, West University of Timisoara, ROMANIA
16:30-16:45	I05 (Oral) Preparation and Performance of Optical-Grade Single-Crystal Diamond Shulong Zhang, Yin Hang, Shanghai Institute of Optics and Fine Mechanics, CAS, CHINA
16:45-17:00	I06 (Oral) Yb ³⁺ -Doped Y ₂ (Mg,Ca) ₃ (SiO ₄) ₃ : A Novel Potential Ultrafast Laser Crystal Lin Li, Peixiong Zhang, Zhenqiang Chen, Yin Hang, Shanghai Institute of Optics and Fine Mechanics, CHINA
17:00-17:15	I07 (Oral) Growth of Er:CaF ₂ Single-Crystal Fibers for Mid-Infrared Laser by the Laser Heated Pedestal Method Xu Wu, Anhua Wu, Shanghai Institute of Ceramics, CAS, CHINA

17:15-17:30 I08 (Oral)
Growth-Mediated Sectoral Anisotropies in Rapidly Grown KDP Crystals: Impurity Adsorption and Defect-Dominated Optical-Mechanical Heterogeneity
Guodong Lei, Xianghui Li, Junru Huang, Zhongjun Cao, Yang Li, Hongkai Ren, Lisong Zhang, Mingxia Xu, Baoan Liu, Xun Sun, Shandong University, CHINA

I3: August 5 (Tuesday), 11:00-12:30

Room: 205+206

Chair: Jiyong Yao

11:00-11:30 I09 (Invited)
Mixed valence (+II/+III) of Tm cations in CaF₂ single crystal grown by the Bridgman-Stockbarger technique
Philippe Roger Veber, Gabriel Buse, Carla Schornig, Marius Stef, Maria Poienar, Dragos Tatomirescu, Alexandra Pospescu, Jerome Debray, Vincent Motto-Ros, Frederic Pelascini, Daniel Vizman, West University of Timisoara, ROMANIA

11:30-11:45 I10 (Oral)
Probing ultrafast damage dynamics of IR nonlinear optical crystals with pump-probe spectroscopy
Hongjun Liu, Fangli Jing, Tianjin University of Technology, CHINA

11:45-12:00 I11 (Oral)
LaNbTe₂O₈: A Mid-infrared Nonlinear Optical Crystal Exhibiting Strong Second Harmonic Generation Effect and Notable Birefringence
Rukang Li, Ziyue Chen, Beijing Center for Crystal Research and Development, Technical Institute of Physics and Chemistry, CAS, CHINA

12:00-12:15 I12 (Oral)
Pushing multiphonon-coupling laser into mid-infrared region beyond 3 μm: theory and characterization of Ho,Pr:YGG crystals
Yuxiao Liu, Fei Liang, Haohai Yu, Shandong University, CHINA

12:15-12:30 I13 (Oral)
Extending mid-infrared wavelength to 6.84 μm in oxide nonlinear optical crystal via birefringence dispersion management
Xu Hong Gu, Zhi Da Lu, Hai Hao Yu, Jin Huai Zhang, Shandong University, CHINA

I4: August 5 (Tuesday), 14:15-15:15

Room: 205+206

Chair: Philippe Roger Veber

14:15-14:45 I14 (Invited)
Recent progress on the design, crystal growth, and frequency-conversion evaluation of IR NLO materials
Jiyong Yao, Beijing Center for Crystal Research and Development, Technical Institute of Physics and Chemistry, CAS, CHINA

14:45-15:00	I15 (Oral) Lanthanide doped optical crystals for emerging imaging and lasing application Yunfei Shang, Chunhui Yang, Harbin Institute of Technology, CHINA
15:00-15:15	I16 (Oral) Growth and electronic structure study of cadmium germanium arsenide crystals Chongqiang Zhu, Harbin Institute of Technology, CHINA

15: August 5 (Tuesday), 16:00-17:30

Room: 205+206

Chair: Haohai Yu

16:00-16:30	I17 (Invited) Research and Development on laser gain single crystal fibers Anhua Wu, Shanghai Institute of Ceramics, CAS, CHINA
16:30-16:45	I18 (Oral) Electron-lattice synergistic coordination for boosting the electro-optic response of the crystal Han Jinfeng, Lu dazhi, Shandong University, CHINA
16:45-17:00	I19 (Oral) Design and Performance Study of Novel Tellurate Nonlinear Optical Crystals Conggang Li, Mengru Liu, Zhanggui Hu, State Key Laboratory of Crystal Materials, Tianjin Key Laboratory of Functional Crystal Materials, Institute of Functional Crystals, Tianjin University of Technology, CHINA
17:00-17:15	I20 (Oral) Crystal Growth and Design of Indolium-based Nonlinear Optical Crystals for Terahertz-wave Generation and Detection Xinyuan Zhang, Tianjin University of Technology, CHINA
17:15-17:30	I21 (Oral) Quasi Phase Matching crystal for quantum information Dongzhou Wang, Jinan Institute of Quantum Technology, CHINA

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

Room: 205+206

Chair: Anhua Wu

9:00-9:30	I22 (Invited) La ₂ CaB ₁₀ O ₁₉ : a Promising Crystal for Nonlinear Optical and Laser Applications Fangli Jing, Tianjin University of Technology, CHINA
9:30-9:45	I23 (Oral) Study of the Local Structure, Spectroscopy, and Laser Performance of Tm:CaF ₂ Crystals Shaochen Liu, Zhen Zhang, Dapeng Jiang, Zhonghan Zhang, Liangbi Su, Shanghai Institute of Ceramics, CAS, CHINA

9:45-10:00	I24 (Oral) Large-size crystal growth and defect analysis of a novel UV nonlinear optical crystal $\text{NaSr}_3\text{Be}_3\text{B}_3\text{O}_9\text{F}_4$ Shuangyue Shang, Tong Wu, Tianhong Huang, Lijuan Liu, Xiaoyang Wang, Technical Institute of Physics and Chemistry, CAS, CHINA
10:00-10:15	I25 (Oral) Recent progress on the 2.3 μm lasers based on the Tm^{3+} -doped crystals Xiaoxu Yu, Zhongben Pan, Han Pan, Hongwei Chu, Dechun Li Shandong University, CHINA
10:15-10:30	I26 (Oral) Advances in KBBF crystal growth, device fabrication and DUV laser generation Lijuan Liu, Xiaoyang Wang, Technical Institute of Physics and Chemistry, CAS, CHINA

17: August 6 (Wednesday), 11:00-12:00

Room: 205+206

Chair: Fangli Jing

11:00-11:30	I27 (Invited) New laser performances in old Nd:YAG crystal Fei Liang, Shandong University, CHINA
11:30-11:45	I28 (Oral) Wavelength-dependent Birefringent Behaviors of Single Crystals Wonbae Sohn, Joon Hyuk Kang, Su Jong Jeon, Ju Hyoen Choi, Seon Hoon Kim, Korea Photonics Technology Institute, SOUTH KOREA
11:45-12:00	I29 (Oral) Growth and Lase Performance of Yb: CNGG Laser Crystals Jia Tang, Yanchun Guo, Hui Luo, Norla Institute of Technical Physics, CHINA