Quantum Technology with Defects in Semiconductors | QTDS

Date & Time Dec. 7 (Thu) 14:55~18:15 / Dec. 8 (Fri) 09:30~15:45

Place Dec. 7 (Thu): 8F, Ara Hall / Dec. 8 (Fri): 2F, Udo Hall [On & Off Hybrid Session]

Organized by Son Nguyen (Linköping University, Sweden),
Ivan Ivanov (Linköping University, Sweden),
Seongmin Jeong (Korea Institute of Ceramic Engineering and Technology, Korea),
Sang-Yun Lee (Gwangju Institute of Science and Technology, Korea)

Date	Time(Korea Time)	Presenter	Title-Research field
Dec. 7 (Thu)	**Dec. 7 (Thu) 14:55~16:30, | Session 1 | Chair: Son Nguyen (Linköping University, Sweden)**		
	14:55-15:00	Opening	
	15:00-15:30	Joerg Wrachtrup (University of Stuttgart)	Precision spin control and nanophotonics in SiC
	15:30-16:00	Bong-Shik Song (SungKyunkwan University)	Silicon carbide-based integrated nanophotonics
	16:00-16:30	Yun-Ji Shin (Korea Institute of Ceramic Engineering & Technology)	Investigation of the defects in SiC crystals grown by TSSG method
	Dec. 7 (Thu) 16:30:18:15, | Session 2 | Chair: Ivan Ivanov (Linköping University, Sweden)		
	16:30-16:45	Opening	
	16:45-17:15	Cristian Bonato (Heriot-Watt University)	Telecom-wavelength vanadium centres in SiC with ultranarrow inhomogeneous spectral distribution
	17:15-17:45	Jin-Shi Xu (University of Science and Technology of China)	High-pressure quantum sensing based on spin defects in silicon carbide
	17:45-18:15	Myung-Ki Kim (Korea University)	Advanced nanophotonics printing technology for enhanced quantum interfaces
Dec. 8 (Fri)	**Dec. 8 (Fri) 09:30~11:30 | Session 3 | Chair: Seongmin Jeong (Korea Institute of Ceramic Engineering and Technology, Korea)**		
	09:30-10:00	Ivan Ivanov (Linköping University)	Optical Properties of Point Defects in SiC with Near-Infrared and Telecom Emission
	10:00-10:30	Soon-Ku Hong (Chungnam National University)	Structural defects in 4H-SiC and their investigations by transmission electron microscopy
	10:30-11:00	In-Ho Bae (Korea Research Institute of Standards and Science)	Single-photon wavelength conversion using a thermal-waveguide
	11:00-11:30	Naoya Morioka (Kyoto University)	Electrical Spin Detection in Diamond and Silicon Carbide forQuantum Technologies
	Dec. 8 (Fri) 14:45~15:45, | Session 4 | Chair: Sang-Yun Lee (Gwangju Institute of Science and Technology, Korea)		
	14:45-15:15	Son Nguyen (Linköping University)	Charge-state stability and spectral diffusion of colour centres in silicon carbide
	15:15-15:45	Donggyu Kim (Korea Advanced Institute of Science & Technology)	Structured Illuminations for Solid-State Quantum Technologies