

**The 9th A3 Symposium on Emerging Materials:
Nanomaterials for Energy and Electronics**

2018/10/29-10/31, Kyoto

Date	Time	Session Chair	Speaker	Title
2018/10/28	10:00-20:00			
2018/10/29	9:00-10:00		Registration	
	10:00-10:10		Opening	
	10:10-10:35 (25min)	Kazunari Matsuda	Sumio Iijima (Meijo University)	TBA
	10:35-11:00 (25min)		Jin Zhang (Peking University)	Chirality controlled growth of singled-walled carbon nanotubes array
	11:00-11:25 (25min)		Teun-Teun Kim (Sungkyunkwan University)	Graphene based active metasurfaces
	11:25-11:45	Break		
	11:45-12:05 (20min)	Qingwen Li	Young-Woo Son (KIAS)	Effects of interlayer interactions on physics of layered crystals
	12:05-12:25 (20min)		Hiromichi Kataura (AIST)	Low-defective dispersion of individual SWCNTs
	12:25-12:45 (20min)		Ming Xu (Huazhong University of science and technology)	Carbon nanotube dry adhesives with performances superior to nature-originated adhesions
	12:45-13:45	Lunch		
	13:45-14:10 (25min)	Riichiro Saito	Mikito Koshino (Osaka University)	Effective model for the twisted bilayer graphene
	14:10-14:30 (20min)		Dinh Loc Duong (Sungkyunkwan University)	Room-temperature dilute magnetic semiconductor in V-doped monolayer WSe ₂
	14:30-14:50 (20min)		Tomoki Machida (Tokyo Univiersity)	Cyclotron resonance in graphene/h-BN van der Waals heterostructures
	14:50-15:10	Break		
	15:10-15:35 (25min)	Kaihui Liu	Fei Wei (Tsinghua University)	TBA
	15:35-16:00 (25min)		Hiroki Ago (Kyushu Univiersity)	CVD growth of large-area, uniform multilayer h-BN as a platform of 2D material applications
	16:00-16:25 (25min)		Seokwoo Jeon (KAIST)	Exfoliation and conversion of 2D materials for optical and thermal applications
	16:25-16:45 (20min)		Duhee Yoon (Sungkyunkwan University)	Raman spectroscopy of van der Waals heterostructures
	16:45-18:15	Poster Session I		
	18:30-20:30	Welcome reception		
2018/10/30	9:00-9:20 (20min)	Hiroki Ago	Esko I. Kauppinen (Aalto University School of Science)	Direct synthesis of colorful SWNT thin films
	9:20-9:45 (25min)		Yue Zhang (University of Science and Technology)	Interface engineering for charge carrier behavior modulation in ZnO photoelectrochemical water splitting
	9:45-10:10 (25min)		Wanlin Guo (Nanjing University of Aeronautics and Astronautics)	Emerging hydrovoltaic technology
	10:10-10:35 (25min)		Keun Su Kim (Yonsei University)	Observation of novel composite particles in MoS ₂
	10:35-10:55 (20min)		Bingbing Liu (Jilin University)	New structure of carbon under ultrahigh pressure
	10:55-11:25	Group Photo+Break		
	11:25-11:45 (20min)	Esko I. Kauppinen	Hyeon Suk Shin (UNIST)	Graphene quantum dots array embedded in hexagonal boron nitride monolayer
	11:45-12:05 (20min)		Kaihui Liu (Peking University)	Growth and application of meter-sized single-crystal graphene
	12:05-12:25 (20min)		Chang Liu (IMR)	High-quality single-wall carbon nanotube films prepared by floating catalyst CVD
	12:25-12:45 (20min)		Yutaka Ohno (Nagoya Univiersity)	Carbon nanotube-based flexible electronics: Sensors, integrated circuits, and energy harvesters
	12:45-13:55	Lunch		
	13:55-14:15 (20min)	Hyeonsik Cheong	Seunghyun Baik (Sungkyunkwan University)	Thermal management by nanomaterials: Conductive thermal interface materials & convective nanochannels
	14:15-14:35 (20min)		Yongsheng Chen (Nankai University)	3D Cross-linked polymeric graphene materials and their energy applications
	14:35-14:55 (20min)		Duk Young Kim (Sungkyunkwan University)	Thermal-transport studies of the unconventional superconductor CeCoIn ₅
	14:55-15:15 (20min)		Tsuyohiko Fujigaya (Kyushu University)	Thermoelectric figure of merit of sorted semiconducting single-walled carbon nanotube sheet
	15:15-15:35	Break		
	15:35-16:00 (25min)	Fei Wei	Shigeo Maruyama (Tokyo Univiersity)	Synthesis and properties of one dimensional van der Waals heterostructures wrapped around single-walled carbon nanotubes
	16:00-16:25 (25min)		Suguru Noda (Waseda University)	Customizing carbon nanotube production using metallic foils, CO ₂ , and flame
	16:25-16:45 (20min)		Qingwen Li (Chinese Academy of Sciences)	Conductive carbon nanotube networks for high-performance flexible electrodes
	16:45-18:15	Poster Session II		
	19:15-21:00	Dinner for invited speakers		
2018/10/31	9:00-9:25 (25min)	Shigeo Maruyama	Riichiro Saito (Tohoku Univiersity)	Enhancement of electric field for measuring optical response in two-dimensional materials
	9:25-9:50 (25min)		Hyeonsik Cheong (Sogang University)	Antiferromagnetic ordering in 2-dimensional materials studied by Raman spectroscopy
	9:50-10:10 (20min)		Kazunari Matsuda (Kyoto Univiersity)	Control of excitonic dynamics of transition metal dichalcogenides and its hetero-structures
	10:10-10:30	Break		
	10:30-10:50 (20min)	Seunghyun Baik	Ji-Hee Kim (Sungkyunkwan University)	Femtosecond dynamics of exciton and structure in 2H-MoTe ₂
	10:50-11:10 (20min)		Ryo Kitaura (Nagoya Univiersity)	Properties of van der Waals heterostructures of transition metal dichalcogenide and hexagonal boron nitrides
	11:10-11:30 (20min)		Susumu Saito (Tokyo Institute of Technology)	First-principles electronic-structure study of doped graphene, doped hexagonal boron nitride layers, and their heterostructures
	11:30-11:50 (20min)		Huaping Liu (Chinese Academy of Sciences)	Exciton energy transfer among different chiral carbon nanotubes probed by photoluminescence
	11:50-12:00	Summary : Fei Wei Young Hee Lee Riichiro Saito		
	12:00-12:30	Lunch		
	12:30-18:00	Excursion		
	18:10-21:00	Banquet & Poster Awards		