Poster Preview: 1min (Presentation)

Special Lecture: 25min (Presentation) + 5min (Discussion)
Invited Lecture: 10min (Presentation) + 5min (Discussion)
General Lecture: 10min (Presentation) + 5min (Discussion)

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1–2	Fast synthesis of vertically aligned CNTs array exceeding one-centimeter height * Shunsuke Sakurai, Takashi Tsuji, Maho Yamada, Kenji Hata, Don N. Futaba	18
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1P-5 ☆	Evaluation of various nitrogen-doping in graphene on the performance as a supercapacitor electrode  * Rohit Yadav, Prerna Joshi, Masanori Hara, Masamichi Yoshimura	49
1P-6 ☆	Gene expression analysis of macrophages on carbon nanohorn coated titanium * Sadahito Kimura, Eri Hirata, Sari Takada, Masatoshi Sakairi, Masako Yudasaka, Atsuro Yokoyama	50
1P-7 ☆	Unidirectional bright exciton transport in a $WS_{2x}Se_{(2-2x)}$ alloy monolayer * Masafumi Shimasaki, Taishi Nishihara, Naoki Wada, Zheng Liu, Kana Kojima, Keisuke Shinokita, Kazunari Matsuda, Yasumitsu Miyata, Yuhei Miyauchi	51
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During 13:30-14:00, please give priority to selection of candidates for Young Scientist Poster Award

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	* Ryo Nouchi, Yoshiaki Ishihara, Wataru Sugimoto	
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1–13 Development of Mobility, Charge and Optical Measurement System for Nanomaterials

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\* Toshiki Sugai, Fumiaki Uchiyama, Yuya Ooishi, Reona Miyamoto, Ryo Sasaki, Takanori Nakayasu, Kanata Oguri, Tomoya Ono

# Tutorial (18:15-19:45)

Fundamental and application of optical physics in nano-carbon and atomically thin materials

\* Kazunari Matsuda

Poster Preview: 1min (Presentation)

Special Lecture: 25min (Presentation) + 5min (Discussion) General Lecture: 10min (Presentation) + 5min (Discussion)

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	ties of nanotubes • Atomic Layers [CREST] One dimensional characteristics in thermoelectric properties of semiconducting single walled carbon nanotubes  Yota Ichinose, Kan Ueji, Yohei Yomogida, * Kazuhiro Yanagi	30
2-2	Synthesis of Boron Nitride Nanotubes and MoS <sub>2</sub> @BNNTs Heteronanotubes * Ming Liu, Yongjia Zheng, Yang Qian, Rong Xiang, Taiki Inoue, Shohei Chiashi, Esko I. Kauppinen, Shigeo Maruyama	31
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	Il Lecture (11:00–11:30)	
2-4	First-principles electronic-structure study of stabilities and electronic properties of trilayer h-BN  * Taishi Haga, Yuuto Matsuura, Yoshitaka Fujimoto, Susumu Saito	33
2-5	Molecular modification of graphene/Au electrode for controlled proton permeability * Tomohiro Fukushima, Takaha Komai, Hidetaka Hasebe, Kei Murakoshi	34
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☆	Yuhei Miyauchi, Kazunari Matsuda, Jun Matsui, Masaya Mitsuishi, Mitsuaki Suzuki	

2P−2 ☆	Stable MoO <sub>3</sub> Doping of Carbon Nanotube Top Electrodes for Highly Efficient Metal-Electrode-Free Perovskite Solar Cells  * Seungju Seo, Il Jeon, Esko I. Kauppinen, Yutaka Matsuo, Shigeo Maruyama	77
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2P−6 ☆	Synthesis of 3D hybrid Structures composed of Single-walled CNTs and Mesopores Carbon by Chemical Vapor Deposition * Aliza Khaniya Sharma, Kamal P Sharma, Takahiro Saida, Shigeya Naritsuka, Takahiro Maruyama	81
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Poster Preview: 1min (Presentation)

Special Lecture: 25min (Presentation) + 5min (Discussion) General Lecture: 10min (Presentation) + 5min (Discussion)

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3P-12	Iron ion-mediated oxidation of coenzyme NADH by carbon nanotubes  * Atsushi Hirano, Momoyo Wada, Takeshi Tanaka, Hiromichi Kataura	117

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