March 10th, Sat.

Special Lecture: 25min (Presentation) + 5min (Discussion)
Invited Lecture: 10min (Presentation) + 5min (Discussion)
General Lecture: 10min (Presentation) + 5min (Discussion)
Poster Preview: 1min (Presentation)

Special Lecture （ 9:45-10:15 ）

1S-1 Fast characterization of FC-CVD nanotubes using an array of transistors 1
*Nan Wei, Patrik Laiho, Saeed Ahmed, Aqeel Hussain, Qiang Zhang, Taher Khan, Yongping Liao, Ying Tian, Er-Xiong Ding, Yutaka Ohno, * Esko I. Kauppinen*

Special Lecture （ 10:15-10:45 ）

1S-2 Manipulating Crystallization and Assembly of Nanomaterials via Fluidic Engineering 2
*Yitan Li, Yuguang Chen, Hao Wang, * Yan Li*

>>>>>>> Coffee Break （ 10:45-11:00 ）<<<<<<<

General Lecture （ 11:00-12:00 ）

Formation and purification of nanotubes ・ Applications of nanotubes

1-1 Tracing growth processes of individual single-walled carbon nanotubes by digital isotope coding 13
** Keigo Otsuka, Shun Yamamoto, Taiki Inoue, Rong Xiang, Shohei Chiashi, Shigeo Maruyama*

1-2 Effects of Pre-forming the different density layers on ELF method for the separation of metallic and semiconducting SWCNTs 14
** Yuki Kuwahara, Fusako Sasaki, Nihey Fumiyuki, Takeshi Saito*

1-3 Influence of Dissolved Oxygen on Introduction of Defects into SWCNTs during Ultrasonic Dispersion Process 15
** Hiromichi Kataura, Tomoko Sugita, Mariko Kubota, Takeshi Tanaka*

1-4 Determination of association constants in complexation of nanotweezers and nanocalipers with SWNTs 16
** Alejandro López-Moreno, Naoki Komatsu*

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Special Lecture （ 13:15-13:45 ）

1S-3 Science and Applications of Wafer-Scale Aligned Carbon Nanotube Films 3
*W. Gao, N. Komatsu, F. Katsutani, X. Li, K. Yanagi, * J. Kono*

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Invited Lecture （ 13:45-14:00 ）

1 I-1 Advanced Carbon Based Energy Materials for Lithium-Sulfur Batteries 11
** Qiang Zhang*

General Lecture （ 14:00-15:00 ）

Applications of nanotubes

1-5 Record-high Efficiency in Carbon Nanotube Electrode-used Perovskite Solar Cells via employing Formamidinium Lead Iodide ($FAPbI_3$) and Trifluoromethanesulfonic Acid Vapor Doping 17
** Il Jeon, Jin-Wook Lee, Anton Anisimov, Esko I. Kauppinen, Yang Yang, Shigeo Maruyama, Yutaka Matsuo*

1-6 Carbon-nanotube differential amplifier on flexible substrate 18
*Tomoki Matsuura, Taiga Kashima, Jun Hirotani, Shigeru Kishimoto, * Yutaka Ohno*

1-7 Carbon Nanotubes versus Graphene as Flexible Transparent Electrodes in Inverted Perovskite Solar Cells 19
** Jungjin Yoon, Il Jeon, Namyoung Ahn, Mohamed Atwa, Clement Delacou, Anton Anisimov, Esko Kauppinen, Shigeo Maruyama, Yutaka Matsuo, Mansoo Choi*

1-8 Interdigitated electrode with dense carbon nanotube forests for electrochemical biosensors 20
** Hisashi Sugime, Takuya Ushiyama, Keita Nishimura, Yutaka Ohno, Suguru Noda*

Poster Preview （ 15:00-16:00 ）

Poster Session （ 16:00-17:45 ）（☆）Candidates for the Young Scientist Poster Award

Chemistry of fullerenes

1P-1 Electronic structures of solid phases of chemically functionalized C_{60} 45
** Sho Furutani, Yutaka Matsuo, Susumu Okada*

Endohedral metallofullerenes

1P-2 Temperature dependence of anisotropic transient conductivity of a La@C_{2v}-C_{82}(Ad) crystal 46
** Michio Yamada, Satoru Sato, Wookjin Choi, Shu Seki, Tsuneyuki Abe, Mitsuaki Suzuki, Yutaka Maeda, Shigeru Nagase, Takeshi Akasaka*

1P-3 Spectroscopic studies of dimetallofullerene anions encapsulating Nd 47
** Shinya Nishimoto, Koichi Kikuchi, Yohji Achiba, Takeshi Kodama*

1P-4 Isolation and Characterization of Tm_2@C_n(n=78, 80) anion 48
** Kazuhiro Kobayashi, Ko Furukawa, Tatsuhisa Kato, Koichi Kikuchi, Yohji Achiba, Takeshi Kodama*

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Fullerenes

1P-5 Energetics and Electronic Structure of Endohedral C_{60} Fullerenes 49
** Yuki Sugaya, Masayuki Toyoda, Susumu Saito, Tomonari Wakabayashi, Yasuyuki Kanai, Noboru Sasao, Motohiko Yoshimura*

1P-6 $N@C_{60}$ produced from C_{60} by irradiation of N^+ and N^{2+} ion beam 50
** Tomonari Wakabayashi, Yasuyuki Kanai, Noboru Sasao, Yuki Sugaya, Masayuki Toyoda, Susumu Saito, Motohiko Yoshimura*

1P-7 Self-patterning of C_{60} sheet like crystals by liquid-liquid interfacial precipitation method 51
** Yuto Funamori, Saori Yamamoto, Hiromichi Gonnokami, Hidenobu Murata, Yuko Kaneda, Makoto Tanimura, Masaru Tachibana*

Properties of nanotubes

1P-8 Third-harmonic generation process in a thin film of (6,5) single-wall carbon nanotubes 52
** Takahiro Yokoyama, Takeshi Koyama, Hideo Kishida*

1P-9 Tuning of the Thermoelectric Properties of High-Purity Single-Chirality (6,5) Single-Walled Carbon Nanotubes by Electrolyte Gating 53
☆ ** Yota Ichinose, Kengo Fukuhara, Junko Eda, Yohei Yomogida, Kazuhiro Yanagi*

1P-10 Optimizing photothermoelectric effects in semiconducting and metallic carbon nanotubes 54
** Ahmad R. T. Nugraha, Nguyen T. Hung, Riichiro Saito*

1P-11 Ferric ions affect surfactant assembly structures on carbon nanotubes 55
** Atsushi Hirano, Tomoshi Kameda, Takeshi Tanaka, Hiromichi Kataura*

Applications of nanotubes

1P-12 Near-infrared luminescence thermometric imaging using carbon nanotubes 56
☆ ** Kengo Hachiya, Saki Okudaira, Yui Konno, Yutaka Maeda, Kazunari Matsuda, Yuhei Miyauchi*

1P-13 Polymeric p-Type Dopant showing Permanent Doping Durability for Transparent Carbon Electrodes 57
** Clement Delacou, Il Jeon, Ahmed Shawky, Rong Xiang, Anton Anisimov, Esko I. Kauppinen, Yutaka Matsuo, Shigeo Maruyama*

1P-14 Transparent and flexible triboelectric generator based on carbon nanotube 58
☆ ** Masahiro Matsunaga, Jun Hirotani, Shigeru Kishimoto, Yutaka Ohno*

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☆ ** Atsushi Onodera, Masaru Sekido*

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** Takahiro Maruyama, Makoto Kumakura, Takahiro Saida, Shigeya Naritsuka*

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** Toshihiro Sato, Hisashi Sugime, Bin Liang, Eongyu Yi, Richard Laine, Suguru Noda*

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** Xu Liu, Feng Yang, Yan Li*

1P-19 ☆ Mechanism of preferential synthesis of (6,4) single-walled carbon nanotube using surface state control of Co catalyst 63
** Bin Xu, Toshiro Kaneko, Yasushi Shibuta, Toshiaki Kato*

1P-20 Separation of CoMoCAT-SWNTs by utilizing aqueous two immisible solution phase (ATP) technique and Raman/fluorescence spectroscopy 64
*Tatsuki Watase, Tokinaru Matsuoka, * Shinzo Suzuki*

Graphene synthesis

1P-21 Atomistic simulations of formation processes of in-plane heterostructures of h-BN and graphene 65
** Hisaki Sawahata, Ayaka Yamanaka, Mina Maruyama, Susumu Okada*

1P-22 ☆ Selective Growth of AB-Stacked Bilayer Graphene 66
** Yuri Terao, Kenji Kawahara, Kenshiro Suenaga, Keisuke Yamamoto, Hiroshi Nakashima, Kosuke Nagashio, Hiroki Hibino, Hiroki Ago*

1P-23 Fabrication of graphene nanoribbon transistors with high on/off ratio using advanced plasma CVD 67
** Yuta Wato, Hiroo Suzuki, Toshiro Kaneko, Toshiaki Kato*

Applications of graphene

1P-24 Energetics of water migration through unstitched grain boundaries of graphene 68
** Kenta Yasuraoka, Susumu Okada*

1P-25 ☆ Computational Simulation of Edge-Roughness Effects on GNR-based FETs 69
** Kengo Takashima, Takahiro Yamamoto*

1P-26 Synthesis of Novel $IrRuO_x$ / Graphene Catalyst for Oxygen Evolution Reaction 70
** Masanori Hara, Badam Rajashekar, Hsin-Hui Huang, Masamichi Yoshimura*

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Properties of graphene

1P-27 Ab initio study of double-layered graphene with ethylenic linkage structures 71
** Hiroyuki Yokoi*

1P-28 Electronic structures of N-doped graphene nanoribbons with H-terminated armchair edges 72
** Airi Yasuma, Mina Maruyama, Susumu Okada*

1P-29 Tuning of Kagome bands of 2D hydrocarbon networks by the molecular conformations 73
** Yasumaru Fujii, Mina Maruyama, Susumu Okada*

1P-30 Ultrafast photocarrier relaxation in monolayer graphene on SiC substrate due to phonons in the buffer layer 74
** Hirotaka Imaeda, Takeshi Koyama, Hideo Kishida, Kenji Kawahara, Hiroki Ago, Jianfeng Bao, Tomoo Terasawa, Wataru Norimatsu, Michiko Kusunoki*

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☆ ** Yuga Miyamoto, Daiki Yoshikawa, Kuniharu Takei, Takayuki Arie, Seiji Akita*

1P-32 Direct TEM/STEM imaging of 2D atomic layer crystals on SiO_2 76
** Rong Xiang, Akihito Kumamoto, Yu Kobayashi, Yasumitsu Miyata, Yuichi Ikuhara, Shigeo Maruyama*

1P-33 Two-dimensional van der Walls p-n heterostructures: Two-step CVD growth and transport properties 77
☆ ** Masanori Izumoto, Adha Sukma Aji, Hiroki Ago*

1P-34 Investigation on the influence of ball milling conditions to the morphology of exfoliated hexagonal boron nitride nanosheets 78
** Naoko Ogino, Gang Liu, Naoki Komatsu*

1P-35 Chemical doping of monolayer MoS_2 by crown ether complex salts 79
☆ ** Shintaro Yoshimura, Yu Kobayashi, Takahiko Endo, Yutaka Maniwa, Yasumitsu Miyata*

Bio

1P-36 *In vivo* behaviors of oxygen-doped carbon nanotube imaging probes after intravenous administration to mice 80
** Yoko Iizumi, Tsukasa Takeuchi, Masako Yudasaka, Toshiya Okazaki*

1P-37 ☆ Experimental System for Testing Dynamics of Carbon Nanomaterials in Lymphatic Vessels 81
** Chika Kuroda, Kumiko Ajima, Hisao Haniu, Haruka Ishida, Katsuya Ueda, Kaoru Aoki, Hiroyuki Kato, Naoto Saito*

1P-38 Quantification of Single-Walled Carbon Nanotubes in Mouse Feces : Phantom Experiments 82
** Mitsuko Takahashi, Yuko Okamatsu-Ogura, Takeshi Tanaka, Hiromichi Kataura, Masako Yudasaka*

>>>>>>> Coffee Break（17:45-18:00）<<<<<<<

Tutorial（18:00-19:30）

Basics of Organic Solar Cells and Nano-carbon Materials-utilized Solar Cells
** Yutaka Matsuo*

March 11th, Sun.

Special Lecture: 25min (Presentation) + 5min (Discussion)
Invited Lecture: 10min (Presentation) + 5min (Discussion)
General Lecture: 10min (Presentation) + 5min (Discussion)
Poster Preview: 1min (Presentation)

Special Lecture （ 9:00–9:30 ）

2S–4 Potential applications of CNT in automotive industries 4
** Hisayoshi Oshima*

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Formation and purification of nanotubes ・ Endohedral nanotubes

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** Takayuki Watanabe, Satoshi Yamashita, Takahiro Morimoto, Kazufumi Kobashi, Toshiya Okazaki*

2–2 Biodegradation Rate of Carbon Nanotube Depending on Diameters 22
** Minfang Zhang, Yinmei Deng, Mei Yang, Hideaki Nakajima, Masako Yudasaka, Sumio Iijima, Toshiya Okazaki*

2–3 Growth of Horizontally Aligned Chirality-Specific SWNTs using Intermetallic W_6Co_7 Catalysts 23
** Feng Yang, Yan Li*

2–4 Direct Microscopic Analysis of Individual [60]Fullerene Dimerization Events : Kinetics and Mechanisms 24
** Koji Harano, Satoshi Okada, Satori Kowashi, Luca Schweighauser, Kaoru Yamanouchi, Eiichi Nakamura*

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2 I–2 Photoexcited states in transition metal dichalcogenide heterostructures 12
*Fei Lu, * Erik Einarsson*

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** Mina Maruyama, Susumu Okada*

2-6 Bilayer fullerenes (carbon nano-onions) studied by ion mobility mass spectrometry 26
** Motoyoshi Nakano, Ryoichi Moriyama, Jenna Wu, Keijiro Ohshimo, Fuminori Misaizu*

2-7 Development of Ion Trap Ion Mobility Measurement System and Observation of Nanomaterials 27
** Toshiki Sugai, Yudai Hoshino, Hiroki Morita, Reona Miyamoto, Yuta Hamano, Kazumasa Somei, Ryota Jinnouchi*

2-8 Self-Assembly of Detonation Nanodiamonds from their Colloidal Solutions 28
** Toshihiko Tanaka, Yasuhiro F. Miura, Tetsuya Aoyama, Makoto Takahashi, Takumi Sato, Eiji Osawa*

>>>>>>> Lunch Time （12:00-13:15）<<<<<<<

Awards Ceremony （13:15-14:00）

Poster Preview （14:00-15:00）
Poster Session （15:00-16:45）（☆）Candidates for the Young Scientist Poster Award
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2P-1 Understanding Efficiency Enhancement in Solution-Processed C_{60}/C_{70} Mixed Fullerenes Perovskite Solar Cells 83
** Haosheng Lin, Il Jeon, Shigeo Maruyama, Yutaka Matsuo*

2P-2 Preparation of [C_{60}]fullerene nanowhisker-cadmium sulfide nanoparticle composites and their photocatalytic activity for degradation of Rhodamine B 84
** Jeong Won Ko, Weon Bae Ko*

Endohedral metallofullerenes

2P-3 Search for Missing $Lu_2@C_{80}(I_h)$ 85
** Ryoya Takai, Koichi Kikuchi, Yohji Achiba, Takeshi Kodama*

2P-4 Chemical Reduction of Lithium-Ion-Encapsulated Fullerene to $Li@C_{60}$ 86
** Hiroshi Okada, Hiroshi Ueno, Yasuhiro Takabayashi, Takeshi Nakagawa, Martina Vrankic, Shinobu Aoyagi, Ken Kokubo, Kimio Akiyama, Ioannis Arvanitidis, Kosmas Prassides, Yutaka Matsuo*

Properties of nanotubes

2P-5 Thermoelectric Properties of Aligned Single-Wall Carbon Nanotube Films 87
** Kengo Fukuhara, Yota Ichinose, Yohei Yomogida, Weilu Gao, Junichiro Kono, Kazuhiro Yanagi*

2P-6 THz high harmonic generation from single wall carbon nanotubes 88
** Hiroyuki Nishidome, Kohei Nagai, Yota Ichinose, Kengo Fukuhara, Junji Nozaki, Junko Eda, Yohei Yomogida, Kazuhiro Yanagi, Koichiro Tanaka*

2P-7 Growth of Individually-suspended Single-Walled Carbon Nanotubes toward Thermal Conductivity Measurement and Manipulation 89
** Takumi Inaba, Ryuunosuke Shima, Maki Shimizu, Tomohiro Yamaguchi, Koji Ishibashi, Yoshikazu Homma*

Applications of nanotubes

2P-8 Voltage generation by electrolyte droplet on carbon nanotube thin film : Dependence of output power on carrier density 90
☆ ** Ryohei Nishi, Shigeru Kishimoto, Jun Hirotani, Hiromichi Kataura, Yutaka Ohno*

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** Koichi Utsugi, Nao Otsuki, Ryota Yamada, Riku Ota, Atsushi Onodera, Masaru Sekido*

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☆ ** Masaaki Tsukuda, Takahiro Yamamoto*

Formation and purification of nanotubes

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** Yuya Tanaka, Toshiki Sugai*

2P-12 Purification of SWNT-porous glass (PG) composite by using heat treatment 94
☆ ** Tokinaru Matsuoka, Yoshiki Hayashi, Horoshi Nagasawa, Shinzo Suzuki*

2P-13 Growth simulation of chirality-assignable single-walled carbon nanotubes with perfect cap structure by molecular dynamics 95
** Hiroyuki Ukai, Ryo Yoshikawa, Shohei Chiashi, Shigeo Maruyama*

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2P-14 Stability of isomerized forms of photoisomerizable molecules complexed with carbon nanotubes 96
** Keisuke Hamajima, Takeshi Koyama, Takeshi Saito, Hideo Kishida*

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** Yuya Nagasawa, Takeshi Koyama, Susumu Okada*

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** Ryo Nagai, Yosuke Kataoka, Hironori Ogata*

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☆ ** Yukuya Nagai, Hisashi Sugime, Suguru Noda*

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** Yasushi Ishiguro, Genki Hirobe, Kazuyuki Takai*

Applications of graphene

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** Hiroo Suzuki, Toshiro Kaneko, Toshiaki Kato*

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☆ ** Hikaru Horii, Satoru Konabe, Takahiro Yamamoto*

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** Yusei Kioka, Yuki Maekawa, Kenji Sasaoka, Takahiro Yamamoto*

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☆ ** Kento Shiota, Takazumi Kawai*

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** Masashi Horibe, Seichiro Ito, Yuya Mizuno, Chenxing Wang, Hitoshi Nakahara, Yahachi Saito*

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** Kosuke Nakamura, Kazuyuki Takai, Tomoaki Nishimura*

2P-26 Near-Field Electron-Photon Matrix Element of Monolayer Graphene 108
** Fenda Rizky Pratama, M. Shoufie Ukhtary, Riichiro Saito*

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2P-27 Valley relaxation in monolayer WSe_2 studied by ultrafast spectroscopy 109
** Keisuke Shinokita, Xiaofan Wang, Yuhei Miyauchi, Kazunari Matsuda*

2P-28 ☆ Layer-by-layer growth of single crystalline transitional metal dichalcogenides thin films by molecular beam epitaxy 110
** Yue Wang, Masaki Nakano, Yuta Kashiwabara, Yoshihiro Iwasa*

2P-29 Preparation and optical properties of suspended monolayer MoS_2 111
** Kana Kojima, Zhang Wenjin, Yuhei Miyauchi, Tetsuki Saito, Yu Kobayashi, Takahiko Endo, Kazunari Matsuda, Yutaka Maniwa, Yasumitsu Miyata*

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** Seiya Suzuki, Tatsurou Inaba, Masamichi Yoshimura*

2P-31 ☆ Photoluminescence properties of twisted bilayer transition metal dichalcogenides 113
** Masafumi Shimasaki, Wenjin Zhang, Xiaofan Wang, Takashi Taniguchi, Kenji Watanabe, Kazunari Matsuda, Yuhei Miyauchi*

2P-32 Monolayer WSe_2-MoS_2 Lateral Heterojunction Light-Emitting Diodes 114
** Jiang Pu, Ming-Yang Li, Jing-kai Huang, Yuhei Miyauchi, Kazunari Matsuda, Lain-Jong Li, Taishi Takenobu*

2P-33 Absorption spectra from exciton effect of atomic layer materials 115
** Toshiya Shirakura, Yuki Tatsumi, Riichiro Saito*

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2P-34 ☆ Aqueous dispersion of carbon materials inspired by Japanese Ink II 116
** Kaito Ishido, Kazuki Nakamura, Koki Taniyama, Kento Fujita, Junpei Hayakawa*

2P-35 Applicability of DLS to Diluted Nanodiamond Colloidal Solutions 117
** Takumi Sato, Toshihiko Tanaka, Yasuhiro F. Miura, Tetsuya Aoyama, Eiji Osawa*

Bio

2P-36 ☆ Suppression of carbon nanotube redox reaction caused by protein adsorption 118
** Tomohito Nakayama, Takeshi Tanaka, Kentaro Shiraki, Muneaki Hase, Atsushi Hirano*

2P-37 Biodistribution of carbon nanotubes after local implantation of mice 119
** Eri Hirata, Masako Yudasaka, Yukari Maeda, Takeshi Tanaka, Hiromichi Kataura, Atusro Yokoyama*

March 11th, Sun.

Other topics

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** Yanlin Gao, Susumu Okada*

2P-39 Catalytic Activity of Several Carbons with Different Structures and By-Produced Carbons for Methane Decomposition — 121
** Dai Miyamoto, Haruki Nishii, Yoshito Umeda, Hiroaki Hamaguchi, Masashi Suzuki, Toru Harigai, Tsuyoshi Tanimoto, Hirofumi Takikawa, Yoshiyuki Suda*

Special Lecture （ 16:45-17:15 ）

2S-5 Field Emission from Carbon Nanotube and Graphene: Unique Characteristics and Related Phenomena — 5
** Yahachi Saito*

Special Lecture （ 17:15-17:45 ）

2S-6 Quantum transport in van der Waals junctions of 2D materials — 6
** Tomoki Machida*

General Lecture （ 17:45-19:00 ）

Applications of graphene ・ Atomic Layers ・ Other topics

2-9 Graphene-Silicon Schottky Junction for Optoelectronic Devices — 29
** Xinming Li, Hongwei Zhu, Renzhi Ma, Takayoshi Sasaki*

2-10 Schottky barrier control between indium tin oxide and WSe_2 for fabrication of transition metal dichalcogenide-based transparent solar cell — 30
** Yoshiki Yamaguchi, Wakana Okita, Chao Li, Toshiro Kaneko, Toshiaki Kato*

2-11 Angular momentum conservation in helicity-dependent Raman and Rayleigh scattering — 31
** Yuki Tatsumi, Tomoaki Kaneko, Riichiro Saito*

2-12 Carrier dynamics in 3-layer ReS_2 studied by ultrafast spectroscopy — 32
** Xiaofan Wang, Keisuke Shinokita, Hong En Lim, Nur Baizura Mohamed, Yuhei Miyauchi, Kazunari Matsuda*

2-13 *In situ* transmission electron microscopy of the formation and annihilation of charge density waves in 1*T*-$TaSe_2$ — 33
** Keita Kobayashi, Hidehiro Yasuda*

Banquet （ 19:00-20:45 ）

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Special Lecture: 25min (Presentation) + 5min (Discussion)
General Lecture: 10min (Presentation) + 5min (Discussion)
Poster Preview: 1min (Presentation)

Special Lecture （ 9:00–9:30 ）

3S-7 Exploring Molecular Nanocarbon Science 7
** Kenichiro Itami*

General Lecture （ 9:30–10:30 ）

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** Yutaka Matsuo*

3-2 Molecules inside Fullerenes as Magnetic Probes for the Detection of Specific Intramolecular Interactions 35
** Yoshifumi Hashikawa, Yasujiro Murata*

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** Takuji Mitani, Ko Furukawa, Tatsuhisa Kato, Koichi Kikuchi, Yohji Achiba, Takeshi Kodama*

3-4 Highly Stabilized Perovskite Solar Cells by Li^+-Encapsulated [60]Fullerene as Both Dopant and Anti-Oxidant 37
** Hiroshi Ueno, Il Jeon, Seungju Seo, Ryosuke Nishikubo, Hiroshi Okada, Akinori Saeki, Shigeo Maruyama, Yutaka Matsuo*

>>>>>>> Coffee Break （ 10:30–10:45 ）<<<<<<<

Special Lecture （ 10:45–11:15 ）

3S-8 Phonon engineering of graphene for thermal management 8
** Takayuki Arie*

General Lecture （ 11:15–12:00 ）

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3-5 Matrix approach to calculation of phonon group velocities from MD transient dispersion relation as applied to graphene 38
** Tatiana Zolotoukhna, Kentaro Kumaki, Kenta Tawara*

3-6 High-yield production of thin layer materials by solid phase ball milling 39
** Ahmad Tayyebi, Gang Liu, Naoko Ogino, Naoki Komatsu*

3-7 Automated searching and assembly of atomic layers: a robotic building system of van der Waals superlattices 40
** Satoru Masubuchi, Masataka Morimoto, Sei Morikawa, Momoko Onodera, Yuta Asakawa, Kenji Watanabe, Takashi Taniguchi, Tomoki Machida*

>>>>>>> Lunch Time （ 12:00-13:15 ）<<<<<<<

Poster Preview （ 13:15-14:15 ）
Poster Session （ 14:15-16:00 ）（☆）Candidates for the Young Scientist Poster Award
Endohedral metallofullerenes

3P-1 Chromatographic Separation of FeCl-Fullerene Complexes 122
** Yuri Tanuma, Seiji Hosoda, Toru Maekawa, Takashi Uchida*

3P-2 Separation and Characterization of Sc-dimetallofullerenes: Sc_2C_n(n=76, 78, 80, 82) 123
** Shun Yoshida, Koichi Kikuchi, Yohji Achiba, Takeshi Kodama*

3P-3 ☆ Crystal structure analysis of $[Li^+@C_{60}](TFSI^-)\cdot CH_2Cl_2$ 124
** Kazuhira Miwa, Shinobu Aoyagi, Hiroshi Okada, Hiroshi Ueno, Yutaka Matsuo*

3P-4 Photoreaction of $Sc_3N@I_h$-C_{80} with Disilirane: Formation and Isomerization of 1,2-, 1,3-, and 1,4-Adducts 125
** Shinpei Fukazawa, Yuichi Sato, Masahiro Kako, Masanori Yasui, Michio Yamada, Yutaka Maeda, Takeshi Akasaka*

3P-5 Rotational dynamics of a H_2O molecule encapsulated in a fullerene C_{60} at low temperature 126
** Hal Suzuki, Motohiro Nakano, Yoshifumi Hashikawa, Yasujiro Murata*

Properties of nanotubes

3P-6 Electronic structure of carbon nanotube thin films under an external electric field 127
** Donghao Wang, Susumu Okada*

3P-7 Structural Isomer-induced spectral changes in near infrared photoluminescence of locally-functionalized single-walled carbon nanotubes 128
** Tomohiro Shiraki, Shunsuke Uchimura, Tomonari Shiraishi, Fumiyuki Toshimitsu, Naotoshi Nakashima*

3P-8 ☆ Response of Localized Carriers to Terahertz Radiation in a Carbon Nanotube Film 129
** Takuya Okamoto, Naoki Fujimura, Xiaowei He, Weilu Gao, Junichiro Kono, Yukio Kawano*

3P-9 Exciton effect of circular dichroism in single-wall carbon nanotubes 130
** Yuya Iwasaki, Riichiro Saito*

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