March 3rd, Mon.
Special lecture：25min(Presentation)+5min(discussion)
General lecture：10min(Presentation)+5min(discussion)
Poster preview：1min(Presentation),no discussion

Special lecture（9：00-9：30）

1S-1 In silico catalyst design for fuel cells ○*Yasuharu Okamoto*

General lecture（9：30-10：30）
Properties of Nanotubes

1-1 Phonon softening effect on Raman G-band spectra of metallic single wall carbon nanotubes
Riichiro Saito ○, Ken'ichi Sasaki, Kentaro Sato, Jin Sung Park

1-2 Electroabsorption spectroscopy in single wall carbon nanotubes
○*Hideo Kishida, Yoshiaki Nagasawa, Sadanobu Imamura, Arao Nakamura*

1-3 Photoluminescence brightening through the direct transition from isolated to bundled freestanding single-walled carbon nanotubes
○*Toshiaki Kato, Rikizo Hatakeyama*

1-4 Multiexciton recombinations and exciton fine structures studied by a single carbon nanotube photoluminescence spectroscopy
○*Kazunari Matsuda, Tadashi Inoue, Yoichi Murakami, Shigeo Maruyama, and Yoshihiko Kanemitsu*

Coffee Break（10：30-10：45）

General lecture（10：45-11：45）
Properties of Nanotubes

1-5 Optical and electrical properties of semiconducting SWNT extracted using polyfluorene
○*S. Kazaoui, N. Izard, K. Hata, T. Okazaki, T. Saito, Y. Sato, K. Suenaga, Y. Futami, N. Minami*

1-6 Three dimensional effects in the boron-doped carbon nanotubes
○*Takashi Koretsune, Susumu Saito*

1-7 Conductivity Enhancement of Boron-Doped MWNTs Synthesized from Methanol Solution Containing Boric Acid
○*Satoshi Ishii,Tohru Watanabe,Shunsuke Tsuda,Takahide Yamaguchi,Yoshihiko Takano*

1-8 Recent progress of study of carbon-nanotube superconductivity
○*Junji Haruyama, Shigeo Maruyama, Hisanori Shinohara*

Lunch Time（11：45-13：00）

Special lecture（13：00-13：30）

1S-2 Carbon nanotube LSI via interconnects ○*Yuji Awano*

General lecture（13：30-14：45）
Properties of Nanotubes

1-9 Local electronic structure of a carbon nanotube on metal surface
○*Yousoo Kim, Hyung-Joon Shin, Sylvain Clair, Maki Kawai*

1-10 Long-ranged bandgap modulation of SWCNT on Ag(100)
○*Hyung-Joon Shin, Sylvain Clair, Yousoo Kim, Maki Kawai*

1-11 First Principles Calculations for Electronic Properties of Diffusing Oxygen Atoms on the Surface of Graphene and Nanotubes
○*Takazumi Kawai, Yoshiyuki Miyamoto*

1-12 Field Emission Properties of Single-Walled Carbon Nanotubes with a Variety of Emitter-Morphologies
○*Yosuke Shiratori, Koji Furuichi, Suguru Noda, Hisashi Sugime, Yoshiko Tsuji, Zhengyi Zhang, Shigeo Maruyama, Yukio Yamaguchi*

1-13 Magnetoresistance of the Metallic Nanotubes observed by Contactless Method
○*Yugo Oshima, Hirotaka Suzuki, Yoshihiro Iwasa, Hiroyuki Nojiri*

Coffee Break（14：45-15：00）

General lecture（15：00-16：15）
Properties of Nanotubes

1-14 Influence of surrounding materials on heat conduction of carbon nanotubes: Molecular dynamics simulations
〇*Junichiro Shiomi, Shigeo Maruyama*
1-15 Specific Surface Area Measurement for Purity and SWNT Selectivity Analysis
〇*Don N. Futaba, Jundai Gotou, Takeo Yamada, Satoshi Yasuda, Motoo Yumura, Sumio Iijima and Kenji Hata*
1-16 Chirality Dependence on Destabilizing Agents Added to CMC-stabilized Carbon Nanotube Dispersions
〇*Hiroshi Saito, Masahito Sano*
1-17 Electrochemical and Diameter-selective Cutting of Carbon Nanotubes
〇*Shigekazu Ohmori, Takeshi Saito, Satoshi Ohshima, Motoo Yumura, Sumio Iijima*
1-18 Bending deformation of carbon nanotubes caused by a five-seven pair couple defect
〇*Kei Wako, Tatsuki Oda, Masaru Tachibana, Kenichi Kojima*

Poster Preview（16：15-17：15）
Poster Session（17：15-18：35）

Formation and Purification of Nanotubes

1P-1 Growth of Carbon Nanotubes by Carbon Transmission Method
〇*Takeshi Hikata, Kazuhiko Hayashi, Tomoyuki Mizukoshi, Yoshiaki Sakurai, Itsuo Ishigami, Takaaki Aoki,Toshio Seki, Jiro Matsuo*
1P-2 Synthesis of Radially-Aligned Carbon Nanotube Powder by SiC Surface Decomposition Method
〇*Kazuo Yoshikawa, Motohiro Yamamoto, Michiko Kusunoki*
1P-3 Photoluminescence of mono-dispersed single-walled carbon nanotubes made by using arc-burning method in nitrogen gas atmosphere
〇*Takashi Mizusawa, Shinzo Suzuki, Toshiya Okazaki, Yohji Achiba*
1P-4 Production of SWNTs by Laser Ablation and ACCVD
〇*Shin-ichi Kodama, Atsushi Ikeda, Yuki Masuo, Tetsushi Murakami, Tomonari Wakabayashi*
1P-5 Synthesis and Applications of Novel Vanadium Oxide Nanotubes
〇*Abhishek Kumar, Nikhil Dhawan*
1P-6 Time Dependence of Carbon Nanotube Growth by Gas Source Method using Alcohol in High Vacuum
〇*Kenji Tanioku, Tomoyuki Shiraiwa, Takahiro Maruyama, Shigeya Naritsuka*
1P-7 Patterned growth of CNTs through AFM nano-lithography
〇*Chien-Chao Chiu, Masamichi Yoshimura, Kazuyuki Ueda*
1P-8 A Study on Chirality-Selectivity of Metal Catalyst Particles in CNT Synthesis by Alcohol-CCVD
〇*Shogo Suzuki, Hideki Sato, Koichi Hata, Kazuo Kajiwara*
1P-9 TEM observetion of Carbon Nanotube Pattern fabricated on SiC(000-1) using Ta mask
〇*Yoko Hozumi, Yo Yamamoto, Midori Mori, Takahiro Maruyama, Shigeya Naritsuka, Michiko Kusunoki*
1P-10 Growth mechanism of carbon nanotubes over gold-supported catalysts
〇*Naoki Yoshihara, Hiroki Ago, Masaharu Tsuji*

Miscellaneous

1P-11 G' band Raman Spectrum of Single, Double, and Triple Layer Graphene
〇*Jin Sung Park, Alfonso Reina Cecco, Riichiro Saito, Jing Kong, Gene Dressselhaus, and Mildred S. Dresselhaus*

Applications of Nanotubes

1P-12 Influence of Cathode-Anode Distance on Field Emission Properties for Bulky CNT Emitters
〇*Huarong Liu, Shigeki Kato, Yahachi Saito*
1P-13 Applcations of vertically well-aligned CNT films in capacitors
〇*Haruo Kato,Michiko Kusunoki,Shigeyuki Sugimoto,Kunihiro Sugihara,Noriyoshi Shibata*
1P-14 *In-situ* observation of welding process of a muti-walled carbon nanotube to metal surface
〇*Koji Asaka, Hitoshi Nakahara, Yahachi Saito*
1P-15 Formation of Honeycomb Structure on PET Using Soluble Carbon Nanotube
〇*Nobuo Wakamatsu, Hisayoshi Takamori, Tsuyohiko Fujigaya, Naotoshi Nakashima*
1P-16 Investigation of Methane Adsorption on MWNTs Using Field Emission Microscopy (FEM)
〇*Tetsuya Yamashita, Koji Asaka, Hitoshi Nakahara, Yahachi Saito*
1P-17 Culture of osteoblast-like cells on transparent conductive thin films with carbon nanotubes
〇*Tsukasa Akasaka, Atsuro Yokoyama, Makoto Matsuoka, Shigeaki Abe, Motohiro Uo, Yoshinori Sato, Kazuyuki Tohji, Takeshi Hashimoto, Fumio Watari*
1P-18 In situ TEM study on field emission property of an isolated CNT
〇*Kensuke Okumura, Koji Asaka, Yahachi Saito*

1P-19 Fabrication Process of Carbon Nanotube FETs Using ALD Passivation for Biosensors
○*Yasuhiro Nakashima, Yutaka Ohno, Shigeru Kishimoto, Mina Okochi, Hiroyuki Honda, Takashi Mizutani*
1P-20 Electron Optical Evaluation of Carbon Nanotube Field-Emitter
○*Takumi Kono, Koji Asaka, Hitoshi Nakahara, Yahachi Saito*

Properties of Nanotubes

1P-21 Studying the Same-Handedness in Double-Walled Carbon Nanotubes Using the Dispersion-Augmented Density Functional Tight Binding Method
○*Stephan Irle, Raviprasad Krishnamurthy, Keiji Morokuma*
1P-22 Electronic propertes of hybrid (DNA/SWCNT) thin film
○*Yusei Maruyama,Satoru Motohashi,Masayuki Tanaka,Biao Zhou,Akiko Kobayashi,Hironori Ogata*
1P-23 Theory of superconductivity by the edge states in graphene
○*Ken-ichi Sasaki,Masahiro Suzuki,Riichiro Saito, Seiichiro Onari, Yukio Tanaka*
1P-24 Electrical transport properties of azafullerene $C_{59}N$ encapsulated single- and double-walled carbon nanotubes
○*Y. F. Li, T. Kaneko, S. Nishigaki, and R. Hatakeyama*
1P-25 Embedding of Carbon Nanotubes on Silicon substrates for use in Solar Cells
○*Abhishek Kumar, Nikhil Dhawan*
1P-26 Synthesis of single-walled carbon nanotubes by arc plasma reactor with twelve-phase alternating current discharge
○*T. Matsuura, Y. Kondo, N. Maki, Y. Ito,K. Matsumoto, N. Tamura, Y. Taira, R. Ehara*
1P-27 Electronic structures at edges of carbon nanotube and molecular dynamics simulations
○*Hirofumi Sakashita, Tatsuki Oda, Nobuhisa Fujima*
1P-28 Phase transition from Tomonaga-Luttinger liquid states to superconductive phase in carbon nanotubes.
○*Masaharu Matsudaira, Junji Haruyama, Naoyoshi Murata, Yuko Yagi, Erik Einarsson, Shigeo Maruyama, Toshiki Sugai, Hisanori Shinohara*
1P-29 Cooperative behaviors in carbene additions through local modifications of nanotube surface
○*Takashi Yumura, Miklos Kertesz*

Metallofullerenes

1P-30 Location of the Metal Atoms in $Ce_2@C_{78}$ and Its Bis-silylated Derivative
○*Michio Yamada, Takatsugu Wakahara, Takahiro Tsuchiya, Yutaka Maeda, Takeshi Akasaka, Kenji Yoza, Naomi Mizorogi, Shigeru Nagase*
1P-31 ^{13}C NMR Spectroscopic Study of ^{13}C-enriched Carbide-encapsulated Scandium Metallofullerenes
○*Yuko Yamazaki, Koji Nakajima, Takatsugu Wakahara, Tsuchiya Takahiro, Yutaka Maeda, Takeshi Akasaka, Markus Waelchli, Naomi Mizorogi, Shigeru Nagase*
1P-32 Reaction of $La@C_{82}$ with Cyclopentadiene Derivatives
○*Satoru Sato, Yutaka Maeda, Koji Inada, Michio Yamada, Takahiro Tsuchiya, Midori O. Ishitsuka, Tadashi Hasegawa, Takeshi Akasaka, Tatsuhisa Kato, Naomi Mizorogi, Shigeru Nagase*
1P-33 STM-tip Current Induced Polymerization of $Ce_2@C_{80}$ Metallofullerenes
○*Kazunori Ohashi, Nobuyuki Fukui, Masahiro Akachi, Takao Akachi, Hisashi Umemoto, Yasuhiro Ito, Toshiki Sugai, Ryo Kitaura, Hisanori Shinohara*
1P-34 Relative Stability of Metallofullerenes $Sc_3N@C_{70}$
○*Hong ZHENG, Qian XU, Xiang ZHAO*
1P-35 Cage Size Dependence on Photoluminescence Properties of Erbium-Metal-Carbide Metallofullerenes: $(Er_2C_2)@C_{2n}$
○*Masahiro Akachi, Yasuhiro Ito, Toshiya Okazaki, Yutaka Ohno, Takashi Mizutani, Ryo Kitaura, Toshiki Sugai, Hisanori Shinohara*

Endohedral Nanotubes

1P-36 Orientation of individual fullerenes inside carbon nanotubes determined by aberration-corrected electron microscopy
○*Yuta Sato, Kazu Suenaga, Shingo Okubo, Toshiya Okazaki, Sumio Iijima*
1P-37 Coating of BN nanotubes with metal oxides using novel ethanol-thermal method
○*Yang Huang, Yoshio Bando, Chengchun Tang, Chunyi Zhi, Takeshi Terao and Dmitri Golberg*
1P-38 Adsorption Efficiency of Polyynes into Single-Wall Carbon Nanotubes
○*Tetsushi Murakami, Tomonari Wakabayashi*
1P-39 Direct Observation on Formation Process of Nanopeapods by in-situ X-ray diffraction Measurements
○*Yuko Kato, Ryo Kitaura, Shinobu Aoyagi, Eiji Nishibori, Yasuhiro Ito, Makoto Sakata, Hisanori Shinohara*
1P-40 Fabrication of Metal-Nanowire in Carbon Nanotube Via Nano-Template Reaction
○*Naoki Imazu,Ryo Kitaura,Keita Kobayashi,Hisanori Shinohara*
1P-41 Optimization of Conditions for Formation of Carbon Nanotubes Filled Perfectly with Copper Nanowire
○*Akira Koshio, Naoki Mizuno, Hironobu Kito, Fumio Kokai*

1P-42 Synthesis and Characterization of Carbon Nanotubes Encapsulating Erbium-Chrolide Nanowires
〇*Daisuke Ogawa, Ryo Kitaura, Keita Kobayashi, Takeshi Saito, Satoshi Ohshima, H. Shinohara*

1P-43 Nucleation of an SWNT from a catalytic metal cluster inside a carbon nanotube template: MD simulations of DWNT formation
〇*Yoshifumi Izu, Junichiro Shiomi and Shigeo Maruyama*

Nanohorns

1P-44 SWNH as an Effective Delivery System for Macromolecule Anti-cancer Drugs
〇*Xu Jianxun, Yudasaka Masako, Zhang Minfang, Iijima Sumio*

1P-45 Gd oxide particles confined inside single-wall carbon nanohorns
〇*Ryota Yuge, Masako Yudasaka, Toshinari Ichihashi, Jin Miyawaki, Tsutomu Yoshitake, Sumio Iijima*

1P-46 Effect of compression pressure on the electrical resistivity for the pellet formed from nanohorns
〇*Yuhei Fukunaga,Manabu Harada,Sunji Bandow,Sumio Iijima*

1P-47 Anticancer Effect of ZnPc-Nanohorn-Protein in vivo
〇*Minfang Zhang, Masako Yudasaka, Tatsuya Murakami, Kumiko Ajima, A. D. Sandanayaka, Osamu Ito, Kunihiro Tsuchida, Sumio Iijima*

1P-48 Influence of formation technique of catalyst layer and addition of conductive material on performance of direct methanol fuel cell
〇*yuuki izumi, kennzi shinohara, masanobu yamamoto, shinnichirou oke, hirofumi takikawa, ikuo sakakibara, syuuichi*

1P-49 Close-open-close evolution of holes in single-wall carbon nanohorns caused by heat treatment
Jing Fan, 〇*Masako Yudasaka, Jin Miyawaki, Ryouta Yuge, Takazumi Kawai, Sumio Iijima*

1P-50 Intravenous Toxicity of Single-Walled Carbon Nanohorns
Jin Miyawaki, 〇*Masako Yudasaka, Minfang Zhang, Sumio Iijima*

March 4th, Tue.
Special lecture：25min(Presentation)+5min(discussion)
General lecture：10min(Presentation)+5min(discussion)
Poster preview：1min(Presentation),no discussion

Special lecture（9：00-9：30）

2S-3 Applications of Nanodiamond Hydrogels Toward Biology and Medicine
Houjin Huang, Erik Pierstorff, Eiji Osawa, and 〇*Dean Ho*

General lecture（9：30-10：30）
Metallofullerenes

2-1 Scanning Tunneling Spectroscopy Mapping of a Single Lu@C_{82} on Alkanethiol Self Assembled Monolayer
〇*Yuhsuke Yasutake, Keijiro Kono, Norihiro Kobayashi, Masachika Iwamoto, Hisashi Umemoto, Yasuhiro Ito, Haruya Okimoto, Hisanori Shinohara, Yutaka Majima*

2-2 Estimation of the amounts of transferred electron in Lu-entrapped Metallofullerenes
〇*Takafumi Miyazaki, Ryohei Sumii, Hisashi Umemoto, Haruya Okimoto, Toshiki Sugai, Hisanori Shinohara, Shojun Hino*

2-3 ^{13}C NMR Study of Pr_2@C_{80} and LaPr@C_{80}
〇*Manabu Ito, Shiho Nagaoka, Takeshi Kodama, Yoko Miyake, Shinzo Suzuki, Koichi Kikuchi, Yohji Achiba*

2-4 Structure of metal-carbide endoheadral metallofullerene Sc_2C_2@C_{82}(C_{2v})
〇*Koji Nakajima, Yuko Yamazaki, Takatsugu Wakahara, Takahiro Tsuchiya, Yutaka Maeda, Takeshi Akasaka, Markus Waelchli, Kenji Yoza, Naomi Mizorogi, Shigeru Nagase*

Coffee Break（10：30-10：45）

General lecture（10：45-11：45）
Fullerene Solids and Chemistry of Fullerenes

2-5 Discovery of the atomic-carbon-insertion reactions for fullerene growth
〇*Teruhiko Ogata, Tetsu Mieno, Yutaka Shibi, Yoshio Tatamitani*

2-6 Chemical modification on a non-IPR metallofullerene: La_2@C_{72}
〇*Xing Lu, Hidefumi Nikawa, Takahiro Tsuchiya, Yutaka Maeda, Takeshi Akasaka, Naomi Mizorogi and Shigeru Nagase*

2-7 Physical Properties of H_2 Endohedral C_{60}
〇*Katsumi Tanigaki, Takeshi Rachi, Ryotaro Kumashiro, Yasujiro Murata, Koichi Komatsu, Toru Kakiuchi, Hiroshi Sawa, Yoshimitsu Kohama, Satoru Izumisawa, Hitoshi Kawaji, Tooru Atake*
2-8 Pressure-Induced Structural Phase Transition of Two-dimensionally polymerized C_{60}
〇*Yuichiro Yamagami, Susumu Saito*

Lunch Time（11：45-13：00）

Awards Ceremony（13：00-13：30）

Special lecture（13：30-14：00）
2S-4 The structures of endohedral metallofullerene by the systematic structural studies from SR powder diffraction data
〇*Eiji Nishibori*

General lecture（14：00-15：00）
Endohedral Nanotubes・Nanohorns
2-9 Imaging of Transportation of Single Hydrocarbon Chain through Nano-sized Pore
〇*Takatsugu Tanaka, Masanori Koshino, Niclas Solin,Hiroyuki Isobe, Eiichi Nakamura*
2-10 Synthesis of Pd-filled CNTs for the tip of SPM
〇*Tomokazu Sakamoto, Chien-Chao Chiu, Kei Tanaka, Masamichi Yoshimura, Kazuyuki Ueda*
2-11 Electronic Structure of Polyyne Molecules by Resonance Raman and Optical Emission Spectroscopy
〇*Tomonari Wakabayashi*
2-12 Photoinduced Charge-Separation of Carbon Nanohorns with Porphyrin Connected via Amino Group
〇*Osamu Ito, Atula Sandanayaka, Yasuyuki Araki, Takatsugu Tanaka, Hiroyuki Isobe, Ei-ichi Nakamura, Masako Yudasaka, Sumio Iijima*

Coffee Break（15：00-15：15）

General lecture（15：15-16：00）
Science of Nanocarbons
2-13 Non-collinear Magnetic Phase Diagram of Graphene Nanoribbons
〇*Keisuke Sawada, Fumiyuki Ishii, Mineo Saito, Susumu Okada, Takazumi Kawai*
2-14 High temperature treatment of carbon fullerene soot and formation of multi-shell carbon nano-capsules filled with La carbide
〇*Kazunori Yamamoto, Takatsugu Wakahara, Takeshi Akasaka*
2-15 Monodisperse Single-Nano Diamond Particles as Seeding for CVD Diamond Thin Films. 1. A New Seeding Technique
〇*Sachio Inaba, Takashi Tarao, Masaaki Kawabe, Oliver A. Williams, Eiji Osawa*

Poster Preview（16：00-17：00）
Poster Session（17：00-18：20）

Formation and Purification of Nanotubes
2P-1 Effect of Al oxide buffer layer on SWNT growth using alcohol gas source in high vacuum
〇*Tomoyuki Shiraiwa, Shigenori Numao, Osamu Oishi, Nobuyuki Nishi, Takahiro Maruyama, Shigeya Naritsuka*
2P-2 Dispersion and Separation of Single-Walled carbon nanotubes prepared by using metal-catalysts supported on Zeolite
〇*Masahiro Hashimoto, Yutaka Maeda, Tadashi Hasegawa, Makoto Kanda, Takahiro Tsuchiya, Takatsugu Wakahara, Takeshi Akasaka, Yuhei Miyauchi, Shigeo Maruyama, Jing Lu, Shigeru Nagase*
2P-3 A protocol to remove surfactants and gradient media from metallic and semiconducting single-wall carbon nanotubes in density gradient separations
〇*Kazuhiro Yanagi, Yasumitsu Miyata, Yuta Sato, Zheng Liu, Kazutomo Suenaga, Takeo Ishida, Hiromich Kataura*
2P-4 Diagnostics and Control of Growth of Vertical-aligned Carbon Nanotube Forest by Using a Telecentric Optical System
〇*Satoshi Yasuda, Don N. Futaba, Motoo Yumura, Sumio Iijima, Kenji Hata*
2P-5 FT-IR Gas Analysis for Alcohol Catalytic Chemical Vapor Deposition
〇*Tomohiro Shimazu, Yoshinobu Suzuki, Hisayoshi Oshima, Shigeo Maruyama*
2P-6 Growth of double- and triple-walled carbon nanotube on MgO substrate
〇*Ryoji Naito, Toshiya Murakami, Yuki Hasebe, Kenji Kisoda, Koji Nishio, Toshiyuki Isshiki, Hiroshi Harima*
2P-7 Purification of Carbon Nanotubes by Amphiphilic Oligopeptides
〇*Shinya Masuhara, Atsushi Yamamoto, Yosuke Miura, Yasushi Maeda, Shin Ono*

2P-8 Toward Single Structure of SWNTs: Simultaneous Enrichment in (n,m) and the Optical Purity of SWNTs through Extraction with Carbazole-Bridged Chiral Diporphyrin Nanotweezers
○*Xiaobin Peng, Naoki Komatsu, Takahide Kimura, Atsuhiro Osuka*

2P-9 Effect of density of carbon supply on the synthesis of small diameter SWNTs by ACCVD method using platinum as catalyst
○*Keisuke Urata, Sinzo Suzuki, Hiroshi Nagasawa, and Yohji Achiba*

2P-10 Toward the selective production of metallic SWNT by the laser ablation method
○*Yasuhiro Tsuruoka, Yohji Achiba*

2P-11 The synthesis of the single-walled carbon nanotubes films by DC arc discharge
○*Zhh.Li, Hf.Wang,S.Inoue Y.Ando*

Applications of Nanotubes

2P-12 Nitrogen and oxygen plasma functionalization of carbon nanotubes for photovoltaic device application
○*Golap Kalita , Sudip Adhikari, Hare Ram Aryal , Rakesh Afre, Tetsuo Soga, Maheshwar Sharon, Masayoshi Umeno*

2P-13 Formation of nano pn junction diode via alkali-halogen plasma ion irradiation
○*Jun Shishido, Toshiaki Kato, Wataru Oohara, Rikizo Hatakeyama, Kazuyuki Tohji*

2P-14 Novel Carbon Nanotubes/Photopolymer Nanocomposites with High Conductivity and Application to Nanoimprint Photolithography
○*Tsuyohiko Fujigaya, Takahiro Fukumaru, Naotoshi Nakashima*

2P-15 Increase of surface area of super-growth single-walled carbon nanotubes via opening, resulting in improved electrochemical capacitance
○*Ali Izadi-Najafabadi, Kenji Hata, Tatsuki Hiraoka, Takeo Yamada, Don N. Futaba, Satoshi Yasuda, Osamu Tanaike, Hiroaki Hatori, Motoo Yumura, Sumio Iijima*

2P-16 Photovoltaic cell made of single wall carbon nanotubes and fullerenes
○*Tatsunori Kuranoto,Toru Arai,Shingo Nobukuni,Yoshikazu Shimote,Tetsuji Moriguchi*

2P-17 Precise Optical Detection of Mechanical Vibration of Cantilevered Carbon Nanotubes in Air
○*Shun Fukami, Seiji Akita*

2P-18 Density increase of well-dispersed single-walled carbon nanotubes by laser trapping
○*Thomas Rodgers, Satoru Shoji, Satoshi Kawata*

2P-19 Effects of Microwave Radiation on Heat-resistive Proteins Adsorbed on Carbon Nanotubes
○*Hirokazu Horiguchi, Masahito Sano*

2P-20 Dependence on Insulator thickness for sensitivity of Carbon Nanotube Field-Effect Transistor Biosensor
○*Masuhiro Abe, Katsuyuki Murata, Tatsuaki Ataka, Kazuhiko Matsumoto*

2P-21 FET Properties of Exohedrally Modified SWCNTs
○*Ryotaro Kumashiro, Naoya Komatsu, Tatsuya Saito, Takeshi Akasaka, Yutaka Maeda, Nagao Kobayashi, Katsumi Tanigaki*

Properties of Nanotubes

2P-22 Atomic structures of graphene adatom and its aggregation
○*Tomofumi Hashi, Mineo Saito*

2P-23 Environmental effect on excitons of single wall carbon nanotubes
○*Kentaro Sato, Riichiro Saito, Jie Jiang, Gene Dresselhaus, Mildred S. Dresselhaus*

2P-24 Spectroscopically probed doping processes in semiconducting single-wall carbon nanotubes selectively isolated using polyfluorene
○*Nobutsugu Minami, Yoshisuke Futami, Said Kazaoui*

2P-25 Response of Carbon Nanotube Field Effect Transistors to Vibrating Gate Using Scanning Gate Microscopy
○*Kosuke Hata, Yoshikazu Nakayama, Seiji Akita*

2P-26 Third-order nonlinear optical properties and phase relaxation time in single-walled carbon nanotubes
○*Masao Ichida, Yumie Kiyohara, Shingo Saito, Yasumitsu Miyata, Hiromichi Kataura, Hiroaki Ando*

2P-27 Multi-backgate control of carbon nanotube double quantum dot
○*Tomoyuki Mizuno,Hideyuki Maki,Satoru Suzuki,Yoshihiro Kobayashi,Tetsuya Sato*

2P-28 Design of Si Nanotube: New Multi-shalle Nanotubes
○*Susumu Okada*

2P-29 Influence of Diameter on the Raman Spectra of Multi-Walled Carbon Nanotubes
○*Hiroyuki Nii, Yoshiyuki Sumiyama, Hamazo Nakagawa, Atsuhiro Kunishige*

2P-30 Resonance Raman spectroscopy of metallic and semiconducting single-wall carbon nanotubes
○*Yasumitsu Miyata, Kazuhiro Yanagi, Yutaka Maniwa, Hiromichi Kataura*

Metallofullerenes

2P-31 Chemical Derivatization of La@C_{82} and La_2@C_{80} with Phenylchlorodiazirine
〇*Haruka Enoki, Midori O. Ishitsuka, Takahiro Tsuchiya, Takeshi Akasaka, Zdenek Slanina, Michael T. H. Liu, Naomi Mizorogi, Shigeru Nagase*

2P-32 [2+1] Cycloaddition of Nitrene onto [60]fullerene: Interconversion between an Aziridinofullerene and an Azafulleroid
〇*Mitsunori Okada, Tsukasa Nakahodo, Hiroyuki Morita, Toshiaki Yoshimura, Midori O. Ishitsuka, Takahiro Tsuchiya, Yutaka Maeda, Hisashi Fujihara, Takeshi Akasaka, Xingfa Gao, Shigeru Nagase*

2P-33 HPLC Purification of Li Endohedral [60]Fullerene
〇*Takeshi Sakai, Hiroshi Okada, Fuyuko Yamashita, Kenji Omote, Yasuhiko Kasama, Kuniyoshi Yokoo, Shoichi Ono, Hiromi Tobita, Rikizo Hatakeyama, Masayuki Toda*

2P-34 Electron Transport Properties of Sc_2C_2@C_{84} Using the Encapsulated Sc_2C_2 Moiety as an Electric lead, First-Principle Study
〇*Shinji Usui, Noritaka Inoue*

2P-35 Photophysical Properties of N@C_{60}
〇*Hidefumi Nikawa, Yoichiro Matsunaga, Takeshi Akasaka, Tatsuhisa Kato, Yasuyuki Araki, Osamu Ito, Masafumi ATA, Klaus-Peter Dinse*

2P-36 Synthesis of High Purity Nitrogen Atom Encapsulated Fullerenes
〇*Shohei Nishigaki, Toshiro Kaneko, Rikizo Hatakeyama*

Carbon Nanoparticles

2P-37 Detection of single atomic layer of graphene by highly charged ion
〇*Yoshiyuki Miyamoto, Hong Zhang*

2P-38 Effect of heat-treatment temperature on preparation of carbonized ferritin
Masato Tominaga, 〇*Katsuya Miyahara, Kota Nakao, Isao Taniguchi*

2P-39 Chlorine-End-Capped Polyyne: Formation and Characterization
〇*Yoriko Wada, Tomonari Wakabayashi*

2P-40 Resonance Effects in the Raman Spectra of Polyynes
〇*Yohei Ami, Tomonari Wakabayashi*

2P-41 Cyanopolyynes Formed by Laser Ablation of Graphite in Acetonitrile
〇*Takaki Haseba, Yoshihiko Kashihara, Tomonari Wakabayashi*

2P-42 Dicyanopolyynes Formed by Laser Ablation of Graphite in Liquid Nitrogen
〇*Yoshihiko Kashihara, Takaki Haseba, Tomonari Wakabayashi*

Chemistry of Fullerenes

2P-43 Kinetic study in Diels-Alder reactions of fulleroids and methanofullerenes with various 1,3-dienes
〇*Yasunori Susami, Hiroshi Kitamura, Ken Kokubo, Takumi Oshima*

2P-44 Evaluation of Antioxidant Activity of Water-Soluble Fullerene Derivatives and Natural Antioxidants by β-Carotene Bleaching Assay
〇*Kyoko Togaya, Tadashi Goto, Ken Kokubo, Hisae Aoshima, Takumi Oshima*

2P-45 Photoelectrochemical Properties of [70]fullerene derivatives on ITO
〇*Takahiko Ichiki, Yutaka Matsuo, Eiichi Nakamura*

2P-46 Synthesis and Property of Fullerene Cobalt Dithiolene Complexes
〇*Masashi Maruyama, Yutaka Matsuo, Eiichi Nakamura*

2P-47 Hydroarylation of Fullerene with Aromotic Compound and Subsequent Friedel-Crafts Acetylation Reaction
〇*Shinya Tochika, Yui Sol, Mai Kato, Ken Kokubo and Takumi Oshima*

2P-48 Surface Functionalization of Fullerene Bilayer Vesicles and Study of Water Permeability
〇*Tatsuya Homma, Koji Harano, Hiroyuki Isobe, Eiichi Nakamura*

2P-49 Singlet Oxygen Generation Efficiencies of Water-Soluble Fullerenes and Their Photo-Induced Cytotoxicity
〇*Yoko Iizumi, Toshiya Okazaki, Minfang Zhang, Masako Yudasaka, Sumio Iijima*

2P-50 Synthesis of Fullerene Glycoconjugates via a Copper-Catalyzed Huisgen Cycloaddition Reaction
〇*Kaimei Cho, Niclas Solin, Daniel B. Werz, Hiroyuki Isobe, Peter H. Seeberger, Eiichi Nakamura*

March 5th, Wed.
Special lecture：25min(Presentation)+5min(discussion)
General lecture：10min(Presentation)+5min(discussion)
Poster preview：1min(Presentation),no discussion

Special lecture（9：00-9：30）

3S-5 Chemical Modification of Carbon Nanohorns
〇*Nikos Tagmatarchis*

General lecture（9：30-10：30）
Formation and Purification of Nanotubes

3-1 Intensity enhancement of intermediate frequency Raman mode (IFM) by the presaence of very small diameter SWNTs
〇*Yohji Achiba, Yasuhiro Tsuruoka, Keisuke Urata*

3-2 Mechanism of Gold-Catalyzed Carbon Material Growth
〇*Daisuke Takagi, Yoshihiro Kobayashi, Hiroki Hibino, Satoru Suzuki, Yoshikazu Homma*

3-3 Acetylene Assisted Fast Growth of Vertically Aligned Single Walled Carbon Nanotubes in Alcohol Catalytic Chemical Vapor Deposition
〇*Rong Xiang, Jun Okawa, Zhengyi Zhang, Erik Einarsson, Yohei Miyauchi, Yoichi Murakami, Shigeo Maruyama*

3-4 Discovery of Novel Carbon Structure: Graphene Multi-Layers Spontaneously Formed on the Top of Aligned Carbon Nanotubes
〇*Daiyu Kondo, Shintaro Sato, Akio Kawabata, Yuji Awano*

Coffee Break（10：30-10：45）

Special lecture（10：45-11：15）

3S-6 Electronic and Photo-electrochemical Functions of Fullerene-Metal Complexes 〇*Yutaka Matsuo*

General lecture（11：15-12：15）
Purification and Applications of Nanotubes

3-5 Stability of Double Wall Carbon Nanotubes on Oxidation
〇*Hiromichi Yoshida, Toshiki Sugai, Hisanori Shinohara*

3-6 Separation of Metallic and Semiconducting Single-Wall Carbon Nanotubes by Gel Electrophoresis
〇*Takeshi Tanaka, Hehua Jin, Yasumitsu Miyata, Hiromichi Kataura*

3-7 The New Feature Development of Carbon Nanotubes-Polybenzimidazole Composite
〇*Minoru Okamoto, Tsuyohiko Fujigaya, Naotoshi Nakashima*

3-8 Reduction of low-temperature-growth-CNT via resistances using inner layers by Chemical Mechanical Polishing
〇*Kentaro Ishimaru, Daisuke yokoyama, Takayuki Iwasaki, Shintaro Sato, Takashi Hyakushima, Mizuhisa Nihei, Yuji Awano and Hiroshi Kawarada*

Lunch Time（12：15-13：30）

Special lecture（13：30-14：00）

3S-7 Review of Nanotechnology R&D in NEC 〇*Shuichi Tahara*

Poster Preview（14：00-15：00）
Poster Session（15：00-16：20）

Formation and Purification of Nanotubes

3P-1 Growth characteristics of single-walled carbon nanotubes at low temperature by low-pressure chemical vapor deposition
〇*Hiroshi Yoshida, Masahiro Asakura, Shu Watanabe, Takao Shiokawa, and Koji Ishibashi*

3P-2 Effective catalyst diameter for extended growth duration of single-walled carbon nanotubes
〇*Takashi Uchida, Hiroshi Sakai, Akira Yamazaki, Yoshihiro Kobayashi*

3P-3 RHEED Study on Growth Process of Carbon Nanotubes by Chemical Vapor Deposition
〇*Hidetoshi Nagatsu, Koji Asaka, Hitoshi Nakahara, Yahachi Saito*

3P-4 Carbon Nanotube Growth with Dipped (Fe,Co) Mo Catalysts by Chemical Vapor Deposition
〇*Daisuke Ishizuka, Takayuki Yanai, Hiroki Okuyama,Katsumi Uchida, Nobuyuki Iwata, Hirofumi Yajima, Hiroshi Yamamoto*

3P-5 Sorting of double-walled carbon nanotubes using density-gradient ultracentrifugation.
〇*Shingo Ina, Kazuhiro Yanagi, Yasumitu Miyata, Yutaka Maniwa, Hiromichi Kataura*

3P-6 In-situ Monitoring and Kinetic Analysis of Millimeter-Thick Single-Walled Carbon Nanotube Growth
〇*Kei Hasegawa, Suguru Noda, Shigeo Maruyama and Yukio Yamaguchi*

3P-7 Crucial Role of Gas-Phase Pyrolysis of Etylene in Rapid Growth of Carbon Nanotubes
Ryuhei Ito, Suguru Noda, Toshio Osawa, Shigeo Maruyama, Yukio Yamaguchi

3P-8 Interaction of Amphiphilic Oligopeptides with Carbon Nanotubes
○*Shin Ono, Atsushi Yamamoto, Shin-ya Masuhara, Yosuke Miura, Yasushi Maeda, Kishio Hidaka, Hiromitsu Miyamoto*

3P-9 Growth of super-long straight CNTs by highly dense catalyst particles
○*Ryogo Kato, Tasuku Maki, Takayuki Iwasaki, Hiroshi Kawarada*

3P-10 Chemical Vapor Deposition of Carbon Nanotubes with dip-coated (Fe,Co)Pt catalysts
○*Takuya Sonomura,Daisuke Ishizuka,Hiroki Okuyama,Nobuyuki Iwata,Hiroshi Yamamoto*

3P-11 Effect of flow rate of ethanol on growth dynamics of VA-SWNT -Transition from no-flow CVD to normal ACCVD-
○*Jun Okawa,Rong Xiang,Shigeo Maruyama*

3P-12 Growth of Very-Thin Single-Wall Carbon Nanotubes by Catalyst-supported Chemical Vapor Deposition Using Surface-Treated Zeolites
○*Keita Kobayashi, Ryo Kitaura, Hisanori Shinohara*

Applications of Nanotubes

3P-13 Quantum response of carbon nanotube quantum dots to teraherz wave
○*Seiko Toyokawa, Tomoko Fuse, Yukio Kawano, Tomohiro Yamaguchi, Koji Ishibashi*

3P-14 Dispersion of Single-Wall Carbon Nanotubes by Thermostable Chitinases
○*Takeshi Tanaka, Hyekyeong Park, Hehua Jin, Tadayuki Imanaka, Hiromichi Kataura*

3P-15 Cabon nanotube single electron transistors on a GaAs/AlGaAs 2-dimensional electron gas wafer
○*Mitsutoshi Makihata, Takahiro Mori, Tomohiro Yamaguchi, Yoshinobu Aoyagi, Koji Ishibashi*

3P-16 Inhibitory Effect of Carboxymethylcellulose Wrapping on the Oxidation of Single-walled Carbon Nanotubes Induced by Acidification
○*Toru Ishii, Katsumi Uchida, Tadahiro Ishii, Hirofumi Yajima*

3P-17 Manipulation and Observation of Carbon Nanotubes in Microfluidic Chip Under Optical Microscope
○*Naoki Inomata, Yoko Yamanishi, Fumihito Arai*

3P-18 Purification and Physicochemical Properties of Double-Walled Carbon Nanotubes
○*Noriko Maeda, Katsumi Uchida, Tadahiro Ishii, Hirofumi Yajima*

3P-19 Effects of the neutral Ar beam irradiation to the random-network single-walled carbon nanotube field effect transistors
○*Shunsuke Sato, Takahiro Mori, Kazuo Omura, Koji Ishibashi*

3P-20 Theoretical Analysis on Ion Permeation Mechanism through an Anion-Doped Carbon Nanotube
○*Takashi Sumikama, Shinji Saito, Iwao Ohmine*

Properties of Nanotubes

3P-21 Recovery process of low-energy irradiation damage of SWNTs
○*Kenji Yamaya, Satoru Suzuki, Yoshikazu Homma, Yoshihiro Kobayashi*

3P-22 Synthesis of SWNTs by FH-arc method and evaluation of SWNTs by Raman spectroscopy
○*Beibei Chen, Sakae Inoue, Takeshi. Hashimoto, Yoshinori Ando*

3P-23 Long-range Electron Transfer through a Single-walled Carbon Nanotube Sheet
○*Takeshi Saito, Koji Matsuura, Satoshi Ohshima, Shigekazu Ohmori, Motoo Yumura, Sumio Iijima*

3P-24 Diameter evaluation of multi-walled carbon nanotubes using SEM images
○*Tohru Kawamoto, Hamazo Nakagawa, Takashi Muranaka, Atsuhiro Kunishige, and Yoshiyuki Sumiyama*

3P-25 Saturation of Photoluminescence from Carbon Nanotubes at High Laser Intensities: Exciton-Exciton Annihilation near the Mott Density
○*Yoichi Murakami, Junichiro Kono*

3P-26 Growth and characteristics of ^{13}C enriched carbon nanotubes
○*Nobuyuki Yamazaki, Ryo Hashiba, Manabu Oie, Yuichi Ochiai, Tomohiro Yamaguchi, Koji Ishibashi*

3P-27 Polarized Raman Spectroscopy of Vertically Aligned Single-walled Carbon Nanotubes
○*Zhengyi Zhang, Yuhei Miyauchi, Erik Einarsson, Shigeo Maruyama*

3P-28 Moleacular dynamics of phonon relaxation of an SWNT
○*Minetaka Nihsimura,Junichiro Shiomi, Shigeo Maruyama*

3P-29 Surface Potential Investigations of Ballistic Conduction in SWNTs by Atomic Force Microscopy
○*Yuji Miyato, Kei Kobayashi, Kazumi Matsushige, Hirofumi Yamada*

3P-30 Raman Scattering Studies on Nanopeapod-Derived Double-Walled Carbon Nanotubes: Comparisons with Photoluminescence Spectra
○*Soon-Kil Joung, Toshiya Okazaki, Naoki Kishi, Takeshi Nakanishi, Shunji Bandow, Zujin Shi, Sumio Iijima*

Miscellaneous

3P-31 Behaviors of cells cultured on carbon nanotube-synthesized substrate surface
Shouichiro Nagaishi, Nagisa Yoshizaka, Estuko Kumagai, Shinji Harada, Isao Taniguchi

3P-32 Synthesis of Carbon Nanotube Particles from Used SiC Powder by SiC Surface Decomposition Method
〇*Takayuki Morishita, Akihiro Ichikawa, Motohiro Yamamoto, Ryo Sasai, Michiko Kusunoki*
3P-33 Carbon nanowalls as a negative electrode in lithium-ion secondary battery
〇*Norihiro Kitada, Hirofumi Yoshimura, Osamu Tanaike, Ken-ichi Kobayashi, Kenichi Kojima, Masaru Tachibana*
3P-34 Synthesis of Thin Graphite by Exfoliation Technique
〇*Satoshi Heguri, Nozomu Kimata, Mototada Kobayashi*

3P-35 Flattened Carbon Nanocoil and application to field emitter
〇*Yuichiro Shinohara, Yuji Hosokawa, Masashi Yokota, Shinichiro Oke, Hirofumi Takikawa, Youhei Fujimura, Tatsuo Yamaura, Shigeo Itoh, Koji Miura, Kazuo Yoshikawa, Takashi Ina, Fumio Okada*
3P-36 Ab-initio study on the electronic structure of few-layer graphene films connected to a titanium electrode under an electric field
〇*Mari Ohfuchi,Masakatsu Ito*
3P-37 Preparation of porous carbons composed of carbon nanotube and fullerene-like carbon by carbonization of Fe-containing phenol formaldehyde resin
〇*Yuji Sakamoto, Katsuya Inomata, Yoshinobu Otake*
3P-38 Antimicrobial activity of fullerene and its derivatives
〇*Hisae Aoshima, Ken Kokubo, Shogo Shirakawa, Masayuki Ito, Shuichi Yamana, Takumi Ohshima*

Formation of Fullerenes・Higher Fullerenes

3P-39 Production of carbon clusterts by collisonal explosion-reaction of asteroids in space (model experiment)
〇*Tetsu Mieno, Sunao Hasegawa*
3P-40 Energetics and Electronic Structures of Fullerenes with Vacancies
〇*Susumu Okada*

Fullerene Solids

3P-41 Morphological Study of C_{60}Thin Films for Electronic Device Application
〇*Hiroyuki Sagami, Haruna Oizumi, Morihiko Saida, Kenji Omote, Yuzo Mizobuchi, Yasuhiko Kasama, Kuniyoshi Yokoo, Shoichi Ono, Hiroji Ohigashi, Keiko Koga, Takeo Furukawa*
3P-42 Helium intercalated C_{60} solid under high pressure
〇*Shinji Kawasaki, Takeshi Hara, Yusuke Kanamori, Atsushi Iwata*
3P-43 Electric double-layer capacitances of the C_{60} dispersed porous carbons
〇*Shunsuke Mori, Takehiro Kawashita, Shinji Kawasaki*
3P-44 Electronic transport properties of photo- and electron-beam-irradiated C_{60}
〇*Yasuto Chiba , Hajime Tsuji , Misaki Ueno , Nobuyuki Aoki , Jun Onoe , Yuichi Ochiai*
3P-45 Modification of Hole-Transport Property of Fullerene Materials by Hydrogenation: A DFT Study on $C_{60}H_4$
〇*Ken Tokunaga, Hiroshi Kawabata, Kazumi Matsushige*
3P-46 Fabrication of C60MC12 Films for Solution-Processed n-type Organic Thin Film Transistors
〇*Koichi Sakaguchi, Masayuki Chikamatsu, Atsushi Itakura, Yuji Yoshida, Reiko Azumi, Kiyoshi Yase*
3P-47 High Performance N-Type Organic Thin-Film Transistors Based on Soluble C_{60} Derivatives
〇*M. Chikamatsu, A. Itakura, K. Sakaguchi, Y. Yoshida, R. Azumi, K. Yase*
3P-48 Effect of Free Electron Laser Irradiation on Pressed C_{60} Powder at the Order of GPa
〇*Nobuyuki Iwata, Shingo Ando, Ryo Nokariya, Yasunari Iio, Hiroshi Yamamoto*
3P-49 C_{60} Crystal Growth and Free Electron Laser Irradiation Effect on Pressed C_{60} Powder in Solution
〇*Yasunari Iio, Shingo Ando, Ryo Nokariya, Nobuyuki Iwata, Hiroshi Yamamoto*
3P-50 Magnetic Properties of superconducting sodium fulleride Na_xC_{60}
〇*Nozomu Kimata,Satoshi Heguri,Mototada Kobayasi*