

Time Table

Oral Presentation

Sep. 27 ~ Sep. 29
(Building A5, Room A)

	Sep. 27	Sep. 28	Sep. 29
9:00			3A01
	1A02	2A02	3A02
10:00	1A03	2A03	3A03
	1A05	2A05	3A05
	1A06	2A06	3A06
11:00	1A07		3A07
		2A08	
	1A09		3A09
12:00		Poster 12:10-13:10 core time for odd presentaiton number	
13:00		13:10-14:10 core time for even presentaiton number	3A13
			3A15
14:00			3A16
	1A17	2A17	
	1A18	2A18	3A18
15:00	1A19	2A19	3A19
	1A21	2A21	
16:00	1A22	2A22	
	1A23	2A23	
17:00	1A25	2A25	
	1A26	2A26	
	1A27		
18:00	1A28	Poster award ceremony	
19:00		Banquet 18:30 - 20:30 Conference Hall	
20:30			

Poster Presentation

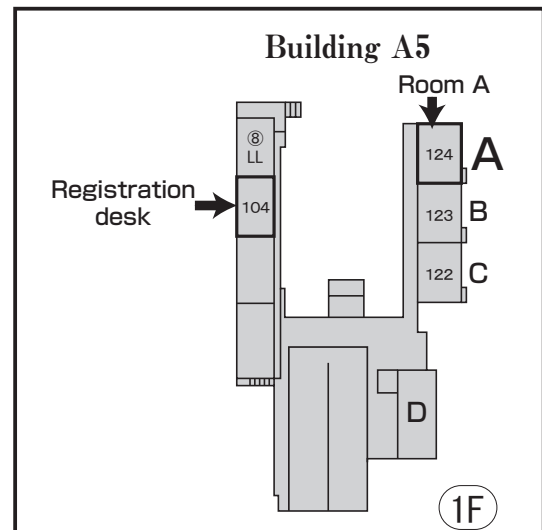
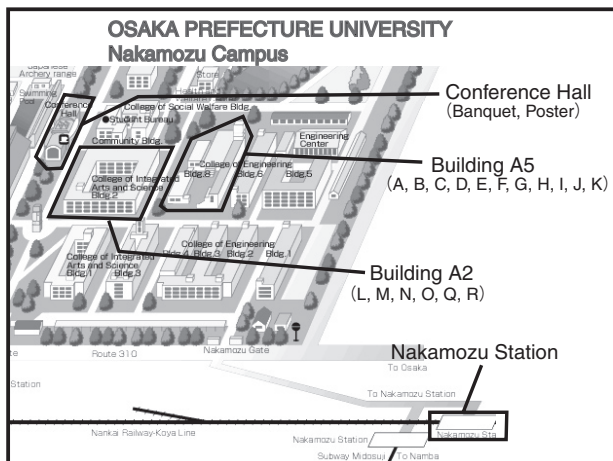
Sep. 28 12:10 ~ 14:10
(Conference Hall)

core time
12:10 ~ 13:10

2PA01
2PA03
2PA05
2PA07
2PA09
2PA11
2PA13
2PA15
2PA19
2PA21
2PA23
2PA25
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2PA29
2PA31
2PA33
2PA35
2PA37
2PA39
2PA41
2PA43
2PA45

core time
13:10 ~ 14:10

2PA02
2PA04
2PA06
2PA08
2PA10
2PA12
2PA14
2PA16
2PA18
2PA20
2PA22
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2PA40
2PA42
2PA44
2PA46



Program

■■■■ September 27 (Tue.) (Room A) ■■■■

[AOCF_Chemical Design for Functional Innovation]

(9 : 20)

1A02 Opening address

(9 : 40) (President Lian Gao)

1A03★Recent Developments of Low-temperature Combustion Synthesis of Ultrafine Ceramic Powder (University of Science and Technology Beijing)

○Chang-Chun Ge · Xin-Tai Su · Xiao-Hai Ma · Qing-Zhi Yan · Wen-Feng Zhang

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1A05 Precursor process designing to synthesize pure silicon carbide powders (National Institute for Materials Science) ○Satoru Ishihara · Toshiyuki Nishimura · Hidehiko Tanaka

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1A06 Silicon Carbide Particle Synthesis from Sol-Gel Precursors with Controlled Heterogeneity (Osaka Prefecture University) ○Masaki Narisawa · Masanori Yoshida · Hiroya Yasuda · Hiroshi Mabuchi

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(11 : 00) (President Masaki Narisawa)

1A07★Preparation and Characterization of Carbon Nanotube Ceramic Composites (Shanghai Institute of Ceramics, Chinese Academy of Sciences)

○Lian Gao

2

1A09 A Route to Prepare BN Nanofibers from Borazine Oligomer Using Al Template (Graduate school of Engineering, Hokkaido University)

○Yuting Wang · Shiro Shimada · Yasunori Yamamoto · Norio Miyaura

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(14 : 20) (President Shiro Shimada)

1A17 Interface structure of partial transient-liquid-phase-bonded alumina via In/Ag alloy/In interlayers (University of California, Berkeley · Hokkaido University) ○Takaya Akashi · (University of California, Berkeley) Sung Hong · (Hokkaido University) Hajime Kiyono · (University of California, Berkeley) Andreas M. Glaeser

3

1A18 Preparation of $\text{La}_{0.7}\text{Ca}_{0.3}\text{MnO}_3$ thin films on LSAT substrates by excimer-laser metal-organic deposition (National Institute of Advanced Industrial Science and Technology (AIST)) ○Kais Daoudi · Tetsuo Tsuchiya · Iwao Yamaguchi · Takaaki Manabe · Susumu Mizuta · Toshiya Kumagai

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1A19★Micro/Nano scaled Fabrication of the Functional Non-Oxide Ceramics for Opto-electronic applications (Hanyang University) ○Kwang Bo Shim

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(15 : 40) (President Kwang Bo Shim)

1A21 Design and Estimation of buffer solution for DNA separation by using Ceramic nano-particles (Kitami Institute of Technology · Shizuoka University) ○Tomoya Ohno · (Shizuoka University) Masayuki Fujimoto · (Kitami Institute of Technology) Takeshi Matsuda · (Shizuoka University) Hisao Suzuki

5

1A22 Tunable Optical Properties of SiO_2 -Coated Linear-Chains of Gold Nanoparticles (Nagoya Institute of Technology) ○Yong Yang · Masayuki Nogami

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1A23★Preparation and Catalytic Application of Structural-controlled Metal Nanoparticles (Japan Advanced Institute of Science and Technology)

○Mikio Miyake

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(17 : 00) (President Hisao Suzuki)

1A25 Effect of Anion Surface Active Agent on the Preparation of Nanocrystalline SrTiO_3 (Xidian University · Xi'an Jiaotong University) ○Ren Qingli · (The Second Artillery Institute of Engineering) Luo Qiang · (Xidian University) Cao Quanxi

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1A26 Prediction of Crystal Size of the Mg,Al-hydroxalcalite Nanocrystalline Using Improved Back Propagation Networks (The Second Artillery Institute of Engineering) ○Luo Qiang · (Xidian University · Xi'an Jiaotong University) Ren Qingli

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1A27 Preparation of Mg,Al-hydroxalcalite Nanocrystalline under hydrothermal Condition (Xidian University · Xi'an Jiaotong University) ○REN Qing-li · (The Second Artillery Institute of Engineering) LUO Qiang

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1A28 Oxidation and Electric Property of the Compound in the System Al-Si-C (Okayama Ceramics Research Foundation) ○Motonari Fujita · Junji Ommyoji · Akira Yamaguchi

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■■■■ September 28 (Wed.) (Room A) ■■■■

[AOCF_Chemical Design for Functional Innovation]

(9 : 20) (President Koichi Kikuta)

2A02 Spatially Regulated Growth of Metal Oxide Films on Mechanically Flexible Polymer Sheet (NIMS) ○Naoto Shirahata · Yoshio Sakka · (AIST) Atsushi Hozumi

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2A03★Electrophoretic deposition of ZnO nanoparticles (Kyungnam University) ○Byungsei Jun · K. Hong Hwang · S. Young Yoon

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(10 : 20) (President Koji Watari)

2A05 Orientation Control of Ceramic Thin Film Using Nano Sheet Layer (Nagoya University) ○Koichi Kikuta · Koji Noda · Shin Okumura · Toshiaki Yamaguchi · Shin-ichi Hirano

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2A06★Bioinspired Micropatterning of Ceramics on Organic Templates (Nagoya University) ○Kunihito Koumoto

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(11 : 20) (President Junichi Hojo)

2A08★Chemical Strategies for Controlling Structural Evolution and Properties of Self-Assembled Organic-Inorganic Nanohybrids (Institute of Materials and Engineering Science, ANSTO) ○John Bartlett

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(14 : 20) (President Hiromitsu Kozuka)

2A17 Bottom-Up Fabrication of Pb-Free Piezoelectric Structures Using Complex Alkoxides (National Institute of Advanced Industrial Science and Technology · Nagoya Institute of Technology) ○Kazumi Kato · (Nagoya Institute of Technology) Kiyotaka Tanaka · (National Institute of Advanced Industrial Science and Technology) Yiping Guo · Kazuyuki Suzuki · Tatsuo Kimura · Kaori Nishizawa · Takeshi Miki

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2A18 Electrochemical Properties of VO_2 and WO_3 -doped VO_2 Thin Film by Sol-Gel method (Korea Institute of Ceramic Engineering and Technology) ○Jeong Ho Cho · Jong Bum Choi · Byung Yul Choi · Myoung Pyo Chun · Byoung Ik Kim

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2A19★Design of organosiloxane-based organic/inorganic hybrids by incorporating various inorganic components (Fine Ceramics Research Associa-

tion) ○Shingo Katayama · (Nippon Steel Corporation) Noriko Yamada	12
(15 : 00) (President Kazumi Kato)	
2A21 Preparation and Characterisation of proton conducting P_2O_5 - SiO_2 - TiO_2 glasses for fuel cell electrolyte (Nagoya Institute of Technology) ○Uma Thanganathan · Masayuki Nogami	12
2A22 Valence change of samarium ions in Al_2O_3 - B_2O_3 - SiO_2 glass by femtosecond laser irradiation (Nagoya Institute of Technology) ○Hongpeng You · Tomokatsu Hayakawa · Masayuki Nogami	13
2A23★Nanohybrids and Mesoporous Thin Films by Copolymer Templating (National University of Singapore) ○John Wang · Akhmad Herman Yuwono · Yu Zhang	13
(17 : 00) (President Masayuki Nogami)	
2A25 Stress evolution in alkoxide-derived gel coating films on firing (Kansai University) ○Hiromitsu Kozuka	14
2A26★Functionalised silica-based membranes for hydrothermal stable purification of hydrogen (The University of Queensland) ○G.Q. Max Lu · Mikel Duke · J.D.Z.da Costa	14

■■■ Poster September 28 (Tue.) (Conference Hall) ■■■
core time (for odd presentation number:12:10-13:10, for even presentation number:13:10-14:10)

[AOCF_Chemical Design for Functional Innovation]

2PA01 Synthesis of NbC Powder by Fluidized-bed Reaction of Nb_2O_5 Powder (Niigata University) ○Kenta Hashimoto · Hiroyuki Seyama · Ayumu Ozaki · Kenji Toda · Noriyasu Hotta	21
2PA02 Ferromagnetic $Fe_{16}N_2$ Formation from Different Kinds of α -Iron Fine Powder (Hokkaido University) ○Yuumi Onuma · Takashi Takeda · Shinichi Kikkawa	21
2PA03 Magnetoresistance in Spinel-Type Fe-Mn Binary Oxide System (Hokkaido University) ○Makoto Minoya · Takashi Takeda · Shinichi Kikkawa	22
2PA04 Synthesis of Magnetite Nanoparticles in an Ethanol-Water Solution (Kyushu University) ○Dang Feng · Kai Kamada · Naoya Enomoto · Junichi Hojo	22
2PA05 Solution-Phase Synthesis of Gold Icosahedrons by Adjusting Reaction Temperature (Kyushu University) ○Jonghee Lee · Kai Kamada · Naoya Enomoto · Junichi Hojo	23
2PA06 Preparation of Stable Silver Nanoparticles (Shanghai Institute of Ceramics, Chinese Academy of Sciences) ○Yangqiao Liu · Lian Gao	23
2PA07 Preparation of rutile TiO_2 photocatalyst and tuning its pore size and aggregation (Shanghai Institute of Ceramics, Chinese Academy of Sciences) ○Qinghong Zhang · Lian Gao	24
2PA08 Synthesis of Titania Coated Zeolite from Coal Fly Ash (Kyusyu University) ○Miki Inada · (Kyusyu University) Asato Urata · (Kyusyu University) Kai Kamada · Naoya Enomoto · Junichi Hojo	24
2PA09 Morphology Control for $BaTiO_3$ Precursor Particles through Aqueous Solution Process (Nagoya University) ○Y. Tanaka · Y. Masuda · K. Koumoto	25
2PA10 Nanosized $BaMgAl_{10}O_{17}:Eu^{2+}$ blue phosphor prepared by precursor process (Korea Institute of Ceramic Eng. & Tech.) ○Dae Sung Kim · (Halla University) Takaki Masaki · (Korea Institute of Ceramic Eng. & Tech.) Seung-Ho Lee · Hyung Mi Lim · Kyung-Tae Lee	25
2PA11 Preparation and Luminescence Properties of PDP red phosphors by impregnation method (Halla University) ○Soo-Jong Kim · Takaki Masaki · Cheong-Hwa Han · (Chungbuk National University) Dong-Kyu Lee · Sang-Bae Jun	26
2PA12 Preparation and Luminescence Properties of PDP green phosphors using polymer matrix technique (Chungbuk National University) Dong-Kyu Lee · Su-Yong Han · (Halla University) ○Soo-Jong Kim · Cheong-Hwa Han · Takaki Masaki	26
2PA13 Cathodoluminescence of compositionally graded solid solution synthesized by coupling of β - Ga_2O_3 , α - Al_2O_3 and ZnO (Nagaoka University of Technology) ○Kenichi Suzuki · Yuichiro Kuroki · Tomoichiro Okamoto · Masasuke Takata	27
2PA14 Electrochemical-deposition of single-crystal-like ZnO film and its photoluminescence properties (Graduate School of Engineering, Nagoya University, Musashi Institute of Technology) ○Yanfeng Gao · (Graduate School of Engineering, Nagoya University) Yoshitake Masuda · Kunihito Koumoto · (Musashi Institute of Technology) Masayuki Nagai · (Noritake Co., Limited) F. Sato	27
2PA15 Solid-State Photoluminescence Device Using NASICON Thick-Film Prepared by EPD Method (Kyushu Institute of Technology) ○Masataka Imamura · Satoko Takase · Youichi Shimizu	28
2PA16 Perovskite-Type Oxide Thin-Film Prepared by Wet-Chemical Method and Application for Sensor (Kyushu Institute of Technology) ○Satoko Takase · Masato Saida · Youichi Shimizu	28
2PA18 PLD Preparation of $La_{0.9}Sr_{0.1}Ga_{0.8}Mg_{0.2}O_{3-d}/Ce_{0.8}Sm_{0.2}O_{2-d}$ Composite Film and High Power Solid Oxide Fuel Cell (Kyushu University) Jingwang Yan · ○Hiroshige Matsumoto · Makiko Enoki · Tatsumi Ishihara	29
2PA19 Crystallization of Amorphous Silicon at Low Temperature by Field Aided Rapid Thermal Annealing Process (Hanyang University) ○Hyun-Chul Kim · Doo-Sung Jung · Young-Woong Kim · Duck-Kyun Choi	29
2PA20 Design of Textured Alumina/Alumina Laminate Composites with Crystalline-Orientated Layers Fabricated by Colloidal Processing under Electrostatic, Electric and Magnetic Fields (NIMS) ○Tetsuo Uchikoshi · Tohru S Suzuki · Yoshio Sakka	30
2PA21 Striped micro-patterns assembled with nano-sized particles using a micromolding in capillary processing (National Institute for Materials Science) ○Junko Imasu · Hiroshi Fudouzi · Yoshio Sakka	30
2PA22 Micropatterning of $Y_2O_3:Eu^{3+}$ Phosphor Particles in an Aqueous Solution (Nagoya University) ○M. Yamagishi · Y. Masuda · K. Koumoto	31
2PA23 Novel Process for Improving Monodispersity of Ceramic Spheres and Crystallinity of Colloidal Crystal Film (Kyushu University) ○Eunhee Lee · Masayoshi Takata · Kai Kamada · Naoya Enomoto · Junichi Hojo · (National Institute for Materials Science) Hiroshi Fudouzi	31
2PA24 Morphologically controlled synthesis of nanocarbons from resorcinol-based nanopolymers (Miyazaki University · CREST, Japan Science and Technology Agency) ○Daisuke Fujikawa · Masafumi Uota · Takumi Yoshimura · Go Sakai · Tsuyoshi Kijima	32
2PA25 Microstructure and Photocatalytic Activity of Mesoporous TiO_2 - SiO_2 Prepared by Polymer Templating (Keio University) ○Tanaka Takashi · Hirashima Hiroshi	32
2PA26 Synthesis and Structure of New Layered Perovskite Compounds, $H_xNa_{1-x}LaTiO_4yH_2O$ (Okayama University) ○Shunsuke Nishimoto · Motohide Matsuda · (KEK) Stefanus Harjo · Akinori Hoshikawa · Takashi Kamiyama · (Muroran Institute of Technology) Toru Ishigaki · (Okayama University) Michihiro Miyake	33

2PA27	Reactions between n-alcohols and a protonated form of an ion-exchangeable layered perovskite derived from an Aurivillius phase $\text{Bi}_2\text{SrTa}_2\text{O}_9$ (School of Science and Engineering, Waseda University) ○Seiichi Tahara · Yoshiyuki Sugahara	33
2PA28	Preparation of new inorganic-organic complex by using nanosheets (University of Yamanashi) ○G. K. Prasad · Nobuhiro Kumada · Mamiko Horiuchi · Yoshinori Yonesaki · Takahiro Takei · Nobukazu Kinomura	34
2PA29	Fabrication of hybrid materials based on interlayer exchange reactions in layered single-metal hydroxide (Keio University) ○Asayo Kasai · Shinobu Fujihara	34
2PA30	In situ polymerization of poly (methyl methacrylate)/layered silicate nanocomposites by microwave energy (Busan National University) Dong-Hyun Kim · (Kyungnam University) Byun-Se Jun · (Kysang National University) Kyu-Hong Hwang · (Busan National University) Hong-Chae Park · ○Seog-Young Yoon	35
2PA31	Self-Assembly of Organically-Bridged Lamellar Hybrids from Alkoxy-Derivatives of Bis-trichlorosilane Precursors (Waseda University) ○Masaru Heishi · Yasuhiro Fujimoto · Atsushi Shimojima · (Waseda University · CREST, JST) Kazuyuki Kuroda	35
2PA32	Synthesis of ettringite from portlandite suspensions under various Ca/Al ratio (Yamaguchi U.) T. Terai · (Yamaguchi Pref Ind. Tech. Inst) A. Mikuni · (Yamaguchi U.) R. Komatsu · K. Ikeda	36
2PA33	Preparation of calcium phosphates containing metal ions and evaluation of their catalytic activity (Nara Institute of Science and Technology) ○Masanobu Kamitakahara · Akio Takahashi · Chikara Ohtsuki · Masao Tanihara	36
2PA34	Porous Hydroxyapatite designed by hydrothermal technique (Tohoku University) ○Giichiro Kawachi · Emile Hideki Ishida · Koji Ioku	37
2PA35	Formation of calcium silicate hydrates by two different hydrothermal methods (Kochi University) ○Xiulan Hu · Kazumichi Yanagisawa · Ayumu Onda · Koji Kajiyoshi	37
2PA36	Development of Novel Preparation Method of HAP Ceramics (Kochi University) ○Kongjun Zhu · Kazumichi Yanagisawa · Takahiro Fujino · Ayumu Onda · Koji Kajiyoshi · (Tohoku University) Koji Ioku	38
2PA37	Synthesis of novel bulky porous material by HHP process and its evaluation (Kyoto Inst Tech) ○Shinichi Takezoe · Mari Takimura · (Osaka Prefectural College of Technology) Yuki Yamasaki · (Osaka Prefecture Univ) Hidezumi Nagata · Atsushi Nakahira	38
2PA38	Densification behavior of hydroxyapatite on spark plasma sintering for preparation of transparent ceramics (Tohoku University) ○Daisuke Kawagoe · Yoshihiro Koga · Hideki Ishida · Koji Ioku	39
2PA39	Synthesis of dense carbon material with structural disorder-order transformation (Ryukoku University) ○Takeshi A. Yamamoto · Yasuhiro Kodera · Manshi Ohyanagi · (University of California, Davis) Zuhair A Munir	39
2PA40	Spectroscopic Analysis in Disorder-order Transformation of SiC During Spark Plasma Sintering (Ryukoku University) ○Yasuhiro Kodera · Naoki Toyofuku · Takeshi A Yamamoto · Manshi Ohyanagi · (Department of Chemical Engineering and Materials Science, University of California, Davis) Zuhair A Munir	40
2PA41	Preparation of Translucent MgO Ceramics by HIP sintering (Niigata University) ○Noriyasu Hotta · Chiaki Someya · Masato Ohguri · Noriko Saito · Kunihiro Yanagita	40
2PA42	Mixing Effect of Nanometer-sized SiC Powder on Processing and Mechanical Properties of SiC Using Submicrometer-sized Powder (Kagoshima University) ○Nobuhiro Hidaka · Yoshihiro Hirata	41
2PA43	Development of electrically conductive CNT-Si ₃ N ₄ composites (Yokohama National University) ○Junichi Tatami · Tomofumi Katashima · Katsutoshi Komeya · Toru Wakihara · Takeshi Meguro	41
2PA44	Dispersion of Zr-Precursors by Chemical routes in Al ₂ O ₃ Particles (Gyeongsang National University) ○Kyu Hong Hwang · J. J. Kim · Sang Heum Youn · (Osaka National Research Institute) Mikio Iwasa · (Kyungnam University) Byung Sei Jun · (Pusan National University) Suk Young Yoon · K. H. Kim · (Chosun University) Jong Kook Lee	42
2PA45	Dielectric Behavior of Bi ₃ Ti ₄ O ₁₂ -based Composites Incorporating Silver Particles (National Institute of Advanced Industrial Science and Technology) ○Ping-Hua Xiang · Yoshiaki Kinemuchi · Koji Watari	42
2PA46	Piezoelectric Properties of lead free (K,Na)NbO ₃ Ceramics with added excess K ₂ CO ₃ , Na ₂ CO ₃ (Korea Institute of Ceramic Engineering & Technology) ○Jeong Ho Cho · Moon Seok Lee · Yong Hyun Lee · Myoung Pyo Chun · Byung-Ik Kim	43
2PA47	Red luminescence of MgO-GeO ₂ glasses and glass ceramics doped with Mn ions prepared by sol-gel method (Ritsumeikan University) ○Tomoe Sanada · Kazuhiro Yamamoto · (Suzuka National College of Technology) Noriyuki Wada · (Ritsumeikan University) Kazuo Kojima	43

■■■ September 29 (Thu.) (Room A) ■■■

[AOCF_Chemical Design for Functional Innovation]

(9 : 00)	(President Kiyoshi Okada)	
3A01	Fabrication of controlled released "Milli-Capsule" from wasted porcelain (Saga University) ○Takanori Watari · Takeshi Kodama · Toshio Torikai · Mitsunori Yada	15
3A02	Synthesis of Nano-ZrO ₂ Coated Polystyrene Spheres for Three-Dimensional Ordered Macroporous Structures (National Institute of Advanced Industrial Science and Technology) ○Yuji Hotta · Kimiyasu Sato · Koji Watari	15
(9 : 40)	(President Takanori Watari)	
3A03★	Nanoscale Design of Mesoporous Materials (Waseda University, CREST) ○Kazuyuki Kuroda	16
3A05	Effect of Si/Al ratios of mineral templates on the preparation of Al-containing mesoporous silica (Tokyo Institute of Technology) ○Kiyoshi Okada · Yoshikazu Kameshima · Akira Nakajima · (CTL, India) Chengala D. Madhusoodana	16
3A06	Freezing of supercooled water droplets and dynamic hydrophobicity on solid surface coated with various silanes (Kanagawa Academy of Science and Technology, KAST/Tokyo Institute of Technology) Shunsuke Suzuki · Yoshikazu Kameshima · Akira Nakajima · (KAST) Munetoshi Sakai · Jeong-Hwan Song · (KAST/University of Tokyo) Naoya Yoshida · (Tokyo Institute of Technology) Kiyoshi Okada	17
(11 : 00)	(President Yi-Bing Cheng)	
3A07★	Nanostructure design for the electrodes used in dye-sensitized solar cell (Tsinghua University) ○Hong Lin · Jianbao Li	17
3A09	Synthesis and properties of meso-porous smectite-TiO ₂ hybrid materials (Tokyo Institute of Technology) ○Yoshikazu Kameshima · Akihiro Tamura · Akira Nakajima · Kiyoshi Okada	18
(13 : 00)	(President Akira Nakajima)	
3A13★	Modification of Chemistry and Microstructure of Nano Titanium Oxide for Dye Sensitized Solar Cells (Monash University) ○Yi-Bing Cheng · David Menzies · Fuzhi Huang · George Simon · Leone Spiccia · (University of Melbourne) Rachel Carus	18

★=Guest Presentation

- 3A15 Fabrication and Investigation of Titanoniobate Photocatalyst Using an Ion-exchange Reaction. (Graduate School of Musashi Institute of Technology) ○Koichi Inoue · (Musashi Institute of Technology) Masayuki Nagai 19
(14 : 00) (President Junichi Hojo)
- 3A16★Photo-electro functional nanocomposite thin films based on dispersion of nanosized noble metals in TiO₂ (Hanyang University) ○Jong-Won Yoon 19
- 3A18 TiO₂ nanocrystals via redox reactions under mild hydrothermal conditions: Phase selective synthesis of anatase, brookite, and rutile (National Institute for Materials Science) ○J.-G. Li · Takamasa Ishigaki 20
- 3A19 Photocatalytic Destruction of Gaseous Toluene by Sulfated TiO₂ Powder (Tokyo Institute of Technology) ○Akira Nakajima · Hiromi Obata · Yoshikazu Kameshima · Kiyoshi Okada 20