

○ = Speaker

The symbol that attached to the end of the presentation number

A = Award lecture F = Frontiers of industrial research

We recommend comprehensive discussion at the intermission.

The Ceramic Society of Japan Annual Meeting 2019 Program

■■ March 24 (Sun) (Room A) ■■

02. Dielectric material

構造・機能

(13:00) (Chairman 北條元)

- 1A17 Domain Structure of Orthorhombic Phase Hafnia Thin Films (Tohoku University) ○KIGUCHI Takanori·SHIRAIISHI Takahisa·(Tokyo Institute of Technology) MIMURA Takanori·SHIMIZU Takao·FUNAKUBO Hiroshi·(Tohoku University) KONNO Toyohiko J.
- 1A18 Effect of Semiconducting SrTiO₃ Substrates on Steepness of PbTiO₃/SrTiO₃ epitaxial Interface (Tohoku University) ○KIGUCHI Takanori·SHIMIZU Takumi·SHIRAIISHI Takahisa·KONNO Toyohiko J.
- 1A19 On a possible formation of local negative-pressure phase in BaTiO₃ thin film (Kyushu University) ○SATO Yukio·MIYAUCHI Ryuki·TERANISHI Ryo·KANEKO Kenji
- 1A20 Microstructural analysis of PbCrO₃ and PbMnO₃ by HAADF-STEM (Toray Research Center) KURUSHIMA Kousuke·(KAIST) SAKAI Yuki·(Tokyo Institute of Technology) YAMAMOTO Tatsuru·OGATA Takahiro·AZUMA Masaki·(Osaka Prefecture University) ASAI Uminari·YAMADA Ikuya·ISHII YUI·○MORI Shigeo
- 1A21 Structural Fluctuation of Aluminate Sodalite Type Oxides X₃[AlO₂]₁₂(SO₄)₂ (X = Ca, Sr) (Hiroshima University) KAWAMURA Genta·○NAKAHIRA Yuki·(Nagoya University) WAKAMATSU Toru·TANIGUCHI Hiroki·TERASAKI Ichiro·(Hiroshima University) MORIYOSHI Chikako*·KUROIWA Yoshihiro
- 1A22A ★ [The 72nd CerSJ Awards] Development of new functions and material design in polar perovskites (The University of Tokyo) ○NOGUCHI Yuji
- 1A24 *Intermission*

■■ March 24 (Sun) (Room B) ■■

03. Electroconductive material

新物質・新規導電性

(12:45) (Chairman 大橋直樹)

- 1B16A ★ [The 72nd CerSJ Awards] Functional materials synthesis under high pressure via impurity control, Study on Boron Nitride (National Institute for Materials Science) ○TANIGUCHI Takashi
- 1B18 Preparation and Characterization of H⁺-mica as new protonic conductivity material. (Shinshu University) ○KEMI Junnosuke·YAMAGUCHI Tomohiro·OKADA Tomohiko·TARUTA Seiichi*
- 1B19 Bromide ion conducting solid electrolyte based on lanthanum oxybromide (Osaka University) ○MUHAMMAD RADZI IQBAL BIN MISRAN·TAMURA Shinji*·NUNOTANI Naoyoshi*·IMANAKA Nobuhito*
- 1B20 Impact of a surface TiO₂ atomic sheet on the electronic transport properties of LaAlO₃/SrTiO₃ heterointerfaces (National Institute for Materials Science) ○Ohsawa Takeo·(Nippon Institute of Technology) Shiraki Susumu·(Tokyo Institute of Technology) Shimizu Ryota·Hitosugi Taro
- 1B21 *Intermission*

光センシング

(14:15) (Chairman 谷口尚)

- 1B22 P-n junction effect of MgO-MgFe₂O₄ binary oxides on H₂S detection (Kumamoto University) ○HASHISHIN Takeshi·NARA Yasumasa·Matsuda Motohide·Kubota Hiroshi
- 1B23 New developments in reactive diffusion technique for fabrication of grain-aligned ceramics (Nagoya Institute of Technology) ○FUKUDA Koichiro·Urushihara Daisuke·Asaka Toru
- 1B24 High Pressure Synthesis of A_xWO₃ Towards Novel Structures and Properties (Kyoto University) ○TASSEL Cedric·Ikeuchi Yuya·Takatsu Hiroshi·(NIST) Brown Craig, M.·(Kyoto University) Murakami Taito·Matsumoto Yuki·(Nagoya University) Okamoto Yoshihiko·(Kyoto University) Kageyama Hiroshi
- 1B25 Structural analysis of Cs-doped tungsten oxides (Sumitomo Metal Mining Co., Ltd.) ○Machida Keisuke·(Ohkuchi Electronics Co., Ltd.) Okada Mika·(Sumitomo Metal Mining Co., Ltd.) Adachi Kenji
- 1B26 Potential candidate ecofriendly photodiodes prepared by a facile diffusion process for SWIR sensing (NIMS·Waseda Univ.) ○El-Amir Ahmed·(NIMS) Takeo Ohsawa·Wada Yoshiki·Ishii Satoshi·Imura Masataka·(NIMS·Hokkaido Univ.) Nagao Tadaaki·(NIMS·Waseda Univ.) Shimamura Kiyoshi*·(NIMS·Tokyo Inst. Tech.) Ohashi Naoki

■ ■ March 24 (Sun) (Room C) ■ ■

16. Characterization

電子構造解析

(13:00) (Chairman 佐々木拓也)

- 1C17 Crystal structure analysis of stuffed-tridymite compound $\text{BaZn}(\text{Ge}_{1-x}\text{Si}_x)\text{O}_4$ (Nagoya Institute of Technology) ○URUSHIHARA Daisuke•ASAKA Toru•FUKUDA Koichiro
- 1C18 Metal-insulator transition of mixed valence homologous oxide $\text{CaFe}_2\text{O}_4 \cdot n\text{FeO} (n = 2)$ (Tokyo Institute of Technology) ○TERAGUCHI Kent•YASUI Shintaro•(Hiroshima University) MORIYOSHI Chikako•KUROIWA Yoshihiro•(Osaka Prefecture University) MORI Shigeo•(Tokyo Institute of Technology•Nagoya University) TANIYAMA Tomoyasu•(Tokyo Institute of Technology) ITOH Mitsuru*
- 1C19 Direct imaging of atomistic grain boundary migration (Institute of Engineering Innovation, the University of Tokyo) ○Wei Jiakē•Feng Bin•Ishikawa Ryo•(Department of Materials Physics, Nagoya University) Yokoi Tatsuya•Matsunaga Katsuyuki•(Institute of Engineering Innovation, the University of Tokyo•Nanostructures Research Laboratory, Japan Fine Ceramics Center) Shibata Naoya•Ikuhara Yuichi

(13:45) (Chairman 森吉千佳子)

- 1C20A ★ [The 72nd CerSJ Awards] Development of atomic-resolution electromagnetic field imaging electron microscopy and its application to material interface studies (The University of Tokyo•Japan Fine Ceramics Center) ○SHIBATA Naoya

1C22 *Intermission*

材料解析

(14:30) (Chairman 久保田佳基)

- 1C23 High-pressure synthesis of group 6 transition metal nitrides using ammonium salt (Nagoya University) ○SASAKI Takuya•SAGO Kazuki•(National Institute of Advanced Industrial Science and Technology) LIU Zheng•(Nagoya University) NIWA Ken•OHSUNA Tetsu•HASEGAWA Masashi
- 1C24 Quantitative analysis of beta-phase transformation of Nickel Sulfide for high reliability of tempered sheet glass (NSG SHEET GLASS CO., LTD.) ○SAKAI Chihiro

12. Education

(15:30) (Chairman 樽田誠一)

- 1C27 60-minute class and quarter system in the 3rd year (Okayama University) ○KAMESHIMA Yoshikazu
- 1C28 Introduction of Center for Crystal Science and Technology - Crystal and Ceramics - (University of Yamanashi) ○TAKEI Takahiro•ARIMOTO Keisuke•KUMADA Nobuhiro•TANAKA Isao
- 1C29 Ruby Coating Experiment in Flux Growth at the Human Resources Interactive Fair (Nanshin Institute of Technology) ○OISHI Shuji•AYUZAWA Shunsuke•(Shinshu University) SUZUKI Sayaka•TESHIMA Katsuya•(Society for the Promotion of Nanshin-Koka-Tandai) ITOH Noriaki

(16:15) (Chairman 亀島欣一)

- 1C30 Practical and experiential chemistry experiments using zeolites (Gunma University) ○IWAMOTO Shinji
- 1C31 Experience Course for Junior High School Students Aimed at Confirming Photocatalytic Activity Easily and Quickly (National Institute of Technology, Gunma College) ○TAIRA Nobuyuki
- 1C32 Utilization of Experience-based training conducted in Research Forum of High School Education (Shinshu University) ○TARUTA Seiichi

■ ■ March 24 (Sun) (Room D) ■ ■

13. Liquid phase process

ゾルゲル法

(13:00) (Chairman 藤原忍)

- 1D17 Alignment Regulating Force of Aligned Silica Nanogrooves with Sub-5 nm Periodicity - Uniaxiality of 2D Hexagonal Mesoporous Silica Films - (Waseda University) ○Sakamoto Ain•Hirota Keiya•Hara Shintaro•Shimajima Atsushi•Wada Hiroaki•Kuroda kazuyuki*
- 1D18 Preparation of polymer/silica hybrid thick films by sol-gel method and their waterproof properties (Kansai University) ○KASASAKU Mamoru•KOZUKA Hiromitsu*•(Hokkaido University) TADANAGA Kiyoharu•(LIXIL) YONEDA Hirokazu•SHINKAI Seiji
- 1D19 Evaluation of reactivity of silanol groups for structure control of siloxane oligomer (Osaka prefecture University) ○KINO Daisuke•OKADA Kenji•TOKUDOME Yasuaki•TAKAHASHI Masahide*
- 1D20 Effects of the microstructure on the relaxation of the stress of sol-gel-derived ceramic thin films (Kansai University) KOZUKA Hiromitsu*•○NISHIMURA Yuki

(14:00) (Chairman 内山弘章)

- 1D21 Preparation of organic-inorganic hybrid thick films and their hardening by deposition of thin silica overlayers (LIXIL Corporation) ○Yoneda Hirokazu•Shinkai Seiji•(Kansai University) Kozuka Hiromitsu•(Hokkaido University) Tadanaga Kiyoharu•(Mie Prefecture) Inoue Koji•(Mie Prefecture Industrial Research Institute) Tomimura Tetsuya•(Kansai University) Kasasaku Mamoru
- 1D22 Preparation of SiO_2 added methylsilsesquioxane-phenylsilsesquioxane hybrid thick films by sol-gel method (Hokkaido University) ○INOUE Yuta•ROSETO-NAVARRO Nataly Carolina•MIURA Akira•TADANAGA Kiyoharu*•(Kansai University) KASASAKU Mamoru•KOZUKA Hiromitsu•(LIXIL) YONEDA Hirokazu•SHINKAI Seiji
- 1D23 Fabrication of Nano/Micro-structured $\text{YVO}_4:\text{Eu}^{3+}$ Films by Biphasic Sol-Gel Method and Application for H_2O_2 Sensors (The University of Keio) ○MOTOMIYA Kasumi•HAGIWARA Manabu•FUJIHARA Shinobu*
- 1D24 Improvement of heat resistance of AES fiber board using silica sol with crystal particles (Nagoya Institute of Technology) ○Ozeki Takahiro•Hashimoto Shinobu*•Daiko Yusuke•Honda Sawao•Iwamoto Yuji•(ISOLITE INSULATING PRODUCTS CO.,LTD.) Shiraishi Yasuo
- 1D25 Preventing technique of zinc ion bleeding by surface coating on zinc oxide (Sumitomo Osaka Cement Co.,Ltd.) ○MATSUSHITA Hirokazu•FUJIHASHI GAKU•NEYA TADASHI

(15:15) (Chairman 幸塚広光)

1D26 *Intermission*

■■ March 24 (Sun) (Room E) ■■

13. Liquid phase process

水熱・ソルボサーマル

(13:00) (Chairman 鈴木孝宗)

- 1E17 Synthesis of colloidal MgCr₂S₄ thiospinel by solvothermal method (Tohoku University) ○Truong Quangduc*・Honma Itaru
1E18 Solvothermal synthesis of oxyfluorides including molybdenum or tungsten (Tohoku University) ○ASAKURA Yusuke* (Gakushuin University) INAGUMA Yoshiyuki・UEDA Koichiro* (Tohoku University) YIN Shu
1E19 Synthesis of negative thermal expansion material Zr_{2-x}Ti_xSP₂O₁₂ and the application to filler (Tokyo Institute of Technology) ○Adachi Yuri・Isobe Toshihiro*・Matsushita Sachiko・Nakajima Akirra
1E20 Synthesis of Zn-Incorporated Zeolites and Their Ion Exchange Properties (The University of Tokyo) ○Iyoki Kenta・Koike Natsume・Wang Bangda・Chaikittisilp Watcharop・Wakihara Toru・Okubo Tatsuya

(14:00) (Chairman 朝倉裕介)

- 1E21 Liquid-phase Synthesis and Morphology Control of Ferroelectric BiFeO₃ Particles for Stress-sensing Applications (Keio University) ○Yoshiyama Kohei・Mori Masae・Hagiwara Manabu*・Fujihara Shinobu
1E22 Morphological control of hydrothermally derived light scattering CeO₂ particles for use in dye-sensitized laminated electrodes (Keio University) ○SHOJI Takahito・HAGIWARA Manabu・FUJIHARA Shinobu*
1E23 Hydrothermal synthesis of La_{1-x}Pr_xF₃ (x=0.01 to 1) particles. (Hyogo Prefectural Institute of Technology) ○ISHIHARA Tsuguo
1E24 Hydrothermal Synthesis of layered Niobium Phosphates and delaminated (Kyushu University) ○YOSHIDA Yuichiro・HASEGAWA George*・AKAMATSU Hirofumi・HYASHI Katsuro
1E25 Hydrothermal Synthesis of Aeschninite-type Complex Oxide (Aichi Institute of Technology) ○HIRANO Masanori・SAKURAI Miki

(15:15) (Chairman 殷シュウ)

- 1E26 *Intermission*

■■ March 24 (Sun) (Room F) ■■

15. Process of powder

焼結 1

(13:00) (Chairman 森田孝治)

- 1F17 Development of TMA-MS for analyzing gases evolved during sintering process. (Netzsch Japan K.K.) ○Kajiwara Takehiro・Sato Kenta・Tsukamoto Osamu
1F18 Study on sheets between punch and sample during reactive SPS for fabrication of transparent AlON (Shibaura Institute of Technology・National Institute for Materials Science) ○Kawaguchi Tomoya* (National Institute for Materials Science) Suzuki Tohru*・Hirosaki Naoto* (Shibaura Institute of Technology) Kiyono Hajome
1F19 Development of GAGG ceramics scintillators prepared by the SPS method (Tohoku Univ.・Yamagata Univ.) ○KUROSAWA Shunsuke* (Industrial Technology Institute, Miyagi Prefectural Government) SONE Hiroshi・UJIE Hiroteru* (Tohoku Univ.) HARATA Koichi・YAMAJI Akihiro・OHASHI YUJI・YOSHINO Masao・KAMADA Kei・YOKOTA Yuui・YOSHIKAWA Akira

焼結 2

(13:45) (Chairman 清野肇)

- 1F20 Sintering of Transparent Zinc Sulfide (ZnS) (National Institute for Materials Science (NIMS)) ○MORITA Koji・KIM Byung-Nam・SUZUKI Tohru* (NEC) SANO Masahiko
1F21 Sintering Behavior of Reaction-Bonded Silicon Nitride (National Institute of Advanced Industrial Science and Technology) ○MATSUNAGA Chika・Zhou You* (Japan Fine Ceramics Co., Ltd.) Kusano Dai* (National Institute of Advanced Industrial Science and Technology) Hyuga Hideki・Hirao Kiyoshi

(14:15) Break

スラリー・集積

(14:30) (Chairman 松永知佳)

- 1F23 Particle assembly in dispersed nonaqueous dense slurries using complexed polymeric dispersants (Yokohama National University) ○MORITA Seitaro・IIJIMA Motoyuki*・TATAMI Junichi
1F24 Internal particle states of condensed slurry and rheology (Nagaoka University of Technology) ○TANAKA Satoshi・Kagawa Youichi
1F25 Evaluation technique for ceramic slurry -Observation of slurry flowing through a thin flow path- (Murata Manufacturing Co., Ltd.) ○ADACHI Masato・NIIMI Hideaki・KAWASE Hirokazu・TANAKA Nobuhiko

■ ■ March 24 (Sun) (Room H) ■ ■

09. Environment and material related to resource

多孔体

(13:00) (Chairman 前田浩孝)

- 1H17 Preparation of Porous Materials from Layered Octosilicate by Silylation with Cage Siloxane (Waseda University) ○Oka Yosuke·Hirohashi Takeru·Koike Masakazu·Sato Naoto·Wada Hiroaki·Shimojima Atsushi·Kuroda Kazuyuki*

濡れ性

(13:15) (Chairman 前田浩孝)

- 1H18 Characterization of oil freezing on TiO₂ surface in water (Okayama University) ○NISHIMOTO Shunsuke·MATSUO Jumpei·KAMESHIMA Yoshikazu·MIYAKE Michihiro
- 1H19 Preparation and property of solid/ionic liquid materials with visible light transmission (Tokyo Institute of Technology) ○Higashino Yuta·Isobe Toshihiro·Matsushita Sachiko·Nakajima Akira*
- 1H20 Leidenfrost effect and water-harvesting performance of hydrophobic ZnO nanorod arrays (Tokyo Institute of Technology) ○Kano Takahiro·Isobe Toshihiro·Matsushita Sachiko·Nakajima Akira*·(Ibaraki University) Sakai Munetoshi

触媒

(14:00) (Chairman 後藤知代)

- 1H21 Catalytic *p*-cresol oxidation using Pt loaded on CeO₂-ZrO₂-SnO₂/SBA-16 (Osaka University) ○SUPANDI Abdul Rohman·NUNOTANI Naoyoshi·IMANAKA Nobuhito*
- 1H22 Effect of Conductivities of CeO₂-ZrO₂ Based Solids on Catalytic Activities (Osaka University) ○NUNOTANI Naoyoshi·JEONG Minchan·IMANAKA Nobuhito
- 1H23 Development of Sr-Ti mixed oxide support for purifying automotive gases (Kyoto University) ○WATANABE Chikara·HOSOKAWA Saburo*·ASAKURA Hiroyuki·TERAMURA Kentaro·TANAKA Tsunehiro*

(14:45) (Chairman 今中信人)

- 1H24 Effect of K addition on the catalytic activity of bimodal mesoporous silica supported Pt catalyst for C₃H₆ combustion (Akita University) ○KATO Sumio·INOUE Kota·SAITO Kanji·Ogasawara Masataka
- 1H25 Synthesis and Characterization of New Platinum Oxide Nanosheets (Kumamoto University·JST, PRESTO) ○FUNATSU Asami·(Kumamoto University) HANAMURA Sae·IDA Shintaro
- 1H26 *Intermission*

■ ■ March 24 (Sun) (Room J) ■ ■

10. Material related to energy

熱利用材料

(13:00) (Chairman 鈴木宗泰)

- 1J17 Analysis for melting behavior of hydrate materials using molecular dynamics calculation (Salesian Polytechnic) ○YAGI Yuta·KUROKI Yuichiro*
- 1J18 Strain dependence of latent heat in VO₂ ceramics (National Institute of Advanced Industrial Science and Technology) ○KINEMUCHI Yoshiaki·NAKAYAMA Hiroyuki·FUJITA Asaya·(Nagoya Institute of Technology) KATO Kunihiko·SHIRAI Takashi

光触媒

(13:30) (Chairman 鈴木宗泰)

- 1J19 Hydrothermal synthesis of BiVO₄/BiOI photocatalyst and its photocatalytic properties (Nagoya Institute of Technology) ○Razavi-Khosroshahi Hadi·Mohammadzadeh Sara·(Nagoya University) Hojamberdiev Mirabbos·(Kyushu University) Kitano Sho·Yamauchi Miho·(Nagoya Institute of Technology) Fuji Masayoshi
- 1J20 Condition of synthesizing a reduced titanium oxide by microwave carbothermal reduction method using TiO₂ nanotube as precursor, and observing its microstructure (Tohoku University) ○ISHIYAMA Takeshi·FUKUSHIMA Jun*·HAYASHI Yamato*·TAKIZAWA Hirosugu*

気体分離・貯蔵材料

(14:00) (Chairman 鈴木宗泰)

- 1J21 Measurement of hydrogen specific surface area of deproteinized naces (Nagaoka University of Technology) ○TAKATOKU Yunosuke·LI Heng·KOMATSU Keiji·(Chubu Chelest Co., Ltd.·Nagaoka University of Technology) NAKAMURA Atsushi·(Chubu Chelest Co., Ltd.) ITO Osamu·(ACCHE Corporation) NAMBU Keiki·(Nagaoka University of Technology) SAITOH Hidetoshi*

(14:15) (Chairman 林大和)

- 1J22 Crystal Structure Change of lightly fired pearl-nacre powder obtained from pearl oyster (Nagaoka Univ. Tech.) ○LI HENG·KOMATSU Keiji·(Chubu Chelest Co., Ltd.·Nagaoka Univ. Tech.) NAKAMURA Atsushi·(Chubu Chelest Co., Ltd.) ITO Osamu·(ACCHE Corporation) NAMBU Keiki·(Nagaoka Univ. Tech.) SAITOH Hidetoshi*
- 1J23 Development of Oxygen Transport Membrane using composite of stabilized zirconia and (La,Sr)CrO₃ (NGK SPARK PLUG CO., LTD.) ○Watanabe Shuntaro·Kondo Tomonori

SOFC1

(14:45) (Chairman 林大和)

- 1J24 Discovery and Diffusion Mechanism of New Oxide-ion Conductors Ba₇Nb₄MoO₂₀ (Tokyo Institute of Technology) ○YASHIMA Masatomo·TSUJIGUCHI Takafumi·SAKUDA Yuichi·FUJII Kotaro·NIWA Eiki·(KEK) TORII Shuki·KAMIYAMA Takashi
- 1J25 Atomistic origin of enhanced ionic conductivity in YSZ single dislocation studied by scanning transmission electron microscopy (The University of Tokyo) ○Feng Bin·Ishikawa Ryo·Shibata Naoya·Ikuhara Yuichi
- 1J26 *Intermission*

■■March 24 (Sun) (Room K) ■■

01. Engineering ceramics

状態図

(13:00) (Chairman 多々見純一)

- 1K17 Development of thermodynamic database of Si_3N_4 ceramics (AIST) ○SHOBU Kazuhisa・YAMADA Hiroshi (Kyutech) HASEBE Mitsuhiro
- 1K18 Measurement of Freezing Points and the Phase Diagram of $\text{CeO}_2\text{-GdO}_{1.5}$ System Using an Arc Image Furnace (Yamaguchi University) ○FUJIMORI Hirotsuka*・KUBOTA Koichi

結晶構造

(13:30) (Chairman 多々見純一)

- 1K19 Direct electric field imaging of graphene defects (The University of Tokyo) ○ISHIKAWA Ryo・SEKI Takehito・SANCHEZ-SANTOLINO Gabriel・IKUHARA Yuichi・SHIBATA Naoya (Monash University) FINDLAY Scott (Japan Electron Optics Laboratory) KOHNO Yuji
- 1K20 Additive effects on free-surface faceting in alumina (The University of Tokyo) ○Ishihara Saki・Tochigi Eita (The University of Tokyo) Japan Fine Ceramics Center) Shibata Naoya・Ikuhara Yuichi*

(14:00) Break

(14:15) (Chairman 藤森宏高)

- 1K22 Influence of light illumination on mobility of dislocations in cubic ZnS crystals (Nagoya University) ○Oshima Yu・Nakamura Atsumoto*・Yokoi Tatsuya (Nagoya University・Japan Fine Ceramics Center) Matsunaga Katsuyuki*
- 1K23 Crystal Structure and thermal conductivity of LnTa_3O_9 (Japan Fine Ceramics Center) ○MATSUDAIRA Tsuneki・OGAWA Takashi・FISHER Craig A. J.・YOKOE Daisaku・KATO Takeharu・KAWASHIMA Naoki (TOCALO Co., Ltd.) HABU Yoichiro (Japan Fine Ceramics Center) KITAOKA Satoshi

微小領域

(14:45) (Chairman 柴田直哉)

- 1K24 Nanoindentation study of crystal plasticity in cubic zirconia (National Institute for Materials Science) ○MASUDA Hiroshi・MORITA Koji・OHMURA Takahito
- 1K25 Mechanical properties of Si-C-O coating measured using microcantilever beam specimens (Yokohama National University・Kanagawa Institute of Industrial Science and Technology) ○TATAMI Junichi (Yokohama National University) IMOTO Yumi・ITO Akihiko (Yokohama National University・Kanagawa Institute of Industrial Science and Technology) IJIMA Motoyuki (Kanagawa Institute of Industrial Science and Technology) YAHAGI Tsukaho・TAKAHASHI Takuma
- 1K26 A model of crack healing of glass by viscous flow at elevated temperatures (Nihon Parkerizing Co., Ltd.) ○KANCHIKA Shun (Tokyo Institute of Technology) WAKAI Fumihiro*

■■March 24 (Sun) (Room L) ■■

05. The glass photonics material

ガラス合成

(13:00) (Chairman 岸哲生)

- 1L17 Fabrication of $\text{MgO-SiO}_2\text{-PO}_{5/2}$ ternary glasses by using containerless method (Hirosaki University) ○Sasaki Soh・Masuno Atunobu*
- 1L18 Preparation of porous silicon from monolithic porous silica glass via magnesiothermic reduction. (Kyoto Institute of Technology) ○Matsubara Keisuke・Shiomi Haruhisa・Shiono Takeshi・Okada Arifumi・Wakasugi Takashi・Kadono Kohei*
- 1L19 Optical properties and thermoplastic properties of amorphous materials prepared from titanium alkoxide solutions containing carboxylic acid (Kansai University) KOZUKA Hiromitsu*・○Tsutsui Ryo

(13:45) Break

ガラス融液・熱的性質

(14:00) (Chairman 増野敦信)

- 1L21 Proton conductivity and thermal stability of rare-earth containing phosphate glass (Hokkaido University) ○TATEBAYASHI Takashi (Xi'an University of Technology) FANG Tong・FANG Xinxiong (Hokkaido University) FUJIOKA Masaya・KAIJU Hideo (Xi'an University of Technology) ZHAO Gaoyang (Hokkaido University) NISHII Junji*
- 1L22 In situ Evaluation on Crystallization Process of Borate Glass Melt by Polarized Raman Spectroscopy (Tokyo Institute of Technology) ○Uchida Hikaru・Kishi Tetsuo・Matsushita Nobuhiro・Yano Tetsuji*
- 1L23 Thermal diffusivity of alkali silicate glasses around the glass transition temperature (The University of Shiga Prefecture) ○Onoyama Kazuki (Akita University) Sugawara Toru (The University of Shiga Prefecture) Yamada Akihiro・Yoshida Satoshi・Matsuoka Jun*

(14:45) (Chairman 松岡純)

- 1L24A ★ [The 72nd CerSJ Awards] Theoretical model and its verification for Soret effect of glass melts (Kyoto University) ○SHIMIZU Masahiro
- 1L26 *Intermission*

■ ■ March 24 (Sun) (Room M) ■ ■

05. The glass photonics material

蛍光体(希土類 I)

(13:00) (Chairman 佐藤泰史)

- 1M17 Formation process of orange-red light emitting YAG:Ce phosphor (National Institute of Advanced Industrial Science and Technology)
○NAKAMURA Hitomi•SHINOZAKI Kenji•OKUMURA Toyoki•YAMASHITA Masaru•AKAI Tomoko
- 1M18 Luminescence properties of Sr₃Sc₂O₅Cl₂:Ce (Tokyo Univ. of Science) TAKADA Fumi•NISHIO Taichiro•(NIMS) TSUJIMOTO Yoshihiro•(NAIST) YANAGIDA Takayuki•(Kyoto Univ.) UEDA Jumpei•TANABE Setsuhisa•(AIST) IWASA Yuuki•○OGINO Hiraku
- 1M19 Investigation of optical properties and temperature dependence of quantum yield for Ce³⁺ doped RE₂Si₂O₇ crystals (Tohoku University)
○HORAI Takahiko•KUROSAWA Shunsuke*•SHOJI Yasuhiro•YOSHINO Masao•YAMAJI Akihiro•OHASHI Yuji•KAMADA Kei•YOKOTA Yuui•YOSHIKAWA Akira*
- 1M20 Orange light emitting Eu²⁺-doped Sr-Al-Si nitride phosphor with a new polytypoid structure of α-SiAlON (Mitsubishi Chemical Corporation)
○YOSHIMURA Fumitaka•(Tohoku university) YAMANE Hisanori*

(14:00) Break

(14:15) (Chairman 荻野拓)

- 1M22 Relationship between photoluminescence properties and cation concentration on oxide-based phosphors prepared by solution techniques (Okayama Univ. Sci.) ○SATO Yasushi•YOSHIMURA Natsumi•KUSANO Yoshihiro•(SAGA-LS) OKAJIMA Toshihiro•(Tohoku Univ.) KAKIHANA Masato
- 1M23 Effect of Sr substitution for Pr-activated Ca_{2-x}Sr_xLaNbO₆ (Nagaoka University of Technology) ○SHIBANUMA Takumi•OKAMOTO Tomoichiro*
- 1M24 *Intermission*

■ ■ March 24 (Sun) (Room P) ■ ■

15:30-17:30

01. Engineering ceramics

- 1P001 Formation of Nano-eutectic-structure from an Amorphous with Y₂Si₂O₇-mullite Eutectic Composition Prepared by Sol-Gel Method (Nihon University) OHSHIMA Takumi•(Osaka University) CHO Sunghun•Sekino Thoru•(Nihon University) ○UENO Shunkichi
- 1P002 Grain Necking Size Effect on Porous Alumina for Support Substrates of Ceramic Membranes (Nagoya Institute of Technology) ○JIA PENGFEI•HONDA Sawao•DAIKO Yuusuke•HASHIMOTO Shinobu•IWAMOTO Yuji*
- 1P003 Synthesis of Al₂O₃-TiO₂ thin film by sol-gel method and nitridation (Gifu University) ○WATANABE Yutaro•BAN Takayuki•OHYA Yutaka*•(Gifu Prefectural Ceramics Research Institute) IBARAKI Yasuhiro
- 1P004 Nitridation of sol-gel synthesized TiO₂ film and effect of adding PVP (Gifu University) ○kon masahiro•Ban Takayuki•Ohya Yutaka*•(Gifu Prefectural Ceramics Research Institute) Ibaraki Yasuhiro
- 1P005 Low temperature sintering and mechanical properties of TiO₂ and Fe₂O₃- added alumina ceramics (Shinshu University) ○Nishiguchi Tomo•Yamakami Tomohiko•Yamaguchi Tomohiro•Taruta Seiichi*
- 1P006 Effects of Sintering Aid on Zr_{2-x}Ti_x(WO₄)(PO₄)₂ and Zr₂(W_{1-y}Mo_yO₄)(PO₄)₂ (Tokushima University) ○SAWADA Tomoki•INOUE Norimasa•FUJIWARA Yasushi•MURAI Kei-ichiro*•MORIGA Toshihiro
- 1P007 Preparation and characterization of Na-mica/apatite composites (Shinshu university) ○YAMAGUCHI Koki•YAMAGUCHI Tomohiro•TARUTA Seiichi*
- 1P008 Fractal Characters of Material Texture of Self-assembled BaTiO₃/Poly-L-Lactic-Acid Composites (1)-Application of multifractal analysis to evaluation of aggregated morphology- (Tokyo City University) ○TAKEDA MARIKO•YOSHINO Kentaro•MIZUKAMI Yuka•SATO Yoshihiro•(Mitsubishi Gas Chemical Co. , Inc.) ITO Akira•(Tokyo City University) BAO Yue•MUNAKATA Fumio*
- 1P009 Novel material aiming for regeneration of hard tissue / soft tissue complex of surrounding tissue of implantation (Osaka Dental University) ○KOMASA Satoshi•NISHIDA Hisataka•KUSUMOTO Tetsuji•NISHIZAKI Hiroshi•OKAZAKI Joji•(Osaka University) SEKINO Tohru
- 1P010 effects of atmospheric pressure plasma treatment on bone marrow cells and vascular endothelial cells on treated NANOZR (Osaka Dental University) ○TAKAO Seiji*•KOMASA Satoshi•YIN Derong•YANG Yuanyuan•YOSHIMINE Shigeki•OKAZAKI Joji
- 1P011 Thermal changes of mullite based castable heated in hydrogen atmosphere (Kyoto Institute of Technology) ○SHIOMI Shuya•TAKEUCHI Nobuyuki*
- 1P012 Effect of mold materials on transparent Y₂O₃ ceramics during spark plasma sintering (Kyushu University) ○LEE JHWOAN•JANG BYUNG-KOOG*•(National Institute for Materials Science) KIM BYUNG-NAM
- 1P013 Fabrication of spherical composite aggregate using electrostatic interaction (Toyohashi University of Technology) ○INOUE Souta•YOKOI Atsushi•TAN Wai Kian•KAWAMURA Go•MATSUDA Atsunori•MUTO Hiroyuki*
- 1P014 Synthesis of polycrystalline Ca(Si_{0.5}Ti_{0.5})O₃ and its mechanical properties (Tokyo Institute of Technology) ○Miyazaki Kazumasa•Kanatani Kouki•Nishiyama Norimasa*•Wakai Fumihiko*•(Hirosaki University) Masuno Atsunobu
- 1P015 Fabrication of spherical composite aggregate consists of various geometrical shape of particles (Toyohashi University of Technology) ○OGASAWARA Ryota•NONOMURA Kouki•YOKOI Atsushi•Tan Wai Kian•KAWAMURA GO•MATSUDA Atsunori•MUTO Hiroyuki*
- 1P016 Synthesis of Cotunnite-Type Zirconia under high pressure and high temperature conditions. (Tokyo Institute of Technology.) ○Tinnakorn Palakrit•Kouki KANATANI•Norimasa NISHIYAMA*•Fumihiko WAKAI*
- 1P017 Growth of Cr₂N Bulk Single Crystals under High Pressure of Nitrogen by Laser-Heating FZ Method (Yamanashi University) ○SAKAGUCHI Ryouichi•MARUYAMA YUKI•NAGAO MASANORI*•WATAUCHI SATOSHI•TANAKA ISAO•(Crystal Systems Corporation) MARUYAMA ERIKA•SHINDO ISAMU
- 1P018 Fabrication of LaPO₄-coated Al₂O₃-based fiber/Al₂O₃ matrix composites and their mechanical properties (Tokyo Institute of Technology) ○Yoshida Kohei•Maletaskic Jelena•Gubarevich Anna•Yoshida Katsumi*

02. Dielectric material

- 1P019 Fabrication and microwave dielectric properties of 100 textured NaNbO_3 dielectric ceramics (TOYOTA CENTRAL R&D LABS., INC.)
○SAITO Yasuyoshi·Wada Kensuke
- 1P020 Temperature dependence of electric-induced strain of $\text{Ba}(\text{Ti}_{1-x}\text{Hf}_x)\text{O}_3$ lead-free piezoelectric ceramics (Shizuoka University) ○IIDA Yutaro·FU Desheng*
- 1P021 Effects of A-site vacancy on the microstructure and physical properties of $(\text{Sr}_{0.5}\text{Ba}_{0.5})_{1+x}\text{Nb}_2\text{O}_{6+x}$ ceramics. (Shizuoka University) ○OISHI Rikuya·FU Desheng*
- 1P022 Effects of A-site vacancy on the microstructure and physical properties of $(\text{Ca}_{0.3}\text{Ba}_{0.3})_{1+x}\text{Nb}_2\text{O}_{6+x}$ ceramics (Shizuoka University) ○Imai Shinya·Desheng Fu*
- 1P023 Domain structure of PZT epitaxial thin film around morphotropic phase boundary (Tohoku University, Department of Engineering)
○Shimizu Takumi·(Tohoku University, Institute for Materials Research) Kiguchi Takanori*·Shiraishi Takahisa·Konno Toyohiko
- 1P024 Fabrication and physical properties of heteroepitaxially *c*-axis-oriented $(\text{Bi}_{3.25}\text{Nd}_{0.65}\text{Eu}_{0.10})\text{Ti}_3\text{O}_{12}$ thin films (University of Hyogo) ○Takasaki Hideyuki·Kobune Masafumi*·Ito Ryoga·Obayashi Taiki·Migita Tsubasa·Kikuchi Takeyuki
- 1P025 Synthesis and evaluation of physical properties of Mg doping on YbFe_2O_4 by liquid phase method (The University of Okayama)
○SAKAGAMI Takumi·ITO Ryosuke·NAKANISHI Makoto·KANO Jun·IKEDA Naoshi·FUJII Tatsuo*
- 1P026 Experimental study of perovskite BNT-base ferroelectric solid solutions (Fukuoka University) ○ASAKURA Kazuki·KIBA Kazumasa·(JAEA) SAITO Jun-ichi·(Fukuoka University) TAKESUE Naohisa*
- 1P027 Synthesis of Nanocube crystals of Barimu Titanate-toward The integration through Stirring (Fukuoka University) ○KIBA Kazumasa·ASAKURA Kazuki·TAKESUE Naohisa*·(Japan Atomic Energy Agency) SAITO Jun-ichi
- 1P028 Preparation and piezoelectric performance of SiO_2 -doped $(\text{Bi}_{0.5}\text{Na}_{0.5})\text{TiO}_3$ - BaTiO_3 (University of Tsukuba) ○SUGANUMA Kai·SUZUKI Yoshikazu*
- 1P029 Preparation of Amorphous BiFeO_3 Ceramics by Coprecipitation Method and Partial Crystallization by Heat Treatment (The University of Yamanashi) ○Sakamoto Ayato·Ueno Shintaro*·Fujii Ichiro*·Wada Satoshi*
- 1P030 Low-Temperature Preparation of Paraelectrics/Metal Composite Dielectrics from Ti-Ca TiO_3 Core-Shell Particles (Yamanashi University)
○ISERO Saki·WADA Satoshi*·UENO Shintaro*·FUJII Ichiro*
- 1P031 Preparation of Insulator-coated Conductive Perovskite Ceramics by Hydrothermal Method for High-performance Capacitors with Three-dimensional MIM Structure (University of Yamanashi) ○OSHIMA Yusuke·HATTORI Yuya·Ueno Shintaro*·FUJII Ichiro*·WADA Satoshi*
- 1P032 Rapid deposition of potassium niobate films by microwave-assisted hydrothermal process (Sophia University) ○OKURA Masaki·UCHIDA Hiroshi*·(Tohoku University) SHIRAISHI Takahisa·KIGUCHI Takanori·KONNO Toyohiko·(Tokyo Institute of Technology) ITO Yoshiharu·KUROSAWA Minoru·FUNAKUBO Hiroshi
- 1P033 Temperature Dependence of High-Power Piezoelectric Properties on Mn-doped $(\text{Bi}_{0.5}\text{Na}_{0.5})\text{TiO}_3$ - $(\text{Bi}_{0.5}\text{La}_{0.5})\text{TiO}_3$ Ceramics (Tokyo University of Science) ○Asaba Kazuma·Takagi Yuka·Nagata Hajime*·Takenaka Tadashi
- 1P034 STEM Observation of Pseudo-Cubic Phase in BiFeO_3 - BaTiO_3 Dielectric System (Osaka Research Institute of Industrial Science and Technology.) ○OZAKI Tomoatsu·(Osaka Prefecture University) MORI Shigeo
- 1P035 Fabrication of BaTiO_3 / BaTiO_3 - $\text{Bi}(\text{Mg}_{0.5}\text{Ti}_{0.5})\text{O}_3$ - BiFeO_3 layered composite ceramics using spark plasma sintering and evaluation of electrical properties (University of Yamanashi) ○SAEGUSA Yuya·FUJII Ichiro*·UENO Shintaro*·WADA Satoshi*
- 1P036 Investigation of Poling Conditions for $0.85(\text{Bi}_{0.5}\text{Na}_{0.5})\text{TiO}_3$ - 0.15BaTiO_3 Ceramics (University of Yamanashi) ○KAWACHI Kosuke·FUJII Ichiro*·UENO Shintaro*·WADA Satoshi*
- 1P037 Molecular Orbital Calculation for Evaluation of Electric Conduction and Insulation of Bismuth Ferrite and Its Solid Solutions (Fukuoka University) ○TAKESUE Naohisa*·ASAKURA Kazuki·KIBA Kazumasa·(JAEA) SAITO Jun-ichi

03. Electroconductive material

- 1P038 Grain-oriented polycrystalline sodium titanaluminate formed by solid-liquid reactive diffusion (Nagoya Institute of Technology)
○HASEGAWA Shin·HASEGAWA Eisei·URUSHIHARA Daisuke·ASAKA Toru·FUKUDA Koichiro*
- 1P039 Flux growth of doped lanthanum silicate oxyapatite crystals with hexagonal tabular morphology (Nagoya Institute of Technology)
○TSUNODA Yuki·URUSHIHARA Daisuke·ASAKA Toru·FUKUDA Koichiro*
- 1P040 Graded carrier density film using Nb:Sr TiO_3 (Meiji University) ○Doi Yasushi·Miura Noboru*
- 1P041 Improvement of characteristics of TiCxOy high-temperature strain gauge films using MgO buffer films (Osaka Research Institute of Industrial Science and Technology) ○KAKEHI Yoshiharu·SATO Kazuo·OGURI Taizo·KONDO Yusuke·YAMADA Yoshiharu
- 1P042 Tilt growth of ScN films grown on α - Al_2O_3 (1-102) substrates (National Institute for Materials Science) ○OHGAKI Takeshi·SAKAGUCHI Isao·OHASHI Naoki
- 1P043 Preparation of excess phosphorus added $\text{LiZr}_2\text{P}_3\text{O}_{12}$ -based ceramic and its properties (National Institute of Technology, Niigata College)
○NAKAYAMA Susumu·NISHIJIMA Koichi·(Daiichi Kigenso Kagaku Kogyo Co., Ltd.) NITANI Issei·NAKAJIMA Yasushi
- 1P044 Synthesis of Na^+ conductive glass-ceramics in the system Na_2O - Fe_2O_3 - X_2O_3 - SiO_2 ($\text{X}=\text{B},\text{Al},\text{Ga}$) and effect of Si substitution (Kogakuin University) ○KAWADA Koji·YOSHIDA Naoya*·(Tokyo Medical and Dental University) YAMASHITA Kimihiro·(Kogakuin University) OKURA Toshinori*
- 1P045 Synthesis of $\text{Sr}_3(\text{Ti}_{1-x}\text{Co}_x)_2\text{O}_7$ thermoelectric conversion material by using molten salt method and their characteristic evaluation (Tokushima University) ○NAGATA Ryutaro·NAKANISHI Akihiro·NISHIURA Takuya·MURAI Kei-ichiro*·MORIGA Toshihiro
- 1P046 Improvement of electrical conductivity of ceramics/carbon composite by impregnation in iodine solution (Nagoya Institute of Technology)
○TAKEUCHI Yuya·XIN Yunzi·HUU HIEN Nguyen·SHIRAI Takashi*
- 1P047 Electrical Characteristic of Undoped BaTiO_3 Ceramics Fired under Various Conditions (Kyoto Institute of Technology) ○MORI Keita·TAKEUCHI Nobuyuki*
- 1P048 Fabrication of ITO-GTO Junction Element and Evaluation of Current—Voltage Characteristics. (Tokushima University) ○ECHIMOTO Atsushi·TAZAWA Ryutaro·IMRAN Sutan Chairul·MURAI Kei-ichiro·MORIGA Toshihiro*·(National Institute of Technology, Kagawa College) MIKAWA Michio*
- 1P049 Electrical properties of Nb:Sr TiO_3 thin films prepared under different O_2 pressure (Meiji University) ○INOMOTO Tatsuhiko·MIURA Noboru*
- 1P050 Discovery of Dion-Jacobson Type Ion Conductors $\text{CsR}_2\text{Ti}_2\text{NbO}_{10}$ (R = Rare Earths) by Screening through the Bond-Valence Method (Tokyo Institute of Technology) ○ZHANG WENRUI·Fujii Kotaro·Niwa Eiki·Yashima Masatomo*·(High Energy Accelerator Research Organization) Kamiyama Takashi·Torii Shuki·Hagihala Masato

- 1P051 Discovery of a New-Structure-Family Oxide-Ion Conductor $\text{Ca}_3\text{Ga}_4\text{O}_9$ by the Combined Technique of Screening through the Bond-Valence Method and Experiments (Tokyo Institute of Technology) ○ Yasui Yuta • Niwa Eiki • Matsui Masahiro • Fujii Kotaro • Yashima Masatomo*
- 1P052 The synthesis of layered iridium oxyfluorides by topochemical fluorination and its physical properties (Tokyo University of Science • National Institute of Advanced Industrial Science and Technology) ○ KURAMOCHI Kenta • SHIMANO Tomohito • (Tokyo University of Science) NISHIO Taichiro* • (High Energy Accelerator Research Organization) OKABE Hirotaka • (Okayama University) HIRIGANE Kazumasa • AKIMITSU Jun • (National Institute of Advanced Industrial Science and Technology) OGINO Hiraku*
- 1P053 Discovery of a New Structure Family of Proton Conductors $\text{BaNdIn}_{1-x}\text{Sc}_x\text{O}_4$ (Tokyo Institute of Technology) ○ YAGUCHI Hiroshi • SHIRAIWA Masahiro • KIDO Takahisa • HUIJI Koutarou • NIWA Eiki • YASHIMA Masatomo*
- 1P054 Microstructure control and thermoelectric properties of Bi_2O_3 -added WO_3 fired bodies (National Institute of Technology, Kochi College) ○ YASUKAWA Masahiro
- 1P055 Improvement of thermal sensitivity of NiMn_2O_4 thin-sintered body (Saitama Univ) YANASE Ikuo* • Nakazaki Narumi

04. Magnetic material

- 1P056 The evaluation of the magnetocrystalline anisotropy and the magnetic structure of an X-type hexaferrite (Nagoya Institute of Technology) ○ KOMABUCHI Mai • URUSHIHARA Daisuke • KIMATA Yusuke • ASAKA Toru* • FUKUDA Koichiro • (Japan Atomic Energy Agency) OHHARA Takashi • (Comprehensive Research Organization for Science and Society) MUNAKATA Koji • ISHIKAWA Yoshihisa
- 1P057 Crystal structures and physical properties of $\text{Ca}_x\text{Sr}_{3-x}\text{Fe}_2\text{O}_7$ with unusually high valence Fe^{4+} (Kyoto University) ○ Kosugi Yoshihisa • Romero Fabio • Saito Takashi • Goto Masato • Shimakawa Yuichi*
- 1P058 Synthesis and physical properties of $\text{BaFe}_x\text{Co}_{6-x}\text{O}_{11}$ with the R-type hexagonal ferrite structure (Kyoto University) ○ SUGANO Satoshi • SAITO Takashi • GOTO Masato • SHIMAKAWA Yuichi*
- 1P059 Preparation of Sr hexaferrite for Magnetic Recording Media by Polymerizable Complex Method (University of Hyogo) ○ KIKUCHI Takeyuki • AKAI Ryoto • AKAMATSU Takeshi • KOBUNE Masafumi • (Okayama University) NAKANISHI Makoto • FUJII Tatsuo
- 1P060 High Pressure Synthesis of BaFeO_3 with Unusual-High Valence Fe^{4+} and the Structural Properties (Kyoto University) ○ TAN Zhenhong • GOTO Masato • SAITO Takashi • SHIMAKAWA Yuichi*
- 1P061 Syntheses and physical properties of solid solution $R(\text{Al}, \text{T})\text{B}_4$ ($R = \text{Ho}, \text{Er}$; $T = \text{Cr}, \text{Fe}$) crystals (Kokushikan University) ○ Kouzu Kaoru • Yamasaki Takashi • Okada Shigeru • (Tohoku University) Nomura Akiko • Yubuta Kunio • Shishido Toetsu • Yoshikawa Akira • (NIMS) Mori Takao • (Kanagawa University) Imai Youko • (University of Vienna) Peter Rogl

05. The glass photonics material

- 1P062 Crystal structure change of Al-doped $\text{Ca}_2(\text{Si}, \text{P})\text{O}_4$: Eu^{2+} phosphor (Toyohashi University of Technology) ○ KAMIMOTO Konatsu • OKAMOTO Kazuho • NAKANO Hiromi*
- 1P063 Deposition of white-light-emitting metavanadate cesium (CsVO_3) films (Shimane University) ○ Mimiru Yu • Makinose Yuki • Miyazaki Hidetoshi* • (Nagoya Institute of Technology) Ota Toshitaka • (Shizuoka University) Suzuki Hisao
- 1P064 Analysis of relaxation processes of excited states in self-activated scintillators using transient absorption spectroscopy (Tohoku University) ○ KOSHIMIZU Masanori • Fujimoto Yutaka • Asai Keisuke • (Osaka University) Muroya Yusa • (The University of Tokyo) Yamashita Shinichi • (National Institutes for Quantum and Radiological Science and Technology) Yamamoto Hiroki • (Nara Institute of Science and Technology) Yanagida Takayuki
- 1P065 Scintillation and dosimetric properties of Eu-doped Al_2O_3 transparent ceramics (Akita University) ○ Naoki Kawano • (Nara Institute of Science and Technology) Takumi Kato • (Kanazawa Institute of Technology) Go Okada • (Nara Institute of Science and Technology) Noriaki Kawaguchi • Takayuki Yanagida
- 1P066 Scintillation properties of Sn-doped YAG crystal synthesized by the floating zone method (Nara Institute of Science and Technology) ○ YANAGIDA Takayuki • KAWAGUCHI Noriaki • (National Institute of Advanced Industrial Science and Technology) MASAI Hirokazu • (Tohoku University) KOSHIMIZU Masanori
- 1P067 Radiation Response Properties of Sb-doped $\text{Ca}_3(\text{PO}_4)_2$ Transparent Ceramics Prepared by SPS (Nara Institute of Science and Technology) ○ KATO Takumi • KAWAGUCHI Noriaki* • YANAGIDA Takayuki*
- 1P068 Formation of colored pattern film on PET film using latent pigments and siloxane group modified acrylic resin and its application to flexible color filter (Shibaura Institute of Technology) ○ TAKAHASHI Karin* • OHISHI Tomoji
- 1P069 X-ray-, heavy-particle, or neutron-induced thermoluminescence of Tb^{3+} -doped $\text{CaO}-\text{Al}_2\text{O}_3-\text{B}_2\text{O}_3$ -based glasses (Tohoku University) ○ Kawamura Ichiro • Kawamoto Hiroki • Fujimoto Yutaka • Koshimizu Masanori* • Asai Keisuke* • (Kanazawa Institute of Technology) Okada Go • (Nara Institute of Science and Technology) Yanagida Takayuki • (National Institute for Quantum and Radiological Science and Technology) Koba Yusuke • Ogawara Ryo
- 1P070 Cr^{3+} -activated Phosphors: Promising Ratiometric Luminescent Thermometers for Biological Applications (Kyoto University) ○ Back Michele* • Ueda Jumpei • Tanabe Setsuhisa
- 1P071 Surface modification and gas barrier characteristics due to preparation of polysilazane-derived SiO_2 thin films on organic film with vacuum-evaporated SiO_2 using ultraviolet irradiation (Shibaura Institute of Technology) ○ ISONO Satoki • OHISHI Tomoji*
- 1P072 Optical properties of Cr^{3+} ion doped theta-alumina (National Institute of Advanced Industrial Science and Technology (AIST)) ○ KODAIRA Tetsuya • (Yokohama National University) SENGOKU Mayuko • SEKIYA Takao • (Kawaken Fine Chemicals) NAGAI Naofumi
- 1P073 Red fluorescence and glass transition temperature for Mn^{2+} -doped phosphate glasses (National Institute of Technology, Suzuka College) ○ YAMASHITA You • WADA Noriyuki* • (Ritsumeikan University) KOJIMA Kazuo
- 1P074 Synthesis and scintillation properties of Ce-doped SrHfO_3 (Nara Institute of Science and Technology) ○ Fukushima Hiroyuki* • Nakauchi Daisuke • Kawaguchi Noriaki • Yanagida Takayuki
- 1P075 Scintillation properties of Nd-doped RESiO_3 ($\text{RE} = \text{Ca}, \text{Sr}, \text{Ba}$) single crystals synthesized by the Floating Zone method (Nara Institute of Science and Technology) ○ Akatsuka Masaki* • Nakauchi Daisuke • Kawaguchi Noriaki • Yanagida Takayuki
- 1P076 Fluorescence and radioluminescence properties of Sm-doped SrCl_2 single crystals (Nara Institute of Science and Technology) ○ NAKAUCHI Daisuke • (Tohoku University) FUJIMOTO Yutaka • (Nara Institute of Science and Technology) KAWAGUCHI Noriaki • YANAGIDA Takayuki*
- 1P077 Ion exchange of mica glass-ceramics and mechanical properties of ion-exchangers (shinshu university) ○ archanna darshini gunasegaran • yamagami tomohiko • yamaguchi tomohiro • taruta seiichi*
- 1P078 Dependence of Auger-free luminescence characteristics of $\text{Cs}(\text{Ca}_{1-x}\text{Mg}_x)\text{Cl}_3$ on the Cs/Mg crystal proportion (Tohoku University) ○ Keisuke Takahashi • Masanori Koshimizu* • (NAIST) Takayuki Yanagida • (Tohoku University) Yutaka Fujimoto • Keisuke Asai*
- 1P079 Survey of light emission characteristics of blue excited red emitting $\text{Ca}_{1.2}\text{Eu}_{0.8}\text{SiO}_4$ phosphor (Tokai University) ○ Nakazato Nobuhiro • Kobayashi Syohei • Tomita Koji* • (Okayama University of Science) Sato Yasushi • (Nagoya University) Kobayashi Ryo • (Tohoku University) Kakihana Masato

- 1P080 Radio-photoluminescence properties of CsCl:Ag transparent ceramic prepared by the SPS method (Nara Institute of Science and Technology) ○Kimura Hiromi*·Kato Takumi·(Kanazawa Institute of Technology) Okada Go·(Nara Institute of Science and Technology) Kawaguchi Noriaki·Yanagida Takayuki
- 1P081 Density of a borosilicate melt over a wide temperature range (University of Shiga Prefecture) ○Nishikawa Shintaro·Yamada Akihiro·Yoshida Satoshi·Matsuoka Jun*
- 1P082 Mechanochemical-derived Sm-doped LiCaAlF₆ and the RPL properties (Kanazawa Institute of Technology) ○OKADA GO·(Nara Institute of Science and Technology) KAWAGUCHI Noriaki·(Kanazawa Institute of Technology) NANTO Hidehito·(Nara Institute of Science and Technology) YANAGIDA Takayuki
- 1P083 Photoluminescence and scintillation properties of Yb²⁺-doped KSr₂X₅ (X = Cl, Br) crystals (Tohoku University) ○SEKINE Dai·FUJIMOTO Yutaka·KOSHIMIZU Masanori·(NAIST) NAKAUCHI Daisuke·YANAGIDA Takayuki·(Tohoku University) ASAI Keisuke*
- 1P084 L-edge X-ray absorption fine structure measurement to analyze the change in valency of Ag in Ag-doped phosphate glasses composed of different alkali metals (Tohoku University) ○KAWAMOTO Hiroki·KOSHIMIZU Masanori·(AIST) MASAI Hirokazu·(Tohoku University) FUJIMOTO Yutaka·ASAI Keisuke*
- 1P085 Elucidation of silver nanoparticle formation process by microwave synthesis (Nagoya Institute of Technology) ○IWASAKI Ryota·XIN Yunzi·Nguyen Huu Hien·SHIRAI Takashi*
- 1P086 Improvement of crystal orientation in perfectly-surface crystallized glass-ceramics and its Pockels effect (Tohoku University) ○OTSUKI TOMOKI*·TERAKADO NOBUAKI·TAKAHASHI YOSHIHIRO·FUJIWARA TAKUMI
- 1P087 Development of Multi-piezo Material Using Niobic Acid Compound (The University of Kyushu·National Institute of Advanced Industrial Science and Technology) ○HARA Hirota·(National Institute of Advanced Industrial Science and Technology) WANG Ruiping·TU Dong·(The University of Kyushu·National Institute of Advanced Industrial Science and Technology) XU Chao-Nan*
- 1P088 Long Afterglow Characteristics of Eu²⁺, Dy³⁺ codoped SrAl₂O₄ Phosphor Fired under Various Conditions (Kyoto Institute of Technology) ○MIYAMOTO Koyomi·TAKEUCHI Nobuyuki*
- 1P089 Stress Analysis of Femur Model with Near-infrared Mechanoluminescence Material (Kyushu University·National Institute of Advanced Industrial Science and Technology) ○ISHII Yoshiharu·Xu Chaonan*·(Saga University) Ueno Naohiro·(National Institute of Advanced Industrial Science and Technology) Hyodou Koji
- 1P090 Synthesis of Lu_{2-x}Ca_{1+x}Mg_{2-x}Sc_xSi₃O₁₂:Ce³⁺ by using Propylene Glycol-modified Silane (Tohoku University) ○KIKUCHI Natsumi·KOMUKAI Tetsufumi·KATO Hideki·(Nagoya University) KOBAYASHI Makoto·(Tohoku University) WEN Dawei·KAKIHANA Masato*
- 1P091 Laser irradiation to Na₂FeP₂O₇ glass-ceramics (Nagaoka University of Technology) ○HIRATSUKA Masafumi·HONMA Tsuyoshi*·KOMATSU Takayuki
- 1P092 Crystallization behavior of Na₂O-FeO-MgO-P₂O₅ glasses (Nagaoka University of Technology) ○IINO Souma·HONMA Tsuyoshi*·KOMATSU Takayuki
- 1P093 Preparation of the Zn₄B₆O₁₃ ceramic for radiation measurement applications (NAIST) ○KAWAGUCHI Noriaki·YANAGIDA Takayuki
- 1P094 Variation of the photoluminescence properties by substitution of La for a novel Ca-Y-Si-O-N compound (Institute of Multidisciplinary Research for Advanced Materials Tohoku University) ○YASUNAGA Takuya·(Nagoya University) KOBAYASHI Makoto·(Institute of Multidisciplinary Research for Advanced Materials Tohoku University) KATO Hideki·Wen Dawei·KAKIHANA Masato*
- 1P095 Fabrication of Bi₂Ti₂O₇-nanocrystallized glass-ceramics toward photocatalysis material (Tohoku University·Pusan National University) ○KWON OHHYEOK·(Pusan National University) Baek chang gyu·(Tohoku University) Terakado Nobuaki·Takahashi Yoshihiro·Fujiwara Takumi*·(Pusan National University) Yang Yong Suk*
- 1P096 Preparation of Sn-doped SiO₂ glasses by the SPS method and evaluation of radiation induced fluorescence properties (Nara Institute of Science and Technology) ○Shiratori Daiki·Kimura Hiromi·Kawaguchi Noriaki·Yanagida Takayuki*
- 1P097 Scintillation properties of TlCl-SrCl₂(Ce) crystal scintillators (Tohoku University) ○Arai Miki·Takahashi Keisuke·Fujimoto Yutaka*·Koshimizu Masanori*·(NAIST) Yanagida Takayuki·(Tohoku University) Asai Keisuke*
- 1P098 Crystal Structure and Luminescence Property of BaGdScO₄ (Tokyo Institute of Technology) ○Inoue Ryota·Shiraiwa Masahiro·Fujii Kotaro·Yashima Masatomo*·(Kyoto University) Kitagawa Yuuki·Asami Kazuki·Ueda Junpei·Tanabe Setsuhisa
- 1P099 Photoluminescence and scintillation properties of Tl₂ACl₆ (A = Hf, Zr) crystals (Tohoku University) ○FUJIMOTO Yutaka·SAEKI Keiichiro·(Nara Institute of Science and Technology) NAKAUCHI Daisuke·YANAGIDA Takayuki·(Tohoku University) KOSHIMIZU Masanori·ASAI Keisuke
- 1P100 Morphological changes for laser polarization of nano-patterns on Ti³⁺:Al₂O₃ crystals induced by multiple femtosecond laser pulse ablation (Akita University) ○INOUE Takuya*·TAKAHASHI Tomoko·KODAMA Nobuhiro·(Adamant Namiki Precision Jewel Co.) NAKAYA Takayuki
- 1P101 Preparation and fluorescence spectra of GeO₂-M_xO_y-R₂O (M_xO_y=SiO₂, B₂O₃; R=Li,Na,K) glasses. (National Institute of Technology, Niihama College) ○KISHIDA Riho·ASAHI Taro*·NAKAYAMA Susumu·(National Institute of Technology, Suzuka College) WADA Noriyuki
- 1P102 Molecular dynamics simulation on aluminum lithium fluoride oxide, a host compound for deep-red phosphors (Yamagata University) SATO Chika·KOBAYASHI Riho·(Shizuoka University) KOMINAMI Hiroko·HARA Kazuhiko·(Yamagata University) ○MATSUSHIMA Yuta*
- 1P103 X-ray detection properties of high concentration Hf doped plastic scintillators synthesized using solvent evaporation method (Tohoku University) ○KAGAMI Kei·KOSHIMIZU Masanori·FUJIMOTO Yutaka·(KEK) KISHIMOTO Syunji·HARUKI Riel·(QST) NISHIKIDO Fumihiko·(Tohoku University) ASAI Keisuke*
- 1P104 Photocatalytic properties and X-ray photoemission spectroscopy (XPS) investigation of size-controlled CuGaO₂/ZnO hybrids (Nagoya Institute of Technology) ○CHOI Mi Nuk·HAYAKAWA Tomokatsu*
- 1P105 Synthesis of Tb-substituted CuMoO₄ powder and its photoluminescence (Saitama Univ) YANASE Ikuo*·○Koda Ryo
- 1P106 Glassification and additive effect of In₂O₃ for F⁻ ion-emission glasses (NITech) ○DAIKO Yusuke*·Yanagida Haruki·Honda Sawao·Iwamoto Yuji
- 1P107 Synthesis of rare earth substituted Ce₂W₃O₁₂ powder and its color phase change (Saitama Univ) YANASE Ikuo*·○Shimoyama Atsushi
- 1P108 Preparation and fluorescence spectra of alkali borate glasses containing sulfur (National Institute of Technology, Niihama College) ○ASAHI Taro·KISHIDA Riho·NAKAYAMA Susumu·(National Institute of Technology, Suzuka College) WADA Noriyuki
- 1P109 Ag metal/glass interface reaction and long-term stable ion emission for Ag⁺ ion-emission glasses (NITech) ○DAIKO Yusuke*·Mori Hiroki·Honda Sawao·Iwamoto Yuji

- IP110 Fabrication of transparent and fluorescent Ca- α -SiAlON: Eu²⁺ bulk ceramics (Kanagawa Institute of Industrial Science and Technology)
○LI Ying•Takahashi Takuma•Yokouchi Masahiro•(Kanagawa Institute of Industrial Science and Technology•Yokohama National University) Tatami Junichi

06. Material related to living body

- IP111 Preparation of transparent apatite films by an inorganic-organic nanocomposite technique (Nagaoka University of Technology) LIU Zizhen•
(Nagaoka University of Technology•Japan Society for the Promotion of Science) ○KATAOKA Takuya•(Nagaoka University of Technology) TAGAYA Motohiro*
- IP112 Evaluation of Singlet Oxygen Generation with the Light Irradiation to the Methylene Blue Supported by Naonporous Titania Particles
(Nagaoka Univ. Tech.) IKEDA Ryouta•○YAMADA Iori•NAGATA Shinya•KATAOKA Takuya•(Sysmex corp.) KAKUTA Masaya•
(Nagaoka Univ. Tech.) TAGAYA Motohiro*
- IP113 Fabrication of Ap-TNT composite particle in a solution mimicking body fluid (Osaka University) ○NISHIDA Hisataka•Goto Tomoyo•
Sekino Tohru
- IP114 Tailoring Structure of Inorganic Adjuvants towards Cancer Immunotherapy (National Institute of Advanced Industrial Science and
Technology) ○WANG Xiupeng•LI Xia•ITO Atsuo
- IP115 Apatite-forming ability and adhesion property of surface layer formed on Ti metal in hydrogen peroxide solution dissolving ammonium salt
(Yamagata University) ○Kazama Mizuki•Kawai Takahiro*
- IP116 Effect of particle size of amino-functionalized silica spheres on adsorption and elution of nucleic acids (National Institute of Advanced
Industrial Science and Technology•Nagoya Insutitute of Technology) ○KAWAI Akari•(Nagoya Insutitute of Technology) OBATA Akiko*•
(National Institute of Advanced Industrial Science and Technology) NAGATA Fukue•KATO Katsuya*
- IP117 Tough hydrogel utilizing ionic bond between hydroxyapatite and polyelectrolyte (Hokkaido university) ○KASHIMURA Naohiro•
TANAKA Kazuki•FUKAO Kazuki•KIYAMA Ryuji•NONOYAMA Takayuki*•GONG JianPing*
- IP118 Biocompatibility and antitumor property of novel bioresorbable bone substitute loaded with zoledronic acid (Meiji University) ○KAMEDA
Yuka•SUZUKI Norihiro•NAGATA Kohei•AIZAWA Mamoru•HONDA Michiyo*
- IP119 Development of a novel gene transduction system using cationic peptides (Meiji University) ○HONDA Michiyo•Yuki Taigo
- IP120 Preparation of hollow apatite nanoparticles for delivery of nucleic acids (Tokyo Institute of Technology) ○NISHIKORI Sakurako•
TANAKA Toshiaki*•IKOMA Toshiyuki*
- IP121 Development of afterglow phosphor toward human-body temperature sensing probe (Tohoku University) ○SATO Aoni*•GOTO Satoshi•
OHASHI Masaharu•TERAKADO Nobuaki•TAKAHASHI Yoshihiro•(Sendai Medical Center) ONOUE Noriko•SHINOZAKI Tuyaoshi•
(Tohoku University) FUJIWARA Takumi
- IP122 Fabrication and physical property evaluation of porous β type tricalcium phosphate by foaming method (Chiba Institute of Technology)
○Takeda Rikiya•Sasaki Hayato•Shibata Hirobumi•Hashimoto Kazuaki*
- IP123 Development of novel bone substitute material using β type tricalcium phosphate and cyanoacrylate (Chiba Institute of Technology) ○Aida
Shuhei•Shibata Hirobumi•(Fukuyama ika Co., Ltd) Fukuyama Nozomu•Fukuyama Shigeo•Meguro Takashi•(Chiba Institute of
Technology) Hashimoto Kazuaki*
- IP124 Synthesis and characterization of anticancer agent/layered double hydroxide and its application of drug carrier (Iwate University)
○AISAWA Sumio•OGAWA Yugo•YASUGAHIRA Riku•SANG Jing•HIRAHARA Hidetoshi
- IP125 Detection of biomolecules by a complex in which size and amount of silver nanocrystals were controlled on hydroxyapatite microparticles
surface (Tokyo Institute of Technology) ○TORII Yoshitane•IKOMA Toshiyuki*•(KYOCERA Corp.) SASAKI Shun•KYOMOTO
Masayuki
- IP126 Zn controlled-release by octacalcium phosphate (Nihon University) ○Hosino Yuka•Uchino Tomohiro*
- IP127 Mechanical property of Mn-containing bone-like apatite cement (Nihon University) ○Toda Kazuki•Uchino Tomohiro*
- IP128 TNT applied as a biological scaffolding material (Osaka Dental University) ○ZENG Yuhao•KOMASA Satoshi*•NISHIDA Hisataka•
CHEN Luyuan•ZHANG Honghao•(Osaka University) SEKINO Tohru

08. Pottery

- IP129 Microstructure and formation mechanism of gold-colored Bizen stoneware (Okayama Univeristy of Science) KUSANO Yoshihiro*•
○NAKATA Hiroyuki•FUKUHARA Minoru*

09. Environment and material related to resource

- IP130 Development of the vapor separation materials for energy-saving air-conditioning (Toshiba Corporation Research & Development Div.
Corporate Research & Development Center) ○HARADA Kouichi•Yagi Ryosuke•Yonetsu Maki•Saito Hitomi•(Toshiba Materials Co., Ltd)
Suenaga Seiichi
- IP131 Development of the water vapor separation sheets of wet-seal type (Toshiba Corporate Research and Development Center) ○Yonetsu Maki•
Harada Kouichi•Yagi Ryosuke•Saito Hitomi•Fukuda Yumi•Albessard Keiko•Hattori Yasushi•Imada Toshihiro•(Toshiba Materials Co.,
Ltd.) Suenaga Seiichi
- IP132 Fabrication of Fluorine-Substituted Mg-Al LDHs Crystal for Highly Selective Removal of Nitrate Ions (Shinshu University) ○Kiyama
masahiro•Sudare Tomohito*•Hayashi Humitaka•Teshima Katuya*
- IP133 Fabrication of one direction porous zirconia ceramics using agar as template. (Shinshu University) ○NAKATA Shohei•YAMAGUCHI
Tomohiro•TARUTA Seiichi*
- IP134 Catalytic performance of Cu-supported zinc ferrite for CO oxidation (National Institute of Technology, Kurume College) ○OBUKURO
Yuki•SONODA Mizuho•OKUYAMA Tetsuya•(Kyushu University) EINAGA Hisahiro•SUGIYAMA Takeharu
- IP135 Synthesis of Titanosilicate using Titanium Oxide and Adsorption of Cs and Sr (University of Hyogo) ○Shimada Yutaro•Nishioka Hiroshi*
- IP136 Synthesis of Sodium Titanate for Removal of Strontium Ions (University of Hyogo) ○Gogo Hitoshi•Nishioka Hiroshi*
- IP137 Preparation and properties of tiles composed of transition metal ion-treated natural zeolite (Yamagata University) ○Kobayashi Tatsuya•
Sasaki Keiko•Kawai Takahiro*
- IP138 Anion adsorption properties of Li-Al Layered Double Hydroxides (Chiba Institute of Science Graduate School) ○HOSHI Kouki•TEZUKA
Satoko*
- IP139 Reactivity improvement of DCPD and fluoride ion by induction of precursor on surface of the DCPD particle by using aqueous solution of
simple composition (National Institute of Technology, Toyama College) ○Okajima Natsuki•Tafu Masamoto*•Takamatsu Saori•Toshima
Takeshi•(FUDO TETRA) Takada Masafumi•Hagino Yoshiaki
- IP140 Flocculation of Exfoliated Layered Perovskite and Its Ammonia Decomposition Property (University of Yamanashi) ○FUKASAWA
Chihiro•TAKEI Takahiro*•YANAGIDA Sayaka•KUMADA Nobuhiro

- IP141 Joining of SiC ceramics by the flash-bonding technique (Fukuoka Institute of Technology) ○YOSHITAKE Takuro•KITAYAMA Mikito*•OHTA Yoshio*
- IP142 Production of ceramic tiles using granulated blast furnace slag and waste glass (Muroran Institute of Technology) ○Takeda Miyako•Sawaguchi Naoya*•Sasaki Makoto•(Hokkaido Research Organization) Inano Hiroyuki•Nomura Takahumi
- IP143 Removal of Cr (III) ion using aluminum substituted tobermorite (University of Hyogo) ○WATANABE Ryosuke•NISHIOKA Hiroshi*
- IP144 Solid-state synthesis and photocatalytic activity of SrTi_{1-x}(Fe_{0.5}Nb_{0.5})_xO₃ (University of Tsukuba) ○NAKAMURA Yuya•SUZUKI Yoshikazu*
- IP145 Fabrication and Characterization of Tantalum oxynitride Photonic Crystals (Tokushima University) ○FUJISAKA Ai•FURUKAWA Yusuke•MURAI Kei-ichiro•MORIGA Toshihiro*•(Auckland University) Geoffrey Waterhouse
- IP146 Preparation of Al₂O₃/3Y-ZrO₂ porous composites and their application to a water purification filter (University of Tsukuba) ○HATORI Rei•SUZUKI Yoshikazu*
- IP147 Synthesis of visible light-active Nb doped TiO₂ photocatalyst through a mechanochemical method (Hosei University) ○KATO Ryuma•TARUTANI Naoki*•ISHIGAKI Takamasa*•(National Institute for Materials Science) UCHIKOSHI Teturo
- IP148 Synthesis and characterization of new sodium bismuthate by hydrothermal synthesis (University of Yamanashi) ○AKUTSU Shuhei•TAKEI Takahiro•YANAGIDA Sayaka•KUMADA Nobuhiro*•(University of Tohoku) YAMANE Hisanori•(Kurashiki University of Science and the Arts) KUSANO Yosinori
- IP149 Photocatalytic activity of chemically treated titania nanotubes (Osaka university) ○KONDO Yoshifumi•GOTO Tomoyo•CHO Sung Hun•NISHIDA Hisataka•SEKINO Tohru*
- IP150 Synthesis of Anion Exchangeable Layered Mixed Basic Salt by Solvothermal Reaction (University of Yamanashi) ○MATSUMOTO Sunpei•TAKEI Takahiro*•YANAGIDA Sayaka•KUMADA Nobuhiro
- IP151 Wettability of solutions of sodium salts on self-assembled monolayers (Kogakuin University) ○SHIBAGAKI Ibuki•YOSHIDA Naoya*•OKURA Toshinori*
- IP152 Advanced Oxidation Process using Zeolite as the Solid Catalyst (Fukuoka Institute of Technology, Graduate school of engineering) ○MEI HAORONG•Ohta Yoshio•KITAYAMA MIKITO*
- IP153 Synthesis of pyrochlore type Al₂Zr₂O₇ (The University of Kitakyushu) TANAKA Yuho•OGAWA Tomoya•○SUZUKI Takuya
- IP154 Influence of phase separation of target glass on wettability of sputtered glass films. (Nagoya Institute of Technology) ○Sakai Tomoyuki•Maeda Hirota*•Kasuga Toshihiro
- IP155 Preparation of Mesoporous Silica from Waste Glass and Its Adsorption of Rare-earth Metal Cation (University of Yamanashi) ○TAKABAYASHI Tomohiro•TAKEI Takahiro*•YANAGIDA Sayaka•KUMADA Nobuhiro
- IP156 Discovery of a new structure family of oxide-ion conductors BaLaZn₃GaO₇ (Tokyo Tech Institute) ○TEJIMA Hiroaki•FUJII koutarou*•NIWA Eiki*•YASHIMA Masatomo*
- IP157 Photocatalyst Activity of Transition Metal Ion Exchange by Layered Metal Phosphate (University of Yamanashi) ○Aoyama Kazuki•Takei Takahiro*•Yanagida Sayaka•Kumada Nobuhiro
- IP158 Selective extraction of calcium from blast furnace slag and synthesis of high purity calcium carbonate (Saitama Institute of Technology) ○YAMAGUCHI Shie•Hongo Teruhisa*
- IP159 Photocatalytic Deposition of Cu₂O on Au Nanoparticles Loaded on TiO₂ Photocatalyst (University of Yamanashi) ○YANAGIDA Sayaka•YAJIMA Takumi•TAKEI Takahiro•KUMADA Nobuhiro
- IP160 Syntheses of aluminosilicate cation exchange materials from rice husk ash or steel slag, and its heavy metal ion adsorption properties (Saitama Institute of Technology) ○IWAKI Takumi•HATADA Yuji•HONGO Teruhisa*
- IP161 Purification of silica in rice hull ash by hydrothermal treatment (Shimane University) ○MAKINOSE Yuki•SUGIHARA Tesuya•EGAWA michiko•HANDA Makoto•Miyazaki Hidetoshi
- IP162 Preparation of Novel Blue Phosphate Pigment in Imitation of Turquoise (Kyoto Prefectural University) ○SASAKI Ryota•ONODA Hiroaki*

10. Material related to energy

- IP163 I-V characteristics of BaTiO₃-(La,Sr)MnO_{3-δ} composite for SOFC cathode (Okayama University) ○HAMADA Ren•TERANISHI Takashi*•KISHIMOTO Akira
- IP164 Preparation and characterization of novel electrocatalyst for medium-temperature anhydrous fuel cells (Toyohashi University of Technology) ○ASHIDA YUYA•NBELAYIM PASCAL•KAWAMURA GO*•MUTO HIROYUKI*•MATSUDA ATSUNORI*
- IP165 Crystal structure and electrical conductivity of PrLaNi_{1-x}Cu_xO_{4+δ} (Nihon University) ○YUGI Takao•WANG Chengkun•OKIBA Takashi•HASHIMOTO Takuya*
- IP166 Study of average and local structure of La-Ni-O based layered mixed conductors by quantum beam and theoretical calculation (Tokyo University of Science) ○ISHIZAKI Kakeru•KITAMURA Naoto*•ISHIDA Naoya•IDEMOTO Yasushi
- IP167 Relationship among oxide ion conductivity, average and local structures of K substituted Na_{0.5}Bi_{0.5}TiO₃ based oxide (Tokyo University of Science) ○Ishikawa Kazuya•Kitamura Naoto*•Ishida Naoya•Idemoto Yasushi
- IP168 Synthesis of Pyroxene Type LiFe_{1-x}Mn_xSi₂O₆ (0 ≤ x ≤ 0.2) and Average, Electronic and Local Structure Analyses Using Quantum Beam (Tokyo University of Science) ○TAJIMA Taketoshi•ISHIDA Naoya•KITAMURA Naoto•IDEMOTO Yasushi*
- IP169 Partial substitution of phosphate-based positive electrode materials and crystal/electronic structure analysis (Tokyo University of Science) ○Koyanagawa Yudai•Ishida Naoya*•Kitamura Naoto*•Idemoto Yasushi*
- IP170 Rate Dependence of Average, Electronic and Local Structures of 0.5Li₂MnO₃-0.5Li(Mn_{1/3}Ni_{1/3}Co_{1/3})O₂ Using Quantum Beams and First-principle Calculation (Tokyo University of Science) ○HAMADA Daisuke•ISHIDA Naoya•KITAMURA Naoto•IDEMOTO Yasushi*
- IP171 Effects of iron raw materials and firing condition on solid phase synthesis of Li₂FeSiO₄ (The University of Tokai) ○SUZUKI Ryuya•SATO Masashi•AKIYAMA Yasunobu•MATSUMAE Yoshiharu•HIGUCHI Masashi*
- IP172 Formation of hydrogen by partial oxidation of methane over gadolinium-doped ceria (Kagoshima University) ○FANG Zhiyuan•HIRATA Yoshihiro•SAMESHIMA Soichiro*•SHIMONOSONO Taro
- IP173 Electrochemical and mechanical properties of Li₄SnS₄ solid electrolyte prepared by aqueous ion-exchange method (Toyohashi University of Technology) ○KOKUBO Takumi•MATSUDA Reiko•Nguyen Phuc•MUTO Hiroyuki•MATSUDA Atsunori*
- IP174 Synthesis of rock-salt type lithium titanium oxynitride anode material and investigation on the effect of cation ratio (Tokushima University) ○SHIZUKAWA Kohei•TAKAHARA Rie•SUN Jung Ting•MIZUTA Yusuke•MURAI Kei-ichiro•MORIGA Toshihiro*
- IP175 First-principles studies on Mg Diffusion in spinel-type cathodes materials for Mg ion batteries (Nagoya Institute of Technology) ○ATSUMI Taruto•(Tohoku University) SHIMOKAWA Kohei•(Nagoya Institute of Technology) HARADA Maho•TANIBATA Naoto•(Nagoya

Institute of Technology • National Institute of Materials Science • Unit of Elements Strategy Initiative for Catalysis & Batteries. Kyoto University) NAKAYAMA Masanobu* (Tohoku University) ICHITSUBO Tetsu

- 1P176 Characterization of doping La into SrCeO₃ as an SOFC electrolyte material synthesized by nanoparticle growth method (Tokushima University) ○OTANI Yasumasa • HATAI Kengo • MINATO Ryunosuke • LIU Xie • MURAI Kei-ichiro • MORIGA Toshihiro* • (Central Research Institute of Electric Power Industry) MORI Masashi
- 1P177 Synthesis of layered niobate-copper nanoparticle compound (Seikei University) ○NAKAO Osamu • SOHMIYA Minoru* • OSHIMA Kazuma • SATOKAWA Shigeo* • (Waseda University) ISHITSUKA Daiki • KOYAMA Yuki • SUGAWARA Yoshiyuki
- 1P178 Sr-substitution effect for sinterability of Garnet like lithium ion conductor LLZ-Ga (Mie University) ○Ohmori Kenta • Sugimoto Kaoru • Mori Daisuke* • Taminato Sou • Takeda Yasuo • Imanishi Nobuyuki • (Osaka Institute of Technology) Matuda Yasuaki
- 1P179 Quantitative evaluation of resistance from high-resistive compound formed between LSCF/YSZ interface (Japan Fine Ceramics Center) ○KAWAHARA Koichi • SUZUKI Masaya • (Toshiba Energy Systems & Solutions Corporation) OSADA Norikazu • INUZUKA Riko • KAMEDA Tsuneji
- 1P180 Arrangement of La and vacancies in La_{1/3}NbO₃ predicted by first-principles density Functional with cluster expansion and Monte Carlo simulation (Nagoya Institute of Technology) ○Yang Zijian • (National Institute of Materials Science) Ward Robyn • (Nagoya Institute of Technology • National Institute of Materials Science) Nakayama Masanobu*
- 1P181 Computational Study of Temperature Affected Cation Arrangement in Spinel type Li_{4/3}Ti_{5/3}O₄ system (Nagoya Institute of Technology • Beijing University of Chemical Technology) ○BAI Lu • (National Institute of Materials Science) Ward Robyn • (Nagoya Institute of Technology • National Institute of Materials Science) Nakayama Masanobu*
- 1P182 Discovery of a new structure family of oxide-ion conductors Ca₂Ge₇O₁₆ by a bond valence method and various experiments (Tokyo Institute of Technology, Department of Chemistry, School of Science) ○Matsui Masahiro • FUJII Kotaro • NIWA Eiki • YASHIMA Masatomo*
- 1P183 Application of hydrogensulfate-heteropolyacid composites prepared by wet milling for fuel cell electrolyte membranes (Toyohashi University of Technology) ○MATSUBARA Naohiro • MAEGAWA Keiichiro • KYAW ZAY Ya • KAWAMURA Go • MUTO Hiroyuki • MATSUDA Atsunori*
- 1P184 Preparation of 100Li₃PS₄-50Li_{1-x}Li₃PO₄ solid electrolytes with liquid phase shaking (Toyohashi University of Technology) ○Indrawan Radian Febi • Yamamoto Tokoharu • Phuc Nguyen Huu Huy • Muto Hiroyuki • Matsuda Atsunori*
- 1P185 Discovery of new oxide-ion conductor Ba₇Nb₄MoO₂₀ (Tokyo Institute of Technology) ○SAKUDA Yuichi • TSUJIGUCHI Takafumi • FUJII Kotaro • NIWA Eiki • YASHIMA Masatomo* • (High Energy Accelerator Research Organization) TORII Shuki • KAMIYAMA Takeshi
- 1P186 The rate and cycling performance of sulfide-based all-solid-state batteries with various anode layer preparation conditions (Osaka Research Institute of Science and Technology) ○TAKAHASHI Masanari • YAMAMOTO Mari • TERAUCHI Yoshiriro • KATOU Atsutaka
- 1P187 Efficient determination of grain boundary structures with informatics approach (The University of Tokyo) ○Otani Ryuken • Kiyohara Shin • Sugimori Yuuki • Mizoguchi Teruyasu*
- 1P188 Relationship between structure of insulating ceramic layer and properties of lithium ion battery (Hitachi, Ltd.) ○NAOE Kazuaki • AMASAKI Shimpei
- 1P189 Synthesis of Cobalt Layered Oxides with Various Interlayer Distances and Evaluation of Their Thermal Conductivity (National Institute of Technology, Ube College) ○SHIGENO Koichi • EMORO Hiroki • SAKASEGAWA Yudoku • SHIRAKAWA Fumiki
- 1P190 Effect of active materials with various volume change rate and their combination for the rate and cycling performance (Osaka Research Institute of Industrial Science and Technology) ○YAMAMOTO Mari • TERAUCHI Yoshihiro • (Osaka Prefecture Univ.) SAKUDA Atushi • (Osaka Research Institute of Industrial Science and Technology) KATO Atushi • TAKAHASHI Masanari
- 1P191 Flexible Li₇La₃Zr₂O₁₂ sheet electrolyte for Li-ion batteries (Tokyo Metropolitan University) ○Cheng Eric Jianfeng • Kimura Takeshi • Shoji Mao • Munakata Hirokazu • Kanamura Kiyoshi
- 1P192 Study of the structure model for the interface between graphite and a lithium compound (Osaka Research Institute of Industrial Science and Technology) ○SONOMURA Hirotsuke

13. Liquid phase process

- 1P193 The irreversible pressure response of the infrared absorption spectrum of amorphous calcium carbonate (Tokyo Metropolitan Industrial Technology Research Institute) ○YOSHINO Toru • SANO Shin • (The University of Tokyo) KAGI Hiroyuki
- 1P194 Crystal Growth and Physical Properties of AlMgB₁₄-type having Metal Fluorides (Kokushikan University) ○Yamasaki Takashi • Kouzu Kaoru • Okada Shigeru • (National Institute for Materials Science) Mori Takao • (Kanagawa University) Imai Youko • (Tohoku University) Yubuta Kunio • Shishido Toetsu • (University of Vienna) Peter Rogl
- 1P195 Formation of low temperature SiO₂ film with polysilazane coating and light irradiation, and development of high gas barrier high heat resistant PET film (Shibaura Institute of Technology) ○ICHIKAWA Kosei • OHISHI Tomoji*
- 1P196 Copper wiring formation in the atmosphere using laser irradiation using a glyoxylic acid copper complex as the starting material and adhesion improvement (Shibaura Institute of Technology University) ○Uetsuki Akira • Ohishi Tomoji*
- 1P197 Crystal phases and microstructures of barium titanate prepared by liquid phase method (Osaka University) ○KAKO Chisato • HASHIMOTO Hideki • GOTO Tomoyo • CHO Sunghun • SEKINO Tohru*
- 1P198 Fabrication of multiferroic composite thin films produced using a non-aqueous sol-gel process (University of Hyogo) ○YOSHII Masamitsu • KOBUNE Masafumi* • ITO Ryoga • OBAYASHI Taiki • MIGITA Tsubasa • KIKUCHI Takeyuki
- 1P199 Preparation of (Fe, Ni)₃(PO₄)₂•8H₂O particles via an aqueous solution process (Kansai University) uchiyama hiroaki* • Okomatsu fumito
- 1P200 Preparation of Na₅YSi₄O₁₂ thin film by sol-gel method (Kogakuin University) ○NAMBU Sota • YOSHIDA Naoya* • OKURA Toshinori*
- 1P201 Crystal Growth of Niobium Nitride with Layered Structure using Ammonium Chloride under High Pressure and Temperature (Nagoya University) ○IKOMA Takahide • SASAKI Takuya • NIWA Ken • KAWADA Takuya • SODA Kazuo • HASEGAWA Masashi*
- 1P202 Formation of BaTiO₃/KNbO₃ Epitaxial Interface of Nanocomposite Ceramics by Solvothermal Solidification Method (University of Yamanashi) ○ISOBE Yamato* • UENO Shintaro • FUJII Ichiro • WADA Satoshi
- 1P203 Optimization of Preparation Conditions for Surfactant-free Barium Titanate-nanocube Suspensions for Assemblies (Yamanashi University) ○HATAKEYAMA Sakuya • UENO Shintaro • CHIKATA Tsukasa • FUJII Ichiro • WADA Satoshi*
- 1P204 Optimization of Preparation Conditions of BaTiO₃ Epitaxial Shell Layers on Perovskite-nanoparticle Substrates by Solvothermal Solidification Method (Yamanashi University) ○KAYANUMA Ryusei • ISOBE Yamato • UENO Sinto • FUJII Itiro • WADA Satoshi*
- 1P205 Influence of Ball-milling for Precursor Niobium Oxide Sols on Morphology of Sodium Niobate Nanocubes and Preparation of Nanocube Assemblies (University of Yamanashi) ○Osada Kazuki • Ueno Shintaro* • Chikata Tsukasa • Fujii Ichiro* • Wada Satoshi*
- 1P206 Synthesis of Dendritic Siloxane with Si-OH Groups by Stepwise Silylation of a Cage Siloxane (Waseda University) ○FUJINO Koki • SATO Naoto • WADA Hiroaki • SHIMOJIMA Atsushi • KURODA Kazuyuki*

- 1P207 Pore structure of TiO₂-modified ZrO₂ particles prepared by the solvothermal method (Gunma University) SUGIYAMA Fuya•HAYASHI Shunsuke•IWAMOTO Shinji
- 1P208 Synthesis of phosphate-based phosphor using water-soluble phosphorous acid (Institute of Multidisciplinary Research for Advanced Materials, Tohoku University) OMIURA Hironobu•KATO Hideki•(Nagoya University) KOBAYASI Makoto•(Institute of Multidisciplinary Research for Advanced Materials, Tohoku University) Wen Dawei•KAKIHANA Masato*
- 1P209 Transparent Apatite Nano Film on Glasses for Observation of Living Cells. (National Institute of Technology, Oyama College) OKIYAMA Shintaro•NAMAI Reiya•KAWAGOE Daisuke*•(National Institute for Materials Science) HIROMOTO Sachiko

14. Vapor phase process

- 1P210 Fabrication of gallium oxide thin films on substrate by reduction vaporization-oxidation method using gallium oxide powder (Shibaura Institute of Technology) OMISE Takuto•KIYONO Hajime*
- 1P211 Microfabrication of bismuth layer-structured ferroelectric (BSLF) thin films by reactive ion etching (RIE) (University of Hyogo) OITO Ryo•KOBUNE Masahumi*•MATSUNAGA Takuya•MIGITA Tsubasa•KIKUCHI Takeyuki•KANDA Kensuke•MAENAKA Kazusuke
- 1P212 Fabrication of gallium nitride nanoparticles by nitridation of gallium oxide powder (Shibaura Institute of Technology) O MATSUO Yasuyuki•KIYONO Hajime*
- 1P213 Preparation of HfO₂-Al₂O₃ composite films with eutectic structure by chemical vapor deposition (Yokohama National University) O MATSUMOTO SHOGEN•ITO AKIHIKO*
- 1P214 Dense film preparation by self-oxidation of zirconium plate (Hirosaki University) OSASAKI Kazuya•(Tokai University) TAKEMURA Rio•(Tokyo Institute of Technology) NIWA Eiki•KONDO Masatoshi
- 1P215 Heat-resistant black TiC_xO_y film fabricated by DC magnetron sputtering (Sumitomo Metal Mining Co., Ltd.) Ono Katsushi•Wakabayashi Masao•Tsukakoshi Yukio•Abe Yoshiyuki

15. Process of powder

- 1P216 In-situ observation of the change in particle accumulation structure during uniaxial pressing by optical coherence tomography (Kanagawa Institute of Industrial Science and Technology) OTAKAHASHI Takuma•(Kanagawa Institute of Industrial Science and Technology•Yokohama National University) TATAMI Junichi
- 1P217 Influence of fabrication parameters on filament structure prepared by robo-casting method (Nagaoka University of Technology) OOno Yusuke•Tanaka Satoshi*
- 1P218 Size distribution control of NaNbO₃ single crystals using ultrasonic treatment and micromesh sieve (The National Defense Academy) OISHII Keisuke•MORIMOTO Takaaki
- 1P219 Dispersion of ZrO₂ nanoparticles in episulfide monomer by surface modification using silane coupling agents (Yokohama National University) OKUBOTA Momoe•IIJIMA Motoyuki*•TATAMI Junichi•(Mitsubishi Gas Chemical Company, INC) KOHN Hideki•NAMIKI Kosuke•MIYAMOTO Miyuki
- 1P220 Diffusion joining of hydrogen-charged Al metal and thermo-conductive AlN ceramics at non-vacuum atmosphere: Gas chromatography-mass spectroscopy (GC-MS) study (National Institute of Technology, Ube College.) OKIKUGAWA Shokichi•(Yamaguchi University) ITO Toshio•OGAWA Yasushi•MURATA Takuya
- 1P221 Effects of sintering conditions on grain growth of Bi-based ceramics (The University of Yamanashi) OHIROSE Minako*•Fujii Ichiro•Ueno Shintaro•Wada Satoshi
- 1P222 Influence of powder characteristics on sinterability of LiCoO₂ ceramics (Nagaoka University of Technology) OWATABE Ryoichi•TANAKA Satoshi*
- 1P223 Fabrication and pore evaluation of alumina porous ceramics by gel-casting forming method with pore former agents (Nagaoka university of technology) OTANAKA Takuma•TANAKA Satoshi*
- 1P224 Solid state synthesis and sinterability of Li₇La₂Zr₃O₁₂ powder (Nagaoka University of Technology) OYoneda Keisuke•Tanaka Satoshi*
- 1P225 Design of dispersant for highly dense uniform dispersion of fine particles in epoxy resin: polyethyleneimine functionalized with poly(ethylene glycol) methyl ether (Yokohama National University) OYAHATA Tomohiro•IIJIMA Motoyuki*•TATAMI Junichi
- 1P226 Observation of internal structure of Al₂O₃ slurry under shear by optical coherence tomography (YOKOHAMA National University) OTakaba Hiroki•(YOKOHAMA National University•Kanagawa Institute of Industrial Science and Technology) Tatami Junichi*•Iijima Motoyuki•(Kanagawa Institute of Industrial Science and Technology) Takahashi Takuma
- 1P227 Crystallographic orientation of the multiple oxide thin films prepared on the reactive substrates (Toyota Technological Institute) OARAKAWA Shuichi
- 1P228 Heat Resistance of Transparent Polycrystalline Al₂O₃ with Y₂O₃ Dopant Produced by Two-step Pulsed Electric Current Sintering (Nagoya Institute of Technology) ONGUYEN HUU HIEN•SHIRAI TAKASHI*•(Nagaoka University of Technology) NANKO MAKOTO*
- 1P229 High-pressure synthesis of double perovskite-type oxyfluorides A₂BB'O_xF_{6-x} (A = K⁺, Ag⁺, Na⁺, B = Mn²⁺, Ni²⁺, Cu²⁺, Zn²⁺, B' = Ti⁴⁺, W⁶⁺, x = 1, 2, 4) (Gakushuin University) OSUGIMOTO Ken•UEDA Koichiro•INAGUMA Yoshiyuki*
- 1P230 Synthesis of Novel Filled Skutterudite-type Compound ZrCo₄Sb₁₂ under High Temperature and Pressure (Nagoya University) OCHIKAWA Masanari•SASAKI Takuya•NIWA Ken•HASEGAWA Masashi*
- 1P231 Comparison of Alumina granules produced by a freeze granulation and spray drying using an automated particle image analysis as cornerstone method. (Malvern Panalytical, Div of Spectris Co., Ltd.) OSASAKURA DAISUKE•(NETZSCH Japan K.K.) KAJIWARA Takehiro•(Preci Co.,Ltd.) KAWAGUCHI Shinya•MISUMI Yuichi•KATO Shinsuke
- 1P232 Appearance observation of alumina particles prepared by Spray Freeze Granulation Method (PRECI Co., Ltd.) OMISUMI Yuichi•Kawaguchi Shinya•HOMBO Takanobu•(Malvern Panalytical division of Spectris Co., Ltd) SASAKURA Daisuke

16. Characterization

- 1P233 Simulation of Formic Acid and Water Adsorption on Hydrogarnet Surface by First-Principles Calculation (Nagoya Institute of Technology) OISHIDA Kunihiro•WATANABE Kentarou•(Nagoya Institute of Technology•Elements Strategy Initiative for Catalysts and Batteries Kyoto University) TANIBATA Naoto*•(Nagoya Institute of Technology•Elements Strategy Initiative for Catalysts and Batteries Kyoto University•National Institute for Materials Science) NAKAYAMA Masanobu*•(Nagoya Institute of Technology) MAEDA Hirotaka
- 1P234 Crystal structure and photoluminescence properties of an incommensurate phase in Eu²⁺-doped Ca₂SiO₄ solid solution (Nagoya Institute of Technology) OHIRAMATSU Yuya•(National Institute of Materials Science) MICHIEUE Yuichi•FUNAHASHI Shiro•HIROSAKI Naoto•(Nagoya Institute of Technology) URUSHIHARA Daisuke•ASAKA Toru•FUKUDA Koichiro*
- 1P235 Real space and real time observation of formation of phase-separated structure in the middle stage of spinodal decomposition of glass by STEM (The University of Tokyo) ONakazawa Katsuaki•Mizoguchi Teruyasu*

- 1P236 Modulated structure analysis of $\text{Yb}_2\text{Fe}_3\text{O}_7$ by X-ray diffraction and transmission electron microscopy (Nagoya Institute of Technology)
○HAYAKAWA Tatsuya·URUSHIHARA Daisuke·ASAKA Toru*·FUKUDA Koichiro·(Tokyo Institution of Technology) Yu Hongwu·
OKIMOTO Yoichi·KOSHIHARA Shin-ya·(Kyoto University) KONISHI Shinya·TANAKA Katsuhisa
- 1P237 EDXRF application for rapid elemental analysis of granulated slag (Hitachi High-Tech Science Corporation) ○OGAKI Masataka·
YAMADA Atsuko·TSUJIKAWA Hana·FUKAI Takayuki·SOETA Naoki·NAKAMURA Kazuhiro·SAKAMOTO Hideyuki·
SHINOHARA Keiichiro

■■ March 25 (Mon) (Room A) ■■

02. Dielectric material

圧電材料-1

(9:00) (Chairman 保科拓也)

- 2A01 Fabrication and Characterization of Vibration Energy Harvester including Oriented Fibers (Nagoya Institute of Technology) ○HASEGAWA Ryohei·Kakimoto Ken-ich^{*}·(University of Erlangen-Nuremberg) Mehnert Markus·Mergheim Julia·Steinmann Paul
- 2A02 Size dependence of piezoelectric response in (111)-tetragonal Pb(Zr,Ti)O₃ nanorods (Nagoya University) ○OKAMOTO Kazuki·(Nagoya University·JST PRESTO) YAMADA Tomoaki^{*}·(National Institute for Materials Science) SAKATA Osami·(Japan Synchrotron Radiation Research Institute) IMAI Yasuhiko·(Nagoya University) YOSHINO Masahito·NAGASAKI Takanori
- 2A03 Oxygen defects in fatigued alkali-niobate piezoceramics (Nagoya Institute of Technology) ○MAEDA Shinsaku·ITO Yuichiro·KAKIMOTO Ken-ichi^{*}
- 2A04 Fabrication of 101 oriented (Li,Na,K)NbO₃ ceramics by magnetic field forming and its piezoelectric property (Nagaoka University of Technology) ○ONO Yuuki·TANAKA Satoshi^{*}·HONMA Tsuyoshi·(Taiyo Yuden Co.Ltd) HARADA Tomohiro·SHIMIZU Hiroyuki·(Ashikaga University) DOSHIDA Yutaka
- 2A05 The quenching effects for mechanical strength and depolarization temperature of (Bi_{0.5}Na_{0.5})TiO₃ ceramics (Tokyo University of Science) Miura Tatsuki·○Takagi Yuka·Nagata Hajime·Takenaka Tadashi
- 2A06 *Intermission*

圧電材料-2

(10:30) (Chairman 永田肇)

- 2A07A ★ [The 72nd CerSJ Awards] Polarization twist in high-quality single crystals of ferroelectrics (The University of Tokyo) ○KITANAKA Yuuki
- 2A09 Investigation of formation mechanism for hydrothermally-synthesized (K,Na)(Nb,Ta)O₃ films (Tohoku Univ.) ○SHIRAIISHI Takahisa·MUTO Yuta·KIGUCHI Takanori·KONNO Toyohiko·(Tokyo Tech.) TATEYAMA Akinori·ITO Yoshiharu·FUNAKUBO Hiroshi·(Sophia Univ.) UCHIDA Hiroshi
- 2A10 Fabrication of (K_{0.5}Na_{0.5})NbO₃ single crystals by solid-state crystal growth method and their electric properties (University of Yamanashi) ○FUJII Ichiro·UENO Shintaro·WADA Satoshi

部会特別講演

(13:30) (Chairman 徐超男)

- 2A19B ★ (部会特別講演) Ceramics and SDGs (The University of Tokyo) ○MIYAYAMA Masaru

プロセス

(14:30) (Chairman 野口祐二)

- 2A23 Fabrication and piezoelectric property of grain-oriented (Sr,Ca)₂NaNb₅O₁₅ ceramics in rotating high magnetic field with stereolithography (Nagaoka University of Technology) ○BABA Shoko·TANAKA Satoshi^{*}
- 2A24 Spectroscopy and two-dimensional two-color temperature measurement in AlN synthesis using microwave irradiation (Tohoku University) ○MIURA Hanae·FUKUSHIMA Jun·HAYASHI Yamato·TAKIZAWA Hirotsugu^{*}
- 2A25F ★ (企業研究フロンティア講演) The Development of the new shape packages (KYOCERA Corporation) ○Higashi Toshifumi
- 2A27 *Intermission*

■■ March 25 (Mon) (Room B) ■■

03. Electroconductive material

酸化物半導体・導電性酸化物

(9:00) (Chairman 大澤健男)

- 2B01A ★ [The 72nd CerSJ Awards] Room-temperature epitaxial formation of wide-bandgap oxide semiconductor thin films (Tokyo Institute of Technology) ○MATSUDA Akifumi
- 2B03 Analysis of ion dynamics in lithium ion conductors by far-infrared ellipsometry (Tokyo Institute of Technology) ○Takezawa Shuhei·Nishiyama Junji·Takeda Hiroaki·Tsurumi Takaaki·Hoshina Takuya^{*}
- 2B04 Fabrication of β-NaGaO₂ thin films by Mist-CVD method and its ion exchange to β-CuGaO₂ thin films (Tohoku University) ○SUZUKI Issei·TAKEMURA Sayuri·OMATA Takahisa
- 2B05 Preparation of Ca_{2-x}Ag_xAlMnO_{5+δ} and its oxygen absorption / desorption characteristics (Nagaoka University of Technology) ○TSUJI Shogo·OKAMOTO Tomochiro^{*}
- 2B06 *Intermission*

熱電・温度センサ

(10:30) (Chairman 松田晃史)

- 2B07 Thermoelectric Power Factor Enhancement in CuFeO₂ Ceramics by Texture Control (Keio University) ○Tato Masahiko·Shimonishi Rina·Hagiwara Manabu^{*}·Fujihara Shinobu
- 2B08 Fabrication and thermoelectric properties of Ca₃Co₄O₉ ceramics with controlled orientation and porosity (Keio University) ○SHIMONISHI Rina·HAGIWARA Manabu^{*}·FUJIHARA Shinobu^{*}
- 2B09 Study of wurtzite (Al,Ti)N thermistor materials on polyimide resin substrate (Mitsubishi Materials Corporation) ○SUZUKI Shunpei·FUJITA Toshiaki·CHIBA Hajime·SAKO Nagisa·NAGATOMO Noriaki
- 2B10 Development of Semi-conductive Nano-carbon/Ceramic Composite and Evaluation of Its Properties (Nagoya Institute of Technology) ○XIN Yunzi·KUMAZAWA Tomoshi·FUJI Masayoshi·NGUYEN Huu Hien·SHIRAI Takashi
- 2B11 Relationship between the flexibility and the microstructure of ceramic thin films on plastics substrates (Kansai University) KOZUKA Hiromitsu^{*}·○KUBOTA Masumi

04. Magnetic material

磁性薄膜

(14:30) (Chairman 松下伸広)

- 2B23 Spontaneous phase separation in strontium titanate thin film doped with cobalt ferrite by dynamic aurora PLD (Shizuoka University) ○TAKASHIMA Keisuke·SAKAMOTO Naonori (Tohoku University) KIGUCHI Takanori (Shizuoka University) KAWAGUCHI Takahiko (Tokyo Tech.) SHINOZAKI Kazuo (Shizuoka University) SUZUKI Hisao·WAKIYA Naoki*
- 2B24 Fabrication and orientation control of multilayered YbFe₂O₄/Fe₃O₄ films by sputtering method (Okayama University) NISHIMURA Kazuhiro·NAKANISHI Makoto·KANO Jun·IKEDA Naoshi·○FUJII Tatsuo
- 2B25 Improved tunnel magneto-dielectric properties of (Co-Fe)-(Mg-F) granular films by optimizing the composition of Co-Fe alloys (FRIS, Tohoku Univ.) ○CAO Yang·Hanae Kijima-Aoki (FRIS, Tohoku Univ.·DENJIKEN) Kobayashi Nobukiyo·Ohnuma Shigehiro (FRIS, Tohoku Univ.) Masumoto Hiroshi*
- 2B26 Fabrication of monolayer arrays with Fe₃O₄ nanocubes and evaluation of their magnetic property (Keio University) ○SHIMIZU Makoto·MATSUMOTO Riho·MIZOGUTI Tsuyoshi·Sato Tetsuya·Takasaki Mihiro·Oaki Yuya*·IMAI Hiroaki*
- 2B27 The Enhancement Magneto-optical Effect due to Au-Ag metal nanoparticles in Bismuth Iron Garnet (Nagoya Institute of Technology) ○ADACHI Nobuyasu·Ohashi Kouya·Ota Toshitaka

■■ March 25 (Mon) (Room C) ■■

07. Cement

管理・キャラクタリゼーション

(9:00) (Chairman 小泉公志郎)

- 2C01 Influence of storage condition on cement characteristics and properties (Taiheito Cement Corporation) ○NAKAGAWA yuta·KUROKAWA Daisuke·UCHIDA Syunichiro
- 2C02 Development of sludge water recycling system (Shimane University) ○ATARASHI Daiki (Hiroshima Area Concrete Cooperative Association) FURUI Hiroshi (Maruse) SUNADA Eiji (Kitagawa Corporation) KATSUBE Eiichi (DKK-TOA Corporation) TSUKADA Yuichi (Shimane University) ANDO Rie
- 2C03 Sealing of water of mortar hardened body by surface treatment using metal-EDTA complex solution (Nagaoka Univ. Tech.) ○KUDO Takuya·KOMATSU Keiji*·SAITOH Hidetoshi*·SHIMOMURA Takumi (Chubu Chelest Co., Ltd.·Nagaoka Univ. Tech.) NAKAMURA Atsushi (HONMA Corporation) HIRAIKE Tomohiro
- 2C04 Influence of CO₂ gas presence on chemical of hardened paste (Shimane University) ○yatsushiro daiki·atarashi daiki* (General Building Research Corporation of Japan) yoshida natsuki·okumura yuma
- 2C05 Improvement of mechanical properties of alumina cement castable at intermediate temperatures by the addition of silica sol (Nagoya Institute of Technology) ○Yamaguchi Keitaro·Hashimoto Shinobu*·Daiko Yusuke·Honda Sawao·Iwamoto Yuji (NIPPON STEEL & SUMITOMO METAL CORPORATION) Ikemoto Tadashi

混和材料

(10:15) (Chairman 大宅淳一)

- 2C06 Synthesis of Xonotlite in cement - slaked lime - quartzite system (Shimane University) ○Morimoto Yuta·Atarashi Daiki* (Sumitomo Metal Mining Siporex) Imasawa Kouiti·Horiguchi Masatoshi·Yamashita Taisuke
- 2C07 Reaction analysis of expanding additives in geo-polymer using fly ash and blast furnace slag (Shimane University) ○ATARASHI Daiki·NAKAMURA Shogo (DENKA) SHIMAZAKI Daiki·MORI Taiichiro·IGARASHI Karuma
- 2C08 Hydration reaction in FA cement added alkanolamine (Shimane University) ○SONG Hyeonjin·ATARASHI Daiki*·OZAWA Daichi·OSAKI Shuya (TAIHEIYO CEMENT CORPORATION) HOSOKAWA Yoshifumi (GCP Chemicals CO.,LTD) MIYAKAWA Miho
- 2C09 Initial Hydration Reaction Characteristics of Blast Furnace Cement Mixed with Ultrafine Blast Furnace Slag (Shimane University) ○SONG Hyeonjin·ATARASHI Daiki*·TANI Soma (DC CO.,LTD) YATAGAI Atsushi·NITO Nobukazu
- 2C10 Influence calcium nitrite on the hydration of blast furnace slag (Shimane University) ○Ohsaki Shuya·Atarashi Daiki*·Song Hyeonjin·Nakamura Shogo (Nissan Chemical CORPORATION) Sudo Yuji
- 2C11 Effect of chemical composition of slag on the autogenous shrinkage of Portland cement-blast furnace slag system (Maebashi Institute of Technology) ○SAGAWA Takahiro·IINUMA Yusuke

(11:45) (Chairman 小泉公志郎)

2C12 *Intermission*

部会特別講演

(13:30) (Chairman 三五弘之)

2C19B ★ (部会特別講演) Study of Cement Chemistry, and Establish of Enterprise Company (Nihon University) ○TSUYUKI Naomitsu

08. Pottery

上絵

(14:30) (Chairman 武内浩一)

- 2C23 Influence of concentration of hematite and constituent elements of lead-free frits on the microstructure of red overglaze enamels. (Kyoto Municipal Institute of Industrial Technology and Culture) ○INADA Hirofumi·Okazaki yuki·Arakawa Yuya·Takaishi Taigo (Okayama University) Fujii Tatuo·Takada Jun (Kogakuin University) Asoh Hidetaka·Hashimoto Hideki
- 2C24 Interaction between lead-free frit for ceramic ware and hydrothermally synthesized hematite under heat treatment. (Kogakuin University) ○Terasawa Akane (Kyoto Municipal Institute of Industrial Technology and Culture) Inada Hirofumi·Takaishi Taigo (Okayama University) Fujii Tatsuo (Kogakuin University) Hashimoto Hideki*·Asoh Hidetaka*

素地

(15:00) (Chairman 橋本英樹)

- 2C25 Why is stamp mill effective in pulverizing the Amakusa pottery stone? (Ceramic Research Center of Nagasaki) ○TAKEUCHI Koichi
- 2C26 Discrimination between cristobalite and quartz in the shivering-fractured porcelain body by EBSD method (Ceramic Research Center of Nagasaki) ○TAKEUCHI Koichi (Tohoku University) NAGASE Toshiro
- 2C27 *Intermission*

■ ■ March 25 (Mon) (Room D) ■ ■

13. Liquid phase process

成膜

(9:00) (Chairman 小島隆)

- 2D01 Oriented growth of COF crystals on metal-hydroxides thin film (Osaka Prefecture University) ○IKIGAKI Ken•OKADA Kenji•TOKUDOME Yasuaki•TAKAHASHI Masahide*(Graz University of Technology) Falcaro Paolo•(The University of Adelaide) Andrew Tarzia•Christian Doonan*
- 2D02 Solution processed Cu₂O films with high crystallinity at high deposition rate (Tokyo Institute of Technology) ○nitta ryousuke•kishi tetsuo•yano tetsuji•matsushita nobuhiro*
- 2D03 Synthesized Oxynitride Nanostructure Array Thin Films by Metal Organic Decomposition(MOD) Method (Osaka University) ○SUGAHARA Toru•ALIPOUR Leila•SUGANUMA Katsuaki•(Kyushu University) WATANABE Kosuke

(9:45) (Chairman 菅原徹)

- 2D04 Preparation of ZnO-LDH complex film with crystallite orientation by thermal decomposition and hydrolysis of layered double hydroxide thin film (Chiba University) ○UEKAWA Naofumi•KAWAKUBO RYO•YAMAMOTO MARIKO•SUN Lu•KOJIMA Takashi

コーティング

(10:00) (Chairman 菅原徹)

- 2D05 Preparation of nanostructured metal oxide materials via the dissolution-precipitation of metastable phases (Kansai University) ○UCHIYAMA Hiroaki•SUGIMOTO Saki•NAGAYASU Yuki

(10:15) Break

- 2D07 Patterned Films of Niobates Containing with Divalent Metal Ions (Kindai University) ○NOMA Naoki•TAKISUMI Munetaro
- 2D08 Metal oxide coating of inner wall of yttria-stabilized zirconia porous body using metal-EDTA complex aqueous solution (Nagaoka Univ.Tech.) NAKAMURA Yohei•(Chubu Chelest Co., Ltd•Nagaoka Univ.Tech.) NAKAMURA Atsushi•(Nagaoka Univ.Tech.) ○KOMATSU Keiji•SAITOH Hidetoshi

(11:00) (Chairman 岡田健司)

- 2D09 Synthesis of oxide nano structure formed by spin coating method (Nagaoka University of Technology) ○Saito Atsuhiko•Komatsu Keiji*•Saitoh Hidetoshi*(Chubu Chelest Co., Ltd•Nagaoka University of Technology) Nakamura Atsushi

膜特性

(11:15) (Chairman 岡田健司)

- 2D10 Fabrication and Solar Cell Characterization of Au Nanoparticles-Loaded Titania Film by Electrophoretic Deposition Process (Kanto Gakuin University) ○YATAGAWA Yuuki•KATO Nanami•HAMAGAMI Jun-ichi*
- 2D11 Solution-processed SnO₂ thin film for transparent and flexible humidity sensor (Tokyo Institute of Technology) ○Lin Hwaien•(Gunma University) Katayanagi Yuta•(Tokyo Institute of Technology) Kishi Tetsuo•Yano Tetsuji•Matsushita Nobuhiro*

14. Vapor phase process

部会特別講演

(13:30) (Chairman 中島章)

- 2D19B ★ (部会特別講演) Oxide nanoparticles prepared via plasma rapid cooling processes: phase selection, transformation and functionalization (Hosei University) ○ISHIGAKI Takamasa

13. Liquid phase process

光学特性

(14:30) (Chairman 高橋儀宏)

- 2D23 Preparation and Optical Properties of Gold Nanorods Using Liquid Phase Method (Kanto Gakuin University) ○KATO Nanami•HAMAGAMI Jun-ichi*
- 2D24 Preparation of porphyrin-based Metal-Organic Framework (MOF) oriented films and their optical properties (Osaka Prefecture University) ○OKADA Kenji•FUJII Shogo•TOKUDOME Yasuaki•TAKAHASHI Masahide•(Graz University of Technology) Falcaro Paolo•(The University of Adelaide) Doonan Christian
- 2D25 Fabrication and optical properties of barium titanate nanocube/polymer composite films (AIST) ○MIMURA Ken-ichi•KATO Kazumi

(15:15) (Chairman 上川直文)

- 2D26 H₂ Reduction Response of Pt/Y₂WO₆:Eu³⁺ Phosphor Particles for Sensing Application (Keio University) ○Ye Hong•(Keio University) Hagiwara Manabu•(Keio University) Fujihara Shinobu*

結晶成長

(15:30) (Chairman 上川直文)

- 2D27 Growth of perovskite-type oxynitride BaTaO₂N small crystals in BaCN₂ melt (Hokkaido University) ○HOSONO Akira•MASUBUCHI Yuji*•HIGUCHI Mikio•KIKKAWA Shinichi

■ ■ March 25 (Mon) (Room F) ■ ■

15. Process of powder

粒子合成1

(9:00) (Chairman 橋本忍)

- 2F01 Fabrication of Fe_3O_4 supported BaTiO_3 particles through spray drying method (Nagoya Institute of Technology) ○XIE Di•FUCHIGAMI Teruaki•KAKIMOTO Ken-ichi*
- 2F02 Development of Micro-flowreactor high-throughput screening system for Noble Metal Hybrid nanoparticles (National Institute of Advanced Industrial Science and Technology) ○NAKAMURA Hiroyuki•TAKEBAYASHI Yoshihiro•ONO Takumi•YODA Satoshi•SUE Kiwamu
- 2F03 Development of Micro-flowreactor high-throughput screening system for Hybrid Rh Nanoparticle Synthesis (National Institute of Advanced Industrial Science and Technology) ○NAKAMURA Hiroyuki•(Toyota Motors) NAGATA Naoto•(National Institute of Advanced Industrial Science and Technology) TAKEBAYASHI Yoshihiro•ONO Takumi•YODA Satoshi•SUE Kiwamu
- 2F04 Formation of tantalum oxynitride whiskers under high pressure and temperature (Venture Business Laboratory, Nagoya University) ○Gaida Nico Alexander*•(Nagoya University) Hirozawa Masaki•(National Institute of Advanced Industrial Science and Technology (AIST)) Liu Zheng•(Nagoya University) Ohsuna Tetsu•Niwa Ken•Sasaki Takuya•Hasegawa Masashi

粒子合成2

(10:00) (Chairman 中村浩之)

- 2F05 Self-Combustion Synthesis of Manganese Molybdenum Nitrides (Hokkaido University) ○MIURA Akira•ODAHARA Jin•Nataly Carolina Rosero-Navarro•TADANAGA Kiyoharu•(University of Yamanashi) NAGAO Masanori•TANAKA Isao
- 2F06 Combustion synthesis of Al_4SiC_4 powders (Nagoya Institute of Technology) ○KAMIYA Ryosuke•HASHIMOTO Shinobu*•(National Institute of Advanced Industrial Science and Technology) HYUGA Hideki•NAKASHIMA Yuki•(Nagoya Institute of Technology) HONDA Sawao•DAIKO Yusuke•IWAMOTO Yuji
- 2F07 New Synthetic Route of Layered Mixed Anion Compound TiNCl (Kyushu Institute of Technology) ○Tanaka Masashi•(Hiroshima University) Yamanaka Shoji

(10:45) Break

固溶体

(11:00) (Chairman 脇原徹)

- 2F09 Synthesis of novel $\text{Zr}_x\text{Ti}_{3-x}\text{SiC}_2$ MAX phase solid solutions (Tokyo Institute of Technology) ○Gubarevich Anna•Maletaskic Jelena•Yoshida Katsumi
- 2F10 Negative thermal expansion induced by ferroelectric to paraelectric phase transition in $\text{BiInO}_3\text{-BiZn}_{1/2}\text{Ti}_{1/2}\text{O}_3$ solid solutions (Tokyo Institute of Technology) ○NISHIKUBO Takumi•OGATA Takahiro•SAKAI Yuki•AZUMA Masaki*

バルク体

(11:30) (Chairman 脇原徹)

- 2F11 Fabrication and evaluation of thermal conductivity of non-firing ceramics using the silicon carbide powders (Nagoya Institute of Technology) ○Hori Masahiro•(The University of Gifu) Takai Chika•(Nagoya Institute of Technology) Hadi Razavi-Khosroshahi•Ishihara Masahiro•Honjo Yumiko•Fuji Masayoshi*
- 2F12 Analysis of densification behavior in final sintering stage of nano-sized zirconia powder (National Institute for Materials Science) ○KIM Byung-nam•SUZUKI Toru•MORITA Koji•YOSHIDA Hidehiro•LI Ji-Guang•(Tohoku University) MATSUBARA Hideaki

■ ■ March 25 (Mon) (Room G) ■ ■

06. Material related to living body

企業研究フロンティア講演

(9:00) (Chairman 大矢根綾子)

2G01F ★ (企業研究フロンティア講演) Development of CaCO₃ Ceramics designed tobiomaterials (Shiraishi Central Laboratories Co., Ltd.)
○UMEMOTO Shota

形態制御

(9:30) (Chairman 大矢根綾子)

- 2G03 Fabrication of nanostructured surfaces with calcite nanorods (Keio University) ○TAGO Makoto・TAKASAKI Mihiro・OAKI Yuya*・IMAI Hitoaki*
- 2G04 Fabrication of anisotropically-controlled ceramics by templated grain growth method using strontium apatite single crystal fibers (Meiji University) ○KOIZUMI Haruna・YOSHIDA Syuhei・(Organization for the Strategic Coordination of Research and Intellectual Property, Meiji University) YOKOTA Tomohiro・(Meiji University) AIZAWA Mamoru*
- 2G05 Preparation of carbonated hydroxyapatite nanoparticles and its application to micrometer-scale design (Keio University) ○HAGIWARA Yuki・TAKASAKI Mihiro・OAKI Yuya*・IMAI Hiroaki*

(10:15) Break

プロセス

(10:30) (Chairman 相澤守)

- 2G07 Adsorption property of dye on needle-like hydroxyapatite crystal synthesized by solvothermal method (Osaka University) ○GOTO Tomoyo・CHO Sung Hun・(Nagoya University) OHTSUKI Chikara・(Osaka University) SEKINO Tohru
- 2G08 Impacts of alternating-current electric fields on electrolytic deposition of calcium phosphate (Okayama University) ○YOSHIOKA Tomohiko・HARUKI Shun・HAYAKAWA Satoshi
- 2G09 Introduction of Inorganic Ion to Titanium Substrates Decorated with Layered Phosphate Compounds (Nagoya University) ○NAKAMURA Jin・KANAOKA Hiroaki・SUGAWARA-NARUTAKI Ayae・OHTSUKI Chikara
- 2G10 Fluoride-incorporated apatite coating on human dentin by laser irradiation in supersaturated solution (National Institute of Advanced Industrial Science and Technology (AIST)) ○OYANE Ayako・SAKAMAKI Ikuko・NAKAMURA Maki・KOGA Kenji・(Hokkaido University) SHITOMI Kanako・MAYUMI Kayoko・MIYAJI Hirofumi
- 2G11 *Intermission*

部会特別講演

(13:30) (Chairman 菊池正紀)

2G19B ★ (部会特別講演) Calcium phosphate cement and intercalation compound complexed with carboxylate ions —encounter and progress—
(Former Kogakuin University) ○MONMA Hideki

リン酸カルシウム

(14:30) (Chairman 横井太史)

- 2G23 Structure and NMR Spectra of Octacalcium Phosphate with Isophthalic Acid Incorporated in the Interlayers (Yamaguchi University) ○FUJIMORI Hirotaka*・ARISUDA Yudai
- 2G24 Effect of ion concentration on albumin adsorption onto octacalcium phosphate (Tohoku University) ○HAMAI Ryo・TSUCHIYA Kaori・SUZUKI Osamu*
- 2G25 The effect of collagen concentration in preparation process on mechanical properties of octacalcium phosphate/collagen composites (Tohoku University) ○YASUDA Ayato・KAMITAKAHARA Masanobu・YANAGISAWA Toshiki・KAWASHITA Masakazu・KAMAKURA Shinji*
- 2G26 Anisotropic crystal growth of dicalcium phosphate dihydrate by micro-mist mixing method (National Institute of Technology, Toyama College) ○TOSHIMA Takeshi・YAMASHITA Daisuke・TAKAMATSU Saori・TAFU Masamoto

(15:30) (Chairman 菊池正紀)

2G27 *Intermission*

■ ■ March 25 (Mon) (Room H) ■ ■

09. Environment and material related to resource

光触媒(CO₂還元)

(9:00) (Chairman 勝又健一)

- 2H01 Adjustment of surface basicity of ZnGa₂O₄ photocatalyst for highly selective conversion of CO₂ in H₂O (Osaka Prefecture University)
○takemoto masanori•tokudome yasuki* (Kyoto University) teramura kentaro•kikkawa shouichi•tanaka tsunehiro•(Osaka Prefecture University) okada kenji*•takahashi masahide*

光触媒(水分解)

(9:15) (Chairman 勝又健一)

- 2H02 Photon up-conversion via triplet-triplet annihilation of Ru(dmb)₃²⁺ and diphenylanthracene at 2D interlayer space of Montmorillonite (The University of Tokyo) ○Kishimoto Fuminao•Wakihara Toru•Okubo Tatsuya
- 2H03 Preparation of silver-titania nanotube arrays nanocomposite photoelectrode and its water splitting performance (Toyohashi University of Technology) ○FUJITA Kosuke•KAWAMURA Go*•MUTO Hiroyuki•MATSUDA Atsunori*
- 2H04 Effects of intermetallic compound Mg_{1-x}Al_xB₂ co-catalysts on photocatalytic water splitting. (Hiroshima University) ○IMADA Yuka•NAGATA Yuki•INUMARU Kei*

(10:00) (Chairman 柳田さやか)

- 2H05 Preparation and Characterization of GaN:ZnO by Using Various Nitriding Agents (Hiroshima University) ○FUJII Yuki•HAYASHI Yuki•KATAGIRI Kiyofumi*•INUMARU Kei* (Hokkaido University) MASUBUCHI Yuji•(Kyoto University) KINOSHITA Seiji•NODA Yasuto•(Tokyo Institute of Technology) MIYOSHI Akinobu•MAEDA Kazuhiko

光触媒(TiO₂関連)

(10:15) (Chairman 柳田さやか)

- 2H06 Activity enhancement effects of molecular adsorption for mesoporous silica-TiO₂ particles nanocomposite photocatalyst (Hiroshima University) SADAMORI Saki•KUNISAKI Yusuke•KATAGIRI Kiyofumi•○INUMARU Kei
- 2H07 Synergetic effect observed in the water treatment with mesoporous TiO₂/BDD hybrid electrode (Tokyo University of Science) ○SUZUKI Norihiro•HARA Aiga•HIRANO Yui•NAKABAYASHI Yukihiko•ROY Nitish•TERASHIMA Chiaki•NAKATA Kazuya•KATSUMATA Ken-ichi•KONDO Takeshi•YUASA Makoto•FUJISHIMA Akira•(ORC Manufacturing Co., Ltd.) OKAZAKI Akihiro•KURIYAMA Haruo•SERIZAWA Izumi
- 2H08 Effect of Na ions doping on the crystallization behavior and the photocatalytic activity of titania thin film (Tokyo University of science) ○SUZUKI Takehiro•IWASAKI Kenichiro•NAKANISHI Takayuki•YASUMORI Atsuo*

(11:00) (Chairman 岩崎謙一郎)

- 2H09 Decomposition of 2-naphthol in water by a metal mesh with MnO_x modified TiO₂ in dark and under visible light (Tokyo Institute of Technology) ○Tanaka Daichi•Isobe Toshihiro•Matsushita Sachiko•Nakajima Akira*
- 2H10 Simple process for direct formation of photocatalytic anatase-type TiO₂ (Sanyo-Onoda City University) ○TSUJIKURA KEIKO•DEGUCHI MASASHI•ISHIKAWA TOSHIHIRO*
- 2H11 *Intermission*

(13:30) (Chairman 井須紀文)

- 2H19B ★ (部会特別講演) Development of wet classification processes using microfiltration membranes (Kogakuin University) ○AKAMATSU Kazuki

分離膜

(14:30) (Chairman 磯部敏宏)

- 2H23 Development of MFI zeolite membrane on the non-ceramic porous substrate (Toshiba Corporation) ○SAITO Hitomi•HARADA Kouichi•YAGI Ryosuke•YONETSU Maki•FUKUDA Yumi•IMADA Toshihiro•(Toshiba Materials Co., Ltd.) SUENAGA Seiichi•(The University of Tokyo) OKUBO Tatsuya
- 2H24 Preparation and separation property of organic-inorganic hybrid oxygen separation membranes (Kobe University) ○KURAOKA Koji•MORIYAMA Kazuto

分離・回収

(15:00) (Chairman 磯部敏宏)

- 2H25 CO₂ release behaviors of layered double hydroxide nanoparticles in repeated adsorption-desorption cycles (Hiroshima University) ○Kawashimo Mio•Okuda Ayaka•Katagiri Kiyohumi*•Inumaru Kei*
- 2H26 Effect of Al substitution in oxygen storage material LaNi_{1-x}Al_xO₃ with perovskite structure (Toyota Central R&D Labs., Inc.) ○GOTO Yoshihiro•MORIKAWA Akira•TANABE Toshitaka•IWASAKI Masaaki
- 2H27 Oxygen storage property of Sr₂Fe₂O_{7-δ} doped by other transition metals (Kyoto University) ○HOSOKAWA Saburo•BEPPE Kosuke•ASAKURA Hiroyuki•TERAMURA Kentaro•TANAKA Tsunehiro

■ ■ March 25 (Mon) (Room J) ■ ■

10. Material related to energy

SOFC2

(9:00) (Chairman 西本俊介)

- 2J01 Design of high quality anode in IT-SOFC using small amount of FeO_x or MnO_x (NIMS) ○MORI Toshiyuki・SUZUKI Akira・OHKUBO Hiroshi・ISAKA Noriko・(QST) YAMAMOTO Shunya・(Tsuruoka KOSEN) ITO Shigeharu
- 2J02 Active site formation on the anode and improvement of anode performance of IT-SOFC by addition of mixed conducting promotor (NIT,Tsuruoka college) ○ITO Shigeharu・SATO Fumitaka・SATO Takaya・(NIMS) MORI Toshiyuki・SUZUKI Akira・OKUBO Hiroshi・ISAKA Noriko・(QST) YAMAMOTO Shunya
- 2J03 Development of Self-Expanding Vermiculite/talc Gas Sealing Composite Not Depending on Substrate Roughness (Shizuoka University) ○XU Jie・SUDA Seichi*
- 2J04 Lanthanum inter-diffusion of LSM/CeO₂ nanocomposite cathode (Shizuoka University) ○SAKUMA Haruka・SUDA Seichi*・(National Institute for Materials Science) HASE Masashi

(10:00) (Chairman 藤井孝太郎)

- 2J05 First principle study of electron density in La₂NiO_{4+δ} (Kumamoto University) ○Nakamura Eri・(Kyushu Sangyo University) Misawa Masaaki・(Kumamoto University) Shimajo Fuyuki・Matsuda Motohide*
- 2J06 Si site substitution and average and local structural analysis of lanthanum silicate based oxide ion conductor (Tokyo University of Science) ○UEHARA Takuya・KITAMURA Naoto*・ISHIDA Naoya・IDEMOTO Yasushi
- 2J07 Long-term Stability of Solid Oxide Electrolysis Cells (3) (Toshiba Energy Systems&Solutions Corporation) ○OSADA Norikazu・KAMEDA Tsuneji

PCFC・ITFC

(10:45) (Chairman 森利之)

- 2J08 Crystal structures and protonic conductivities in Sr₂(Ti_{1-x}M_x)O_{4-δ} (M=Fe, Al) (Nagoya Institute of Technology) ○YAGI Yutaro・KAGOMIYA Isao*・KAKIMOTO Ken-ichi
- 2J09 Electrochemical Properties of Layered Perovskite LaSr₃Fe₃O_{10-2δ}(OH)_{2δ}・xH₂O (Nagoya Institute of Technology) ○Matsue Ikuya・Kagomiya Isao*・Kakimoto Kenichi
- 2J10 Hydride Conduction in Fluorite-Type LnHO with anion order-disorder transition (Kyoto University) ○Ubuakta Hiroki・Broux Thibault・Kageyama Hiroshi*・(Institute for Molecular Science) Takeiri Fumitaka・Kobayashi Genki

リチウムイオン二次電池／正極材料 1

(11:30) (Chairman 石田直哉)

- 2J11 Transient Analysis for Li insertion/removal reaction in LiMn₂O₄ electrode by Laplace Transform Impedance method (Nagoya Institute of Technology・ESICB-Kyoto Univ.) ○TANIBATA Naoto*・(Nagoya Institute of Technology) MORIMOTO Riku・NAKANO Koki・NISHIMURA Norimitsu・(Nagoya Institute of Technology・ESICB-Kyoto Univ.・National Institute for Materials Science) NAKAYAMA Masanobu*
- 2J12 Surface structure degradation of lithium ion battery cathodic thin films during electrochemical cycling (Japan Fine Ceramics Center) ○IKUHARA Yumi・Gao Xiang・Fisher Craig・Kuwabara Akihide・Moriwake Hiroki・(Toyota Motor Corporation) Kohama Keiichi・(Japan Fine Ceramics Center) Ikuhara Yuichi
- 2J19A ★ [The 72nd CerSJ Awards] Research on oxide-type solid electrolyte and electrode active materials (National Institute of Advanced Industrial Science and Technology (AIST)) ○KATAOKA Kunimitsu
- 2J21 Measurement of cathode nanowires for Li-ion batteries by scanning transmission X-ray microscopy (National Institute of Advanced Industrial Science and Technology・AIST-UTokyo Advanced Operando-Measurement Technology Open Innovation Laboratory) ○HOSONO Eiji・ASAKURA Daisuke・(Institute for Molecular Science) Yuzawa Hayato・(The University of Tokyo) AKADA Keishi・(AIST-UTokyo Advanced Operando-Measurement Technology Open Innovation Laboratory・The University of Tokyo) HARADA Yoshihisa・(Institute for Molecular Science・SOKENDAI) OHIGASHI Takuji
- 2J22 Observation of domain structure formed by the ordering of Mn and Ni atoms in LiMn_{1.5}Ni_{0.5}O₄ (Sumitomo Metal Mining Co., Ltd.) ○OKAMOTO Ryosuke・SUZUKI Naomi・MATSUMOTO Satoshi・HAYASHI Kazuhide・(Tohoku University) TSUDA Kenji・TERAUCHI Satoshi

(14:30) (Chairman 片岡邦光)

- 2J23 Electrochemical properties of structure-controlled NCA cathode materials for Li ion battery (Sumitomo Metal Mining Co., Ltd.) ○Ogawa Takahiro・Matsuura Yoshiyuki・Ryoshi Kazuomi
- 2J24 Charge-discharge behavior of lithium ion battery using anisotropic Nb₂O₅ nanoparticles as electrode (Nagoya Institute of Technology) ○FUCHIGAMI Teruaki・YAMAMOTO Hayato・MORIMOTO Riku・TANIBATA Naoto・NAKAYAMA Masanobu・KAKIMOTO Ken-ichi
- 2J25 Evaluation for Electrochemical Properties of Hydrothermal-synthesized LiMn_{1-x}Fe_xPO₄ for Li-ion Batteries (Tokyo Metropolitan University) ○Matsuzawa Masaki・Kanamura kiyoshi*
- 2J26 Electrochemical Estimation of Composite Cathode with Ionic Liquid for Solid-State Lithium Battery (Tokyo Metropolitan University) ○SHOJI Mao・Hommo Katsuya・Munakata Hirokazu・Kanamura Kiyoshi
- 2J27 *Intermission*

■ ■ March 25 (Mon) (Room K) ■ ■

01. Engineering ceramics

CMC1

(9:00) (Chairman 檜木達也)

- 2K01 Evaluation of mechanical properties of Al_2O_3/Al_2O_3 using fiber bundle composites (Tokyo university of science) ○YAMAMOTO Shohei•(JAXA Institute of Space and Astronautical Science) GOTO Ken*•(Tokyo university of science) KOGO Yasuo•INOUE Ryo
- 2K02 Fracture mechanism of Short Fiber Type C/SiC under Compression (Graduated University for Advanced Studies) ○TOBATA Yuta•(Japan Aerospace Exploration Agency) GOTO Ken*
- 2K03 repairation of SiC/SiC minicomposite with ZrO_2 interface and evaluation of interfacial mechanical properties (Tokyo university of science) ○IKEDA Kenyu•(JAXA) GOTO Ken*•(Tokyo university of science) KOGO Yasuo•INOUE Ryo•(Yokohama National University) ITO Akihiko•IKAI Masakazu
- 2K04 Spark plasma sintering of C/SD-coated SiC fiber (Ryukoku Univwersity) ○TABATA Shohei•IKOMA Yasuaki•MIYAZAKI Shouta•SHIRAI Kenshiro•OHYANAGI Manshi*

CMC2

(10:00) (Chairman 後藤健)

- 2K05 High Temperature Mechanical Properties of BN Particle dispersion SiC Composites (Kyoto University) ○HINOKI Tatsuya•KAWASAKI Kanjiro•SHINODA Fujio•(Kobe Material Testing Laboratory Co., Ltd.) TSURUI Norihito•HOKARI Shota
- 2K06 Microstructure and Strength Evaluation of SiC/SiC Composite Fabricated by Film Boiling Method (Tokyo University of Agriculture and Technology) ○Asakura Yuki•Ogasawara Toshio•(JAXA) Aoki Takuya•(IHI AEROSPACE Co., Ltd.) Soeda Haruhiko•Uda Michimasa•(S&T Composite giken) Yamauchi Hiroshi
- 2K07 Fabrication of tensile test specimens of unidirectional SiC fiber-reinforced composites by melt infiltration (Tokyo Institute of Technology) ○TSUNOURA TORU•YOSHIDA KASTUMI*•YANO TOYOHICO•(Tokyo University of Science) HAYAMA NAOKI•SAWAHIRAKI TAKAYA•(Japan Aerospace Exploration Agency) AOKI TAKUYA•(Tokyo University of Agriculture and Technology) OGASAWARA TOSHIO
- 2K08 The property evaluation of CMC manufactured by the MI process using the controlled Si infiltration (ibiden) ○SATO Emiko•ITO Takashi•KAWAGUCHI Akihide

(11:00) (Chairman 北岡諭)

- 2K09F ★ (企業研究フロンティア講演) Research and development of CMC for aircraft engine applications (IHI Corporation) ○KOTANI Masahiro•NAKAMURA Takeshi

2K11 *Intermission*

(13:30) (Chairman 水野賢一)

- 2K19B ★ (部会特別講演) Structure Control and Additive Manufacturing of Ceramics (National Institute of Advanced Industrial Science and Technology (AIST)) ○OHJI TATSUKI

コーティング

(14:30) (Chairman 且井宏和)

- 2K23 Effect of Microstructure of Y_2O_3 coatings on their Plasma Corrosion Behavior (TOTO Ltd•Tokyo Institute of Technology) ○ASIZAWA Hiroaki•(TOTO Ltd) KIYOHARA Masakatsu•(Tokyo Institute of Technology) YOSHIDA Katsumi
- 2K24 Investigation of factors affecting thermal conductivity of Al_2O_3 film prepared by aerosol deposition method (NIPPON STEEL & SUMITOMO METAL CORPORATION) ○TOKUHASHI Keisuke•KIMURA Keiichi•KOBAYASHI Takayuki
- 2K25 Microstructure control of Yb_2SiO_5 layer prepared by double electron beam PVD (Japan Fine Ceramics Center) ○YAMAGUCHI Norio•YOKOI Taishi•YOKOE Daisaku•KITAOKA Satoshi•TAKATA Masasuke

(15:15) (Chairman 吉田克己)

- 2K26 Crystal orientation and microstructure of lanthanum phosphate by chemical vapor deposition (National Institute of Advanced Industrial Science and Technology) ○KATSUI Hirokazu•KONDO Naoki
- 2K27 Synthesis of ceramic matrix composites with (Y, Eu) -EDTA complex and Er-EDTA complex (Nagaoka Univ. Tech.) ○Kikuchi Taito•(Chubu Chelest Co., Ltd. •Nagaoka Univ. Tech.) Nakamura Atsushi•(Nagaoka Univ. Tech.) Komatsu Keiji*•Saitoh Hidetoshi*

■ ■ March 25 (Mon) (Room L) ■ ■

05. The glass photonics material

結晶化ガラス

(14:30) (Chairman 篠崎健二)

- 2L23 Effect of nucleating agent on crystallization behavior of glass in CaO-Al₂O₃-SiO₂ system (Tokyo university of science) ○KATO Shunsuke・YASUMORI Atsuo*・NAKANISHI Takayuki・IWASAKI Kenichiro・(AGC Inc.) MAEDA Kei
- 2L24 Crystallization behavior and electrical properties of Na₂Mn_xFe_{1-x}SiO₄ glass (Nagaoka University of Technology) ○TERASAWA Miyuri・HONMA Tsuyoshi*・KOMATSU Takayuki

(15:00) (Chairman 本間剛)

- 2L25 Crystallization of Anatase type TiO₂ in B₂O₃-TiO₂-SrO glasses (National Institute of Technology, Niihama College) ○NITTA Atsumi・FUKUDA Mana・TSUTSUMI Chikara・(Nagaoka University of Technology) SAITO Nobuo
- 2L26 Glass structures of BaF₂-ZnO-B₂O₃ glasses and the mechanism of nanocrystallization (AIST) ○SHINOZAKI Kenji・AKAI Tomoko・(Osaka Univ.) ISHII Yoshiki・(Tohoku Univ.) SUKENAGA Sohei・SHIBATA Hiroyuki・(JASRI) OHARA Koji
- 2L27 *Intermission*

■ ■ March 25 (Mon) (Room M) ■ ■

05. The glass photonics material

励起子発光

(9:00) (Chairman 黒澤俊介)

- 2M01 Stimulated emission, gain, and exciton binding energy in ZnO micrometer-thick films (Kobe University) ○FUJII Shusuke・(National Institute for Material Science) ADACHI Yutaka・(Kobe University) UCHINO Takashi*
- 2M02 Correlation between the intrinsic luminescence intensity and the modulated structure in (Ca_{1-x}Sr_x)₂Al₂SiO₇ and (Ca_{1-x}Sr_x)MgSi₂O₇ melilite crystals (Akita University) ○KODAMA Nobuhiro*・KUBOTA Hisanori・INOUE Takuya・TAKAHASHI Tomoko
- 2M03 Energy transfer from the self-trapped exciton and inhomogeneous broadening of the Ce³⁺ luminescence in (Y_{1-x}Ln_x)Sc(BO₃)₂:Ce³⁺ (Ln=Lu, La) (Akita University) TAKAHASHI Tomoko・○KODAMA Nobuhiro*・UEMATSU Toru・INOUE Takuya
- 2M04 Synthesis and luminescence properties of layered mixed-anion compounds with perovskite-like oxide layer (National Institute of Advanced Industrial Science and Technology) ○IWASA Yuki・SONG Dongjoon・OGINO Hiraku・(Osaka University) YAMANOI Kohei・Agulto Verdad C.・SHIMIZU Toshihiko・SARUKURA Nobuhiko・(Kyoto University) UEDA Jumpei・TANABE Setsuhisa・(Japan Advanced Institute of Science and Technology) HONGO Kenta・MAEZONO Ryo

(10:00) Break

SHG

(10:15) (Chairman 正井博和)

- 2M06 Flux crystal growth, structure, and 2nd harmonic generation response of a new zinc oxysulfide SrZn₂S₂O (National Institute for Materials Science・University of South Carolina) ○TSUJIMOTO Yoshihiro・(University of South Carolina) Juillerat Christian・(University of Houston) Zhang Weiguo・(Tokyo Institute of Technology) Fujii Kotaro・Yashima Masatomo・(University of Houston) P. Shiv Halashamani・(University of South Carolina) zur Loye Hans-Conrad
- 2M07 Pockels and second-order nonlinear optical constants in perfectly-surface-crystallized glass-ceramics (Tohoku University) TAKANO Kazuya・FUNAJIMA Kosuke・○TAKAHASHI Yoshihiro・YAMAZAKI Yoshiki・TERAKADO Nobuaki・FUJIWARA Takumi

蛍光体(遷移金属)

(10:45) (Chairman 鱒淵友治)

- 2M08 Valence-states of Mn and Luminescence Properties for Red-emitting Li₂TiO₃:Mn⁴⁺ Phosphor Prepared by Sol-gel method (Kochi University) ○HASEGAWA Takuya・NISHIWAKI Yoshinori・FUJISHIRO Fumito・UEDA Tadaharu
- 2M09 Cr³⁺-doped Bi₂Al₄O₉: Temperature and Pressure Sensing Investigation (Kyoto University) ○Back Michele*・Hua Hansen・Ueda Jumpei・Tanabe Setsuhisa
- 2M10 Ratiometric Optical Thermometer Based on Exchange-Coupled Cr³⁺ pairs in LaAlO₃ (Kyoto University) ○Xu Jian*・Murata Daisuke・Back Michele・Ueda Jumpei・Tanabe Setsuhisa

ストレージ蛍光体

(14:30) (Chairman 上田純平)

- 2M23 Deep-trap persistent luminescence materials for optical information storage applications (Xiamen University) ○ZHUANG Yixi*・XIE Rong-Jun
- 2M24 Temperature dependence and afterglow property of red emitting BaCN₂:Eu²⁺ (Hokkaido University) NISHITANI Sayaka・○MASUBUCHI Yuji・HIGUCHI Mikio
- 2M25 Effect of Glass Composition on Persistent Luminescence Properties of Monoclinic-ZrO₂/Glass composites (Tokyo University of Science) ○Yoshikawa Kohei・Iwasaki Kenichiro・Nakanishi Takayuki・Yasumori Atsuo*・(Daiichi Kigenso Kagaku Kogyo Co., LTD) Iwakura Fumitaka・Nakajima Yasushi
- 2M26 Thermally stimulated luminescence by X-ray irradiation in zinc phosphate glasses (National Institute of Advanced Industrial Science and Technology) ○MASAI Hirokazu・(Kanazawa Institute of Technology) OKADA Go・(Nara Institute of Science and Technology) KAWAGUCHI Noriaki・YANAGIDA Takayuki

■ ■ March 25 (Mon) (Room N) ■ ■

05. The glass photonics material

ガラスの機械的強度

(9:30) (Chairman 北村直之)

- 2N03 Development of local stress evaluation method in chemically strengthened glass by using micro-Raman spectroscopy (Tohoku University) SASAKI Ryusei • ○TERAKADO Nobuaki • TAKAHASHI Yoshihiro • FUJIWARA Takumi • (Orihara Industrial) ORIHARA Shuji • ORIHARA Yoshio
- 2N04 Syntheses and mechanical properties of Al_2O_3 - M_xO_y - Ta_2O_5 glasses ($M_xO_y = Nb_2O_5, Ga_2O_3, Y_2O_3$) (Hirosaki University) ○Mikami Yuuki • Masuno Atsunobu* • (The University of Tokyo) Yanaba Yutaka • Inoue Hiroyuki
- 2N05 Fracture behavior of glass-ceramics with plate-like crystals (AGC Inc.) ○Akatsuka Kosho • Maeda Kei • (Tokyo University of Science) Iwasaki Kenichiro • Nakanishi Takayuki • Yasumori Atsuo
- 2N06 In-situ evaluation of indentation-induced stress distributions in metaphosphate glasses (The University of Shiga Prefecture) ASAI Keisuke • ○YOSHIDA Satoshi • YAMADA Akihiro • MATSUOKA Jun • (Trenz Electronic, GmbH) Errapart Andrei • (Rutgers University) Kurkjian Charles

(10:30) Break

ガラスの接合

(10:45) (Chairman 寺門信明)

- 2N08 Direct bonding and its mechanism of bioactive glass thin film on titanium plate (Tokyo Institute of Technology) ○LIU Yin • Jeng Ray-Jay • Kishi Tetsuo • Yano Tetsuji*
- 2N09 Mechanism of direct bonding of tellurite glass thin film with substrate (Tokyo Institute of Technology) ○Ray-Jay Jeng • Tetsuo Kishi* • Nobuhiro Matsushita • Tetsuji Yano*

カルコゲナイドガラス

(11:15) (Chairman 寺門信明)

- 2N10 Creep behavior of Ge-Sb-Se glass around the deformation temperature (National Institute of Advanced Industrial Science and Technology) ○KITAMURA Naoyuki
- 2N11F ★ [Frontiers] Development of IR transmitting glass (Nippon Electric Glass Co., Ltd.) ○SATO Fumio

部会特別講演

(13:30) (Chairman 井上博之)

- 2N19B ★ (部会特別講演) Structural randomness and photonic and electronic properties (Tokyo Institute of Technology) ○HOSONO Hideo

■ ■ March 26 (Tue) (Room C) ■ ■

16. Characterization

材料特性

(9:30) (Chairman 西堀麻衣子)

- 3C03 Thermoporometry of Large Pores using Organic Liquid (Tokyo Metropolitan University) MIYASAKA Ryosuke • ○TAKEI Takashi* • YANAGISHITA Takashi • MASUDA Hideki
- 3C04 Evaluation of released amount of hydrogen after high pressure hydrogen loading in nanoporous carbon (NPC) fabricated from rice husk (Nagaoka Univ. Tech.) ○YAMAZAKI Motoaki • LI Heng • KOMATSU Keiji* • SAITOH Hidetoshi* • (Fuse Technonet) TSUDA Yoshinori
- 3C05 Thermally insulating properties of oxide films with different porosities by chelate flame method (Nagaoka university of technology) ○DAN Yanxin • (Chubu chelest co., ltd. • Nagaoka university of technology) NAKAMURA Atushi • (Nagaoka university of technology) KOMATSU Keiji • SAITOH Hidetoshi*

(10:15) Break

計算科学

(10:30) (Chairman 小野寺陽平)

- 3C07 First-principles Study of Complex Defects and Ionic Conduction in Na-doped Carbonated Apatite (Osaka University • Japan Fine Ceramics Center • National Institute for Materials Science) ○SHITARA Kazuki • (Tokyo University of Science) TANAKA Yumi
- 3C08 Theoretical investigation of surface charge on hydroxyapatite (Nagoya University) ○SAITO Tatsushi • YOKOI Tatsuya • NODA Yusuke • NAKAMURA Atsutomu • (Nagoya University • JFCC) MATSUNAGA Katsuyuki*
- 3C09 Structure searches in R-Ti-O systems using *ab initio* calculations and an artificial neural network potential (Japan Fine Ceramics Center) ○Matsumoto Ushio • Ogawa Takafumi • Fisher Craig • Kitaoka Satoshi • (Gifu University) Asai Kenta • (Japan Fine Ceramics Center • National Institute for Materials Science) Moriwake Hiroki

量子ビーム計測

(11:15) (Chairman 森分博紀)

- 3C10 Structure of Na-P-S ionic conductors using quantum beam experiment and structure modelling (Kyoto University) ○ONODERA Yohei • NAKASHIMA Hiroshi • FUKUNAGA Toshiharu
- 3C11 Application of multiscale analysis to the structural study for solid oxide fuel cells (Ibaraki University) ○TAKAHASHI Haruyuki • INADA Takumi • NODA Yohei • KOIZUMI Satoru • ISHIGAKI Toru • (Japan Atomic Energy Agency) YOSHIDA Yukihiko • (National Institute of Advanced Industrial science and Technology) ISHIYAMA Tomohiro • KISHIMOTO Haruo
- 3C12 *Intermission*

■ ■ March 26 (Tue) (Room D) ■ ■

13. Liquid phase process

蛍光体

(9:00) (Chairman 上野慎太郎)

- 3D01 Novel development of luminescent apatite nanocrystals containing citric acid (Nagaoka University of Technology·Japan Society for the Promotion of Science) ○KATAOKA Takuya·(Nagaoka University of Technology) TAGAYA Motohiro*
- 3D02 Effects of H₂ flow rates in H₂-O₂ flame on Ca-Al-O: (Eu, Nd) phosphors synthesized on mortar hardened body (Nagaoka University of Technology) KIMURA Tetsuro·(Chubu Chelest Co., Ltd.·Nagaoka University of Technology) NAKAMURA Atsushi·(Nagaoka University of Technology) ○KOMATSU Keiji·SAITOH Hidetoshi
- 3D03 Synthesis of Functional Inorganic Materials below 473 K (Niigata University·N-Luminescence Corp.) ○TODA Kenji

低温プロセス

(9:45) (Chairman 黒田義之)

- 3D04 Cleavage and grain growth of calcite nanocrystals at a low temperature under dry and wet conditions (Keio University) ○TAKASAKI Mihiro·OAKI Yuya·IMAI Hiroaki*
- 3D05 Fabrication of iron oxides nanosheets at surfactant oriented interface (Tokyo Institute of Technology) ○HAYASHI MASAKI·KUBOTA YUTA·KISHI TETSUO·YANO TETSUJI·MATSUSHITA NOBUHIRO*

(10:15) Break

(10:30) (Chairman 黒田義之)

- 3D07 Low Temperature Sintering with Cold Sintering Process of Metal Chelate Complex (Murata Manufacturing Co., Ltd.) ○Funahashi Shuichi·Kimura Masahiko·Shiratuyu kosuke
- 3D08 Room Temperature Synthesis of Sn-Sb Nanosolder contain Amorphous Phase (Tohoku University) ○Arai Kazuki·Hayashi Yamato*·Fukushima jun·Takizawa Hirotsugu

合成・その他

(11:00) (Chairman 福島潤)

- 3D09 (Ba,Ca)TiO₃-based crystal growth using Floating Zone method and investigation of Zr doping effect (Nagoya Institute of Technology) ○Sugimoto Hina·Kakimoto Ken-ich*
- 3D10 Preparation of fibrous boron carbide from precursors with different morphology (Shinshu University) ○KOBAYASHI Taiju·YABUYA Kazuma·KAKIAGE Masaki*
- 3D11 Highly active aggregate photocatalyst synthesized by using a hydroxyapatite (Kanagawa Institute of Industrial Science and Technology) ○Yosuke Ono

電気化学

(13:00) (Chairman 淵上輝顕)

- 3D17 Preparation and electrochemical characterization of Co-MOF-derived Co₃O₄ thin films (Yamagata University) ○MURAYAMA Masaki·UNUMA Hidero*
- 3D18 Low temperature combustion synthesis and electrochemical properties of Co₃O₄ thin films (Yamagata University) ○KOBAYASHI Narumi·UNUMA Hidero*
- 3D19 Materials design using solid state electrochemistry (Hokkaido University) ○Fujioka Masaya·Sato Kento·Kaiju Hideo·Nishii junji
- 3D20 Effect of the oxidation-reduction potential during Ni ferrite synthesis on FeNi nanoparticles (Toyota Central R&D Labs) ○Tajima Satomi·HWANG JUNGHWAN·Ishizaki Toshitaka·Akedo Kunio
- 3D21 Liquid Phase Fabrication of BaTiO₃-CoFe₂O₄ Multiferroic Nanocomposite (Toyohashi University of Technology) ○Irna Puteri Shahbudin·KAWAMURA Go*·Wai Kian Tan*·MUTO Hiroyuki*·MATSUDA Atsunori*

■ ■ March 26 (Tue) (Room G) ■ ■

06. Material related to living body

学術賞受賞講演

(9:00) (Chairman 川下将一)

3G01A ★ [The 72nd CerSJ Awards] Fabrication of carbonate apatite bone substitute (Kyushu University) ○ISHIKAWA Kunio

細胞

(9:30) (Chairman 川下将一)

3G03 Preparation of Collagen Porous Body Loaded with Anti-Cancer Drug and Magnetic Nanoparticles (Nagoya University) ○TOKUDA Atsuto・NAKAMURA Jin・SUGAWARA-NARUTAKI Ayae・OHTSUKI Chikara* (Kyushu University) HAYASHI Koichiro*

3G04 Tailoring Composition of Inorganic Adjuvants towards Cancer Immunotherapy (National Institute of Advanced Industrial Science and Technology) ○WANG Xiupeng・LI Xia・ITO Atsuo

3G05 Effects of soluble ions on immune cells (Nagoya Institute of Technology) ○OBATA Akiko・OZEKI Yuki・IGUCHI Makito・KASUGA Toshihiro

(10:15) Break

(10:30) (Chairman 春日敏宏)

3G07 Cytotoxicity of Iron Nitride Nanoparticles against Rat Fibroblast (Tohoku University) ○SHIBATA Misaki・KANETAKA Hiroyasu・FURUYA Maiko・YOKOTA Kotone・OGAWA Tomoyuki・KAWASHITA Masakazu*

3G08 Cytotoxicity of Antibacterial Metal-Doped Raw Silk Fabric on Rat Fibroblasts (Tohoku University) ○CHIGAMA Hiroki・KANETAKA Hiroyasu・FURUYA Maiko・YOKOTA Kotone・KAWASHITA Masakazu*

生体評価

(11:00) (Chairman 春日敏宏)

3G09 Fabrication of honeycomb-structured carbonate apatite blocks and regeneration of bone and bone marrow (Kyushu University) ○HAYASHI Kouichirou・ISHIKAWA Kunio

3G10 Evaluation of bone-forming ability of tricalcium phosphate-fiber scaffolds using a rat calvarial defect model (Meiji University) ○Ohno Rie・Nagata Kohei・Yokota Tomohiro・Yuza Jotaro (Kinki University) Morotomi Hiroaki・Isogai Noritaka (Meiji University) Kajiwara Riichi・Aizawa Mamoru*

3G11 *Intermission*

進歩賞受賞講演

(13:00) (Chairman 中村仁)

3G17A ★ [The 72nd CersJ Awards] Development of novel bioceramics with hierarchical structures controlled by using organic molecules (Japan Fine Ceramics Center) ○YOKOI Taishi

表面

(13:30) (Chairman 中村仁)

3G19 Development of novel antibacterial coating materials with ceramic nanosheets (Nagasaki University) ○YOSHIDA Eri・NAGAYASU Takeshi*・KAMADA Kai*

3G20 Hydrophilization of cotton-wool-like PLGA composites containing β -TCP and vaterite particles (Nagoya Institute of Technology) WATABE Masao・MATSUBARA Takashi・MAEDA Hirotaka・OBATA Akiko・KASUGA Toshihiro (ORTHOREBIRTH Co. Ltd.) OSAKA Naoya・NISHIKAWA Yasutoshi

(14:00) Break

複合材料

(14:15) (Chairman 小幡亜希子)

3G22 Thermosensitive Drug Release of Polymer Coated Nano Iron Oxide Embedded Hydroxyapatite (Osaka City University) ○YOKOGAWA Yoshiyuki・OHKURA Rina・KOJIMA Yusuke (Olympus Terumo Biomaterial) SHISHIDO Atsumasa (Sree Chitra Tirunal Institute for Medical Science and Technology) ANSAR EreathBeeran・VARMA HariKrishna

3G23 Adsorption Behavior of Protein onto Cellulose Nanofiber Covered with Hydroxyapatite Shell (National Institute of Advanced Industrial Science and Technology・Chubu University) ○SUZUKI Aoi (National Institute of Advanced Industrial Science and Technology) NAGATA Fukue*・MIYAJIMA Tatsuya (Chubu University) IMAEDA Kenichi (National Institute of Advanced Industrial Science and Technology) KATO Katsuya

3G24 Preparation of Porous Silica/Apatite Hybrids towards Activation of Osteoblasts (Nagaoka Univ. Tech.) ○YAMADA Shota・TAGAYA Motohiro*

(15:00) (Chairman 上高原理暢)

3G25 Preparation of phosphosilicate glass / poly(lactic acid) composite fiber mats for simultaneous reconstruction of bone quality and quantity (Osaka University) ○LEE Sungho (Nagoya Institute of Technology) KASUGA Toshihiro (Osaka University) NAKANO Takayoshi

3G26 Preparation of non-woven biomaterials with piezoelectric ceramic particles embedded in polymer fiber surface (Nagoya Institute of Technology) ○Hayami Kohei・Maeda Hirotaka・Obata Akiko・Kakimoto Kenichi・Kasuga Toshihiro*

3G27 *Intermission*

■■ March 26 (Tue) (Room H) ■■

09. Environment and material related to resource

LDH

(9:00) (Chairman 藤村卓也)

- 3H01 Synthesis and size control of cobalt clusters in interlayer of layered double hydroxide (Sojo University) ○INOKAWA Hitoshi・OKAMOTO Koji・Binti Mahpudz Aishah・Tomoshige Ryuichi・(Universiti Teknologi PETRONAS) Lim Siu Ling
- 3H02 The Relationship between Anion Exchange Selectivity and Structure of Interlayer Water of Fluorine-Substituted Mg-Al Layered Double Hydroxides (LDHs) (Shinshu University) ○Sudare Tomohito・Kiyama Masahiro・Hayashi Fumitaka・Teshima Katsuya

電気化学

(9:30) (Chairman 西本俊介)

- 3H03 Preparation of Layered Double Hydroxide Composed of Transition Metal and Polyaniline Hybrid Film and Its Electrochemical Property (University of Yamanashi) ○TAKEI Takahiro・YANG Guoshen・YANAGIDA Sayaka・KUMADA Nobuhiro
- 3H04 Electrical property of X-type zeolite (Kumamoto University) ○yoshida moeki・matsuda motohihde*

顔料

(10:00) (Chairman 稲田幹)

- 3H05 Rapid fabrication of frescoes using a supercritical carbon dioxide treatment (Nagoya Institute of Technology) ○NAGATA Yohei・HASHIMOTO Shinobu*・HONDA Sawao・DAIKO Yusuke・IWAMOTO Yuji

(10:15) Break

センサー

(10:30) (Chairman 井野川人姿)

- 3H07 In Situ Topotactic Synthesis of 2D Layered Titanium Carbonitrides Derived from MXenes and Its Excellent H₂ Gas Sensing Performance (Shaanxi University of Science & Technology・Tohoku University) ○ZHANG Biao・(Shaanxi University of Science & Technology) ZHU Jianfeng・(Tohoku University) ASAKURA Yusuke・HERMAWAN Angga・YIN Shu*
- 3H08 Toluene gas sensing performance of micro-/mesoporous SnO₂ spheres synthesized in organic solvents (IMRAM, Tohoku University) ○Hermawan Angga・Asakura Yusuke・(Kyushu University) Inada Miki・(IMRAM, Tohoku University) Yin Shu*

企業研究フロンティア講演

(11:00) (Chairman 蛭名武雄)

- 3H09F ★ (企業研究フロンティア講演) Structure and functions of clay coating on stainless steel surface prepared by wet coating process (ICHINEN CHEMICALS CO., LTD.) ○NOGUCHI Yukinori

3H11 *Intermission*

除去・回収

(13:30) (Chairman 西本俊介)

- 3H19 Removing Strontium by Using Scallop Shell Powder in the Solution (Tokyo University of Science) ○MIHARA Fumihito・SHUSEKI Yuta・FUJIMOTO Kenjiro・YASUMORI Atsuo・KOMABA Shinichi・FUKUNISHI Mika・KOGO Yasuo・IDEMOTO Yasushi・TAKEUCHI Ken*
- 3H20 Geopolymer monolith of secondary radioactive waste derived from coolant for the nuclear decommissioning (Yamaguchi University) ○KOMATSU Ryuichi・Sadamyo Seiya・Miyaji Sho・Asakawa Harutoshi・(Mitsubishi Materials corporation) Horiuchi Nobutake・Satoh Hisao・(Hokkaido University) Kimura Yuki
- 3H21 Resource Recovery from Peltier Materials by Wet-Mechanochemical Technique (Shimane University) ○SASAI Ryo・URABE Kazushi・FUJIMURA Takuya・(ARBIZ Co.) SANO Takuya
- 3H22 *Intermission*

■■ March 26 (Tue) (Room J) ■■

10. Material related to energy

リチウムイオン二次電池／正極材料 2

(9:00) (Chairman 脇谷尚樹)

- 3J01 Conversion reaction mechanism and capacity improvement of FeF₃ cathode (Kyoto University) ○Takami Tsuyoshi (National Institute of Advanced Industrial Science and Technology) Matsui Keitaro • Senoh Hiroshi • Taguchi Noboru • Shikano Masahiro • Sakaebe Hikari (Kyoto University) Fukunaga Toshiharu
- 3J02 Liquid phase synthesis of the sulfur cathode composites and their structure and performances of the all solid state battery (Tokyo Institute of Technology) ○YAGETA AYUMU • SUZUKI KOTA • HIRAYAMA MASAOKI • KANNO RYOJI*

リチウムイオン二次電池／固体電解質材料

(9:30) (Chairman 脇谷尚樹)

- 3J03 Crystal growth and characterization of La_{2/3-x}Li_{3x}TiO₃ lithium ion conductor by the TSFZ method (University of Yamanashi) ○MARUYAMA Yuki • MINAMIMURE Shiho • KOBAYASHI Chinatsu • NAGAO Masanori • WATAUCHI Satoshi • TANAKA Isao
- 3J04 Atomistic structure and lithium-ion conductivity of (La,Li)TiO₃ coincidence site lattice grain boundary (The University of Tokyo) ○SASANO Shun • ISHIKAWA Ryo • (Hokkaido University) OHTA Hiromichi • (The University of Tokyo • Japan Fine Ceramics Center) SHIBATA Naoya • IKUHARA Yuichi*
- 3J05 Evaluation of flexible solid sheet electrolyte for Li-ion batteries (Tokyo Metropolitan University) ○NUMATA Ryuya • Cheng Jianfeng • KANAMURA Kiyoshi*

(10:15) (Chairman 林晃敏)

- 3J06 Effect of particle size of dopant powders on single-phasing of LLZO powder by solid-liquid reaction (Shizuoka University) ○SAKAMOTO Naonori • Kumar Padarti Jeevan • Hirayama Chic • Hanzawa Shuuya • Sugiura Mao • Sugiyama Kazuhiro • Kawaguchi Takahiko • Wakiya Naoki • Suzuki Hisao
- 3J07 Fabrication and electrochemical analysis of sinter-less Ta-doped Li₇La₃Zr₂O₁₂ solid electrolyte film using Li-ion conducting binder (Shizuoka University) ○SAKAMOTO Naonori • Sugiyama Kazuhiro • Kumar Padarti Jeevan • Kawaguchi Takahiko • Wakiya Naoki • Suzuki Hisao
- 3J08 Synthesis and characterization of garnet-type Li_{6.5}La₃Zr_{1.5}Ta_{0.5}O₁₂ using the fluorite-type precursor oxide as a starting material (National Institute of Advanced Industrial Science and Technology • Tokyo University of Science) ○UNNO Yuu • (National Institute of Advanced Industrial Science and Technology) HAMAOKA Naoki • (Tokyo University of Science) ISHIDA Naoya • IDEMOTO Yasushi • (National Institute of Advanced Industrial Science and Technology) KATAOKA Kunimitsu • AKIMOTO Junji*
- 3J09 Theoretical modeling of the effect of quenching on the structure and properties of solid-state electrolyte LLNbo (Japan Fine Ceramics Center) ○FISHER Craig A. J. • Hu Xiaobing • Ikuhara Yumi H. • Moriwake Hiroki • (Toyota Motor Corporation) Kohama Keiichi • (Japan Fine Ceramics Center • The University of Tokyo) Ikuhara Yuichi

学術賞受賞講演

(11:15) (Chairman 宗像文男)

- 3J10A ★ [The 72nd CersJ Awards] Development of glass-based alkali-ion conductors for all-solid-state batteries (Osaka Prefecture University) ○HAYASHI Akitoshi
- 3J12 *Intermission*

リチウムイオン二次電池／固体電解質材料

(13:00) (Chairman 北村尚斗)

- 3J17 Growth of LiCuTa₃O₉ thin films by pulsed-laser deposition and structural optimization by *ab initio* calculation (Tokyo Institute of Technology) ○Ohashi Kotaro • Yamamoto Kazumasa • Shigematsu Kei • Das Hena • Azuma Masaki*
- 3J18 Evaluation of reaction between two oxide solid electrolytes on co-firing (TAIYO YUDEN CO.,LTD) ○Sato Takato • Sakate Daisuke • Ito Daigo • Kawamura Chic • Mizuno Koutarou
- 3J19 Fabrication of a solid-state lithium secondary battery using a lithium-ion-conducting Li₄B₄Al₃O₁₂Cl-based glass-ceramic (Tokyo Metropolitan University) ○SAITO Mayu • KAJIHARA Koichi* • SHOJI Mao • KIZUKI Yota • MUNAKATA Hirokazu • KANAMURA Kiyoshi
- 3J20 Preparation and Characterization of Li₇P₃S₁₁ Thionitride Solid Electrolytes (Osaka Prefecture University) ○KIMURA Takuya • FUKUSHIMA Akihiro • SAKUDA Atsushi • HAYASHI Akitoshi* • TATSUMISAGO Masahiro*

(14:00) (Chairman 林克郎)

- 3J21 Structural analysis on Li₁₀GeP₂S₁₂ single crystal (University of Tokyo) ○YAJIMA Takeshi • IWASAKI Rui • HIROI Zenji • (Tokyo Institute of Technology) HORI Satoshi • KANNO Ryoji • (J-PARC) OHHARA Takashi
- 3J22 Fabrication of Li metal / solid electrolyte interface (National Institute of Advanced Industrial Science and Technology) ○KITAURA Hirokazu • HOSONO Eiji • ZHOU Haoshen

技術奨励賞受賞講演

(14:30) (Chairman 林克郎)

- 3J23A ★ [The 72nd CerSJ Awards] Development of all-solid-state Na ion battery fabricated with glass ceramic (Nippon Electric Glass Co., Ltd.) ○YAMAUCHI Hideo

ナトリウムイオン二次電池

(15:00) (Chairman 細野英司)

- 3J25 Preparation of Crystalline Na₃V₂(PO₄)₃ by Glass-Ceramic Process (Kyushu University) ○NIU Sai • HAYASHI Katsuro*
- 3J26 Preparation of sodium ion conductive Na_{10+x}Sn_{1+x}P_{2-x}S₁₂ solid electrolytes by a mechanochemical technique (Osaka Prefecture University) ○Tsuji Fumika • (Iowa State University) Kah Loong Hoh • Steve W. Martin • (Osaka Prefecture University • Elements Strategy Initiative for Catalysts and Batteries, Kyoto University) AKITOSHI Hayashi* • (Osaka Prefecture University) SAKUDA Atsushi • TATSUMISAGO Masahiro

マグネシウムイオン二次電池

(15:30) (Chairman 細野英司)

- 3J27 Synthesis of porous spinel-type MgMn₂O₄ and its application to magnesium rechargeable battery (Keio University) ○Fukumi Yu • Ise Ryuta • Oaki Yuya* • Imai Hiroaki*

(15:45) (Chairman 中山将伸)

- 3J28 Synthesis, Crystal and Electronic Structure and Electrochemical Properties of $MgMO_2$ ($M=Co, Ni, Mn$) as Cathode Materials for Mg Rechargeable Battery (Tokyo University of Science) ○KAWATA Tomoka•ISHIDA Naoya•KITAMURA Naoto•IDEMOTO Yasushi*
- 3J29 Synthesis, Cathode Property and Crystal and Electronic, Local Structure Analysis of $Mg_2Mo_{3-x}M_xO_8$ ($M: Nb, Ti$) as Magnesium Rechargeable Battery Cathode Material (Tokyo University of Science) ○NAKAMURA Yuta•ISHIDA Naoya•KITAMURA Naoto•IDEMOTO Yasushi*
- 3J30 Charge and Discharge Mechanism of Mg Rechargeable Battery Positive Electrode Material $Li_{1.2-x}Mn_{0.54}Ni_{0.13}Co_{0.13}O_{2-\delta}$ (Tokyo University of Science) ○Satake Yoshihito•Ishida Naoya•Kitamura Naoto•Idemoto Yasushi*
- 3J31 *Intermission*

■■March 26 (Tue) (Room K) ■■**01. Engineering ceramics****複合体作製****(9:00) (Chairman 北憲一郎)**

- 3K01 Fractal Characters of Material Texture of Self-assembled $BaTiO_3$ /Poly-L-Lactic-Acid Composites (2) -Evaluation of aggregated morphology and dielectric properties using by multifractal analysis - (Tokyo City University) ○TAKEDA Mariko•YOSHINO Kentaro•MIZUKAMI Yuka•SATO Yoshihiro•(Mitsubishi Gas Chemical Co. , Inc) ITO Akira•(Tokyo City University) BAO Yue•(Yokohama National University) Tanimura Makoto•(Waseda University) INOUE Yasuhide•KOYAMA Yasumasa•(Tokyo City University) MUNAKATA Fumio*
- 3K02 Preparation and ion-exchange of Na-phlogopite/zirconia composite (Shinshu University) ○Takita Yuji•Yamakami Tomohiko•Yamaguchi Tomohiro•Taruta Seiichi*
- 3K03 Synthesis of precursors with carbosilane backbone structures by using high pressure CO_2 as a condensation ambient (Osaka Prefecture University) ○NARISAWA Masaki•YAMADA Kouya•SAKURA Ukyo•INOUE Hirofumi

(9:45) (Chairman 近藤直樹)

- 3K04 Study on Recyclability of Graphite Cutting Chips as Conductive Fillers (Osaka Prefecture University College of Technology) ○YONESHIMA Arata•OYA Naoyuki*•SUGIURA Kimihiko*•(Anaori Carbon Inc.) UTAKA Kouji
- 3K05 Development of transparent zirconia dispersion and its application of optical materials (ITEC CO.,LTD) ○Kanzawa Tsuneki•Suzuki Singo•Iida Daisuke•Iida Masayasu•(ITEC CO.,LTD•Osaka Prefecture University) Itagaki Yoji•Kamitani Masataka

(10:15) Break**焼結****(10:30) (Chairman 近藤直樹)**

- 3K07 Effect of the calcination temperature on the grain refinement in the Al_2O_3 - ZrO_2 composite materials prepared from metal organic compound (Sojo University) ○MURAYAMA Chisato•INOKAWA Hitoshi•TOMOSHIGE Ryuichi*

(10:45) (Chairman 成澤雅紀)

- 3K08 Sintering of aqueous slurries including alumina powders coated by polymethylsilsequioxane (National Institute of Advanced Industrial Science and Technology) ○KITA Ken'ichiro•KONDO Naoki
- 3K09 Clarification of 3D defect formation process in alumina during sintering by multiscale CT imaging at Spring-8 (Tokyo Institute of Technology) ○OKUMA Gaku•Watanabe Shuhei•Shinobe Kan•Nishiyama Norimasa•Wakai Fumihiko*•(Spring-8/JASRI) Takeuchi Akihisa•Uesugi Kentaro•(Nagaoka University of Technology) Yamaguchi Shuntaro•Tanaka Satoshi
- 3K10 Fabrication of highly porous alumina bodies consisting of platelets using a freeze-drying method (Nagoya Institute of Technology) ○KONDO Hiroki•MUTO Daimu•HASHIMOTO Shinobu*
- 3K11 Characterization of porous alumina sintered using spherical porous powder as raw material (Japan Fine Ceramics Center) ○TAKAHASHI Seiji•SUEHIRO Satoshi•OKAWA Hajime•KIMURA Teiichi

非酸化物セラミックス・物性**(13:00) (Chairman 楠瀬尚史)**

- 3K17 Application and evaluation of SiAlON as a tool material for friction stir welding of high tensile strength steels (National Institute of Advanced Industrial Science and Technology) ○FURUSHIMA Ryoichi•SHIMOJIMA Koji•HOSOKAWA Hiroyuki•(NGK SPARK PLUG CO., LTD.) SUZUKI Ryo
- 3K18 Hydrothermal corrosion of SiC irradiated with charged particles (Tohoku University) ○KONDO Sosuke•KASADA Ryuta•YU Hao•(Kyoto University) MAEDA Yuki•FUKAMI Kazuhiro•YABUUCHI Kiyohiro•HINOKI Tatsuya
- 3K19 Residual strength of B_4C -base ceramic neutron absorber after thermal shock testing (Tokyo Institute of Technology) ○MAKI Ryosuke•MUHAMMAD Fajar•MALETASKIC Jelena•GUBAREVICH Anna•YOSHIDA Katsumi•YANO Toyohiko•(NIMS) SUZUKI Tohru•UCHIKOSHI Tetsuo

酸化物セラミックス・物性**(13:45) (Chairman 古嶋亮一)**

- 3K20 Mass transfer mechanism in Yb_2SiO_5 under oxygen potential gradients at high temperatures (Japan Fine Ceramics Center) ○WADA Masashi•MATSUDAIRA Tsuneaki•KAWASHIMA Naoki•YOKOE Daisaku•KATO Takeharu•KITAOKA Satoshi•TAKATA Masasuke•(The University of Tokyo) TAKEUCHI Miyuki
- 3K21 Preparation and Characterization of Silica-Fiber Mat / Silica-Aerogel Sandwich Heat Insulation (Osaka Prefecture University College of Technology) ○KAWAOKA Shuya•OYA Naoyuki*•SUGIURA Kimihiko*
- 3K22 Making insulating Al_2O_3 ceramics electrically conductive by dispersing a small amount of long SWCNT (Kagawa University) ○KUSUNOSE Takafumi•Fujita Asuka•Kinoshita Ryota•(Osaka University) Sekino Tohru

■ ■ March 26 (Tue) (Room L) ■ ■

05. The glass photonics material

ガラス構造

(9:15) (Chairman 正井博和)

- 3L02 Local structure of Iron Ions in Aluminosilicate Glasses Using by Optical Absorption and Electron Paramagnetic Resonance (Tokyo Institute of Technology) ○KADO Rikiya • KISHI Tetsuo • YANO Tetsuji* (Sorbonne Université) LELONGq Gerald • CALAS Georges
- 3L03 Change of aluminum coordination number by heat treatment of anodic amorphous alumina. (Kogakuin University) ○Fujita Yuki • (JEOL RESONANCE Inc.) Yazawa Koji • (Kogakuin University) Hashimoto Hideki* • Asoh Hidetaka*
- 3L04 Elucidating the Structural Evolution of Amorphous Precursor for *BEA Zeolite around the Organic Structure-Directing Agent by Combining X-ray and Neutron Total Scattering (The University of Tokyo • Japan Synchrotron Radiation Research Institute) ○Yamada Hiroki • (Kyoto University) Onodera Yohei • (The University of Tokyo) Umeda Tadashi • Muraoka Koki • Chokkalingam Anand • (Japan Synchrotron Radiation Research Institute) Ohara Koji • (High Energy Accelerator Research Organization) Ikeda Kazutaka • Otomo Toshiya • Liu Zhendong • (The University of Tokyo) Okubo Tatsuya • Wakiyama Toru*
- 3L05 Microscopic ordering in amorphous poly(*n*-alkylsilsesquioxane) liquids and solids synthesized by a cosolvent-free method via aging (Tokyo Metropolitan University) ○KAJIHARA Koichi • SETO Ryosuke • KANAMURA Kiyoshi • (Kyoto University • NIMS) ONODERA Yohei • (NIMS) KOHARA Shinji

(10:15) Break

(10:30) (Chairman 紅野安彦)

- 3L07 Local structure analyses of simulated waste glasses (Hirosaki University) ○MASUNO Atsunobu • (Japan Nuclear Fuel Limited) Miura Yoshiyuki • Kanehira Norio • (The University of Tokyo) Yanaba Yutaka • Inoue Hiroyuki
- 3L08 Structure of liquid Er₂O₃ using containerless techniques (Japan Aerospace Exploration Agency) ○Koyama Chihiro • Tamaru Haruka • Oda Hirohisa • Ishikawa Takehiko • (National Institute for Materials Science) Kohara Shinji • Sakata Osami • (Kyoto University) Onodera Yohei • (University of the Ryukyus) Tahara Shuta • (Hirosaki University) Masuno Atsunobu • (AES Co., Ltd.) Watanabe Yuki • Nakata Yui • (National Institute of Technology, Hakodate College) Mizuno Akitoshi • (Tohoku University) Okada Junpei • (Japan Synchrotron Radiation Research Institute) Ohara Koji
- 3L09 Structure of ZnO-P₂O₅ glasses prepared by different methods (National Institute of Advanced Industrial Science and Technology) ○MASAI Hirokazu • (Kyoto University) ONODERA Yohei • (SPRING-8/JASRI) Ohara Koji • Ofuchi Hironori • (Chiba University) Ohkubo Takahiro
- 3L10 X-ray absorption near edge structure analysis of Ag in phosphate glasses (National Institute of Advanced Industrial Science and Technology) ○MASAI Hirokazu • (Tohoku University) KAWAMOTO Hiroki • KOSHIMIZU Masanori
- 3L11 *Intermission*

ガラスの蛍光特性

(13:00) (Chairman 岡田豪)

- 3L17 Blue fluorescence of Sn²⁺ center in phosphate glasses (National Institute of Technology, Suzuka College) ○Hara Taiga • WADA Noriyuki* • (Ritsumeikan University) KOJIMA Kazuo
- 3L18 Synthesis and structural/ thermal/ mechanical/and optical estimations of TeO₂-K₂O-Ga₂O₃ glasses (Nagoya Institute of Technology) ○HOSOKAWA Natsumi • HAYAKAWA Tomokatsu* • (Limoges Univ.) COLAS Maggy • THOMAS Philippe
- 3L19 Fluorescence characterization of red emission in highly Eu³⁺-doped glasses (Nikon Corporation) ○Yoshimoto Kohei • Ezura Yoshinobu • Ueda Motoi • (Hirosaki University • The University of Tokyo • National Institute for Materials Science) Masuno Atsunobu • (The University of Tokyo) Inoue Hiroyuki • (Nikon Corporation) Mizuguchi Masafumi

(13:45) Break

透明結晶化ガラスの蛍光特性

(14:00) (Chairman 梶原浩一)

- 3L21 Down conversion luminescence properties of Tb³⁺ and Yb³⁺ co-doped transparent glass ceramics (Nagoya Institute of Technology) ISOGAI Masato • ○HAYAKAWA Tomokatsu* • (Limoges Univ.) DECLERE Jean Rene • THOMAS Philippe
- (14:15) (Chairman 早川知克)
- 3L22 Highly efficient green emission of sol-gel-derived silica-(Tb,Ce)PO₄ glass-ceramics (Tokyo Metropolitan University) ○IWASAKI Rena • KAJIHARA koichi*
- 3L23 KrCl excimer lamp-induced ultraviolet photoluminescence of sol-gel derived transparent silica-(Gd,Pr)PO₄ glass-ceramics (Tokyo Metropolitan University) ○NAKAGAWA Ryosui • KAJIHARA Koichi*
- 3L24 *Intermission*

■ ■ March 26 (Tue) (Room M) ■ ■

蛍光体(希土類 II)

(9:15) (Chairman 増井敏行)

- 3M02 Discussion on the current and luminance relaxation of $\text{Ca}_{0.6}\text{Sr}_{0.4}\text{Ti}_{0.9}\text{Al}_{0.1}\text{O}_{3-d}:\text{Pr}$ thin film (Gunma University) ○KYOMEN Toru・(AIST) TAKASHIMA Hiroshi
- 3M03 Synthesis and optical properties of Eu^{3+} doped double perovskite Ca_3WO_6 (Nagoya Institute of Technology) ○OTSUKA Takahiro・HAYAKAWA Tomokatsu*
- 3M04 Synthesis of Porous $\text{Y}_2\text{O}_3:\text{Eu}^{3+}$ Particles via Yttrium-based MOF and Their Fluorescent Sensing Properties (Keio University) ○Sakamawari Kosuke・Hagiwara Manabu・Fujihara shinobu*
- 3M05 Development of Novel Synthetic Processes of Metal Oxycyanamide ($\text{RE}_2\text{O}_2\text{CN}_2:\text{Eu}^{3+}$ ($\text{RE}=\text{Y}, \text{La}$)) Phosphors by Using Urea (Hiroshima University) ○KAWANISHI Kodai・OKADA Ryoki・KATAGIRI Kiyofumi*・INUMARU Kei*

(10:15) Break

(10:30) (Chairman 田部勢津久)

- 3M07 Luminescent and electrical properties of rare-earth-doped BaSnO_3 synthesized by a solution process (Keio University) ○YAMAUCHI Taro・HAGIWARA Manabu・FUJIHARA Shinobu*
- 3M08 Luminescence properties associated with structural control for $\text{Sr}_3\text{Sn}_2\text{O}_7:\text{Sm}^{3+}$ (Kyushu University・National Institute of Advanced Industrial Science and Technology) ○ISHIYONE Yushi・XU Chao-Nan*・(National Institute of Advanced Industrial Science and Technology) TU Dong・WANG Ruiping・(Fine Ceramics Center) MORIWAKE Hiroki・(National Institute of Advanced Industrial Science and Technology) FUJIO Yuki

顔料

(11:00) (Chairman 田部勢津久)

- 3M09 Synthesis and color evaluation of Ta^{5+} -doped Bi_2O_3 (Tottori University) ○OKA Ryohei・SHOBU Yusuke・MASUI Toshiyuki*
- 3M10A ★ [The 72nd CerSJ Awards] Development of bright inorganic pigments using surface plasmon resonance (Nippon Sheet Glass co., Ltd) ○HORIGUCHI Haruko

■ ■ March 26 (Tue) (Room N) ■ ■

02. Dielectric material

高誘電率材料

(9:45) (Chairman 和田智志)

- 3N04 Dielectric materials design using soft-mode engineering (JFCC・JFCC) ○MORIWAKE Hiroki・(JFCC・JFCC・Kyoto Univ.) TAGUCHI Ayako
- 3N05 Synthesis of ReO_3 type oxyfluoride thin films by hydrothermal method and their dielectric properties (Tokyo Institute of Technology) ○KODERA Masanori・SHIMIZU Takao・FUNAKUBO Hiroshi
- 3N06 Fabrication of $(\text{Bi}_{1/2}\text{K}_{1/2})\text{TiO}_3\text{-SrTiO}_3$ High Temperature Dielectric Ceramics by Reaction Sintering of Hydrothermally Derived Powders (Keio University) ○SHIGA minami・HAGIWARA Manabu*・FUJIHARA Shinobu
- 3N07 High temperature analysis by using Nyquist diagram for CaZrO_3 based dielectric capacitors (National Institute of Advanced Industrial Science and Technology) ○SUZUKI Muneyasu・TSUCHIYA Tetsuo・(TAIYO YUDEN) SAITO Kenji・NAKADA Yosuke・MIZUNO Yoichi
- 3N08 Polarization behavior in DC electric field response of BaTiO_3 based ferroelectrics (Okayama University) ○TERANISHI Takashi・AZUMA Seiichiro・KISHIMOTO Akira
- 3N09 High Dielectric Constant due to Anisotropic Strain in an Ordered Assembly of BaTiO_3 Nanocubes (National Institute of Advanced Industrial Science and Technology (AIST)) ○YASUI Kyuichi・MIMURA Ken-ichi・MATSUBARA Ichiro・KATO Kazumi
- 3N10A ★ [The 72nd CerSJ Awards] Development of Metal/Insulator Composite Ceramics for High-performance Capacitors (University of Yamanashi) ○UENO Shintaro
- 3N12 *Intermission*

ドーピング・欠陥

(13:00) (Chairman 上野慎太郎)

- 3N17 Controlling the stability of Bi based giant tetragonal perovskite compound and negative thermal expansion by means of electron doping (Tokyo Tech) ○ISHIZAKI Hayato・(KISTEC) SAKAI Yuki・(Chuo University) OKA Kengo・(Tokyo Tech) AZUMA Masaki*
- 3N18 Improvement of electrical degradation of Y_2O_3 -doped High Voltage ZnO varistors by adding B_2O_3 (Doshisha University) ○Zheng Yumeng・Maegawa Takuya・Sato Yuuki・Yoshikado Shinzo*
- 3N19 Hydride-ion doping into layered perovskite $\text{Ca}_3\text{Ti}_2\text{O}_7$ (Kyushu University) ○KISHIMOTO Kazuhisa・AKAMATSU Hirofumi*・HASEGAWA George・HAYASHI Katsuro
- 3N20 Hydroxyl Defect-Dielectric Property Relations in Sintering of $\text{CaZrTi}_2\text{O}_7$ Ceramics (Yageo Corporation) ○Kao Yu-Ju・Fujimoto Masayuki

フェロイック薄膜

(14:00) (Chairman 佐藤幸生)

- 3N21 Electromechanical Properties and Electrocaloric Effects in Anti-Ferroelectric $(\text{Pb}, \text{La})(\text{Zr}, \text{Ti})\text{O}_3$ Ceramics (Shonan Institute of Technology) ○MAIWA Hiroshi
- 3N22 Correlation of ferroelectric and ferromagnetic domains with stripe structure in multiferroic $\text{BiFe}_{0.9}\text{Co}_{0.1}\text{O}_3$ thin film (Tokyo Institute of Technology) ○Katsumata Marin*・Shimizu Haruki・Shimizu Keisuke・Shigematsu Kei・Azuma Masaki
- 3N23 Fabrication of $\text{BaTiO}_3\text{-La}_2\text{CoMnO}_6$ Nanocomposite Films by a Two-step Sol-gel Deposition Process and Their Electric and Magnetic Properties (Keio University) ○KAWAGUCHI Taiki・HAGIWARA Manabu*・FUJIHARA Shinobu