

Please note, Almost all presentation will be given in Japanese.

The Ceramic Society of Japan

The 28th Fall Meeting

Program

■■ September 16 (Wed) (Room B) ■■

S1. Stress and Strain ⊗ Powder Processing → Innovative Functions and Reliability of Porous Ceramics

(14 : 20) (Chairman 多々見純一)

- 1B17 ★Microscopic sintering mechanics of amorphous and crystalline particles (Tokyo Institute of Technology) ○Fumihiro Wakai · Kota Katsura · Yutaka Shinoda · (Saga University) Takashi Akatsu
- 1B19 ★Fabrication and characterization of carbonate apatite bone substitute with interconnected pores (Kyushu University) ○Kanji Tsuru · Kunio Ishikawa (15 : 40) (Chairman 安田公一)
- 1B21 ★Fabrication of highly porous ceramics with high strength prepared by gelation freezing method (National Institute of Advanced Industrial Science and Technology) ○Yu-ichi Yoshizawa
- 1B23 ★The subjects of thermal insulation materials from an aspect of mechanical stress and strain (NICHIAS Corporation) ○Kiyoshi Sato (17 : 00) (Chairman 田中諭)
- 1B25 ★Effect of Microstructure on the Properties of Porous Alumina (Nagoya Institute of Technology) ○Sawao Honda · (Noritake Company Limited) Tomokazu Eda · Hirokazu Watanabe · Keita Miyajima · (Nagoya Institute of Technology) Yusuke Daiko · Shinobu Hashimoto · Yuji Iwamoto
- 1B27 ★Development of Solid Oxide Fuel Cell (Noritake Co., Limited) ○Yosuke Takahashi

■■ September 16 (Wed) (Room C) ■■

05. New Development in Environmental Barrier Ceramic Coatings

耐環境性コーティングにおける物質移動

(10 : 20) (Chairman 赤津隆)

- 1C05 Structural Stability of Mullite Layer under Oxygen Potential Gradients at High Temperatures (JFCC) ○Satoshi Kitaoka · Tsuneaki Matsudaira · Makoto Tanaka · Daisaku Yokoe · Takeharu Kato · Masasuke Takata · (Gifu University) Taiga Sato · Osamu Sakurada
- 1C06 Oxygen Permeability Measurement of Single Grain Boundaries in Alumina Bicrystals (Kyoto University) ○Tsubasa Nakagawa · (JFCC) Tsuneaki Matsudaira · Satoshi Kitaoka · (The University of Tokyo) Eita Tochigi · Naoya Shibata · Yuichi Ikuhara
- 1C07 Point defect segregation and its contribution to grain boundary diffusion in impurity-doped Al_2O_3 (Osaka University) ○Yoshihisa Kanamori · Tatsuya Yokoi · (Osaka University · JFCC) Masato Yoshiya (11 : 20) (Chairman 北岡諭)
- 1C08 ★High-temperature Oxidation of Alloys -Development and Growth of Protective Oxide Scale- (Tokyo Institute of Technology) ○Shigenari Hayashi

第一原理計算による耐環境性コーティング特性シミュレーション

(14 : 20) (Chairman 伊藤暁彦)

- 1C17 First-principles analyses of structural and electronic properties of Yb silicates (JFCC) ○Takafumi Ogawa · Akihide Kuwabara · Craig Fisher · Hiroki Moriwake · Satoshi Kitaoka · (Osaka University) Masato Yoshiya
- 1C18 First principles calculation of contribution of substitutional impurity to thermodynamically stable phase (Osaka University) ○Tatsuya Yokoi · Arata Ioki · (Osaka University · JFCC) Masato Yoshiya
- 1C19 Investigation of critical factor in thermal expansion coefficient in complex oxide (Osaka University) ○Yusuke Akada · Susumu Fujii · Tatsuya Yokoi · (Osaka University · JFCC) Masato Yoshiya

PVD, CVD による耐環境性コーティング作製

(15 : 20) (Chairman 横井達矢)

- 1C20 Formation of Yb silicate layers prepared by dual electron beam physical vapor deposition (JFCC) ○Norio Yamaguchi · Kenji Nakahira · Tetsushi Matsuda · Daisaku Yokoe · Takeharu Katou · Satoshi Kitaoka · Masasuke Takata
- 1C21 Phase composition and microstructure of Yb-Si-O films prepared by laser chemical vapor deposition (Tohoku University) ○Akihiko Ito · Masato Sekiyama · Takashi Goto
- 1C22 Preparation of Alumina Coating using Laser-enhanced Electro spray CVD (JFCC) ○Teiichi Kimura

エアゾルデポジション法による耐環境性コーティング作製

(16 : 20) (Chairman 垣澤英樹)

- 1C23 Environmental barrier performance of Al doped $Y_2Ti_2O_7/Al_2O_3$ laminates (JFCC) ○Makoto Tanaka · Tsuneaki Matsudaira · Satoshi Kitaoka · (Gifu University) Shota Hori · Osamu Sakurada · (The University of Tokyo) Kiyoshi Nishioka · Yutaka Kagawa
- 1C24 Deposition mechanism of oxide coatings as candidate environmental barriers by aerosol deposition method (Gifu University) ○Shota Hori · (JFCC) Makoto Tanaka · Naoki Kawashima · Satoshi Kitaoka · (Gifu University) Osamu Sakurada · (Nagoya Institute of Technology) Nobuyuki Shishido · Shoji Kamiya
- 1C25 Texture Evolution of Alumina Coating by Aerosol Deposition Method (Yokohama National University) ○Shinya Sato · Masahiro Komuro · Makoto Hasegawa · (JFCC) Makoto Tanaka · Satoshi Kitaoka · (The University of Tokyo) Yutaka Kagawa
- 1C26 Microstructure Change of Heat Treated Mullite Coating Processed by Aerosol Deposition Method (Yokohama National University) ○Taisuke Mizuno · Shinya Sato · Atuhisa Iuchi · Makoto Hasegawa

有限要素法を用いた耐環境性コーティングの評価

(17 : 40) (Chairman 木村禎一)

- 1C27 Thermal stress evaluation in environmental barrier coatings with finite element method (Tokyo Institute of Technology) ○Yuto Torii · Kei Tsurumaru · (Tokyo Institute of Technology · Saga University) Takashi Akatsu

1C28 Evaluation method of interface mechanical properties in environmental barrier coating (National Institute for Materials Science) ○Hideki Kakisawa · Toshiyuki Nishimura

■■ September 16 (Wed) (Room D) ■■

04. Science and Technology on Engineering Ceramics — Advanced Microstructure Control and Analysis for Safe and Reliable Society

セラミック多孔体の新展開

(9 : 00) (Chairman 周游)

- 1D01 Effects of Aluminum and Boron Additives on Microstructure of Porous SiC Ceramics with In-situ Grain Growth (Tokyo Institute of Technology) ○Makoto Takahashi · Katsumi Yoshida · Toyohiko Yano
- 1D02 Fabrication of highly porous mullite thermal insulators prepared by gelation freezing route (National Institute of Advanced Industrial Science and Technology (AIST)) ○Manabu Fukushima · Yu-ichi Yoshizawa
- 1D03 Freeze-dry processing and pore orientation control of alkali-niobate porous piezoceramics (Nagoya Institute of Technology) ○Takahiro Fujiwara · Ken-ichi Kakimoto · (National Institute of Advanced Industrial Science and Technology) Manabu Fukushima
- 1D04 Gas separation of H₂/CO₂ mixtures through porous oxide compacts (Kagoshima University) ○Hikari Imada · Yoshihiro Hirata · Taro Shimonosono · Soichiro Sameshima
- 1D05 Sintering of Alumina Powder Compacts and Their Compressive Mechanical Properties (Kagoshima University) Yoshihiro Hirata · ○Taro Shimonosono · Soichiro Sameshima · Hidehiro Tominaga

最先端評価技術

(10 : 40) (Chairman 鈴木達)

- 1D06 Mechanical property measurement of submicron spherical particles (Hokkaido University) ○Mitsuhiro Kondo · (Nagoya Institute of Technology) Nobuyuki Shishido · Shoji Kamiya · (National Institute of Advanced Industrial Science and Technology) Toshio Shinbo · Yoshie Ishikawa · (Hokkaido University) Naoto Koshizaki
- 1D07 Fracture strength limit of nano-polycrystalline stishovite using micro-cantilever specimen (Tokyo Institute of Technology) ○Kimiko Yoshida · Fumihiro Wakai · (Deutsches Elektronen-Synchrotron) Norimasa Nishiyama · (Tokyo Institute of Technology) Risako Sekine · Yutaka Shinoda · (Saga University) Takashi Akatsu · (National Institute of Advanced Industrial Science and Technology) Takashi Nagoshi · (Tokyo Institute of Technology) Masato Sone
- 1D08 High-strain-rate tensile failure in a superplastic ceramic with second-phase dispersion (Kitami Institute of Technology) ○Keijiro Hiraga · Hiroaki Furuse · (National Institute for Materials Science) Byung-Nam Kim · Koji Morita · Hidehiro Yoshida · (National Institute for Materials Science) Yoshio Sakka
- 1D09 High-strain-rate superplastic behavior of Ni doped TiC/SiC composite ceramics / behavior of Ni doped TiC/SiC composite ceramics (Tokyo Institute of Technology) ○Yusuke Sakuragi · Yutaka Shinoda · (Saga university) Takashi Akatsu · (Tokyo Institute of Technology) Fumihiro Wakai

飛躍的特性向上を目指した新しい微構造制御

(14 : 20) (Chairman 楠瀬尚史)

- 1D17 ★Development of Translucent Engineering Ceramics (Tosoh Corporation) ○Isao Yamashita
- 1D19 Powder layer manufacturing of alumina using binder jetting (National Institute of Advanced Industrial Science and Technology (AIST)) ○Mikinori Hotta · Akihiro Shimamura · Naoki Kondo · Tatsuki Ohji

(16 : 00) (Chairman 堀田幹則)

- 1D22 Thermal Conductivities of Sintered Reaction-Bonded Silicon Nitride Ceramics at Low and High Temperatures (National Institute of Advanced Industrial Science and Technology (AIST)) ○You Zhou · Hideki Hyuga · Yu-ichi Yoshizawa · Kiyoshi Hirao
- 1D23 Thermal conductivity of hot-pressed boron nitride ceramics (Kagawa University) ○Takafumi Kusunose · Tomonori Tetsuo · Naoki Takata · (Osaka University) Tohru Sekino
- 1D24 Anisotropic properties in the c-axis oriented SiC prepared by a strong magnetic field (National Institute for Material Science) ○Tohru Suzuki · Kiyoshi Kobayashi · Toshiyuki Nishimura · Tetsuo Uchikoshi · Yoshio Sakka

(17 : 00) (Chairman 須山章子)

- 1D25 Preparation of SiC-VB₂ eutectic composite by arc melting (Tohoku University) ○Hirokazu Katsui · Kishin Morita · Takashi Goto
- 1D26 Fabrication of denser layer on surface of RB-SiC porous ceramics (National Institute of Advanced Industrial Science and Technology) ○Akihiro Shimamura · Manabu Fukushima · Mikinori Hotta · Tatsuki Ohji · Naoki Kondo
- 1D27 Immersion Test of Joined Silicon Nitride into Molten Aluminum (National Institute of Advanced Industrial Science and Technology) ○Naoki Kondo · Mikinori Hotta · Hideki Hyuga · Hideki Kita

■■ September 16 (Wed) (Room E) ■■

10. Nano-scale atomic correlation: New development of multi-probe structural analysis

(9 : 00) (Chairman 北村尚斗)

- 1E01 Preparation of Sn-Si mixed oxide composites by mechanochemical treatment and their utilization for the syntheses of Sn-incorporated *BEA zeolites (The University of Tokyo) Takayuki Iida · (NIMS) Shinji Kohara · (The University of Tokyo) Tatsuya Okubo · ○Toru Wakihara
- 1E02 Interatomic potential used for structural simulation of BPI glass (Okayama University) ○Koichi Kikugawa · Shinichi Sakida · Yasuhiko Benino · Tokuro Nanba · (JGC corp.) Atsushi Mukunoki · Tamotsu Chiba · Takahiro Kikuchi · (RWMC) Tomofumi Sakuragi
- 1E03 Molecular dynamics simulation of anisotropic drawn glass compared with total diffraction experiments (Okayama University) ○Yasuhiko Benino · Yoshiya Ono · Shinichi Sakida · Tokuro Nanba
- 1E04 Structural analysis of amorphous NbO_x thin films (Okayama University) ○Chinatsu Oki · (Kagawa NCT) Go Sajiki · (Okayama University) Shinichi Sakida · Yasuhiko Benino · Tokuro Nanba · (NIMS) Shinji Kohara

(10 : 20) (Chairman 紅野安彦)

- 1E05 Structure of amorphous InGaZnO₄ revealed by a combination of x-ray scattering and EXAFS measurements (National Institute for Materials Science) ○Shinji Kohara · Osami Sakata · Rosantha Kumara · Anli Yang · Chulho Song · Naoki Ohashi · (Japan Synchrotron Radiation Research Institute) Koji Ohara · Hiroo Tajiri · Toshiaki Ina · (Tampere University of Technology) Jaakko Akola · (Kumamoto University) Shinya Hosokawa · (University of Ryukyus) Shuta Tahara · (Tokyo Institute of Technology) Kyohei Ishikawa · Hidenori Hiramatsu · Hideo Hosono · Toshio Kamiya
- 1E06 Structural simulation of the oxy-fluoride glass (The University of Tokyo) ○Hiroyuki Inoue · Atunomu Masuno
- 1E07 ★Structural analysis on amorphous states using persistent homology (WPI-AIMR, Tohoku University) ○Yasuaki Hiraoka

(14 : 20) (Chairman 井上博之)

1E17 ★Structure analysis of amorphous materials using Angstrom-beam electron diffraction (Tohoku University) ○Akihiko Hirata · Takeshi Fujita · Mingwei Chen

1E19 Study of average and local structure of $\text{Na}_{0.5}\text{Bi}_{0.5}\text{TiO}_3$ -based oxide-ion conductor (Tokyo University of Science) Naoto Kitamura · ○Naoya Hayashi · Naoya Ishida · Yasushi Idemoto

(15 : 20) (Chairman 小原真司)

1E20 Investigation on oxide-ion conduction mechanism of $\text{Sr}_{2-x}\text{Na}_x\text{MgSi}_2\text{O}_{7-\delta}$ -based materials by theoretical calculation and diffraction measurement (Tokyo University of Science) ○Hiroki Uno · Naoto Kitamura · Naoya Ishida · Yasushi Idemoto1E21 Three-dimensional distribution modeling of conducting oxide ions in $\text{La}_2\text{NiO}_{4+\delta}$ -based mixed conductors (Tokyo University of Science) Yasunori Mizoguchi · ○Naoto Kitamura · Naoya Ishida · Yasushi Idemoto

1E22 ★Structural analysis of metal nanoparticles and an epitaxial oxide thin film using synchrotron x-ray diffraction (National Institute for Materials Science · Tokyo Institute of Technology) ○Osami Sakata

■■ September 16 (Wed) (Room F) ■■

08. Crystal Science

(9 : 40) (Chairman 手嶋勝弥)

1F03 Float zone growth of Cr, Yb: $\text{Y}_3\text{Ga}_5\text{O}_{12}$ single crystal and their spectroscopic properties (Hokkaido University) ○Daisuke Ikutame · Mikio Higuchi · (RIKEN) Takayo Ogawa · Satoshi Wada · (Hokkaido University) Kiyoharu Tadanaga1F04 Preparation of translucent $\text{Gd}_2\text{Si}_2\text{O}_7$:Ce thin plates via liquid phase sintering and their scintillation properties for alpha-particles (Hokkaido University) Mami Nishikata · ○Mikio Higuchi · Youichi Tsubota · Junichi Kaneko · (Nagoya University) Seiichi Yamamoto · (Hokkaido University) Akira Miura · Kiyoharu Tadanaga

1F05 Evolvement of ceramics scintillators prepared by the SPS method IV (Tohoku University) ○Shunsuke Kurosawa · Koichi Harata · Hiroyuki Chiba · Rikito Murakami · Takahiko Horiai · Akihiro Yamaji · (CAS) Pejchal Jan · (Tohoku University) Yuji Ohashi · Kei Kamada · Yuui Yokota · Akira Yoshikawa

(10 : 40) (Chairman 我田元)

1F06 Electrical property and microstructure of MFI-Type giant crystal prepared using bulky starting material (Kumamoto University) Yuuki Okabe · ○Motohide Matsuda

1F07 Luminescent Properties of Co-doped Transparent Ceramics Ce: SrHfO_3 by SPS Method (Tohoku University) ○Hiroyuki Chiba · Shunsuke Kurosawa · Kouichi Harata · Rikito Murakami · Akihiro Yamaji · Yuuji Ohashi · (Tohoku University · Institute of Physics AS CR) Jan Pejchal · (Tohoku University · C&A corporation) Kei Kamada · (Tohoku University) Yuui Yokota · (Tohoku University · C&A corporation) Akira Yoshikawa1F08 Luminescence properties of transition metals doped $(\text{La,Gd})_2\text{Si}_2\text{O}_7$ sintered body (Tohoku University) ○Rikito Murakami · Shunsuke Kurosawa · (Tohoku University · C&A Corporation) Yasuhiro Shoji · (Tohoku University) Yuji Ohashi · (Institute of Physics CAS) Jan Pejchal · (Tohoku University) Yuui Yokota · (Tohoku University · C&A Corporation) Kei Kamada · Akira Yoshikawa

1F09 Luminescent properties of Ce-doped pyrosilicate polycrystal (Tohoku University) ○Takahiko Horiai · Shunsuke Kurosawa · Rikito Murakami · Akihiro Yamaji · Yasuhiro Shoji · Yuji Ohashi · Kei Kamada · Yuui Yokota · Akira Yoshikawa · (Institute of Physics CAS) Jan Pejchal

(14 : 20) (Chairman 田中功)

1F17 ★Development and Implementation of Attractive Teaching Materials for Understanding the Properties of Gems (NIT, Toyama College) ○Takae Kawai

1F19 Photocatalytic Activity of LaTiO_2N Crystals Depending on Flux Growth Processes (Shinshu University) ○Hajime Wagata · Kenta Kawashima · Mirabbos Hojamberdiev · Shuji Oishi · Katsuya Teshima1F20 Growth Mode of Ion-Exchangeable $\text{Li}_5\text{La}_3\text{Ta}_2\text{O}_{12}$ Crystals from Lithium Hydroxide Flux (Shinshu University) ○Xiong Xiao · Fumitaka Hayashi · Hajime Wagata · Hitoshi Onodera · Nobuyuki Zettsu · Shuji Oishi · Katsuya Teshima

(16 : 00) (Chairman 樋口幹雄)

1F22 Shape-controlled growth of lithium nickel phosphates using halide fluxes (Shinshu University) ○Tetsuya Yamada · Nobuyuki Handa · (Shinshu University · JST CREST) Nobuyuki Zettsu · Katsuya Teshima

1F23 Flux Growth and Surface Functionalization of Shape-controlled $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ Crystals toward Improvement of Their High Voltage Durability (Shinshu University) ○Satoru Kida · (Shinshu University · CREST, Japan Science and Technology Agency) Nobuyuki Zettsu · Katsuya Teshima

1F24 ★Study for flux growth of boride crystals (Kokushikan University) ○Shigeru Okada

■■ September 16 (Wed) (Room G) ■■

14. New Evolution of Dielectrics: Creation of Innovative Technology and Contribution to New Fields

薄膜 I

(9 : 00) (Chairman 青柳倫太郎)

1G01 ★Ferroelectric-Gate Field-Effect Transistor Based on a $\text{ZnO}/\text{Pb}(\text{Zr,Ti})\text{O}_3$ Stacked Structure and its Novel Applications (Panasonic Corporation) ○Yukihiro Kaneko · Yu Nishitani · Michihito Ueda1G03 ☆Characteristics of KNbO_3 ultrasonic transducers using thickness vibration mode by hydrothermal method (Toin University of Yokohama) ○Mutsuo Ishikawa · Yosuke Uchida · Daisuke Kameyama · Nobuaki Kosuge · Motoko Shibuya · (Interdisciplinary Graduate School of Science and Engineering, Tokyo Institute of Technology) Hiroshi Funakubo · Minoru Kurosawa1G04 Fabrication and Characterization of {110}-oriented $\text{Pb}(\text{Zr,Ti})\text{O}_3$ (PZT) Thin Films Using PdO/Pd Buffer Layer (National Institute of Technology, Tsuruoka College) ○Kiyoshi Uchiyama · (Tokyo Institute of Technology) Naoya Ohshima · Hiroki Tanaka · Yoshitaka Ehara · Takahiro Oikawa · (National Institute of Technology, Tsuruoka College) Tomoya Sato · (Sophia University) Hiroshi Uchida · (Tokyo Institute of Technology) Hiroshi Funakubo

強誘電体材料

(10 : 20) (Chairman 柿本健一)

1G05 ☆Preparation of BaTiO_3 -based Thick Films with Preferred Orientation by Screen Printing (Toyama Industrial Technology Center) ○Yuichi Sakai · (Toyama Prefectural University) Masatoshi Adachi · Tomoaki Karaki

1G06 ☆Previous and future developments of langasite-type piezoelectric crystals (Tohoku University) ○Yuui Yokota · Yuji Ohashi · Tetsuo Kudo · Andrey Medvedev · Shunsuke Kurosawa · Kei Kamada · Akira Yoshikawa · (C&A) Yasuhiro Shoji · (Piezo Studio) Kenji Inoue · Ko Onodera

★ = Guest ☆ = Invited ◆ = Plenary ○ = Presenter

1G07 Preparation of 0.9Pb((Mg,Zn)_{1/3}Nb_{2/3})O₃-0.1PbTiO₃ transparent ceramics (Ryukoku University) ○Saki Nakashima · Ichiro Fujii · Takahiro Wada

評価解析 1

(11 : 20) (Chairman 北中佑樹)

1G08 Electric-field-induced ferroelectricity and molecular dynamics of AgNbO₃ by using first-principles calculations. (JFCC) ○Ayako Konishi · Takafumi Ogawa · Craig A. J. Fisher · Akihide Kuwabara · Hiroki Moriwake · (Shizuoka University) Desheng Fu

1G09 Observation of the dielectric ceramic structure with the ultra low acceleration voltage SEM (Murata Manufacturing Co., Ltd.) ○Kenji Asada · Noriyuki Hamada

ナノクリスタル 1

(14 : 20) (Chairman 山田智明)

1G17 ★New high-*k* Technology Based on Nanocrystals (MANA, NIMS) ○Minoru Osada · Takayoshi Sasaki

1G19 Hydrothermal Synthesis of Barium Titanate-Based Solid-Solution Nanocubes Using Aqueous Metal Compounds (National Institute of Advanced Industrial Science and Technology) ○Ken-ichi Mimura · Kazumi Kato

1G20 Anisotropy in Morphology of BaTiO₃ Nanoblocks (National Institute of Advanced Industrial Science and Technology) ○Qiang MA · Ken-ichi Mimura · Kazumi Kato

ガラス/ガラスセラミックス

(15 : 40) (Chairman 安井伸太郎)

1G21 ★Fabrication new glass using containerless processing (Shanghai Institute of Ceramics, Chinese Academy of Sciences) ○Jianding Yu

1G23 Indialite/cordierite Glass Ceramics Substrates for Millimeter-wave Applications (Nagoya Industrial Science Research Institute · Nagoya Institute of Technology) ○Hitoshi Ohsato · (Meijo University) Akinori Kan · (Hoseo University) Jeong-Seog Kim · (Nagoya Institute of Technology) Isao Kagomiya

圧電材料

(16 : 40) (Chairman 古川正仁)

1G24 ☆Temperature dependence of electric-field response for ferroelectric (Bi_{1/2}Na_{1/2})TiO₃-BaTiO₃ single crystals (The University of Tokyo) ○Yuuki Kitanaka · Motohiro Ogino · Kouhei Makisumi · Yuji Noguchi · Masaru Miyayama · (High Energy Accelerator Research Organization) Shuki Torii · Takashi Kamiyama

1G25 Effects of additives on dielectric properties of Bi-based perovskite ceramics (Nagoya Institute of Technology) ○Rintaro Aoyagi · Ryota Tanahashi · Makoto Miyata

1G26 Material constants of alkali niobate lead-free piezoceramics determined by the Inverse Method (Nagoya Institute of Technology) ○Kenji Ogo · Ken-ichi Kakimoto · (University of Erlangen-Nuremberg) Manuel Weiss · Stefan Rupitsch · Reinhard Lerch

1G27 Newly found piezoelectric perovskite compound Bi₂Zn_{1-x}Ni_xTi_{1-y}Mn_yO₆ with suppressed *c/a* ratio (Materials and Structures Laboratory Tokyo Institute of Technology) ○Narumi Matsuda · Runze Yu · Hajime Hojo · Masaki Azuma · (KAST) Yuki Sakai · (Chuo University Engineering) Kengo Oka

■■ September 16 (Wed) (Room H) ■■

15. Ceramics for Next-Generation Power Electronics

(10 : 00) (Chairman 武田博明)

1H04 ☆Development of lead-free PTC ceramics (Hitachi Metals) ○Takeshi Shimada · Itaru Ueda · Yutaro Terakado · Shigeo Fujii

1H06 ☆First-principles calculation of nitride-piezoelectric material and its verification by thin-film deposition experiment (Taiyo Yuden Co., Ltd.) ○Yoshiki Iwazaki · Yosuke Onda · Tsuyosi Yokoyama · Yuichi Sasajima · Tokihiro Nishihara

(11 : 20) (Chairman 永田肇)

1H08 Robust Thermal Stability of Oxide Nanosheets and Its applications (WPI-MANA, NIMS · Waseda University) ○Minoru Osada · Yoon-Hyun Kim · (WPI-MANA, NIMS) Yasuo Ebina · Takayoshi Sasaki

1H09 Fabrication of lead-free PTC ceramics by sintering in air atmosphere (Tokyo Institute of Technology) ○Hiroaki Takeda · Hitomi Akutsu · Mohammad A. Zubair · Takuya Hoshina · Yukio Sakabe · Takaaki Tsurumi

(14 : 20) (Chairman 中村吉伸)

1H17 ★Development of low cost cuprate-based coated conductors with high performance (Kyoto University · JST-ALCA) ○Shigeru Horii · Toshiya Doi

1H19 Orientation Control of Bi-based Oxide Film by MOCVD Targeting the Power Electronics Application (Kanazawa Institute of Technology) ○Shinya Kawai · Tomoaki Wada · (National Institute of Advanced Industrial Science and Technology) Tetsuo Tsuchiya · (National Institute of Material Science) Shunichi Arisawa · (Kanazawa Institute of Technology) Isao Tsuyumoto · (Oike Co., Ltd.) Toshiyuki Kaneko · (Kanazawa Institute of Technology · Furuuchi Chemical Co.) Yasushi Tateno · (National Institute of Materials Physics) Petre Badica · (Kanazawa Institute of Technology) Kazuhiro Endo

1H20 Development of High-Temperature Resistors for SiC Power Modules (National Institute of Advanced Industrial Science and Technology) ○Kentaro Shinoda · Tetsuo Tsuchiya · Norimitsu Murayama · (KOA Corporation) Takeshi Shimizu · Kiyoshi Tanaka · (The University of Tokyo) Yoshinobu Nakamura · Masaru Miyayama

1H21 Heat Resistance Observations of RuO₂-based Resistors Toward Applications for SiC Power Electronics Devices (National Institute of Advanced Industrial Science and Technology) ○Tomohiko Nakajima · Keiko Kouno · Tetsuo Tsuchiya · (KOA Corporation) Takeshi Ito · Koichi Urano · Kiyoshi Tanaka · (The University of Tokyo) Yuki Kitanaka · Yoshinobu Nakamura · Masaru Miyayama

(16 : 00) (Chairman 堀井滋)

1H22 The thermal degradation mechanisms of a RuO₂ chip resistor predicted by the local reflectance data mapping (The University of Tokyo) ○Yoshinobu Nakamura · Masaru Miyayama · (KOA, Inc.) Takeshi Shimizu · Kiyoshi Tanaka · (AIST) Kentaro Shinoda · Tetsuo Tsuchiya

1H23 Thermal exposure stability of Ag sinter joined interface (Osaka University) ○Norio Asatani · Yukiharu Kimoto · Shijo Nagao · Toru Sugawara · Katsuaki Sugauma

1H24 Preparation of the high thermal-resistant resistor films by hybrid solution process (National Institute of Advanced Industrial Science and Technology (AIST)) ○Tetsuo Tsuchiya · Yuko Uzawa · Tomohiko Nakajima · Iwao Yamaguchi · Hiroaki Matsui

1H25 Effect of rare earth substitution on the Bi₂Sr₂CaCu₂O_y films by chemical solution process (National Institute of Advanced Industrial Science and Technology) Kaiko Kono · Iwao Yamaguchi · Hiroaki Matsui · Tokohiko Nakajima · Norimitsu Murayama · ○Tetsuo Tsuchiya

■■ September 16 (Wed) (Room I) ■■

09. Frontiers of structural science and the development of novel materials

(9 : 00) (Chairman 本橋輝樹)

1I01 Crystal structures and magnetic properties of double perovskites containing Cu²⁺ (Hokkaido University) ○Shumpei Otsuka · Yukio Hinatsu · Makoto Wakeshima · Yoshihiro Doi1I02 Crystal structure and magnetic properties of PbMn₂Ni₆Te₃O₁₈ type compounds (Hokkaido University) ○Yoshihiro DOI · Ryo Suzuki · Kiyotsugu Asai · Yukio Hinatsu

(9 : 40) (Chairman 土井貴弘)

1I03 Syntheses and Crystal Structures of Eu₂AlO_{3.75}N_{0.1} and EuAl₂O₄ (Utsunomiya University) ○Keitaro Tezuka · Yoshimi Tokuhara · (Hokkaido University) Makoto Wakeshima · (Utsunomiya University) Yue Jin Shan · Hideo Imoto · (Hokkaido University) Yukio Hinatsu1I04 Synthesis and characterization of novel oxides Ln₇MW₆O₃₀ (Ln=La, Pr, Nd; M=Mn, Fe, Co, Ni) (Utsunomiya University) ○Kiyofumi Nemoto · Yue Jin Shan · Keitaro Tezuka

(10 : 40) (Chairman 分島亮)

1I06 ★Ti-site substitution effect on the physical properties of EuTiO₃ (Toho university) ○Daisuke Akahoshi · Shuto Koshikawa · Takuro Nagase · Hiroki Horie · Eiji Wada · Toshiaki Saito

(11 : 20) (Chairman 赤星大介)

1I08 Hydrogen generation through water dissolution reaction by double-perovskite type BaLaMn₂O_{5+δ} (Kanagawa University) ○Teruki Motohashi · (Hokkaido University) Makoto Kimura · Yuji Masubuchi · Shinichi Kikkawa · (RWTH Aachen University) Janine George · Richard Dronskowski1I09 Nitride ion distribution of perovskite-type oxynitride, La_{1-x}Sr_xTiO_{2+x}N_{1-x} (x = 0, 0.2) (Hokkaido University) ○Daiki Habu · Yuji Masubuchi · Shinichi Kikkawa

(14 : 20) (Chairman 山田幾也)

1I17 ☆High-pressure synthesis and physical properties of A-site-ordered perovskites AA₃B₄O₁₂ (Kyoto University) ○Takashi Saito1I18 Charge disproportionation of unusually high valence Fe⁴⁺ in CaFe_{1-x}M_xO₃ (M = Mn, Ti) (ICR, Kyoto University) ○Yoshiteru Hosaka · Noriya Ichikawa · Takashi Saito · (ICR, Kyoto University · JST-CREST) Yuichi Shimakawa1I19 Effects of the A-site order/disorder to the structural and magnetic properties in a perovskite-structure oxide LaCa₂Fe₃O₉ (Institute for Chemical Research, Kyoto University) ○Haichuan Guo · Yoshiteru Hosaka · Hayato Seki · Takashi Saito · Noriya Ichikawa · (Institute for Chemical Research, Kyoto University · JST-CREST) Yuichi Shimakawa

(15 : 20) (Chairman 齊藤高志)

1I20 Inverse-type charge transfer in unusual high valence Fe perovskite (Osaka Prefecture University) ○Makoto Murakami · Ikuya Yamada · Shigeo Mori · (Kyoto University) Naoaki Hayashi

1I21 Various electronic phase transitions for quadruple perovskite oxides containing unusual high valence Fe ions (Osaka Prefecture University) ○Ikuya Yamada · Makoto Murakami · (Kyoto University) Naoaki Hayashi

(16 : 20) (Chairman 森大輔)

1I23 ☆Synthesis and structure of FeSr₂YCu₂O_{6+δ} magnetic superconductor (National Institute for Materials Science) ○Takashi Mochiku · (National Defense Academy) Yoshiaki Hata · (Ibaraki University) Akinori Hoshikawa · Toru Ishigaki · (National Defense Academy) Hiroshi Yasuoka · (National Institute for Materials Science) Kazuto Hirata1I24 Synthesis and physical properties of double-perovskite oxides with unusual high valence Fe⁵⁺ (Institute for Chemical Research, Kyoto University) ○Peng Xiong · Hayato Seki · Haichuan Guo · Yoshiteru Hosaka · Takashi Saito · (Institute for Chemical Research, Kyoto University · JST-CREST) Yuichi Shimakawa1I25 Negative thermal expansion induced by intermetallic charge transfer in Sb substituted BiNiO₃ (Materials and Structures Laboratory, Tokyo Institute of Technology) ○Takumi Nishikubo · (Faculty of Science and Engineering, Chuo University) Kengo Oka · (KAST) Yuki Sakai · (Materials and Structures Laboratory, Tokyo Institute of Technology) Masaki Azuma

(17 : 20) (Chairman 東正樹)

1I26 Composition Dependence of Property and Conductivity for (Ba,Sr)₂(Nb,V)O₄ (Tokyo University of Science) ○Yoshiki Mori · Naoya Ishida · Naoto Kitamura · Yasushi Idemoto1I27 High-Pressure Synthesis, Formation Behavior, Structure and Electronic Conductivity of PbZnO₃ with LiNbO₃-type Structure (Gakushuin University) ○Daisuke Mori · Kie Tanaka · Yoshiyuki Inaguma

■■ September 16 (Wed) (Room J) ■■

18. Chemical Design—Key processes for fabrication of novel functional materials—

(10 : 40) (Chairman 徳留靖明)

1J06 Synthesis of Hierarchically Porous Tin Dioxide Monolith with Controlled Pore Structure (Kyoto University) ○Yoshinao Suzuki · Nirmalya Moitra · Yang Zhu · Kazuyoshi Kanamori · Kazuki Nakanishi

1J07 Synthesis of hierarchically porous monolithic titanium phosphate gels (Kyoto University) ○Koji Yoneda · Yang Zhu · Kazuyoshi Kanamori · Kazuki Nakanishi

1J08 Preparation of Flat Ceramic Particles by Using Macroporous Polymer Thin Films as Templates (Waseda University) ○Itaru Muto · Shintaro Hara · Yoshiyuki Kuroda · Atsushi Shimojima · Hiroaki Wada · Kazuyuki Kuroda

1J09 Local structure of transition metal-doped aluminosilicate (Nagoya Institute of Technology) ○Yusuke Daiko · Shota Saito · Shotaro Tada · Keisuke Nauchi · Sawao Honda · Yuji Iwamoto

(14 : 20) (Chairman 高橋雅英)

1J17 ★Creation and Function of Novel Nanostructured Materials (Kyoto University) ○Hirokazu Kobayashi

1J19 Enhanced photocatalytic reduction by band engineering of WO₃ quantum dots (Keio University) ○Takafumi Suzuki · (Tokyo Metropolitan Industrial Technology Research Institute) Hiroto Watanabe · (Keio University) Yuya Oaki · Hiroaki Imai

(15 : 20) (Chairman 大幸裕介)

1J20 Y₂O₃ nanoparticles synthesized by laser ablation in aqueous solutions of various pH values (Hosei University) ○Mamoru Shida · Al Mamun Sharif Abdullah · Takamasa Ishigaki · (National Institute for Materials Science) Tetsuo Uchikoshi

- 1J21 ☆ Design of highly reduced metal oxide nanocrystals by the low-temperature reductive reaction (National Institute for Materials Science) ○Yoshihiro Tsujimoto
 (16 : 20) (Chairman 辻本吉廣)
- 1J23 Preparation of Sr-Ti-O films in Ti-rich region using laser CVD (Institute for Materials Research, Tohoku University) ○Jianchao Chen · Akihiko Ito · Takashi Goto
- 1J24 Effects of the preferential crystal orientation on the residual stress of ZnO thin films prepared on Si (100) substrates by sol-gel processing (Kansai University) ○Tsubasa Sakamoto · Hiromitsu Kozuka · Hiroaki Uchiyama
 (17 : 00) (Chairman 瀬川浩代)
- 1J25 Effective immobilization of biomolecule on meso-structured layered double hydroxides (Osaka Prefecture University) ○Megu Fukui · Yasuaki Tokudome · Naoki Tarutani · Masahide Takahashi · (Université Blaise Pascal) Vanessa Prevot · Claude Forano
- 1J26 Synthesis of carbamate-stabilized vaterite nanoparticles towards efficient removal of strontium from aqueous environment (National Institute for Materials Science) ○Jin Nakamura · Yoshio Sakka · (Nagoya Institute of Technology) Toshihiro Kasuga
- 1J27 Synthesis and applications of stable Ni-Al type LDH nanoparticles in aqueous media (Osaka Prefecture University) ○Yasuaki Tokudome · Tsuyoshi Morimoto · Naoki Tarutani · Masahide Takahashi

■■ September 16 (Wed) (Room K) ■■

19. Soft-solution process for synthesis and fabrication of ceramics

- (10 : 00) (Chairman 上川直文)
- 1K04 Hydrothermal Synthesis of Fine Particles in the $Y_2O_3-TiO_2-Nb_2O_5$ System (Aichi Institute of Technology) ○Masanori Hirano · Shinngo Sato
- 1K05 Hydrothermal Synthesis of Nb-doped Brookite-type Titanium Oxide and Their Electrical Conduction Properties (Tohoku University) ○Makoto Kobayashi · Hideki Kato · (National Institute for Materials Science) Minoru Osada · (Tohoku University) Masato Kakihana
 (10 : 40) (Chairman 小島隆)
- 1K06 Morphology controlled synthesis by solution method and characterization of ZnO (Tohoku University) ○Mizuki Yoshida · Xiaoyong Wu · Shu Yin · Tsugio Sato
- 1K07 Electrical and optical characteristic of ZnO films prepared by solution film forming method (Tohoku University) ○Saki Fukui · Shu Yin · Xiaoyong Wu · Tsugio Sato
 (11 : 20) (Chairman 小林亮)
- 1K08 Synthesis and structure of Al-doped ZnO using a molten salt route (Chiba University) ○Yoshitaka Kubo · Takahiro Ohkubo · Yasuhiko Iwadata · Shin Nishiyama
- 1K09 Fabrication of ZnO Nanosheet-Accumulated Films by Chemical Bath Deposition using Aqueous Solutions and Their Application to Dye-Sensitized Solar Cells (Keio University) ○Hisasuke Kajihara · Manabu Hagiwara · Shinobu Fujihara
 (14 : 20) (Chairman 平野正典)
- 1K17 Control of titania crystal growth by a solvothermal method using water-soluble titanium complexes (Tohoku University) ○Sungho Lee · Makoto Kobayashi · Hideki Kato · Masato Kakihana
- 1K18 Bottom-up synthesis of titanate nanosheets in ionic liquids (Gifu University) ○Yasuhiko Kondo · Takayuki Ban · Yutaka Ohya
- 1K19 Preparation of layered titanate plate particles with high aspect ratio using gluconic acid and application for structural color material (Chiba University) ○Yutaka Ono · Naofumi Uekawa · Chunming Wen · Takasi Kojima
 (15 : 20) (Chairman 伴隆幸)
- 1K20 Synthesis of titanium oxide sols with dispersion of nanoparticles with different types of shapes and application for preparation of anatase thin film (Chiba University) ○Naofumi Uekawa · Chunming Wen · Takashi Kojima
- 1K21 Platinum Nanosheet Prepared by Soft, Solution process (National Institute of Technology, Kitakyushu College) ○Asami Funatsu · (Kumamoto University) Hikaru Tateishi · Takaaki Taniguchi · Michio Koinuma · Yasumichi Matsumoto
- 1K22 Formation mechanism of rare earth-containing fine particles with various morphologies using aqueous solution reaction fields (Tokai University) ○Chihiro Shoji · Satoshi Ogawa · Koji Tomita · (Tohoku University) Makoto Kobayashi · Hideki Kato · Masato Kakihana
 (16 : 20) (Chairman 水畑穰)
- 1K23 ★Synthesis of novel phosphate white pigment without photocatalytic activity (Kyoto Prefectural University) ○Hiroaki Onoda
- 1K25 ★Preparation of Next-generation Electroceramics by Solvothermal Solidification Method (University of Yamanashi) ○Satoshi Wada · Kouichi Nakashima · Shintaro Ueno

■■ September 16 (Wed) (Room L) ■■

20. Hybrid Materials for Next Generation

- (09 : 00) (Chairman 鈴木義和)
- 1L01 Surface Modification of CNTs by Solution Plasma for Application to Composite Materials (Nagoya University) ○Tomonaga Ueno · Hiroshi Harada · Nagahiro Saito
- 1L02 Development of chemically doped CNT added electro conductive polymer composite (Toyohashi University of Technology) ○Yuuichirou Shigeta · Go Kawamura · Atsunori Matsuda · Hiroyuki Muto
- 1L03 Advanced joining of metal nanoparticles and carbon nanotubes (Osaka University) ○Satoshi Ohara · Kazuhiro Yamamoto · Nan Qiu · (Dailen University of Technology) Zhenquan Tan · (Toulon University) Jean-Christophe Valmalette
 (10 : 00) (Chairman 佐藤和好)
- 1L04 Hybrid assembly of ferromagnetic nanosheets/Au nanoparticles and its application to magneto-plasmonics (WPI-MANA, NIMS) ○Minoru Osada · Takayoshi Sasaki
- 1L05 Fabrication of up-conversion nanosheet phosphor for hybrid material (Tokai University) ○Soichi Takasugi · Koji Tomita · (Hiroshima University) Kiyofumi Katagiri · (NIMS) Minoru Osada · (Tohoku University) Masato Kakihana
- 1L06 Fabrication of Ag Nanowire Transparent Conductive Hybrid Materials by Organic Precursor Painting Reduction Method (Tohoku University) ○Yamato Hayashi · Kenta Sugawara · Jun Fukushima · Hirotosugu Takizawa
 (11 : 00) (Chairman 大原智)
- 1L07 Multi-Wavelength Light Responsive Photocatalysis in Au Nanorod-Deposited Mesoporous SiO_2-TiO_2 (Toyohashi University of Technology) ○Teruhisa

- Okuno · Go Kawamura · Hiroyuki Muto · Atsunori Matsuda
- 1L08 Fabrication of SnO₂/C composite through hydrothermal carbonization in the aqueous dispersions of SnO₂ nanocrystals (Gunma University) ○Yuta Motegi · Kazuyoshi Sato
- 1L09 Self-Organized Formation of Spherical Porous Granules (SPGs): New Perspective of Uniformly Porous Ceramics with 3-D Network Structure (UPC-3D) (University of Tsukuba) ○Yoshikazu Suzuki · Hiroko Tokoro · (Osaka University) Hiroya Abe
- (14 : 20) (Chairman 増田佳丈)
- 1L17 Development of Positive Temperature Coefficient Thermistor with Electro-Conductive Percolation Structure by Nano-sized Carbon Particles (Toyohashi U. Tech.) ○Hiroyuki Muto · Mitsuhiko Sato · Go Kawamura · Atsunori Matsuda
- 1L18 Preparation and evaluation of organic-inorganic complexes with alumina phosphor (Utsunomiya University) ○Yue jin Shan · Takuya Otsuki · Tatsuya Kawatani · Keitaro Tsuka · (Tatsumori Ltd.) Shogo Hosokawa · Norifumi Shinozaki · Shinya Nakajima
- 1L19 ★Metal-organic frameworks towards gas biology applications (Kyoto University) ○Shuheie Furukawa
- (16 : 00) (Chairman 単羅進)
- 1L22 ★Area-selective metal growth triggered by electron transfer across silicon-solution interfaces (Kyoto University) ○Masayuki Nishi · Kazuyuki Hirao
- 1L25 Mechanically induced oxygen vacancy and surface modification of ZnO (Nagoya Institute of Technology) ○Yusuke Daiko · Takahiro Ohnishi · Sawao Honda · Yuji Iwamoto · (Friedrich-Alexander-University) Jochen Schmidt · Doris Segets · Wolfgang Peukert

■■ September 16 (Wed) (Room M) ■■

17. Development of functional ceramics using Green Processing

光機能材料

(9 : 20) (Chairman 松下伸広)

- 1M02 Solution processing and functionalities of nanosized graphene oxide (National Institute for Materials Science) ○Takaaki Taniguchi · (Kumamoto University) Kazuto Hatakeyama · Michio Koinuma · Yasumichi Matsumoto
- 1M03 Preparation of Ag partial exchanged Y-type zeolite and their fluorescence behavior (Ehime University) ○Yasutaka Kanda · Johan Erni · Naoto Matsue · Yoshiteru Itagaki · Hiromichi Aono
- 1M04 Fluorescence of partially Ag⁺-exchanged zeolite X affected by coexistent exchangeable cation (Ehime University) ○Johan Erni · Yohei Yamauchi · Naoto Matsue · Yoshiteru Itagaki · Hiromichi Aono
- 1M05 Evaluation of oxynitride LaTaON₂ photocatalyst synthesized using an oxide precursor derived from hydrothermal method (Meiji University) ○Mai Takasaki · Chihiro Izawa · Kazuhisa Kishida · Tomoaki Watanabe

薄膜

(10 : 40) (Chairman 村瀬琢)

- 1M06 ★Local structure analysis of nano structured materials by microscopic techniques (Shizuoka University) ○Naonori Sakamoto · Satoshi Miyazaki · Shota Yamamoto · Naoki Wakiya · Hisao Suzuki
- 1M08 Dielectric and Piezoelectric Properties of CSD-derived PMN-PT epitaxial thin films on Si wafer (Shizuoka University) ○Takashi Arai · Naonori Sakamoto · Naoki Wakiya · Hisao Suzuki · (Kitami Institute of Technology) Tomoya Ohno · Takeshi Matsuda
- 1M09 Novel solution process to fabricate indium-free transparent conductive oxide film (Tokyo Institute of Technology) ○Yuto Seino · Ken-ichi Katsumata · Nobuhiro Matsushita

低温・低コストプロセス

(14 : 40) (Chairman 青野宏通)

- 1M18 ★Preparation of perovskite-type oxide catalysts by utilizing exothermic reaction of ligands of heteronuclear cyano complex precursor (Ehime University) ○Syuheie Yamaguchi · Daniel Sánchez Rodríguez · Hiroki Wada · Hidenori Yahiro
- 1M20 Low temperature synthesis of spherical AlN by carbothermal reduction and nitridation method with 2.45 GHz microwaves (The University of Tohoku) ○Hideaki Chikami · Jun Fukushima · Yamato Hayasi · Hirotsugu Takizawa
- 1M21 Low-temperature synthesis of boron nitride and calcium hexaboride powders using condensed boric acid-poly(vinyl alcohol) products (Saitama University) ○Masaki Kakiage · Shuheie Shiomi · Toru Shoji · Ikuo Yanase · Hidehiko Kobayashi
- (16 : 00) (Chairman 忠永清治)
- 1M22 Preparation of mordenite using natural resources and its Cs⁺ adsorption properties (Ehime University) ○Tafu Kunimoto · Noriaki Kaji · Johan Erni · Kiyotoshi Ogami · Naoto Matsue · Yoshiteru Itagaki · Hiromichi Aono
- 1M23 Effect of applying magnetic field during deposition on crystallization of epitaxial ferrite thin film by PLD (Shizuoka University) ○Wataru Kumasaka · (Tokyo Institute of Technology) Kazuo Shinozaki · (Shizuoka University) Naonori Sakamoto · Hisao Suzuki · Naoki Wakiya

ナノ構造形成

(16 : 40) (Chairman 坂元尚紀)

- 1M24 Dispersion behavior control of ferrite nanosheets modified with oleic acid (Tokyo Institute of Technology) ○Yuuki Kamei · Yuki Makinose · Kenichi Wakayama · (Tokyo University of Science) Ken-ichi Katsumata · (Tokyo Institute of Technology) Nobuhiro Matsushita
- 1M25 Synthesis of nano-sized oxide powder through an artificially enhanced efflorescence process (NIMS) ○Alfian Noviyanto · Toshiyuki Nishimura · (NIMS · MCES, Tokyo Tech) Naoki Ohashi
- 1M26 Shape-controlled CeO₂ Synthesized by Gas-liquid Co-precipitation (Tokyo Institute of Technology) ○Yuta Kubota · (Tokyo University of Science) Ken-ichi Katsumata · (Tokyo Institute of Technology) Nobuhiro Matsushita

■■ September 16 (Wed) (Room N) ■■

11. Advent and Development of Advanced Photonic Materials

(14 : 20) (Chairman 早川知克)

- 1N17 Preparation and optical properties of Er³⁺ doped Ga₂S₃-GeS₂-CsCl glasses (Kyoto Institute of Technology) ○Masaki Kimata · Arihumi Okada · Takashi Wakasugi · Kouhei Kadono · (Institute of Laser Engineering, Osaka University) Yasushi Fujimoto
- 1N18 Sm-doped glasses and glass-ceramics for high-dose and high-resolution measurements of microbeam X-rays (Nara Institute of Science and Technology) ○Go Okada · Takayuki Yanagida · (Kyoto University) Jumpei Ueda · Setsuhisa Tanabe · (Victoria University of Wellington) Andy Edgar · (University of Saskatchewan) Safa Kasap
- 1N19 Linear and Nonlinear Optical Properties of Ag₂O-TeO₂ glasses (Nagoya Institute of Technology) ○Tomokatsu Hayakawa · Keiichi Kato · (Limoges

University) J.R. Duclère · Philippe Thomas

- 1N20 ★ Fabrication of photoluminescent material for efficient energy utilization (Tohoku University) ○ Yoshihiro Takahashi · Nobuaki Terakado · Takumi Fujiwara
 (16 : 00) (Chairman 黒木雄一郎)
- 1N22 The Effect of the substitution of Ca or Mg ion on the luminescence of SrAl₁₂O₁₉:Gd. (Hyogo Prefectural Institute of Technology) ○ Tsuguo Ishihara · Hirokazu Izumi · (Dyden Corporation) Michio Obata · (YUMEX Incorporated) Yoshitaka Chigi · Tetsuro Nishimoto · Hiroyuki Tanaka · Mikihiro Kobayashi
- 1N23 UV photoluminescence of silica-GdPO₄ glass-ceramics derived by cosolvent-free sol-gel method (Tokyo Metropolitan University) ○ Koichi Kajihara · Shiori Yamaguchi · Kenji Moriyama · Kiyoshi Kanamura
- 1N24 Energy levels of lanthanide ions in YAlO₃ (Kyushu Institute of Technology) ○ Yuhei Shimizu · Kazushige Ueda
 (17 : 00) (Chairman 植田和茂)
- 1N25 Synthesis and Luminescent Properties of (Gd,Lu)AG:Tb Garnet (National Institute for Materials Science) ○ Ji-Guang Li · Yoshio Sakka · (Northeastern University) Xudong Sun
- 1N26 Systematic First-Principles Calculation of Charge Transfer Transition of Transition Metal Ions in YAG (Kwansei Gakuin University) ○ Shota Takemura · Kazuyoshi Ogasawara
- 1N27 Structural analysis of alunite compounds exhibiting blue luminescence (Salesian Polytechnic) ○ Yuichiro Kuroki · Kazuki Kimura · Kota Nakamura · (Nagaoka University of Technology) Tomoichiro Okamoto · (JFCC) Masasuke Takata

■■ September 16 (Wed) (Room O) ■■

22. Development and evaluation of ceramics producing harmony with living body

- (10 : 00) (Chairman 相澤守)
- 1004 Continuous expansion of interlayer distance of octacalcium phosphate by incorporation of dicarboxylate ion (Tohoku University) ○ Taishi Yokoi · Masanobu Kamitakahara · (Nagoya University) Chikara Ohtsuki · (Tohoku University) Hideaki Matsubara
- 1005 Fabrication of Silica Nanoparticles Including Porphyrin (Tokyo Institute of Technology) ○ Yuki Nomura · Tomoaki Sugiyama · Toshiyuki Ikoma
- 1006 Preparation of siloxane-containing polyhydroxyalkanoate for bone regeneration (Nagoya Institute of Technology) ○ Yuki Fujita · Jin Nakamura · Akio Obata · Hirotaka Maeda · Toshihiro Kasuga · (Nagoya University) Hitoshi Hirata
 (11 : 00) (Chairman 横井太史)
- 1007 Conversion of sea urchin tests to calcium phosphates for bone implants (Hokkaido University, National Institute for Materials Science) ○ Naga Vijaya Lakshmi Manchinasetty · Masanori Kikuchi · (National Institute for Materials Science) Suestsugu Yasushi
- 1008 Alternating Magnetic Field-Responsive Smart Core-Shell Nanoparticles for Magnetic Thermochemotherapy (Nagoya University) ○ Koichiro Hayashi · Yoshitaka Sato · Wataru Sakamoto · Toshinobu Yogo
 (11 : 40) (Chairman 上高原理暢)
- 1009 ☆ Developments of life-long artificial hip joint – Biocompatible polymer and ceramics – (KYOCERA Medical Corporation) ○ Masayuki Kyomoto
 (14 : 20) (Chairman 橋本雅美)
- 1017 Preparation of bioactive Ti metal releases Ga ions (Chubu University) ○ Yoko Sugawara · Seiji Yamaguchi · Nath Shekhar · Tomiharu Matsushita · Tadashi Kokubo
- 1018 Evaluation of apatite-forming ability of organic-inorganic hybrids containing phosphate groups in simulated body environment: effect of phosphate group content (Kyushu Institute of Technology) ○ Ryo Hamai · Yuki Shirosaki · Toshiki Miyazaki
- 1019 Adhesion enhancement of hydroxyapatite onto surface-modified polyetheretherketone by vacuum ultraviolet irradiation. (Sophia University) ○ Naoto Suzuki · Tomohiro Umeda · Takuya Sumi · Satoshi Horikoshi · Hideki Kuwahara · (Toho University) Yoshiro Musha · (Nihon University) Takeshi Toyama · (Sophia University) Kiyoshi Itatani
 (15 : 20) (Chairman 山口誠二)
- 1020 Structural evaluation of β-tricalcium phosphate cement powder surface-modified with inositol phosphate (Okayama University) ○ Kohei Yamashita · Toshiisa Konishi · Tomohiko Yoshioka · Satoshi Hayakawa · (Meiji University) Kohei Nagata · Mamoru Aizawa
- 1021 Material properties of injectable chelate-setting β-tricalcium phosphate cements (Meiji University) ○ Kohei Nagata · (Okayama University) Toshiisa Konishi · (Meiji University) Michiyo Honda · Mamoru Aizawa
 (16 : 20) (Chairman 豊嶋剛司)
- 1023 Fabrication of porous fish scale collagen/apatite composite of gradient composition (Tokyo Institute of Technology) ○ Yusuke Sasaki · Tomoaki Sugiyama · Tosiya Ikoma
- 1024 Characterization of Chitosan-Siloxane Hybrid Microspheres Prepared via Sol-Gel Method (Kyushu Institute of Technology) ○ Susana Neves · Yuki Shirosaki · Toshiki Miyazaki
 (17 : 00) (Chairman 鳴瀧彩絵)
- 1025 ★ Amorphous-to-crystal Transformation of Metal Organic Frameworks: Relationship of Biomineralization (Kyoto University) ○ Satoshi Horike

■■ September 16 (Wed) (Room P) ■■

12 : 10~14 : 10

03. Powder and Particle Design for High Quality Advanced Ceramics

- 1PA01 Fabrication of grain-oriented ceramics by colloidal processing UV Curable Binders in magnetic field (Nagaoka University of Technology) ○ Shoko Baba · Satoshi Tanaka · (Taiyo Yuden Co.,Ltd.) Yutaka Doshida · Tomohiro Harada · Hiroyuki Shimizu
- 1PA02 Corrosion behavior of AlN and secondary phase grains in AlN ceramics by CF₄/O₂ plasma (Yokohama National University) ○ Kenta Watanabe · Junichi Tatami · Motoyuki Iijima · (Sumitomo Electric Industries) Ryouhei Fujimi · Akira Mikumo
- 1PA03 Preparation of c-axis oriented AlN by CaF₂ sintering additive and a rotating magnetic field (Shibaura Institute of Technology) ○ Kento Imai · Hajime Kiyono · (National Institute for Materials Science) Yoshio Sakka · Tohru Suzuki

08. Crystal Science

- 1PF01 Preparation and property of Mg₂Si (Kokushikan University) Masatoshi Takeda · ○ Takashi Yamasaki · Eri Sakurai · Shigeru Okada · (Tohoku University) Kunio Yubuta · Toetsu Shishido · Akiko Nomura · (NIMS) Takao Mori
- 1PF02 Hydrothermal synthesis and thermal stability of Zn doped chalcopyrite (Kochi University) ○ Akane Uehara · Ayumu Onda · Kazumitsu Yanagisawa

- 1PF03 Flux growth of layered titanate crystals and their ion exchange properties (Shinshu University) ○Fumitaka Hayashi · Kazuya Ogawa · Hideya Kamikawa · Shuji Oishi · Katsuya Teshima
- 1PF04 Accelerated grain growth of BaTiO₃ ceramics in water vapor atmosphere (Kochi University) ○Yushi Qiu · Ayumu Onda · Kazumichi Yanagisawa
- 1PF05 Thermoelectric properties of Ni and Fe doped LaCoO₃ crystals grown by floating zone method (University of Yamanashi) ○Md Anwar Hossain · Masanori Nagao · Satoshi Watauchi · Isao Tanaka (National Institute for Materials Science (NIMS)) Alif Nur Patriya Sussardi · Takao Mori
- 1PF06 Relaxation of crystal defect in uniaxially oriented topological crystal (National Institute of Technology, Toyama College) ○Aya Kato · Takeshi Toshima · Masamoto Tafu · (Hokkaido University) Toru Matsuura · Satoshi Tanda
- 1PF07 Floating zone growth and characterization of 12Ca_xM_{1-x}O·7Al₂O₃ (M=Y³⁺, Eu³⁺, Ho³⁺ and Nd³⁺) single crystals (University of Yamanashi) ○Md Mozahar Ali · Masanori Nagao · Satoshi Watauchi · Isao Tanaka

07. Synthesis and Functional Properties of Mixed Ion Compounds

- 1PF09 High-pressure synthesis of CaFe₂O₄ type NaMn₂O₄ (The University of Nagoya) ○Eiichi Hirose · Yuichi Shirako · Ken Niwa · Masashi Hasegawa
- 1PF10 High-pressure synthesis of Pyrite-type Zn_{1-x}M_xS₂(M=Ni, Cu) solid solutions and Electric Physical Properties (Nagoya University) ○Takahiro Akita · Yuichi Shirako · Ken Niwa · Masashi Hasegawa
- 1PF11 Photoluminescence properties of Pr³⁺-activated Ca (In_{0.5-x}M_xSb_{0.5})O₃ (M: Sc, Y) solid solution (Okayama University of Science) ○Tatsunori Shimabukuro · Yasushi Sato · (Tohoku University) Masato Kakihana
- 1PF12 Electronic structure and luminescence properties of layered mixed anion compounds with natural superlattice structure (The University of Tokyo) ○Hiraku Ogino · Yukari Katsura · Kouji Kishio · (Aoyama Gakuin University) Jun-ichi Shimoyama · (Osaka University) Kohei Yamanoi · Toshihiko Shimizu · Nobuhiko Sarukura
- 1PF13 Synthesis of Hetero-anion Compound, Li₂FePO₄F, Powders by Flux Method and Their Cathode Material Characteristics for Lithium Ion Secondary Batteries (Osaka University) ○Baowei Xie · Xiao Gao · Ken-ichi Machida
- 1PF14 Particle and Luminescence Characteristics for Mixed Fluoride, K₂MF₆·Mn⁴⁺ (M=Si, Ti) (Osaka University) ○Kiyohisa Nishimoto · Hiromasa Hanzawa · Ken-ichi Machida
- 1PF15 Preparation of Silicon Metal Composite Powders and Their Anode Material Characteristics for Lithium Ion Secondary Batteries (Osaka University) ○Xiao Gao · (Kobe steel) Syoichi Ichikawa · (Osaka University) Kei Hosoya · Hiromasa Hanzawa · Kenichi Machida
- 1PF16 Synthesis of SrTa-oxynitrides with perovskite-related structures (Tokushima University) ○Takanori Hayashi · Sarda Narendra · Minami Omune · Kyosuke Harada · Yuta Takeuchi · Kei-ichiro Murai · Toshihiro Moriga · (University of Auckland) Waterhouse Geoffrey

14. New Evolution of Dielectrics: Creation of Innovative Technology and Contribution to New Fields

- 1PG01 The quenching effect for depolarization temperature T_d of (Bi_{0.5}Na_{0.5})TiO₃ ceramics (Tokyo University of Science) ○Hiroki Muramatsu · H. Nagata · T. Takenaka
- 1PG02 Fabrication and Characterization of Lead-Free Piezoelectric (Ba,Ca)(Ti,Sn)O₃ Ceramics (Nagoya university) ○Kota Noritake · Toshinobu Yogo · Wataru Sakamoto · Koichiro Hayashi
- 1PG03 Preparation of BT-BKT-BMT-BF System Ceramics and Their Piezoelectric Properties (University of Yamanashi) ○Shin Ariizumi · Shintaro Ueno · Kouichi Nakashima · Satoshi Wada
- 1PG04 Investigation of Dopant Effect in Preparation of <110> Grain-oriented Ceramics with Barium Titanate – Bismuth Sodium Titanate (BT-BNT) by Reactive Templated Grain Growth (RTGG) Method (University of Yamanashi) ○Ryo Itou · Shintaro Ueno · Kouichi Nakashima · Satoshi Wada · (Honda Electronics) Tonshaku Tou · Yuichi Maida
- 1PG05 Fabrication and Characterization of (Li,Na,K)NbO₃ ceramic by using magnetic orientation (Nagaoka University of Technology) ○Yuki Ono · Satoshi Tanaka · (Taiyo Yuden Co.Ltd) Tomohiro Harada · Hiroyuki Shimizu · Yutaka Doshida
- 1PG06 Fabrication of Na doped LiNbO₃ single crystal (University of Toyama) ○Tomoyuki Shimada · Takashi Hasidume · Atushi Saiki
- 1PG07 Crystal growth and characterization of (Bi_{1/2}Na_{1/2})TiO₃-Ba(Mg_{1/3}Nb_{2/3})O₃ ferroelectric single crystals with the structural phase-boundary composition (The University of Tokyo) ○Kohei Makisumi · Yuuki Kitanaka · Yuji Noguchi · Masaru Miyayama · (Ibaraki University) Toru Ishigaki · (High Energy Accelerator Research Organization) Takashi Kamiyama
- 1PG08 Shape Control of Barium Titanate Nanocubes prepared by using Microwave-assisted Solvothermal Method (The University of Yamanashi) ○Mutsuki Watanabe · Kouichi Nakasima · Tsukasa Chikata · Shintaro Ueno · Satoshi Wada
- 1PG09 Optimization of Solvothermal Preparation Conditions for Barium Titanate/Potassium Niobate Nanocomplex Ceramics and Their Dielectric Properties (The University of Yamanashi) ○Miki Watanabe · Shintaro Ueno · Kouichi Nakashima · Satoshi Wada
- 1PG10 Polarization responses of Bi-doped SrTiO₃ ceramics (Tokyo Institute of Technology) ○Motoharu Sakurai · Kazuki Kanehara · Takuya Hoshina · Hiroaki Takeda · Takaaki Tsurumi
- 1PG11 High frequency tunable property on nonstoichiometric Ba_{0.8}Sr_{0.2}TiO_{3,δ} and its polarization behavior (Okayama University) ○Koji Osaki · Takashi Teranishi · Hidetaka Hayashi · Akira Kishimoto
- 1PG12 High frequency tunable property on the cation defects loaded Ba_{0.6}Sr_{0.4}TiO₃ ceramics (Okayama University) ○Riku Kanemoto · Takashi Teranishi · Hidetaka Hayashi · Akira Kishimoto
- 1PG13 In-situ impedance analysis on ferroelectric BaTiO₃ – LiCoO₂ composite cathode (Okayama University) ○Yumi Yoshikawa · Takashi Teranishi · Hidetaka Hayashi · Akira Kishimoto · (Mie University) Hirokazu Okamura · Yasuo Takeda
- 1PG14 Fabrication and characterization of epitaxial BaTiO₃-Bi(Mg_{1/2}Ti_{1/2})O₃ films (Sophia University) ○Shota Moki · Hiroshi Uchida · (Tokyo Institute of Technology) Junichi Kimura · Hiroshi Funakubo
- 1PG15 Synthesis of BiFeO₃/noble metal nanoparticles composite thin films and their photoinduced properties (Nagoya University) ○Rika Maruyama · Koichiro Hayashi · Wataru Sakamoto · Toshinobu Yogo

09. Frontiers of structural science and the development of novel materials

- 1PI01 Crystal structure and properties of matter (Yamagata University) ○Takumi Masukawa · S. Kanbe
- 1PI02 Analyses of unknown and disordered structures from X-ray powder diffraction data (Nagoya Institute of Technology · Research Fellow of Japan Society for the Promotion of Science) ○Hiroki Banno · (Nagoya Institute of Technology) Toru Asaka · Koichiro Fukuda
- 1PI03 Crystal structure and electrical property of La₂SrFe₂O₇ (Nagoya Institute of Technology) ○Yuki Hoshino · Isao Kagomiya · Kenichi Kakimoto
- 1PI04 High-Pressure Synthesis of the New Layered Oxyfluoride Perovskite Sr₂MnO₃F (Nagoya Institute of Technology) ○Y. Hoshino · I. Kagomiya · K. Kakimoto
- 1PI05 The crystal structure and oxide ion conductivity of NdBaInO₄ (Tokyo Institute of Technology) ○Masahiro Shiraiwa · Koutaro Fujii · Yuichi Esaki · Masatomo Yashima
- 1PI06 High pressure synthesis and crystal structure of novel xenon compound (Nagoya University) ○Fumiya Matsuzaki · Ken Niwa · Yuichi Shirako ·

Masashi Hasegawa

- 1PI07 High pressure synthesis and crystal structure of novel 3d transition metal (TM) nitrides (TM = Fe,Co,Ni) (Nagoya University) ○Toshiki Terabe · Ken Niwa · Yuichi Shirako · Masashi Hasegawa · (KEK) Takumi Kikegawa
- 1PI08 Preparation of spinel-type $\text{LiNi}_{0.5}\text{Mn}_{1.5-x}\text{Ti}_x\text{O}_4$ using electrostatic spray deposition method and its electrode property (Tokyo University of Science) ○ Mami Yoshimura · (DENSO CORPORATION) Yuta Shimonishi · Shigeki Komine · (Tokyo University of Science · Research Institute for Science and Technology, Tokyo University of Science) Yuki Yamaguchi · Kenjiro Fujimoto
- 1PI09 Establishment of reaction phase diagrams of pseudo-ternary $\text{Li}(\text{Ni},\text{Co},\text{Fe})_{0.85}\text{Ti}_{0.15}\text{O}_2$ (Tokyo University of Science) ○Kohei Nanbu · (Tokyo University of Science · Research Institute for Science and Technology, Tokyo University of Science) Yuki Yamaguchi · Kenjiro Fujimoto
- 1PI10 Crystal Structure Analysis and Electronic Calculations of $\text{BaTaO}_2\text{N-SrWO}_2\text{N}$ Oxynitride Photocatalysts (Tokyo Inst. Tech.) ○Keisuke Hibino · Kazuho Shimada · Kotaro Fujii · Kazuhiko Maeda · Takayoshi Oshima · Osamu Ishitani · Masatomo Yashima
- 1PI11 Nanostructural characterization of $\text{GdBa}_2\text{Cu}_3\text{O}_y$ with BaHfO_3 nano-rods/ BaHfO_3 multilayers (JFCC) Daisaku Yokoe · ○Takeharu Kato · Tsukasa Hirayama · (Nagoya University) Kazunari Ishikakawa · Yutaka Yoshida · (International Superconductive Technology Center) Teruo Izumi · Yuh Shiohara
- 1PI12 Crystallographic and Magnetic Properties of A Novel Rock Salt Superstructure ChromiumSulfide (Utsunomiya University) Masataka Nozawa · (Hokkaido University) ○Makoto Wakeshima · (Utsunomiya University) Keitaro Tezuka · Keita Oshikane · Yue Jin Shan · Hideo Imoto · (Hokkaido University) Yukio Hinatsu

18. Chemical Design—Key processes for fabrication of novel functional materials—

- 1PJ01 Synthesis and properties of tungsten oxide and cesium tungstate thin films by solution method (The University of Gifu) ○Hiroyuki Yanase · Utaka Oya · Takayuki Ban
- 1PJ02 Fabricaion of mesoporous titania thin film by leaching of $\text{TiO}_2\text{-SiO}_2$ composite thin film (The University of Gifu) ○Souta Fujii · Yutaka Ohya · Takayuki Ban
- 1PJ03 Preparation of Pr-doped CeO_2 nanoparticles using zeolites (Industrial Technology Center of Tochigi Pref.) ○Sakae Kato · Takeshi Kaneda · (Yoshizawa Lime Industry Co.,Ltd.) Ken Tsurunaga · Tatsuya Okamura · Norihiro Kobayashi · (Industrial Technology Center of Tochigi Pref.) Taiji Matsumoto
- 1PJ04 Solvothermal synthesis and electrochemical properties of alkali vanadate as cathode material for lithium ion battery (Aichi Center for Industry and Science Technology) ○Junji Umeda · (Nagoya University) Shohei Nabeno · Koichiro Hayashi · Wataru Sakamoto · Toshinobu Yogo

19. Soft-solution process for synthesis and fabrication of ceramics

- 1PK01 Characterization of monoclinic ZrO_2 nanoparticles prepared under hydrothermal conditions (Chuo University) ○Minoru Taguchi · Toshitaka Funazukuri · (National Institute for Materials Science) Takashi Naka
- 1PK02 Synthesis of Spherical and Uniform-Sized Tantalum Oxide Particles by Metal Alkoxide Method (Chiba University) ○Syunsuke Kobayashi · Takashi Kojima · Akiko Takeda · Naofumi Uekawa
- 1PK03 Preparation of Needle-like Titania Particles Supporting Silver Nanoparticles (Chiba university) ○Masayuki Tamba · Takashi Kojima · Kenta Ishii · Rie Suzuki · Naofumi Uekawa
- 1PK04 Synthesis of $\text{Ca}_x\text{Co}_{1-x}(\text{OH})_2$ Having High Ca Contents by a Co-Precipitation Method Using Starting Solutions with Controlled pH and Metal Ion Concentrations (Keio University) ○Rina Shimonishi · Manabu Hagiwara · Shinobu Fujihara

20. Hybrid Materials for Next Generation

- 1PL01 Enhancement of PL intensity and structural change for $\text{Ca}_{2x/2}(\text{Si}_{1-x}\text{P}_x)\text{O}_4$: Eu^{2+} green-light emitting phosphor induced by doping of P^{3+} ion (Toyohashi University of Technology) Nobuyuki Yokoyama · Shohei Furuya · Hiromi Nakano · (Nagoya Institute of Technology) ○Hiroyuki Banno · Koichiro Fukuda
- 1PL02 Synthesis and microstructural characterizations of murataite superstructure for new solid oxide electrolyte (University of Tsukuba) ○Ryosuke Maki · Yoshikazu Suzuki · (University of California Irvine) Peter E. D. Morgan
- 1PL03 Synthesis of Clustered Magnetite Nanoparticles-Anticancer Drug-Containing Polymer Core-Shell Nanoparticles for Magnetic Hyperthermia and Chemotherapy (Nagoya University) ○Yoshitaka Sato · Toshinobu Yogo · Wataru Sakamoto · Koichiro Hayashi
- 1PL04 Fabrication of Continuous Slurry Foaming Machine for Mass Production of Porous Ceramics (Nagoya Institute of technology) ○Kouhei Miyazaki · Jyomei Kato · Takashi Shirai · Masayoshi Fuji
- 1PL05 Preparation of ultrathin hydrogel layer utilized sequential amide bond forming reaction by reactive LbL process (University of Hyogo) ○Masatoshi Munenaga · Atsushi Mineshige · Shin-ichi Yusa · Tetsuo Yazawa · (Nagoya Institute of Technology) Yusuke Daiko
- 1PL06 Synthesis of novel porous Si-C composites as anode materials for Li-ion batteries (The University of Meiji) ○Hiroyuki Asano · Tomoaki Watanabe
- 1PL07 Fabrication of Novel Pore Structured Ceramics using O/W Emulsion Process and Its Properties (Nagoya Institute of Technology) ○Hiromichi Ikeuchi · Kazushi Kumazawa · Takashi Shirai · Masayoshi Fuji
- 1PL08 Enhancement of the ammonia gas detection sensitivity by surface treatment of an optical fiber (Nagoya University) ○Kouta Izawa · (Nagoya University · JST COI STREAM) Oi Lun Li Helena · (INSTITUTION OF INNOVATION FOR FUTURE SOCIETY) Bratescu Maria.A. · (Nagoya University · GREMO · INSTITUTION OF INNOVATION FOR FUTURE SOCIETY · JST-CREST) Nagahiro Saito
- 1PL09 Development of Portable Alcohol Sensor Based on Evanescent Wave Absorption (Nagoya University) ○Hayata Mizutani · (Nagoya University · JST COI STREAM) Helena Oi Lun Li (INSTITUTION OF INNOVATION FOR FUTURE SOCIETY) Maria. A. Bratescu (Nagoya University · GREMO · INSTITUTION OF INNOVATION FOR FUTURE SOCIETY · JST-CREST) N. Saito

22. Development and evaluation of ceramics producing harmony with living body

- 1PO01 HAp formation on oxynitrided TiO_2 (JFCC) ○Masami Hashimoto · Satoshi Kitaoka · (The University of Tohoku) Hiroyasu Kanetaka
- 1PO02 Effect on DNA adsorption and release by silica particle morphologies and amino group structure of the surface (Mie University) ○Ryouichi Hikosaka · Masahiro Tomita · (National Institute of Advanced Industrial Science and Technology) Katsuya Kato
- 1PO03 Synthesis and evaluation of nao-sized inorganic-organic particles with oriented apatite shell (National Institute of Advanced Industrial Science and Technology) ○Fukue Nagata · Tatsuya Miyajima · Masahiko Inagaki · Katsuya Kato
- 1PO04 Protein adsorption behavior of HAp particles with various surface structure (The University of Chubu · National Institute of Advanced Industrial Science and Technology) ○Toshio Ngasaki · (National Institute of Advanced Industrial Science and Technology) Fukue Nagata · (The University of Chubu) Makoto Sakurai · (National Institute of Advanced Industrial Science and Technology) Katsuya Kato
- 1PO05 Formation of alumina layer on titanium alloy for artificial joint by micro arc oxidation (Chubu University) ○Hiroaki Takadama · Rohit Khanna · Seiji Yamaguchi
- 1PO06 Synthesis and evaluation of Sr-containing amorphous calcium phosphate (Nihon University) ○Takahito Kasai · Syunsuke Katsuda · Tomohiro Uchino

- 1PO07 Detection of Oxidative Stress in HeLa Cells by Titania Nanotubes (Osaka University) ○Hisataka Nishida · Kensuke Fujii · Tomoyo Gotou · Tohru Sekino
- 1PO08 Fabrication of hydroxyapatite layer by Er:YAG laser ablation method using the amorphous calcium phosphate target (Kinki University) ○Shigeki Hontsu · Y. Hatoko (Okayama University) Masahiro Okada · (Osaka Dental University) Kazushi Yoshikawa
- 16. Research topics on advanced ceramics for energy conversion and storage devices**
- 1PQ01 Electronic Structure of Cation-Disordered Rocksalt Oxides as Cathode Materials for Lithium-ion Batteries (Nagoya Institute of Technology) ○Yu Hashimoto · Hiromasa Shiiba · (Nagoya Institute of Technology · Unit of Elements Strategy Initiative for Catalysts & Batteries (ESICB), Kyoto University) Masanobu Nakayama · (Nagoya Institute of Technology) Toshihiro Kasuga · (Unit of Elements Strategy Initiative for Catalysts & Batteries (ESICB), Kyoto University · Tokyo Denki University) Naoaki Yabuuchi
- 1PQ02 A kinetic study on two-phase coexistence reaction in lithium titanate electrodes for lithium-ion battery (Nagoya Institute of Technology) ○Yuki Kondo · Norimitu Nishimura · (Nagoya Institute of Technology · The University of Kyoto · Japan Science and Technology Agency) Masanobu Nakayama · (Nagoya Institute of Technology) Toshihiro Kasuga
- 1PQ03 Ion conduction mechanism and examination of electronic structure in the NASICON type solid electrolyte by theoretical calculation (Tokyo University of Science) Naoto Kitamura · ○Hideaki Kuwajima · Naoya Isida · Yasusshi Idemoto
- 1PQ04 Characterization of Garnet-type $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ Films Fabricated by Aerosol Deposition Method (Toyohashi University of Technology) ○Takayuki Okada · Akihiro Bando · Kota Wagatsuma · Satoshi Yasuda · Tomohiro Tojo · Ryoji Inada · Yoji Sakurai
- 1PQ05 Study of ionic diffusion in cathode materials of lithium ion batteries (DENSO CORPORATION) ○Yuta Shimonishi · Shigeki Komine
- 1PQ06 Characterization of composite thick film electrodes consisting active material and NASICON-type solid electrolyte fabricated by aerosol deposition method (Toyohashi University of Technology) ○Masaru Tojo · R. Konishi · Yu Yamashita · Kouhei Okuno · Yuto Tojo · Ryoji Inada · Yoji Sakurai
- 1PQ07 Fabrication of the dense ceramics and the electrical conductivity of MgO-doped lanthanum silicate oxyapatite (Hosei University) ○Yuki Shimura · (National Institute for Materials Science) Kiyoshi Kobayashi · (Hosei University) Takaya Akashi · Kenya Hirai · (National Institute for Materials Science) Yoshio Sakka
- 1PQ08 Long-term phase stability of $\text{Sr}_{1-x}\text{Ti}_{0.8}\text{M}_{0.2}\text{O}_3$ perovskites ($M=\text{Nb, Ta}$, $0 \leq x \leq 0.1$) at an operating temperature (Central Research Institute of Electric Power Industry) ○Masashi Mori · (Tokushima University) Yuutaro Nomura · Masaki Fujikawa · Toshihiro Moriga
- 1PQ09 Characterization and Structure of $\text{Li}_2\text{S-P}_2\text{S}_5$ Solid Electrolytes prepared by Liquid-phase Shaking Method (Toyohashi University of Technology) ○Kei Morikawa · Nguyen H. H. Phuc · Go Kawamura · Hiroyuki Muto · Atsunori Matsuda
- 1PQ10 Electrochemical Performances of an All Solid State Lithium Ion Battery Using Deliquescent- LiVO_3 and LiCoO_2 Composite Electrode (Hitachi, Ltd.) ○Taigo Onodera · Jun Kawaji · Tadashi Fujieda · Takashi Naito · Daiko Takamatsu · Tatsumi Hirano · Takefumi Okumura
- 1PQ11 Synthesis of titanium nitride with a high surface area and application to Li-air battery (Kyushu University) ○Yusuke Fukae · (Kyushu University · International Institute for Carbon-Neutral Energy Research, Kyushu University) Shintaro Ida · (Kyushu University) Takayoshi Miyano · (Kyushu University · International Institute for Carbon-Neutral Energy Research, Kyushu University) Hidehisa Hagiwara · Takaaki Sakai · Tatsumi Ishihara
- 1PQ12 Bending Deformation and Electrode Properties of Nanosheet-Restacked Ruthenium Oxides for All-Solid Electrochemical Capacitors (The University of Tokyo) ○Tetsuya Hongu · Shinya Suzuki · Masaru Miyayama
- 1PQ13 Cell performance and characterization of all-solid-state Na/S batteries with a composite positive electrode using sulfur and phosphorus sulfide (Osaka Prefecture University) ○Naoto Tanibata · (Osaka Prefecture University · Elements Strategy Initiative for Catalysts and Batteries Kyoto University) Akitoshi Hayashi · (Osaka Prefecture University) Masahiro Tatsumisago
- 1PQ14 Preparation of porous glass electrode with electron conductivity (University of Hyogo) ○Tan BuiThanh · Ren Hashino · Atsushi Mineshige · Shintaro Kubota · Yoshiki Higuchi · Tohru Yamasaki · Tethuo Yazawa
- 1PQ15 Reactivity of perovskite-type SrTiO_3 with transition metal oxides in the electrode materials (Tokushima University) ○Yutaro Nomura · Hiroki Ishikawa · Ryota Minakata · Masaki Fujikawa · Kei-ichiro Murai · Toshihiro Moriga · (Central Research Institute of Electric Power Industry) Masashi Mori
- 1PQ16 High porosity Ni-YSZ anode substrates fabricated by extrusion process for high power density planar electrochemical cells (National Institute of Advanced Industrial Science and Technology) ○Hiroyuki Shimada · Toshio Suzuki · Toshiaki Yamaguchi · Hirofumi Sumi · Koichi Hamamoto · Yoshinobu Fujishiro
- 1PQ17 Broadband conductivity spectroscopy on oxygen ion conductor ceramics and single crystals (Okayama University) ○Nami Matsubara · Takashi Teranishi · Hidetaka Hayashi · Akira Kishimoto
- 1PQ18 Influence of Tellurite Glass on the Reaction of Si_3N_4 Anti-Reflection Coating Film and Ag Electrode for Silicon Solar Cells (University of Fukui) ○Shizuharu Watanabe · Takayuki Koda · Takashi Ogihara
- 1PQ19 Thermoelectric properties of Au-doped Mg_2Si (CRIEPI) ○Kaoru Nakamura · Toshiharu Ohnuma
- 1PQ20 Preparation of restacked nanosheets of (Ni,Co,Mn) oxides and evaluation of electrode properties for electrochemical capacitors (The University of Tokyo) ○Yuta Matsuoka · Shinya Suzuki · Masaru Miyayama

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16. Research topics on advanced ceramics for energy conversion and storage devices

- (9 : 00) (Chairman 藤代芳伸)
- 1Q01 Synthesis and characterization of nickel-cobalt complex hydroxide (University of Miyazaki) ○Naoki Matsunaga · Rikako Tanaka · Yuji Okuyama · Go Sakai
- 1Q02 ★ Electrode reaction in solid oxide fuel cells investigated by operando X-ray absorption spectroscopy (Tohoku University) ○Koji Amezawa
- (10 : 20) (Chairman 森昌史)
- 1Q05 Usage of Ceria for Electrochemical Cells (National Institute of Advanced Industrial Science and Technology) ○Hirofumi Sumi · Toshio Suzuki · (Anan Kasei) Eisaku Suda · (Central Research Institute of Electric Power Industry) Masashi Mori
- 1Q06 Decomposition reaction at the interface between perovskite-type cathode material and zirconia-based electrolyte in solid oxide fuel cell (SOFC) (Nagoya Institute of Technology) ○Takayuki Ohshiro · Masanobu Nakayama · (National Institute of Advanced Industrial Science and Technology) Hirofumi Sumi · Toshio Suzuki · Yoshinobu Fujishiro
- 1Q07 Evaluation of CO_2 tolerance of proton conducting BZCYYb oxide at SOFC/SOEC operating conditions (National Institute of Advanced Industrial Science and Technology) ○Tomohiro Ishiyama · Haruo Kishimoro · Katherine Develos-Bagarinao · Katsuhiko Yamaji · Toshiaki Yamaguchi · Yoshinobu Fujishiro

- 1Q08 Fabrication of oriented Ln_2NiO_4 (Ln = La and Nd) cathode (Kumamoto University) Atsufumi Murata · Miwa Hashimoto · ○Motohide Matsuda · (National Institute for Materials Science) Tetsuo Uchikoshi · Tohru Suzuki · Yoshio Sakka
(11 : 40) (Chairman 鈴木俊男)
- 1Q09 Evaluation of electrode overpotential of solid oxide electrolysis cell for methane synthesis (National Institute of Advanced Industrial Science and Technology · JST-CREST) ○Ryosuke Atsumi · Tomohiro Ishiyama · Haruo Kishimoto · Katherine Develos-Bagarinao · Katsuhiko Yamaji · Toshiaki Yamaguchi · Yoshinobu Fujishiro
- 1Q17 ☆Proton transport properties of lanthnum-based perovskites and it application to proton ceramic fuel cell (University of Miyazaki) ○Yuji Okuyama
- 1Q19 Optimization study of ceria compositions for use in electrochemical cells (Anankasei Co., Ltd.) ○Masashi Mori · (National Institute of Advanced Industrial Science and Technology) Hiroshi Sumi · Toshio Suzuki
(15 : 20) (Chairman 鷺見裕史)
- 1Q20 Oxygen reduction reaction property of nanostructured LSM/YSZ composite cathode (Gunma University) ○Kazuyoshi Sato · Kazuya Horiguchi · (Osaka University) Kazuo Kuruma · Takeshi Murakami · Hiroya Abe
- 1Q21 Improved Oxide Ion Conductivity of NdBaInO_4 by Elemental Substitution (Tokyo Institute of Technology) ○Masahiro Shiraiwa · Kotaro Fujii · Yuichi Esaki · Masatomo Yashima
- 1Q22 Synthesis and ionic conductive properties of novel garnet type protonic conductor (National Institute of Advanced Industrial Science and Technology) ○Naoki Hamao · Kunimitsu Kataoka · Junji Akimoto
- 1Q23 Preparation of laccase-immobilized carbon-coated nanoporous alumina film and evaluation as an enzymatic electrode (Tohoku University) ○Yasuto Hoshikawa · Alberto Castro-Muñiz · Hanako Tawata · Takashi Kyotani · (Shinshu University) Kouichi Nozaki · Yoshihiko Amano · Shohei Yamane · (National Institute of Advanced Industrial Science and Technology) Tetsuji Ito
(16 : 40) (Chairman 小林剛)
- 1Q24 ☆Research Development on Na-ion batteries (Tokyo University of Science · Kyoto University) ○Kei Kubota · Shinichi Komaba
- 1Q26 First-principles calculation of battery properties of Na ion battery cathode material $\text{Na}_4\text{Co}_3(\text{PO}_4)_2\text{P}_2\text{O}_7$ (JFCC) ○Hiroki Moriwake · Akihide Kuwabara · Craig Fisher · (Toyota Motor Corporation) Masafumi Nose · Hideki Nakayama · Shinji Nakanishi · Hideki Iba · (JFCC · The University of Tokyo · Tohoku University) Yuichi Ikuihara
- 1Q27 Effect of nanoporous gold electrode on ceramic separator-protected aqueous and nonaqueous sodium-air cells (Kyushu University) ○Katsuro Hayashi · (Tokyo Institute of Technology) Taiju Hashimoto

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21. Novel development of eco-solutions approaching from ceramic science and technologies

- 1R01 ★Ceramics science and technology approaching to eco-technology (National Institute of Technology, Toyama College) ○Masamoto Tafu
(9 : 40) (Chairman 袋布昌幹)
- 1R03 ★Ceramics and Water resource –connecting these matters in arid land-(University of Tsukuba) ○Mitsuteru Irie · (National Institute of Technology, Toyama college) Masamoto Tafu · (Nagoya Institute of Technology) Masayoshi Fuji
- 1R05 Morphology control and water-purification filter application of pseudobrookite-type MgTi_2O_5 (University of Tsukuba) ○Yuta Nakagoshi · Yoshikazu Suzuki
(10 : 20) (Chairman 笹井亮)
- 1R06 Reactivity improvement by surface modification of DCPD (Hokkaido University) ○Yuka Takemura · (Hokkaido University · National Institute for Materials Science) Masanori Kikuchi · (National Institute of Technology, Toyama College) Masamoto Tafu · Takeshi Toshima · (National Institute of Technology, Kagoshima College) Tetsuji Chohji
- 1R07 ★Fluoride removal from drinking water by chicken bone char in developing countries (Toyama Prefectural University) ○Tomonori Kawakami · Herath Ayala · (National water supply and drainage board · Sri Lanka) Weragoda Sujithra · (Uva Wellassa University) Amarasooriya Gayan
(14 : 20) (Chairman 武井貴弘)
- 1R17 Resource Recovery from Spent Magnet Waste by Large-Scale Ball-Milling Apparatus (Shimane University) ○Ryo Sasai · Naohiro Shimamura · Midori Saito
- 1R18 The activation of a waste material by mechanochemical treatment and the characterization of material (Nagoya institute of technology) ○Kunihiko Kato · Hadi Razavi · Masayoshi Fuji · Takashi Shirai
- 1R19 Separation of iron oxide and titanium oxide from ball-milled ilmenite (Okayama University) ○Kanako Okamoto · Kouzi Yamamoto · Yoshikazu Kameshima · Shunsuke Nishimoto · Michihiro Miyake
(15 : 40) (Chairman 中島章)
- 1R20 ★Photocatalytic Hydrogen Production with cheap element-based photocatalytic semiconductor (Mie University) ○Satoshi Kaneco
- 1R22 Preparation of CZTS particles by the ultrasonic mist pyrolysis method and photocatalytic characterization (Utsunomiya University) ○Takuya Wajima · Taki Matsumoto · Takafumi Sato · (Shinshu University) Yoshio Hashimoto · (Hokkaido University) Bunsho Ohtani
- 1R23 Effect of Chemical Treatment on Structure and Photochemical Properties of Titania Nanotubes (Osaka University) ○Kensuke Fujii · Hisataka Nishida · Tomoyo Gotou · Toru Sekino
(17 : 00) (Chairman 西本俊介)
- 1R24 Synthesis co-catalyst doped niobium oxide nanotubes and investigation of photocatalytic water splitting activity (Tokyo Institute of Technology) ○Yusuke Tsujimoto · Nobuhiro Matsushita · (Tokyo University of Science) Ken-ichi Katsumata
- 1R25 Four polymorph titanium dioxide photocatalysts with common element co-catalysts (The University of Tokai) ○Katsuki Iwasaki · Koji Tomita · (Tokyo Institute of Technology) Kenichi Katsumata · (The University of Tohoku) Makoto Kobayasi · Masato Kakihana
- 1R26 Ion-exchange for Layered Niobate Perovskite and Its Photocatalytic Activity (University of Yamanashi) ○Takahiro Takei · Nan Xu · (Hokkaido University) Akira Miura · (University of Yamanashi) Nobuhiro Kumada

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13. Ceramic sensors and transducers – basic researches and their applications

- (14 : 20) (Chairman 伊藤敏雄)
- 1S17 ★Surface characterization of supported noble metal catalyst and its performance for catalytic combustion (Nagoya Institute of Technology) ○Masaaki Haneda

- 1S19 Detection of oxygen partial pressure change on catalytic reaction field by limiting current-type oxygen sensor and its application for sensing PM (Kyushu Univ) ○Hideaki Wakita · Maiko Nishibori · Kengo Shimano · (Ehime Univ) Yoshihiko Sadaoka
(15 : 20) (Chairman 西堀麻衣子)
- 1S20 Three-way catalytic properties of $\text{La}(\text{Co}_{1-x}\text{Pd}_x)\text{O}_3$ perovskite and its crystal structural change (NGK SPARK PLUG Co., LTD) ○Satoshi Suzuki · Yasuyuki Okimura · (Nagoya Institute of Technology) Masaaki Haneda · (NGK SPARK PLUG Co., LTD · Nagoya Institute of Technology) Masahiko Okuyama
- 1S21 Elimination of interference gas effects in cerium oxide-type oxygen sensor for monitoring low oxygen concentrations (National Institute of Advanced Industrial Science and Technology) ○Toshio Itoh · Noriya Izu · Takafumi Akamatsu · Woosuck Shin · (Taiyo Nippon Sanso Corporation) Yusuke Miki · Yasuo Hirose
(16 : 00) (Chairman 島ノ江憲剛)
- 1S22 ★Surface Properties of Tungsten Trioxide Nanocrystal (Kumamoto University) ○Takeshi Hashishin · Kazuya Matsumoto · Kazuki Mikami · Tetsuya Kida · (Ritsumeikan University) Shiso Yoshimura · Aya Fujii · (National Institute of Technology, Suzuka) Noriyuki Wada · (Ritsumeikan University) Tomoe Sanada · Jun Tamaki · Kazuo Kojima · (Osaka University) Hitoshi Haneoka · Takeyuki Suzuki
- 1S24 Gasochromic equilibrium reaction of the Pt/ WO_3 thin film hydrogen gas sensor prepared by sol-gel method (Tokyo University of Science) ○Yuki Yamaguchi · Shigeru Ito · Keishi Nishio · Kenjiro Fujimoto
(17 : 00) (Chairman 橋新剛)
- 1S25 Al doping to SnO_2 for improving the gas sensor response in humid atmosphere (Fukuoka Technology Industrial Center) ○Koichi Suematsu · (Kinki University) Masayoshi Yuasa · (Kumamoto University) Tetsuya Kida · (Kyushu University) Kengo Shimano
- 1S26 Response properties of MEMS type gas sensor using SnO_2 -based materials (Kyushu University) ○Tokiharu Oyama · Nan Ma · Miyuki Sasaki · (Fukuoka Industrial Technology Center) Koichi Suematsu · (Kyushu University) Kengo Shimano

September 17 (Thu) (Room A)

03. Powder and Particle Design for High Quality Advanced Ceramics

セラミックスの粉体材料設計

(9 : 00) (Chairman 内藤牧男)

- 2A01 ◆Functionalization and design of advanced ceramics based on innovative powder processing (Yokohama National University) ○Junichi Tatami

セラミックス粉体の合成と構造制御

(9 : 40) (Chairman 多々見純一)

- 2A03 Preparation of some complex oxides using powder mixtures of hydroxides (Tokyo University of Science) ○Shigeru Ito · Yuki Yamaguchi · Kenjiro Fujimoto
- 2A04 Synthesis and characterization of high-voltage $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ cathode particles by mechanical one-step process (Osaka University) ○Hiroyasu Tarui · Takahiro Kozawa · Makio Naito
- 2A05 Effect of mechanical actions on the electrochemical performances of $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ cathode (Osaka University) ○Takahiro Kozawa · Hiroyasu Tarui · Makio Naito
(10 : 40) (Chairman 小澤隆弘)
- 2A06 Morphology control of needle-shaped anatase particles and mesoporous electrode films for dye-sensitized solar cells (Tokai University) ○Takahiro Kikuchi · Koji Tomita · Akie Seki · Yoshihito Kunugi · (Waseda University) Shinjiro Umezumi · (Tohoku University) Masato Kakihana
- 2A07 Titanium Oxide Particles-Based Organic-Inorganic Hybrid Materials (Tokyo University of Agriculture and Technology) ○Yohei Okada · Kodai Ishikawa · Kazutaka Kikuchi · Natsumi Koike · Kazuhiro Chiba · Hidehiro Kamiya
- 2A08 Structural evolution of Si-O-C(H) ceramic particles at high temperatures in an inert atmosphere (Osaka Prefecture University) ○Shu Takeuchi · Masaki Narisawa · (Ritsumeikan University) Kei Mitsuhara · (Osaka Prefecture University) Akihiro Iwase · Hirofumi Inoue · (Ritsumeikan University) Toshiaki Ohta

微粒子分散プロセス

(14 : 20) (Chairman 堀田裕司)

- 2A17 ★Atomization of the Particle with the High Pressure Wet Jet Mill (Sugino Machine Limited) ○Kenichi Harashima · Jun Iozaki
- 2A19 Direct observation of sedimentation and deposition of particles in slurry (Nagaoka University of Technology) ○Yoshihiro Nagasawa · Zenji Kato · Satoshi Tanaka
(15 : 20) (Chairman 多々見純一)
- 2A20 ★Characterization of ceramic powder and slurry (MicrotracBEL Corp.) ○Shingo Onda

粉体材料設計による機能化

(16 : 00) (Chairman 内藤牧男)

- 2A22 ★Current issues on the development of artificial human bones (University of Toyama) ○Hidetoshi Mori
(16 : 40) (Chairman 岡田洋平)
- 2A24 Presintering behavior of gelcast alumina ceramics (Shanghai Institute of Ceramics · Tokyo University of Agriculture and Technology) ○Shunzo Shimai · (Shanghai Institute of Ceramics) Xiang Peng · Yi Sun · Shiwei Wang · (Tokyo University of Agriculture and Technology) Hidehiro Kamiya
- 2A25 Effect of Surface Modification of Complex Oxide Powders with Polyelectrolyte Layers on Electrophoretic Deposition Process (National Institute for Materials Science) ○Tetsuo Uchikoshi · (Tokiwa University High School) Harue Suzuki · (National Institute of Advanced Industrial Science and Technology) Chika Matsunaga · (National Institute for Materials Science) Kiyoshi Kobayashi · Tohru Suzuki · (Toyoashi University of Technology) Hiroyuki Muto · Atsunori Matsuda

September 17 (Thu) (Room B)

02. Innovative Materials Processing, Properties and Reliability of Bulk Ceramics based on Stress and Strain

機能性セラミックスと応力・ひずみ

(9 : 00) (Chairman 榎本尚也)

- 2B01 Orientation control and stress reduction during colloidal shaping of functional ceramics (National Institute for Materials Science) ○Tetsuo Uchikoshi · Tohru S. Suzuki · Yoshio Sakka · (Kumamoto University) Motohide Matsuda
- 2B02 ★Characteristic of BaTiO_3 nanoparticles synthesized in aqueous solution under ultrasound (National Institute of Advanced Industrial Science and Technology) ○Kyuichi Yasui · Kazumi Kato

★ = Guest ☆ = Invited ◆ = Plenary ○ = Presenter

(10 : 20) (Chairman 打越哲郎)

2B05 ★Importance of Stress and Strain in Ceramic Thin Films (Tokyo Institute of Technology) ○Kazuo Shinozaki

2B07 ★Importance of Mechanical Properties of Component Materials for All-Solid-State Lithium Secondary Batteries (National Institute of Advanced Industrial Science and Technology) ○Atsushi Sakuda · Tomonari Takeuchi · Hironori Kobayashi · (Osaka Prefecture University) Akitoshi Hayashi · Masahiro Tatsumisago

ガラスと応力・ひずみ

(14 : 20) (Chairman 宇尾基弘)

2B17 Crack Bifurcation Phenomena in Tempered Glass (GMS Laboratory · Teikyo University) ○Shinichi Aratani

2B18 High temperature behavior of oxidation resistant glass-ceramics coating for thermoelectric elements (Tokyo University of Science) ○An Ozeki · Daisuke Ono · Kosuke Kato · Tsutomu Iida · Kenichiro Iwasaki · Atsuo Yasumori

(15 : 00) (Chairman 安盛敦雄)

2B19 ★Glass reliability and its evaluation method (ASAHI GLASS CO., LTD.) ○Shusaku Akiba

粉体プロセスと応力・ひずみ

(16 : 00) (Chairman 樽田誠一)

2B22 Structure evaluation of Al_2O_3 powder compact and ceramics prepared from freeze-dried granule (Nagaoka University of Technology) ○Tatsuaki Shibuya · Zenji Kato · Satoshi Tanaka · (Tokyo Institute of Technology) Kouichi Yasuda

2B23 Effect of granule packing structure on the generation and development process of pores (Nagaoka university of technology) ○Tsuyoshi Hondo · Zenji Kato · Satoshi Tanaka

(16 : 40) (Chairman 田中諭)

2B24 ★Measurement of Granule Compression Molding Process using X-ray Micro Computed Tomography (University of Hyogo) ○Michitaka Suzuki

■■ September 17 (Thu) (Room C) ■■

05. New Development in Environmental Barrier Ceramic Coatings

耐環境性コーティングの実験による評価

(9 : 00) (Chairman 北岡諭)

2C01 Mechanical property evaluation with the nanoindentation on a surface heated with a laser beam (Tokyo institute of technology) ○Yuki Kobayashi · Kei Tsurumaru · (Tokyo institute of technology · saga university) Takashi Akatsu · (Tokyo institute of technology) Fumihiko Wakai · Yutaka Shinoda

2C02 Toughening behavior of Si bond coat layer for (SiC/SiC)/EBC system (The University of Tokyo) ○Shohei Magata · Yutaro Arai · Yutaka Kagawa · (JFCC) Satoshi Kitaoka · Naoki Kawashima

S2. Advanced microstructure control of high temperature materials

合同セッション：耐熱材料の先進構造制御

(9 : 40) (Chairman 赤津隆)

2C03 Effect of non-uniform deformation behavior of SiC/SiC substrate system on failure behavior of $3Al_2O_3 \cdot 2SiO_2/Si/(SiC/SiC)$ EBC system (The University of Tokyo) ○Atsushi Otsuka · Kaoru Yonekura · Yutaka Kagawa

2C04 Invisible damages induced after heat exposure in $3Al_2O_3 \cdot 2SiO_2/Si/RB-SiC$ EBC model material (The University of Tokyo) ○Yutaro Arai · Yutaka Kagawa

(10 : 20) (Chairman 鈴木達)

2C05 Interphase formation process for low-conductive SiC fibers by electrophoretic deposition method (Tokyo Institute of Technology) ○Tetsu Kikuhara · Katsumi Yoshida · Toyohiko Yano · (Japan Aerospace Exploration Agency (JAXA)) Masaki Kotani · Toshio Ogasawara

2C06 Evaluation of interfacial shear strength of fiber-reinforced materials by nanoindentation method using finite element analysis (Tokyo Institute of Technology) ○Yuto Torii · (Tokyo Institute of Technology · Saga University) Takashi Akatsu · (Tokyo Institute of Technology) Wataru Kubota · Yutaka Shinoda · Fumihiko Wakai

2C07 Thermal and Mechanical properties of $(La_{1-x}Bi_x)_2Mo_2O_9$ (Osaka University) ○Yusuke Mitazono · Yuji Ohishi · Hiroaki Muta · Ken Kurosaki · (Osaka University · University of Fukui) Shinsuke Yamanaka

(11 : 20) (Chairman 周游)

2C08 ★Current repair technologies of commercial jet engine parts and problems, and future prospects (JAL Engineering) ○Tsuyoshi Nakano

01. Special session for Gender Equality Promotion

理系女性の研究と活躍—大学から—

(14 : 20) (Chairman 中野裕美)

2C17 ★理系で活躍するためのキャリアデザイン (Tokyo Medical and Dental University) ○Miho Nakamura

2C18 ★To interests and beauty of carbon nanotube and graphene/(Nagoya University) ○Michiko Kusunoki

理系女性の研究と活躍—企業から—

(15 : 00) (Chairman 熊田伸弘)

2C19 ★My Days with Lithium Ion Batteries (TOSHIBA CORPORATION) ○Yumiko Takizawa

2C20 ★Activities of women researchers in R&D departments of JFE steel (JFE Steel Corporation) ○Yukiko Ozaki

ダイバーシティの取り組み

(15 : 40) (Chairman 藤原忍)

2C21 ★Gender Equality Promotion in University of Toyama (University of Toyama) ○Fukiko Ichida

2C22 ★Ceramics Research for Creating a Society in which Men and Women Shine (Tokyo Institute of Technology) ○Kiyoshi Okada

■■ September 17 (Thu) (Room D) ■■

04. Science and Technology on Engineering Ceramics — Advanced Microstructure Control and Analysis for Safe and Reliable Society

繊維強化複合材料の新展開

(14 : 20) (Chairman 吉田克己)

2D17 ★Necessity of Backcast-type materials design for self-healing ceramics (Yokohama National University) Wataru Nakao · ○Shunsuke Yoshioka

2D19 Development of Particle Dispersion Silicon Carbide Composites (Kyoto University) ○Tatsuya Hinoki · Moonhee Lee · Shohei Yanagawa · (National Institute for Materials Science) Kazuya Shimoda

- 2D20 Development of BN Particle Dispersion Silicon Carbide Composites (Kyoto University) ○Shohei Yanagawa · Moonhee Lee · (National Institute for Materials Science) Kazuya Shimoda · (Kyoto University) Tatsuya Hinoki
- 2D21 Oxidation resistance of SiC fiber-reinforced BN particle dispersed SiC matrix composites (National Institute for Materials Science) ○Kazuya Shimoda · (Kyoto University) Moonhee Lee · Syohei Yanagawa · Tatsuya Hinoki
- (16 : 00) (Chairman 篠田豊)
- 2D22 Interface Characterization and Mechanical Behavior of SiC Fiber-Reinforced Ti3AlC2 Matrix Composites (National Institute for Materials Science) ○ Shuqi Guo · Chunfeng Hu · Hong Gao · (National Institute for Materials Science · The University of Tokyo) Yutaka Kagawa
- 2D23 Oxidation behavior of SiC_f/SiC-based composites fabricated by melt infiltration method using Si-Hf alloy in steam-containing atmospheres (Tokyo Institute of Technology) ○Toru Tsunoura · Yosuke Okubo · Katsumi Yoshida · Toyohiko Yano · (Japan Aerospace Exploration Agency) Takuya Aoki · Toshio Ogasawara
- 2D24 Steam oxidation behavior of HfSi₂ (Tokyo Institute of Technology) ○Katsumi Yoshida · Toru Tsunoura · Toyohiko Yano · (Japan Aerospace Exploration Agency (JAXA)) Takuya Aoki · Toshio Ogasawara
- 2D25 Evaluation of hydrothermal corrosion behavior of SiC/SiC composite (Toshiba Corporation) ○Shoko Suyama · Masary Ukai · Masayuki Uchihashi · Hideaki Heki · Kazunari Okonogi · Kazuo Kakiuchi
- 2D26 High temperature steam oxidation behavior of SiC for nuclear cladding material (Kyoto University) ○Moonhee Lee · Tatsuya Hinoki · (Toshiba Corporation) Fumihisa Kano · Yoshihiro Hyodo

■ ■ September 17 (Thu) (Room E) ■ ■

12. Random Materials—Function and Physical Property Correlated with the Structure—

結晶化ガラス

(09 : 00) (Chairman 坂本明彦)

- 2E01 ★ Nano-Scale Heterogeneous Structure and Crystallization in Glasses (Nagaoka University of Technology) ○Takayuki Komatsu
- (09 : 40) (Chairman 岸哲生)
- 2E03 Photocatalytic activity of crystallized glass heat-treated in a reducing atmosphere (Tohoku University) ○Kazuki Yoshida · (Kyoto University) Hirokazu Masai · (Tohoku University) Nobuaki Terakado · Yoshihiro Takahashi · Takumi Fujiwara · (IMRAM, Tohoku Univ.) Hideki Kato · Masato Kakihana
- 2E04 Effect of composition and defect on photocatalytic activity in TiO₂-crystallized glass (Tohoku University) ○Hiroshi Takahashi · Kazuki Yoshida · Nobuaki Terakado · Yoshihiro Takahashi · Takumi Fujiwara · (Tohoku University) Hideki Kato · Masato Kakihana
- (10 : 20) (Chairman 篠崎健二)
- 2E05 Color-tunable photoluminescence due to different emissive center in glass-ceramics (The Tohoku University) ○Yoshinobu Hoshino · Nobuaki Terakado · Yoshihiro Takahashi · Takumi Fujiwara
- 2E06 Fabrication of glass-ceramics for fast heat-transport and its morphology (Tohoku University) ○Kouki Watanabe · Nobuaki Terakado · Yuudai Yokochi · Yoshihiro Takahashi · Takumi Fujiwara
- 2E07 Fabrication of VO₂-crystallized glass with latent heat storage (The University of Tohoku) ○Kei Muramoto · Nobuaki Terakado · Yoshihiro Takahashi · Takumi Fujiwara
- (11 : 20) (Chairman 角野広平)
- 2E08 Spinon thermal conductivity in glass-ceramics containing one-dimensional spin-chain compound (Tohoku University) ○Nobuaki Terakado · Kouki Watanabe · Yuudai Yokochi · Yoshihiro Takahashi · Takumi Fujiwara
- 2E09 Laser-induced structure change and formation of low-dimensional spin system in sputtered Sr-Cu-O films (Tohoku University) ○Ryosuke Takahashi · Nobuaki Terakado · Yoshihiro Takahashi · Takumi Fujiwara

ガラス構造と物性

(14 : 20) (Chairman 北村直之)

- 2E17 ★ Structure and properties of heavy metal oxide glasses (Okayama University) ○Tokuro Nanba
- (15 : 00) (Chairman 高橋儀宏)
- 2E19 Raman spectroscopic study on structure of bismuth borate glasses: comparison between glasses and crystals (Kansai University) ○Shun Tsuji · (National Institute of Advanced Industrial Science and Technology) Kohei Fukumi · Naoyuki Kitamura · (Kansai University) Hiroaki Utiyama · Hiromitsu Kozuka
- 2E20 Preparation and properties of glasses based on Ga₂S₃-Sb₂S₃-A (A=CsCl, SnS) systems (Kyoto Institute of Technology) ○Tomoyo Ashida · Arifumi Okada · Takashi Wakasugi · Kohei Kadono
- 2E21 X-ray Absorption Fine Structure (XAFS) Analysis of Sn-containing Oxide Glass (Kyoto University) ○Hirokazu Masai · (Nagoya Institute of Technology) Ko Mibu · (Japan Synchrotron Radiation Research Institute) Toshiaki Ina
- 2E22 Glass-like behavior of bulk materials comprising chemically modified polyoxometalates (Kansai University) ○Hiromitsu Kozuka · Shinya Oda · (National Institute for Materials Science) Shinji Kohara · (Kansai University) Kota Suzuki · Haruka Nakano · Kosuke Iba · Hiroaki Uchiyama

蛍光ガラス

(16 : 20) (Chairman 正井博和)

- 2E23 ★ Novel Phosphor Glasses for Radiation Dosimeter and Their Potentiality (Kanazawa Institute of Technology) ○Hidehito Nanto
- 2E25 Thermal stability of red-emission in Mn-doped benitoite-type tetragermanate (Tohoku University) ○Yoshihiro Takahashi · Rie Suzuki · Kenichiro Iwasaki · Nobuaki Terakado · Takumi Fujiwara
- (17 : 20) (Chairman 寺門信明)
- 2E26 Emission property and structural analysis of tin-doped zinc phosphate glass (Kyoto University) ○Aya Torimoto · Hirokazu Masai · (Nara Institute of Science and Technology) Takayuki Yanagida
- 2E27 Emission Property of Sn²⁺ Center in ZnO-B₂O₃ Glass (Kyoto University) ○Hirokazu Masai · (Nara Institute of Science and Technology) Takayuki Yanagida · (Nagoya Institute of Technology) Ko Mibu

■ ■ September 17 (Thu) (Room F) ■ ■

07. Synthesis and Functional Properties of Mixed Ion Compounds

(9 : 00) (Chairman 林克郎)

- 2F01 New ammonia synthesis catalysts from oxyhydrides (Kyoto University) Naoya Masuda · Toki Kageyama · Yoshinori Uchida · Cedric Tassel · Takafumi Yamamoto · (Kyoto University · ESCIB, Kyoto University) Saburo Hosokawa · (Kyoto University · PRESTO, JST) ○Yoji Kobayashi · (Kyoto

- University · CREST, JST) Hiroshi Kageyama
- 2F02 Ammonia synthesis from oxyhydride-supported catalysts (Kyoto University) ○Yoshinori Uchida · Naoya Masuda · Cedric Tassel · Takafumi Yamamoto · (Kyoto University · Kyoto University, ESICB) Saburo Hosokawa · (Kyoto University · PRESTO, JST) Yoji Kobayashi · (Kyoto University · CREST, JST) Hiroshi Kageyama
- 2F03 ★Development of non-oxide photocatalysts for solar energy conversion (Tokyo Institute of Technology) ○Kazuhiko Maeda
- 2F05 High efficiency of visible light responsive C modified NaTaO₃ mesocrystal nanoparticle (Tohoku University) ○Xiaoyong Wu · Shu Yin · Tsugio Sato (10 : 40) (Chairman 三浦章)
- 2F06 Optical properties of GaN-ZnO solid solution thin films synthesized by low temperature epitaxial growth (The University of Tokyo · KAST · JST-CREST) ○Yasushi Hirose · Chang Yang · Naoki Kashiwa · Tetsuya Hasegawa
- 2F07 Preparation, Crystal Structure and Optical Property of an Oxynitride Photocatalyst (BaTaO₂N)_{0.99}(SrWO₂N)_{0.01} (Tokyo Institute of Technology) ○Keisuke Hibino · Kazuho Shimada · Kotaro Fujii · Kazuhiko Maeda · Takayoshi Oshima · Osamu Ishitani · Masatomo Yashima
- 2F08 ☆Chemical bonding view of TCOs (Tokyo Institute of Technology) ○Hiroshi Mizoguchi (14 : 20) (Chairman 小林洋治)
- 2F17 ★Design of Phosphors Based on Crystal-site Engineering (Tohoku University) ○Masasto Kakihana · (Okayama University of Science) Yasushi Sato · (Tohoku University) Hiroki Kuwahara · (Tokai University) Koji Tomita · (Tohoku University) Makoto Kobayashi · Hideki Kato
- 2F19 Long persistent luminescence and crystallization of SrO-Al₂O₃ glass-ceramics and the effect of addition of B₂O₃ (Nagaoka Univ. Tech.) ○Kenji Shinozaki · Tsuyoshi Honma · Takayuki Komatsu · (Coe College) Mario Affatigato
- 2F20 Persistent luminescence properties and emission quantum efficiency evaluation in Ce,Cr co-doped (Gd,Y)₃(Al,Ga)₅O₁₂ garnet phosphor (Kyoto University) ○Kazuki Asami · Jumpei Ueda · Setsuhisa Tanabe
- 2F21 Effect of synthesis condition on luminescence properties of Eu activated layer mixed-anion compounds (The University of Tokyo) ○Makoto Tatsuda · Hiraku Ogino · (Nara Institute of Science and Technology) Takayuki Yanagida · (Aoyama Gakuin University) Jun-ichi Shimoyama · (The University of Tokyo) Kohji Kishio

■■ September 17 (Thu) (Room G) ■■

S4. High Heat-resistance and High Reliable Dielectrics for Next-Generation Power Electronics

- (9 : 00) (Chairman 木村雅彦)
- 2G01 ☆Defect control in ferroelectric oxides for high-temperature operating capacitors: Toward a marked improvement in insulating resistance (The University of Tokyo) ○Yuji Noguchi · Masaru Miyayama
- 2G03 Composition design of alkali niobate ceramics for high-temperature capacitor (Nagoya Institute of Technology) ○Katsuya Yoshida · Ken-ichi Kakimoto
- 2G04 Influence of zirconium oxide addition on temperature characteristic of a relative permittivity of KSr₂Nb₃O₁₅ (National Institute of Technology, Nagaoka College) ○Ryo Ajikata · Masashi Kajiwara · Yuuna Kajiwara · Yutaka Iwai (10 : 20) (Chairman 永田肇)
- 2G05 ★Development trend and materials design of Monolithic ceramic capacitor for power electronics (Murata Manufacturing Co.,Ltd.) ○Tomotaka Hirata · Kenichi Nada · Harunobu Sano
- 2G07 ★CeraLink New high current – high voltage ceramic capacitor (TDK Corporation) ○Tomoyuki Saito · (EPCOS OHG) Christoph Auer · Juergen Konrad
- 2G09 ☆Lead-free antiferroelectric stabilization for capacitor applications (Taiyo Yuden Co., Ltd.) ○Hiroyuki Shimizu · Youichi Mizuno · (The Pennsylvania State University) Guo Hanzheng · Randall Clive (14 : 20) (Chairman 野口祐二)
- 2G17 ◆Dielectric Breakdown Mechanism of High-temperature Ceramic Capacitors (Tokyo Institute of Technology) ○Takaaki Tsurumi · Mikio Yamazaki · Hiroaki Takeda · Takuya Hoshina
- 2G19 ★The Ceramics Technology for Next Generation Automotive Power Electronics System (Shimane University) ○Masayoshi Yamamoto

14. New Evolution of Dielectrics: Creation of Innovative Technology and Contribution to New Fields

ナノクリスタル2

- (16 : 00) (Chairman 加藤一実)
- 2G22 ★Liquid-phase Oxide Nanoparticles Synthesis: TCO nanoink and Nb-based Piezo Nanocrystal (Tohoku University) ○Atsushi Muramatsu · Kiyoshi Kanie · Masafumi Nakaya
- 2G24 Influence of Depolarizing Field on Domain Structure in Tetragonal Pb(Zr,Ti)O₃ Nanorods (Nagoya University · JST-PRESTO) ○Tomoaki Yamada · (Nagoya University) Daisuke Ito · (National Institute for Materials Science · Tokyo Institute of Technology) Osami Sakata · (University of Hyogo) Junki Kuroishi · Takahiro Namazu · (Tokyo Institute of Technology) Takao Shimizu · Hiroshi Funakubo · (Tohoku University) Takanori Kiguchi · (Nagoya University) Masahito Yoshino · Takanori Nagasaki
- 2G25 Synthesis of niobium-type nanocubes with perovskite structure by microwave-assisted solvothermal method (University of Yamanashi) ○Kouichi Nakashima · Shintaro Ueno · Satoshi Wada

評価解析2

- (17 : 20) (Chairman 寺西貴志)
- 2G26 ☆Phase evolution in Pb(Mg_{1/3}Nb_{2/3})O₃-based relaxors (Shizuoka University) ○Desheng Fu
- 2G27 Fabrication and characterization of perovskite oxynitride dielectrics (Tokyo Institute of Technology) ○Takuya Hoshina · Akira Sahashi · Yuka Morimoto · Kazuki Kanehara · Hiroaki Takeda · Takaaki Tsurumi

■■ September 17 (Thu) (Room H) ■■

15. Ceramics for Next-Generation Power Electronics

- (16 : 00) (Chairman 村山宣光)
- 2H22 ★Passive components for taking maximum advantage of advanced power semiconductor performance (National Institute of Advanced Industrial Science and Technology) ○Hiroshi Yamaguchi
- 2H24 ★Opportunity of ceramic materials for high temperature power semiconductor packaging-use (NISSAN MOTOR CO., LTD.) ○Yoshinori Murakami · (National Institute of Advanced Industrial Science and Technology) Hiroshi Yamaguchi
- 2H26 ★Ceramics substrate for next generation power module (Denki Kagaku Kogyo) ○Hideki Hirotsuru

■■ September 17 (Thu) (Room I) ■■

09. Frontiers of structural science and the development of novel materials

(9 : 00) (Chairman 井田隆)

- 2I01 Electron density analysis of the ferroelectric BiFeO₃ from X-ray powder diffraction data (Tokyo Institute of Technology) ○Kotaro Fujii · Hiroki Kato · Kazuki Omoto · Masatomo Yashima · (University of Science and Technology Beijing) Jun Chen · Xianran Xing
- 2I02 Atomic-scale characterization of oxide-ion diffusion, structure and phase stability of ceria-based catalysts and related materials; Present status and problems (Tokyo Institute of Technology) ○Masatomo Yashima · Kotaro Fujii

(9 : 40) (Chairman 藤井孝太郎)

- 2I03 Crystal and Electronic Structures of Octahedral-Mo₆-Cluster-Complex-Compounds (Tokyo Institute of Technology · National Institute for Materials Science · NIMS Saint-Gobain Center of Excellence for Advanced Materials) ○Norio Saito · (UMR 6226 · University of Rennes 1) Stephane Cordier · Pierric Lemoine · (National Institute for Materials Science · NIMS Saint-Gobain Center of Excellence for Advanced Materials) Yoshiki Wada · Takeo Ohsawa · (National Institute for Materials Science · UMI 3629) Fabien Grasset · (National Institute for Materials Science · NIMS Saint-Gobain Center of Excellence for Advanced Materials) Tetsuo Uchikoshi · (Tokyo Institute of Technology) Jeffrey S Cross · (National Institute for Materials Science · NIMS Saint-Gobain Center of Excellence for Advanced Materials · MCES Tokyo Institute of Technology) Naoki Ohashi
- 2I04 Synthesis and electrical properties of murataite ceramics with fluorite-type superstructure (University of Tsukuba) ○Ryosuke Maki · Yoshikazu Suzuki · (University of California Irvine) Peter E. D. Morgan

(10 : 40) (Chairman 大石克嘉)

- 2I06 Structural phase transitions in R₂BaCo₂O_{5+δ} (R = Sm, Eu, Gd) (Nagoya Institute of Technology) ○Tatsuya Suzuki · Momoko Okabe · Toru Asaka · Koichiro Fukuda · Nobuo Ishizawa · (The University of Tokyo) Nobuyuki Abe · Takahisa Arima
- 2I07 Correlation between magnetism and crystal structure in the layered chalcogenide FePS₃ (Nagoya Institute of Technology) ○Chisato Murayama · Momoko Okabe · Toru Asaka · Koichiro Fukuda · (National Institute for Materials Science) Yoshitaka Matsushita · (Max Planck Institute for Solid State Research) Masahiko Isobe · (JFCC) Kazuo Yamamoto

(11 : 20) (Chairman 分島亮)

- 2I08 Synthesis and Crystal structure of S-doped Sr_xLa_{2-x}Cu(O, S)_{4-y} (Chuo University) Kensuke Shirota · Kengo Oka · ○Katsuyoshi Oh-ishi
- 2I09 Introducing oxygen vacancies and determining vacancy positions in Nd₂CuO₄ system (Chuo University) ○Hirofumi Mukaiyama · Katsuyoshi Oh-ishi · Kengo Oka

(14 : 20) (Chairman 村井啓一郎)

- 2I17 ☆Crystal structures and thermoelectric properties of intermetallic compounds containing Na (Tohoku University) ○Takahiro Yamada · Masahiro Kanno · Michitake Kamamoto · Hisanori Yamane · (National Institute of Advanced Industrial Science and Technology) Hideaki Nagai
- 2I18 Synthesis and Crystal Structure Analysis of the New Compound Prepared in Ba-B-Si-N System (Tohoku University) Takayuki Hashimoto · ○Hisanori Yamane · (RWTH Aachen University) Nils Becker · Richard Dronskowski

(15 : 00) (Chairman 土井貴弘)

- 2I19 A new polymorph of titanium monoxide, TiO synthesized using a Bi flux (Tohoku University) ○Shinsaku Amano · Hisanori Yamane · Masami Terauchi
- 2I20 Characterization of Thermoelectric Properties of Ca and Al doped LaCoO₃ (Tokushima University) ○Kei-ichiro Murai · Ken Nagai · Masaru Takahashi · Toshihiro Moriga

S3. Inorganic Materials Innovation

(16 : 00) (Chairman 田中功)

- 2I22 ★Flux Growth of Hyperspace Controlled Crystalline Materials for Innovative Lithium Ion Secondary Batteries (Shinshu University · CREST, Japan Science and Technology Agency) ○Nobuyuki Zettsu · Katsuya Teshima

(16 : 40) (Chairman 日夏幸雄)

- 2I24 ★Structural Investigation on Inorganic Materials by Lattice Simulation (Niigata University) ○Mineo Sato · Kazuyoshi Uematsu · Atsushi Itadani · Sonwoog Kim · Kenji Toda

(17 : 20) (Chairman 陰山洋)

- 2I26 ★Exploration of perovskite-related compounds with polar structure – consideration of cation arrangement and selection of constituent elements – (Gakushuin University) ○Yoshiyuki Inaguma · Akihisa Aimi · Daisuke Mori · (Tokai University) Tetsuhiro Katsumata · (Nagoya Institute of Technology) Masanobu Nakayama

■■ September 17 (Thu) (Room J) ■■

18. Chemical Design—Key processes for fabrication of novel functional materials—

(9 : 00) (Chairman 幸塚広光)

- 2J01 ☆Fabrication of Ni/Al layered double hydroxide composite material which has a high electron mobility interface by liquid phase deposition (Kobe University) ○Hideshi Maki
- 2J02 Electrode properties of Ni-Co-Mn-oxide nanosheets with vacancy defects (The University of Tokyo) ○Shinya Suzuki · Masaru Miyayama
- 2J03 Synthesis of nano-sized layered iron oxide with molecular assembly template and its soft-chemical behavior (Kyushu University) ○Shin-ichi Hayano · Michitaka Ohtaki

(10 : 00) (Chairman 石垣隆正)

- 2J04 ★Heat-resistant insulating materials—ceramic coatings, silsesquioxane resins, and silicone rubbers (Shinshu University) ○Yasushi Murakami
- 2J06 Flexibility of the ceramic thin films prepared on polymer substrates by sol-gel and transfer process (Kansai University) ○Ryosuke Hamano · Hiromitsu Kozuka · Hiroaki Uchiyama

(11 : 00) (Chairman 鈴木真也)

- 2J07 Amorphous silica-based inorganic-organic hybrid materials derived from perhydropolysilazane chemically modified with alcohols (Nagoya institute of technology) ○Kohei Okibayashi · (Nagoya institute of technology · Universiti Teknologi Malaysia) Mohd Nazri M. Sokri · (Nagoya institute of technology) Takahiro Onishi · Yusuke Daiko · Sawao Honda · Yuji Iwamoto
- 2J08 Synthesis of macrocyclic siloxanes containing alkoxyisilyl groups and their hydrolysis and polycondensation (Waseda University) Masashi Yoshikawa · ○Hiroya Shiba · Hiroaki Wada · Atsushi Shimojima · Kazuyuki Kuroda
- 2J09 Characterization of multilayer BaTiO₃ based nanofilms prepared by in situ multilayering at liquid surface (Kyushu Institute of Technology) ○Hirokazu

■■ September 17 (Thu) (Room K) ■■

19. Soft-solution process for synthesis and fabrication of ceramics

(9 : 00) (Chairman 水畑穰)

- 2K01 Crystal growth of calcite through oriented attachment of nanoblocks (Keio University) ○Mihiro Takasaki · Yuya Oaki · Hiroaki Imai
 2K02 Synthesis of Al-doped ZnO particles in aqueous solution using anion-exchange resin as base (Chiba University) ○Motoharu Sugahara · Naofumi Uekawa · Akira Kuwaki · Takashi Kojima

(9 : 40) (Chairman 今井宏明)

- 2K03 Anode Reaction of SnO₂ prepared by liquid phase deposition with alkali metal ions (Kobe University) ○Yuya Shibata · Hideshi Maki · Minoru Mizuhata
 2K04 Interlayer Distance Control of Layered Double Hydroxide Synthesized by Liquid Phase Deposition (Kobe University) ○Minoru Mizuhata · Masayoshi Inoue · Hideshi Maki
 2K05 Aqueous solution synthesis processes of rare-earth Nb/Ta complex oxides using water-soluble metal complexes and their up-conversion properties (Tokai University) ○Satoshi Ogawa · Sayaka Tamura · Koji Tomita · (Hiroshima University) Kiyofumi Katagiri · (Tohoku University) Masato Kakihana

(10 : 40) (Chairman 小林亮)

- 2K06 Study on Fabrication of Conductive Ceramics Film by Cast Method (Improvement of The Quality of Film by Additives) (Yamagata University) ○Masato Sato · Shiro Kambe
 2K07 ★Fabrication of Metal Oxide Nanocrystals with Aqueous Solution Processes (National Institute of Advanced Industrial Science and Technology) ○Yoshitake Masuda · Toshio Itoh · Woosuck Shin · Tatsuki Ohji · Kazumi Kato

S5. Materials Processing

(14 : 20) (Chairman 水畑穰)

- 2K17 ◆Synthesis and Functional Development of Inorganic Nanoparticles by Water Molecular Controlled-Release Solvothermal Process (IMRAM, Tohoku University) ○Shu Yin · Tsugio Sato
 2K20 ★Synthesis of Oxide Nanosheets and its Application towards Redox Supercapacitors (Shinshu University) ○Wataru Sugimoto
 (16 : 00) (Chairman 高橋雅英)
 2K22 ★Preparation of Porous Ceramic Monoliths in Metal Oxide/Phosphate Compositions using Metal Salts as Precursors (Kyoto University) ○Kazuki Nakanishi
 (16 : 40) (Chairman 鈴木義和)
 2K24 ☆Development of a new synthesis method of nitrides from NaNH₂ molten salt and oxides (Hokkaido University) ○Akira Miura · (University of Yamanashi) Takahiro Takei · Nobuhiro Kumada · (Hokkaido University) Mikio Higuchi · Kiyoharu Tadanaga
 2K25 ☆Design of Porous Coordination Polymers for Achieving Visible-Light-Driven Photocatalytic Processes (Osaka Prefecture University) ○Yu Horiuchi · Takashi Toyao · Masaya Matsuoka

■■ September 17 (Thu) (Room L) ■■

20. Hybrid Materials for Next Generation

(09 : 00) (Chairman 武藤浩行)

- 2L01 Ag•Cu-codoped inorganic-organic hybrid films for rewritable hologram formation (Toyohashi University of Technology) ○Go Kawamura · Keisuke Ikeda · Takuya Ito · Hiroyuki Muto · Atsunori Matsuda
 2L02 Preparation and mechanical properties of aerogels derived from organo-bridged alkoxyxilanes (Kyoto University) ○Kazuyoshi Kanamori · Taiyo Shimizu · Yosuke Aoki · Kazuki Nakanishi
 2L03 Influence of TiO₂ filler shape in an electric field orientation control in the organic-inorganic hybrid materials (Nagaoka University of Technology · Extreme Energy-Density Research Institute) ○Naoto Matsutani · Tadachika Nakayama · Hong-Baek Cho · Masanao Kanno · Minh Triet Huynh Tan · Tsuneo Suzuki · Hisayuki Suematsu · Koichi Niihara

(10 : 00) (Chairman 金森主祥)

- 2L04 ★Solid-Phase Synthesis of Multi-Metallated Peptide Arrays and Their Applications for Biomedical Issues (National Institute for Materials Science) ○Kentarō Tashiro
 2L07 Effect of polymer introduction into thin film capacitor using BaTiO₃ mono-dispersed sol (Fukuoka Technology Industrial Center) ○Koichi Suematsu · Masashi Arimura · Naoyuki Uchiyama · Teruhisa Makino · (Kyushu University) Maiko Nishibori
 2L08 Flux Coating Fabrication of Ta₂N₅ / Current Collector Composite Aiming to Photoelectrode Applications for Water Splitting (Shinshu University) ○Hajime Wagata · Mugi Komatsu · Sayaka Suzuki · Shuji Oishi · Katsuya Teshima
 2L09 Preparation and characterization of magnetic cores using Ferrite coated Fe-Si metal powders (NGK SPARK PLUG CO., LTD.) ○Satoshi Mori · Takeshi Mitsuoka · (Tokyo Institute of Technology) Nobuhiro Matsushita

■■ September 17 (Thu) (Room M) ■■

17. Development of functional ceramics using Green Processing

液相プロセス

(9 : 20) (Chairman 安達信泰)

- 2M02 Electrochemical Evaluation of (3-Aminopropyl) triethoxysilane-coated Fluorine-doped Tin Oxide Electrodes for Avidin-biotin Immobilization (Tokyo Institute of Technology) ○Momoko Yamamoto · (Gunma University) Yuta Katayanagi · (Tokyo University of Science) Kenichi Katsumata · (Tokyo Institute of Technology) Toshiyuki Ikoma · (National Tsing Hua University) Jeff Lee · Shih-Yuan Lu · (Tokyo Institute of Technology) Nobuhiro Matsushita
 2M03 Solid state synthesis of phase pure cubic Li₇La₃Zr₂O₁₂ nanoparticles from a highly reactive precursor (Shizuoka University) ○Kenta Nishimura · Kumar Padarti Jeevan · Naonori Sakamoto · Naoki Wakiya · Hisao Suzuki · (Shizuoka University · Keio University) Tamotsu Senna
 2M04 Synthesis and characterization of Nb-doped TiO₂ nanoparticles by stirring metal chloride solutions in air (Chiba University) ○Eri Asano · Naofumi Uekawa · Chunming Wen · Takashi Kojima
 2M05 Synthesis and Characterization of Silica Coated Superparamagnetic Magnesium Ferrite Nanoparticles (Shizuoka University) ○Harinarayan Das · Takashi Arai · Naonori Sakamoto · (Tokyo Institute of Technology) Kazuo Shinozaki · (Shizuoka University) Hisao Suzuki · Naoki Wakiya

薄膜形成

(10 : 40) (Chairman 増本博)

2M06 ★ Highly-filled Nanoparticle Coating and Application (3M Japan Limited) ○ Naota Sugiyama

2M08 Low pressure chemical vapor deposition of Gd₂O₃ doped CeO₂ thin films on porous alumina substrates (Tokyo Institute of Technology) ○ Kosuke Suito · Tadashi Shiota · (Shizuoka University) Naoki Wakiya · (Tokyo Institute of Technology) Jeffrey Scott Cross · Akio Nishiyama · Osamu Sakurai · Kazuo Shinozaki

2M09 Effect of porous Si on the electrical properties of PZT thin films (Shizuoka University) ○ Kanako Torii · (Tokyo University of Agriculture and Technology) Nobuyoshi Koshida · (Tokyo Tech.) Kazuo Shinozaki · (Shizuoka University) Naonori Sakamoto · Hisao Suzuki · Naoki Wakiya

低エネルギー消費プロセス

(14 : 40) (Chairman 篠崎和夫)

2M18 ★ Fabrication of Cu-Cr-O nanofiber (National Taipei University of Technology) ○ Te-Wei Chiu · Yi-Ting Chen · Chia-Hang Tu

2M20 pH dependence study of YVO₄:Bi,Eu nanophosphor solution synthesis using microreactor (Tottori university) ○ Tadashi Ishigaki · Ryouyusuke Sakata · (Merck Ltd.) Hiroshi Okura · (Tottori university) Koutoku Ohmi

2M21 Phase selective epitaxial crystallization of vanadium oxide thin films by thermal treatment under uniaxial compression (Tokyo Institute of Technology) ○ Akifumi Matsuda · Yasuhisa Nozawa · Ryotaro Namba · Mamoru Yoshimoto · (Kanagawa Industrial Technology Center) Satoru Kaneko

(16 : 00) (Chairman 脇谷尚樹)

2M22 Effect of copper precursor species on continuous hydrothermal synthesis of copper nanoparticles using a flow reaction system (National Institute of Advanced Industrial Science and Technology) ○ Hiromichi Hayashi · Takashi Nakamura · Yoshito Wakui · Takeo Ebina · (Tohoku University) Richard Smith

2M23 X-ray absorption fine structure analysis of BaTiO₃ by reverse homogeneous precipitation method (Kyushu University) ○ Maiko Nishibori · Yasunori Nanri · Yasutake Teraoka · (Noritake Co.,Ltd.) Koji Inukai**磁性材料**

(16 : 40) (Chairman 松田晃史)

2M24 Preparation of BaTiO₃-Co nano-composite films by differential pressure sputtering (Tohoku University) ○ Hiroshi Masumoto · Yiwen Zhang · (DENJIKEN) Nobukiyo Kobayashi · Shigehiro Ohnuma · (University of Toyama) Masateru Nose

2M25 Magneto-optical properties of Magnetic Garnet and metal nano particle composite film (Nagoya Institute of Technology) ○ Nobuyasu Adachi · Dai Go · Manabu Igarashi · Masahiko Ishikawa · toshitaka oota

2M26 Magneto-optical properties in glass materials dispersed with plasmonic- and magnetic-nanoparticles composites (Shizuoka University · RIKEN) ○ Seisuke Nakashima

September 17 (Thu) (Room N)**11. Advent and Development of Advanced Photonic Materials**

(9 : 00) (Chairman 濱上寿一)

2N01 Synthesis of Ce³⁺ Doped Novel Phosphors and Determination of Doping Site (Niigata University) ○ Takuya Hasegawa · Sun-Woog Kim · Kazuyoshi Uematsu · Kenji Toda · Mineo Sato2N02 Novel Ce³⁺-activated phosphor with extremely broad emission band between green and red light region (Niigata University) ○ Masaru Muto · Takuya Hasegawa · Sun Woog Kim · Kazuyoshi Uematsu · Kenji Toda · Mineo Sato2N03 Emission color tuning of Y_{17.33}B₈O₃₈:Ce³⁺ phosphors by crystal site engineering. (Niigata University) ○ Shota Kumagai · Takuya Hasegawa · Sun-woog Kim · Kazuyoshi Uematsu · Kenji Toda · Mineo Sato

2N04 Fabrication and optical characterization of plasmonic array of titanium nitride nanoparticle (The University of Kyoto) ○ Ryosuke Kamakura · Shunsuke Murai · Yohei Daido · Koji Fujita · Katsuhisa Tanaka

(10 : 20) (Chairman 井上幸司)

2N05 Encapsulation of various phosphors into Na₂O-ZnO-B₂O₃-P₂O₅ glass body fabricated by hot isostatic pressing (Sophia University) ○ Soichiro Kudo · (Delft University of Technology) Hubertus T Hintzen · (Sophia University) Kiyoshi Itatani

(10 : 40) (Chairman 戸田健司)

2N06 ★ Recent progress in blue phosphors for white LED (Chonnam National University) ○ Im Won Bin · Kim Yoon Hwa

(11 : 20) (Chairman 井上幸司)

2N07 Growth and structural analysis of CaAl₂Si₄N₈:Eu²⁺ nitride phosphor by novel vapor phase technique (The University of Niigata) ○ Shota Hasegawa · Takuya Hasegawa · Ryota Yamanashi · Tatsuro Kaneko · Sun Woog Kim · Kazuyoshi Uematsu · Kenji Toda · Mineo Sato

2N08 Synthesis know-how of nitride phosphors (Niigata University · N-Luminescence Corporation) ○ Kenji Toda

(14 : 20) (Chairman 伊田進太郎)

2N17 Photochromism of Eu-doped glaserite-type barium silicates (University of Yamanashi) ○ Shino Takei · Yoshinori Yonesaki

2N18 Photochromism of glaserite-type silicates (University of Yamanashi) ○ Yoshinori Yonesaki · Shino Takei

(15 : 00) (Chairman 戸田健司)

2N19 ★ Next Generation Phosphor Materials for Optical Devices (SungKyunKwan University) ○ Dae-Ho Yoon · Young-Hyun Song

(15 : 40) (Chairman 伊田進太郎)

2N21 Preparation of photochromic TiO₂/WO₃ thin film by sol-gel method and its self-cleaning function (Tokyo University of Science) ○ Kouhei Hashimoto · Riho Shioyama · Yuki Yamaguchi · Shigeru Ito · Keishi Nishio · Kenjiro Fujimoto

(16 : 00) (Chairman 米崎功記)

2N22 Preparation of Rh-doped titania nanosheet and observation of photocatalytic reaction center (Kyushu University) ○ Shintaro Ida · Yusuke Fukae · Hedehisa Hagiwara · Tatsumi Ishihara

2N24 Low-temperature preparation and optical properties of Ru-photodeposited titania thin film (Kanto Gakuin University) ○ Jun-ichi Hamagami · Taketo Nakagawa · Aoi Endo · Naoto Shiozawa

(17 : 00) (Chairman 伊田進太郎)

2N25 ◆ Supramolecular Gel-Based Luminescent Film for Light Management (Kumamoto University · PHOENICS) ○ Hiroataka Ihara

■■ September 17 (Thu) (Room O) ■■

22. Development and evaluation of ceramics producing harmony with living body

(9 : 00) (Chairman 小幡亜希子)

- 2001 Dielectric characteristics evaluation of chlorine substituted hydroxyapatite (Tokyo Medical and Dental University) ○Kentaro Watanabe · Naohiro Horiuchi · Kosuke Nozaki · Miho Nakamura · Akiko Nagai · Kimihiro Yamashita
- 2002 Reorientational motion of hydroxide ions in monoclinic hydroxyapatite (Tokyo Medical and Dental University) ○Naohiro Horiuchi · Kosuke Nozaki · Miho Nakamura · Akiko Nagai · Kimihiro Yamashita
- 2003 Surface modification of inositol phosphate to porous hydroxyapatite ceramics with bimodal pore structure and addition of antibacterial property by immobilization of silver ions (Meiji University) ○Shuhei Tsurumi · Michiyo Honda · (Keio University) Ken Ishii · Morio Matsumoto · (Meiji University) Mamoru Aizawa

(10 : 00) (Chairman 宮崎敏樹)

- 2004 One-step synthesis of calcium phosphate spheres encapsulating silver nanoparticles by a laser process (National Institute of Advanced Industrial Science and Technology) ○Maki Nakamura · Ayako Oyane · Yoshiki Shimizu
- 2005 *In vitro* evaluation of hydroxyapatite/collagen paste with 3-glycidoxypropyltrimethoxysilane (Meiji University) ○Taira Sato · (Kyushu Institute of Technology) Yuki Shirotsaki · (Meiji University) Mamoru Aizawa · (National Institute for Materials Science) Masanori Kikuchi
- 2006 Polarized HAp stimulates cell proliferation signaling (Tokyo medical and dental university) ○Takaaki Masutani · Kousuke Nozaki · Naohiro Horiuchi · Miho Nakamura · Kimihiro Yamashita · Akiko Nagai

(11 : 00) (Chairman 中村美穂)

- 2007 Morphological observation of immune cells derived from mouse spleen on hydroxyapatite ceramics surface-modified with inositol phosphate (Meiji University) ○Kiyotaka Yamada · Mariko Nakamura · Michiyo Honda · (Tokyo Medical and Dental University) Shigenori Nagai · (Meiji University) Mamoru Aizawa
- 2008 Material properties of bioresorbable β -tricalcium phosphate cements with gelatin particles as a porogen and their bone-forming ability (Meiji University) ○Tomoya Sawata · Kohei Nagata · Michiyo Honda · Masaki Nagaya · Kazuaki Nakano · Yoshinori Asano · (GUNZE LIMITED) Keishi Kiminami · Hidetoshi Arimura · (Meiji University) Hiroshi Nagashima · Mamoru Aizawa
- 2009 Fabrication of Carbonate-substituted Apatites and Effect of Carbonate-substituted Sites on Protein Adsorption Properties (Tokyo Institute of Technology) ○Kaori Akaike · Tomoaki Sugiyama · Toshiyuki Ikoma

(14 : 20) (Chairman 城崎由紀)

- 2017 ★Egg-in-Cube: Artificial Eggshell with Functionalized Surface for Biomedical Applications (Kyushu Institute of Technology) ○Tomohiro Kawahara

(15 : 00) (Chairman 川下将一)

- 2019 Fabrication of high amount CO₃-containing carbonate apatite foam (Kyushu University) ○Yuki Sugiura · Kanji Tsuru · Kunio Ishikawa
- 2020 Preparation of magnetite in aqueous solution containing surfactant : Effects of ethylene glycol addition (Nagoya University) ○Mikiya Sakashita · Ill Yong Kim · Ayae Sugawara-Narutaki · Chikara Ohtsuki
- 2021 Control of Ca/P molar ratio of apatite powder with preferred orientation to *a(b)*-axis (Meiji University) ○Yuki Mori · Michiyo Honda · Mamoru Aizawa

(16 : 20) (Chairman 横川善之)

- 2023 Hydrothermal synthesis of hydroxyapatite using dodecanedioic acid (Tokyo Medical and Dental University) ○Kotaro Shibata · Naohiro Horiuchi · Kosuke Nozaki · Miho Nakamura · Akiko Nagai · Kimihiro Yamashita
- 2024 Preparation of porous beads consisting of alpha-tricalcium phosphate through freeze-drying process (Nagoya University) ○Takuya Shii · Ill Yong Kim · Ayae Sugawara-Narutaki · Chikara Ohtsuki

(17 : 00) (Chairman 生駒俊之)

- 2025 ★Clinical application of a tissue-engineered oral mucosa —Roadmap from bench to bedside— (Niigata University) ○Kenji Izumi

■■ September 17 (Thu) (Room P) ■■

12 : 10~14 : 10

99. General sessions (Poster presentation only)

- 2P001 Development of high-temperature oilless pressure sensors using strain sensitive multilayered films (Technology Research Institute of Osaka Prefecture) ○Yoshiharu Kakehi · Kazuo Satoh · Taizou Oguri
- 2P002 Structure and Magnetic properties of Divalent Europium Oxide Thin Films (Hyogo Prefectural Institute of Technology) ○Masafumi Fukuzumi · (Kyoto University) Kouji Fujita · Katsuhisa Tanaka
- 2P003 Functionalization of phosphate glasses via electrochemical H⁺ implantation (Nagoya Institute of Technology) ○Yusuke Daiko · (Kyoto University) Shunsuke Murai · (University of Shiga Prefecture) Satoshi Yoshida · (Toyohashi University of Technology) Hiroyuki Muto · (Nagoya Institute of Technology) Tomokatsu Hayakawa
- 2P004 Evaluation of novel bone hemostatic film prepared by the combination of random co-polymer of ethylene oxide and propylene oxide with sugar containing apatite (Sophia University) ○Eri Shima · Tomohiro Umeda · (Toho University) Yoshiro Musha · (Sophia University) Kiyoshi Itatani
- 2P005 Preparation of translucent calcium phosphate green compact suitable for cell observation (Oyama national college of technology) ○Daisuke Kawagoe · Yuma Tsuboi
- 2P006 Cytotoxicity and cisplatin adsorption properties of allophane nanoparticles (Toyota Technological Institute) ○Shuichi Arakawa · Yusuke Toyota · Masashi Ito · Ryota Domura · Yoko Matsuura · Masami Okamoto
- 2P007 Evaluation of solubility of hydrothermally crystallized magnesium substituted HA films using sputtering method (Ibaraki University) ○Chinami Tadano · Kazuhide Ozeki · Toru Masuzawa · (International Apatite Co. Ltd.) Hideki Aoki
- 2P008 Application of calcium nitrate to Eco-cement replaced with fly ash (Taiheiyo Cement Corporation) ○Ryota Soga · Kensuke Hayashi · Syunichiro Uchida
- 2P009 Exothermic property of an energy-saving cement (Taiheiyo Cement Corporation) ○Tomoya Baba · Tomoko Aki · Shun Nijima · Daisuke Kurokawa · Hiroshi Hirao
- 2P010 Preparation of zeolite/apatite composite for adsorption removal of radioactive substances (Ibaraki University) ○Kazuhide Ozeki · Toru Masuzawa · (International Apatite Institute) Hideki Aoki
- 2P011 Effect of NO_x adsorption with zeolite (Kokushikan University) ○Shigeru Okada · Souichirou Watanabe · Takashi Yamasaki · Hang Yu · (Tohoku

- University) Toetsu Shishido · Kunio Yubuta · Akiko Nomura · (NIMS) Takao Mori
- 2P012 Effect of Pressing Pressure on Fabrication of All-Solid-State Battery Using Composite Positive Electrode Sheet (Osaka Municipal Technical Research Institute) ○Mari Yamamoto · Yasuyuki Kobayashi · Shingo Ikeda · (National Institute of Advanced Industrial Science and Technology) Atsushi Sakuda · (Osaka Municipal Technical Research Institute · Nara Institute of Science and Technology) Masanari Takahashi
- 2P013 Preparation of Composite Positive Electrode Sheets using Fine Solid Electrolyte and Their Application to All-solid-state Lithium Secondary Batteries (Osaka Municipal Technical Research Institute · Nara Institute of Science and Technology) ○Masanari Takahashi · (Osaka Municipal Technical Research Institute) Mari Yamamoto · Yasuyuki Kobayashi · Shingi Ikeda · (National Institute of Advanced Industrial Science and Technology) Atsushi Sakuda
- 2P014 Preparation of $\text{Li}_3\text{Zn}_{0.5}\text{SiO}_4$ sintered body by the solid state method (Tokai University) ○Shogo Nakamura · Shinpei Nosiro · Yuki Noguchi · Takashi Asaka · Masashi Higuchi · Keiichi Katayama
- 2P015 Synthesis and electrochemical characterization of sodium manganese oxides (NaMnO_2) (Tokai University) ○Tomohiro Tamura · Shoutarou Takaoka · Masashi Higuchi · Keiichi Katayama · Yasuo Azuma
- 2P016 Fabrication and performance evaluation of SOFC coated with CeO_2 (The University of Toyama) ○Takahiro Sonoda · Takashi Hashizume · Atsushi Saiki
- 2P017 Influence of allophane distribution on photocatalytic activity of allophane-titania composite films (Shinshu University) ○Shingo Matsunaga · Hiromasa Nishikiori
- 2P018 Preparation of $\text{SiO}_2/\text{TiO}_2$ particle and its characterization (National Institute of Technology, Hachinohe College) ○Koki Hamano · Akira Hasegawa
- 2P019 Surface modification of metal titanium plate using alkaline metal salts (Shinshu University) ○Taisuke Hizumi · Hiromasa Nishikiori
- 2P020 Preparation of copper addition titanium oxide thin film by a nearby vaporization CVD method (National Institute of Technology) ○Junichi Nishino · Wataru Takeuchi · Sayuri Matsuura · Daiki Takeuchi · Satomi Kakinoki
- 2P021 Preparation and Characterization of Titanium Oxide Anchored Silica Fiber Using CVD Method (National Institute of Technology, Hachinohe college) ○Momoko Ekari · Akira Hasegawa
- 2P022 The absorption property of La-doped $\text{Sr}_2\text{Bi}_2\text{O}_5$ prepared from a heterobimetallic complex, $\text{Sr}[\text{Bi}(\text{DTPA})] \cdot n\text{H}_2\text{O}$ (University of Miyazaki) ○Yuki Obukuro · (National Institute of Technology, Kitakyushu College) Shigenori Matsushima · Kenji Obata · (The University of Kitakyushu) Takuya Suzuki · (National Institute of Materials Science) Masao Arai · (University of the Ryukyus) Eiji Asato · (University of Miyazaki) Yuji Okuyama · Naoki Matsunaga · Go Sakai
- 2P023 Low-temperature synthesis of barium titanate using titanium dioleate (National Institute of Technology, Hachinohe College) ○Natsumi Yonai · Akira Hasegawa
- 2P024 Diamond synthesis by Combustion Flame process on the condition of low $\text{O}_2+\text{C}_2\text{H}_2$ flow rate (Ashikaga Institute of Technology) ○Nobgoru Nagastuka · Yoshimasa Noda · Yasutaka Ando
- 2P025 MBE Growth of GaN Thin Films on ScN Layers (NIMS) ○Takeshi Ohgaki · Isao Sakaguchi · Naoki Ohashi · Hajime Haneda
- 2P026 Formation technique for gas barrier film using polysilazane and excimer light irradiation (Shibaura Institute of Technology) ○Kazuya Yanagita · Tomoji Ohishi
- 2P027 Synthesis of $\text{Sr}_4\text{Me}_2\text{Fe}_{36}\text{O}_{60}$ (Me = Co, Ni, Cu, Zn) U-type Hexaferrites (University of Hyogo) ○Takeyuki Kikuchi · Masafumi Kobune · (Okayama University) Makoto Nakanishi · Tatsuo Fujii
- 2P028 K^+/Na^+ ion exchange of $\text{K}_2\text{Ta}_2\text{O}_6$ prepared by hydrothermal synthesis (The University of Toyama) ○Masahiro Matsunami · Takashi Hashidume · Atsushi Saiki
- 2P029 Fabrication of linear YSZ films by electrochemical deposition method with the pulsed electrical fields (University of Toyama) ○Tadashi Fujita · Takashi Hashidume · Atsushi Saiki
- 2P030 Synthesis of $\text{LiTi}_x\text{Ni}_{0.5-x}\text{Mn}_{1.5}\text{O}_4$ ($x=0-0.5$) by solid state reaction (The University of Toyama) ○Naoto Horata · Takashi Hashizume · Atsushi Saiki
- 2P031 Electrochemical properties of $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ as positive electrode (The University of Toyama) ○Tomiyuki Shimizu · Takashi Hashizume · Atsushi Saiki
- 2P032 Bi2223 Synthesis and Characterization of Aido oxide superconductors (YAMAGATA UNIVERSITY) ○Saya Suzuki · Shiro Kambe
- 2P033 Precise Imaging of Counter Cations within Zeolitic Nanocavities (JFCC) ○Kaname Yoshida · (Nagoya University) Kazuaki Toyoura · Katsuyuki Matsunaga · (Osaka Prefecture University) Atsushi Nakahira · (Kyoto University) Hiroki Kurata · (JFCC) Yumi Ikuhara · Yukichi Sasaki
- 2P034 Study of Interaction of Bacterial Iron-Oxide having Tubular Structure with Methyl Red: Relation between Surface State and Reactivity (Niigata University) ○Yoshihide Takayama · Atsushi Itadani · Kazuyoshi Uematsu · Kenji Toda · (Okayama University · JST, CREST · Kogakuin University) Hideki Hashimoto · (Okayama University · JST, CREST) Jun Takada · (Niigata University) Mineo Sato
- 2P035 Fixation of Small Gaseous Molecules on Cu(I) Ion Exchanged in Zeolite (Niigata University) ○Kento Yoshino · Atsushi Itadani · Kazuyoshi Uematsu · Kenji Toda · Mineo Sato
- 2P036 Terahertz Analysis of Pottery Bodies (Mie Prefectural Industrial Research Institute) ○Seiji Nijima · Masashi Shoyama · Kazumi Murakami
- 2P037 Effect of viscosity of droplet on dynamic hydrophobicity on self-assembled monolayer surface (Kogakuin University) ○Yuki Okutomi · Naoya Yoshida · Toshinori Okura
- 2P038 First principles calculation of stable structures and ionic conduction in Li_xFePO_4 crystal (Osaka City University) ○Shota Koyama · Ippei Kishida · Yoshiyuki Yokogawa
- 2P039 The Surface Potential of SrTiO_3 and BaTiO_3 : DFT calculations and experimental studies (The University of Tokyo) ○Kazutoshi Kutsuna · Hiroki Matsuo · Yuki Kitanaka · Yuji Noguchi · Masaru Miyayama
- 2P040 Development of Cylindrical Ceramic Pressure-tight Housings - II (JAMSTEC) Yosaku Maeda · ○Kenichi Asakawa
- 2P041 Characterization of α -cordierite solid solution (Ashikaga Institute of Technology) ○Toshio Ogiwara · Yoshimasa Noda · Osamu Kimura
- 2P042 A realtime Particle size distribution monitoring monitoring system in spray drying processes for fine ceramic materials (Preci Co.,Ltd.) ○Shinya Kawaguchi · Hayato Kato · (Spectris Co.,Ltd.) Daisuke Sasakura · Fumiaki Sato · Yukiyoshi Hiramura
- 2P043 Evaluation of a real time monitoring for the spray dry process by in-situ particle size analyze (Div of Spectris Co.Ltd) ○Fumiaki Sato · Daisuke Sasakura · (Preci Co.Ltd.,) Shinya Kawaguchi · Hayato Kato
- 2P044 A Diverse Analysis for Spray Dried Particle as Raw Material of Ceramics Produced by Spray Dry Process. (Spectris Co.,Ltd.) ○Daisuke Sasakura · Fumiaki Sato · (Preci Co.Ltd.,) Shinya Kawaguchi · Hayato Kato · (Netzsch Japan Co.Ltd.,) Kenta Sato · Osamu Tsukamoto · Yasuharu Ishiguro · (Quantachrome Instruments Japan G.K.) Takuya Hirota · (Spectris Co.,Ltd.) Koichi Seo · Yukiyosi Hiramura

17. Development of functional ceramics using Green Processing

- 2PA01 Solid-phase crystallization of wide band gap Ga_2O_3 thin films by room-temperature UV excimer laser annealing (Tokyo Institute of Technology) ○Daishi

- Shiojiri · Daiji Fukuda · Hiroki Uchida · (TOSHIMA Manufacturing Company Limited) Nobuo Tsuchimine · (Namiki Precision Jewel Company Limited) Koji Koyama · (Kanagawa Industrial Technology Center · Tokyo Institute of Technology) Satoru Kaneko · (Tokyo Institute of Technology) Akifumi Matsuda · Mamoru Yoshimoto
- 2PA02 Dependence of film thickness on the photochromic properties of WO₃ based composite films (Shimane University) ○Takumi Ishigaki · Hidetoshi Miyazaki · (Nagoya Institute of Technology) Toshitaka Ota · (Shizuoka University) Hisao Suzuki
- 2PA03 Fabrication and evaluation of Y₂O₃ films by pulsed EPD method (Shimane University) ○Hidetoshi Miyazaki · Asumi Ichikawa · (Shizuoka University) Hisao Suzuki · (Nagoya Institute of Technology) Toshitaka Ota
- 2PA04 Solution-processed nanomesh oxide layer incorporating ZnO nanoparticles on Ti-based bulk metallic glass (Tokyo Institute of Technology) ○Ryo Matsudo · (Tokyo University of Science) Ken-ichi Katsumata · (Tianjin University) Shengli Zhu · (Tohoku University) Guoqiang Xie · Mitsuo Niinomi · (Tokyo Institute of Technology) Nobuhiro Matsushita
- 2PA05 Supercritical fluid deposition of zirconium-hafnium-based metal oxide thin films (Sophia University) Marina Shiokawa · Chihoko Abe · ○Hiroshi Uchida
- 2PA06 Fabrication and characterization of nanostructured silicon carbide from rice husk (Nagoya institute of technology) ○Kunihiko Kato · (Nagoya Institute of Technology) Jin Li · (Nagoya institute of technology) Takashi Shirai · (Nagoya institute of technology) Masayoshi Huji
- 2PA07 Synthesis of GaN photocatalyst for overall water-splitting by ammonothermal method (Meiji University) ○Ryotaro Momoi · Tomoaki Watanabe
- 2PA08 Low-temperature synthesis of visible-light driven photocatalyst BaNbO₂N by ammonothermal method (Meiji University) ○Yuto Morikawa · Tomoaki Watanabe
- 2PA09 Low temperature synthesis of Ce³⁺ doped CaAlSiN₃ phosphor by ammonothermal method (Meiji University) ○Yuki Maruyama · Tomoaki Watanabe
- 2PA10 Orientation control of YSZ thin film using RF sputtering method (Toyama University) ○Shogo Miwa · Takashi Hashizume · Atsushi Saiki

05. New Development in Environmental Barrier Ceramic Coatings

- 2PC01 Films and interface structures on various substrates fabricated by Aerosol Deposition (TOTO LTD.) ○Hironori Hatono · Hiroaki Ashizawa · Takuma Wada
- 2PC02 Environmental barrier coating for SiC using aqueous mullite precursor solution (Gifu University) ○Yuki Tanahashi · Michiyuki Yoshida · Yutaka Ohya · Osamu Sakurada · (JFCC) Makoto Tanaka · Satoshi Kitaoka

04. Science and Technology on Engineering Ceramics — Advanced Microstructure Control and Analysis for Safe and Reliable Society

- 2PD01 Reducing electrical resistivity of alumina by adding a small amount of ITO (Kagawa University) ○Daisuke Tominaga · Takahumi Kusunose · (Osaka University) Tohru Sekino
- 2PD02 Mechanical properties of HfO₂ / Si₂N₂O nanorods composite ceramics (Tokyo institute of technology) ○Shun Izumi · Yutaka Shinoda · (Saga University) Takashi Akatsu · (Tokyo institute of technology) Fumihiko Wakai
- 2PD03 The control of thermal expansion behavior of Al₂TiO₅ by substituting Fe (Nihon University) ○Takayuki Sugimoto · Reina Makimura · Hiroki Fujimori · Satoshi Yamagata · Hisanori Iwafuji · Yoshiharu Ito · Yuria Nakamura
- 2PD04 Fabrication of epoxy/silicon nitride hybrid materials and evaluation of their thermal conductivity (Kagawa University) ○Tomoko Takahashi · Takafumi Kusunose · Tomoki Tanisada · (Osaka University) Tohru Sekino
- 2PD05 Synthesis process and change of physical property of A₂TiO₅ (Nihon University) ○Satoshi Yamagata · Daisuke Yokota · (Osaka University) Atsushi Nagoe · (Nihon University) Takayuki Sugimoto · Hiroki Fujimori
- 2PD06 Development of the exact quantity of oxygen content of ceramics materials (Yamagata University) ○Takehiro Suzuki · Shiro Kambe

12. Random Materials —Function and Physical Property Correlated with the Structure—

- 2PE01 Scintillation and dosimeter properties of rare-earth doped NaPO₃-Al(PO₃)₃ glasses (Nara Institute of Science and Technology) ○Tomoaki Kuro · Go Okada · Takayuki Yanagida · (Tohoku University) Yutaka Fujimoto · (Institute for Chemical Research, Kyoto University) Hirokazu Masai
- 2PE02 Magnesium reduction of silica – Effects of morphology and structure of starting silica materials (Kyoto Institute of Technology) ○Kenta Uehira · Arifumi Okada · Haruhisa Shiomi · Takashi Wakasugi · Kohei Kadono
- 2PE03 Scintillation and dosimeter properties of Ag-doped Li₃PO₄-Al(PO₃)₃ glass (Nara Institute of Science and Technology) ○Hiroki Tatsumi · Go Okada · Takayuki Yanagida · (Institute for Chemical Research, Kyoto University) Hirokazu Masai
- 2PE04 Scintillation and dosimeter properties of Sn-doped 40Li₂O-40B₂O₃-20SiO₂ (NAIST) ○Takayuki Yanagida · Go Okada · (Kyoto Univ.) Hirokazu Masai · (Tohoku Univ.) Yutaka Fujimoto

11. Advent and Development of Advanced Photonic Materials

- 2PN01 Development of heavy doped ZnO (s.s.) Phosphors and Application for Luminescent device on Low-voltage (Mie Industrial Research Institute) ○Koji Inoue
- 2PN02 Fabrication and Redox-Sensitivity of Spherical Hollow CeO₂:Sm³⁺ Phosphor Particles (Keio University) ○Takashi Umehara · Manabu Hagiwara · Shinobu Fujihara
- 2PN03 Preparation of Cr⁴⁺ doped CaYGaO₄ for broadband tunable laser (Toyota Technological Institute) ○Seina Nakamura · Takenobu Suzuki · Yasutake Ohishi
- 2PN04 Magneto-optical properties of Eu(II)-activated CaS nanocrystals (Hokkaido University) ○Ayako Nakajima · Takayuki Nakanishi · Akira Kawashima · Yuichi Kitagawa · Koji Fushimi · Yasuchika Hasegawa
- 2PN05 Magnetic Properties and Faraday Rotation of Terbium Compound Nanoparticles (Hokkaido University) ○Akira Kawashima · Takayuki Nakanishi · Yuichi Kitagawa · Koji Fushimi · Yasuchika Hasegawa
- 2PN06 Survey of the state of Ho³⁺ doped into perovskite oxides (Ryukoku University) ○Hiroki Toda · Tatsuya Shirakami
- 2PN07 Synthesis and photocatalytic properties of perovskite oxides containing lanthanide ions (National Institute of Technology, Gunma College) ○Nobuyuki Taira · Yasuki Yoshida
- 2PN08 Temperature and Material Dependence of the Self-Trapped Exciton Emission in Binary Rare-Earth Borates upon Vacuum UV Excitation : Possibility of Double Exciton generation (Akita University) ○Tomoko Takahashi · Kae Yanagidaira · Nobuhiro Kodama
- 2PN09 Morphology of nanoholes in borate glasses and crystals fabricated by femtosecond laser ablation and focused ion beam etching (Akita University) ○ Mizuki Kudo · Tomoko Takahashi · Nobuhiro Kodama · (Osaka University) Masahiro Tsukamoto · (National Institute for Materials Science) Junichi Nishino · Yoshimasa Sugimoto
- 2PN10 Absorption and emission spectra of silver incorporated into aluminoborosilicate glasses through an ion-exchange method – Effects of heat treatments – (Kyoto Institute of Technology) ○Yusuke Tanahashi · Arifumi Okada · Takashi Wakasugi · Kouhei Kadono · (Osaka University) Yasushi Fujimoto
- 2PN11 Approach to the up-conversion phosphors using crystal site engineering (Tokai University) ○Sayaka Tamura · Satoshi Ogawa · Shinpei Sasahara ·

- Koji Tomita · (Hiroshima University) Kiyofumi Katagiri · (Tohoku University) Masato Kakihana
- 2PN12 Scintillation Properties of $\text{Lu}_3\text{Al}_5\text{O}_{12}$ Co-doped with Nd and Ce (Nara Institute of Science and Technology) ○Tomohisa Oya · Go Okada · Takayuki Yanagida
- 2PN13 Dosimeter properties of MgO transparent ceramic made by SPS (Nara Institute of Science and Technology) ○Takumi Kato · Takayuki Yanagida · Go Okada
- 2PN14 Scintillation Properties of rare earth doped SrAl_2O_4 Crystals (Nara Institute of Science and Technology) ○Daisuke Nakauchi · Go Okada · Takayuki Yanagida · (Tohoku University) Masanori Koshimizu
- 2PN15 Photoluminescence, Scintillation, and Thermoluminescence Properties of $\text{Ce:Y}_3(\text{Al}_x\text{In}_{1-x})_5\text{O}_{12}$ Crystals (Nara Institute of Science and Technology (NAIST)) ○Masaki Mori · Go Okada · Takayuki Yanagida
- 2PN16 Dosimeter properties of CaF_2 doped AlN ceramics prepared by Spark Plasma Sintering (Nara Institute of Science and Technology) ○Kaori Kojima · Go Okada · Takayuki Yanagida · (Tokuyama Corporation) Kentaro Fukuda

21. Novel development of eco-solutions approaching from ceramic science and technologies

- 2PR01 Photocatalytic Reduction of CO_2 over Layered Double Hydroxides (LDHs) Intercalated Nanocomposites (Tokyo Institute of Technology) ○Haoyang Jiang · (Tokyo University of Science) Ken-ichi Katsumata · (Tokyo Institute of Technology) Nobuhiro Matsushita
- 2PR02 Oxygen release characteristic of CeO_2 -rich type oxide on the surface of ZrO_2 by Temperature Programmed Reaction Method (Noritake Co., Limited) ○Kazumasa Akatsuka · Koji Inukai · Hisanori Kurobe · Yosuke Takahashi

13. Ceramic sensors and transducers—basic researches and their applications

- 2PS01 Evaluation of sensor property of W doped ZnO thin films (National Institute for Materials Science) ○Isao Sakaguchi · Noriko Saito · Yutaka Adachi · Ken Watanabe · Taku Suzuki · Shunichi Hishita
- 2PS02 Gas sensing properties of Al-doped ZnO films (National Institute for Materials Science) ○Yutaka Adachi · Ken Watanabe · Noriko Saito · Taku Suzuki · Isao Sakaguchi · Naoki Ohashi

■■ September 17 (Thu) (Room Q) ■■

16. Research topics on advanced ceramics for energy conversion and storage devices

- (9 : 00) (Chairman 藤代芳伸)
- 2Q01 Charge-discharge mechanism of $\text{NaCo}_2\text{Fe}_{1-x}\text{O}_2$ (Central Research Institute of electric Power Industry) ○Takeshi Kobayashi · Yasutaka Ohno · Hiroyuki Yoshida · Yuichi Mita · Tohru Yamamoto · Yo Kobayashi · Hajime Miyashiro · (Electric Power Engineering Systems Co., Ltd.) Shin-ichi Noguchi
- 2Q02 Synthesis of layered double hydroxides containing transition metal and their application to materials of metal-air secondary batteries (Graduate school of Chemical Sciences and Engineering, Hokkaido Univ.) ○Takshi Kubota · (Faculty of Engineering, Hokkaido Univ.) Akira Miura · Mikio Higuchi · Kiyoharu Tadanaga
- (9 : 40) (Chairman 森昌史)
- 2Q03 ★Correlation between the average and local crystal structures, electronic structure, and electrode property of active material for Li ion battery using neutron and synchrotron X-ray sources (Tokyo University of Science) ○Yasushi Idemoto
- 2Q06 Low-temperature synthesis, crystal structure and properties of spinel-type LiCoMnO_4 (National Institute of Advanced Industrial Science and Technology · Tokyo University of Science) ○Yuki Hamada · (National Institute of Advanced Industrial Science and Technology) Naoki Hamao · Kunimitsu Kataoka · (Tokyo University of Science) Naoya Ishida · Yasushi Idemoto · Junji Akimoto
- (11 : 00) (Chairman 秋本順二)
- 2Q07 First principles calculation of Li ion diffusion at a domain boundary in $\text{Li}_2\text{MnO}_3\text{-LiTMO}_2$ (TM = Mn, Ni, Co) (JFCC) ○Akihide Kuwabara · (The University of Tokyo) Yeong-Gi So · Eita Tochigi · Naoya Shibata · Tetsuichi Kudo · Yuichi Ikuhara · (National Institute of Advanced Industrial Science and Technology) Haijun Yu · Haoshen Zhou
- 2Q08 Composition Dependence of Average and Local Structure Change and Thermodynamic Stability for $0.4\text{Li}_2\text{MnO}_3\text{-}0.6\text{LiMO}_2$ (M=Mn, Ni, Co) during First Charge Process (Tokyo University of Science) ○Hirohisa Sakemi · Naoya Ishida · Naoto Kitamura · Yasushi Idemoto
- 2Q09 Optimization of hydrothermal synthesis conditions of LiCoPO_4 for high voltage rechargeable lithium-ion batteries (Tokyo Metropolitan University) ○Shohei Miyamoto · Yuta Maeyoshi · Hirokazu Munakata · Kiyoshi Kanamura
- (14 : 40) (Chairman 井手本康)
- 2Q18 Preparation of lithium-iron-fluorosilicate glass cathodes and their electrochemical properties (Nagaoka University of Technology) ○Takuya Togashi · Kenji Shinozaki · Tsuyoshi Honma · Takayuki Komastu
- 2Q19 Improvement of Electrochemical Property of Pyroxene Type $\text{LiFeSi}_2\text{O}_6$ and Crystal Structure Analysis (Tokyo University of Science) ○Kazumasa Sakatsume · Naoya Ishida · Naoto Kitamura · Yasushi Idemoto
- 2Q20 Raman microscopy for LiCoO_2 composite positive electrodes in all-solid-state lithium batteries (Osaka Prefecture University) ○Misae Otoyama · Yusuke Ito · Akitoshi Hayashi · Masahiro Tatsumisago
- (15 : 40) (Chairman 棟方裕一)
- 2Q21 Morphological Control of TiO_2 Particles and Their Electrochemical Properties as an Anode Material in the Lithium-Ion Battery (Saga University) ○Yukari Kimura · Takashi Miura · Toshio Torikai · Takanori Watari · Hideyuki Noguchi · Mitsunori Yada
- 2Q22 One-step synthesis of $\text{Li}_2\text{FeSiO}_4/\text{C}$ by spray-frozen/freeze-drying method (Kurimoto, LTD. · Kumamoto University) ○Yukiko Fujita · (Kumamoto University) Kenji Shida · Hiroaki Iwase · Motohide Matsuda · (Kurimoto, LTD.) Seiji Sugimura · Takehisa Fukui
- 2Q23 Effect of structure modulation on Li-ion conductivity in solid electrolyte $\text{La}_{(1-x)/3}\text{Li}_x\text{NbO}_3$ (JFCC) ○Craig Fisher · Xiang Gao · Akihide Kuwabara · Yumi Ikuhara · Hiroki Moriwake · (Shinshu University) Yasuyuki Fujiwara · Keigo Hoshikawa · (Toyota Motor Corporation) Keiichi Kohama · (JFCC · The University of Tokyo) Yuichi Ikuhara
- (16 : 40) (Chairman 今西誠之)
- 2Q24 ★Secondary battery and hydrogen use technologies for low carbon social realization and power grid stabilization (Central Research Institute of Electric Power Industry) ○Tomohiko Ikeya
- 2Q27 Preparation of NASICON membrane by Tape-casting method (Kyushu University) ○Keisuke Okubo · Miki Inada · Naoya Enomoto · Katsuro Hayashi

■■ September 17 (Thu) (Room R) ■■

21. Novel development of eco-solutions approaching from ceramic science and technologies

(9 : 00) (Chairman 磯部敏宏)

- 2R01 Investigation of nitric oxide adsorption activity point with single crystals of Lepidocrocite type layered titanate (Tokyo University of Science) ○Akifumi Suzuki · Yuki Yamaguchi · Shigeru Ito · Kenjiro Fujimoto
- 2R02 Thermodynamic and kinetic analyses of chemical reaction of Li_4SiO_4 and CO_2 (Nihon University) Eiki Niwa · Shingo Kaniwa · Masatoshi Yoshino · ○Takuya Hashimoto
- 2R03 Thermodynamic and kinetic analyses of CO_2 absorption reaction of BaCeO_3 and SrCeO_3 (Nihon University) ○Eiki Niwa · Kaori Kondo · Ryosuke Shima · Masatake Aoki · Takuya Hashimoto
- 2R04 Oxygen storage property of the Cr, Al containing delafossite-type copper oxides (Akita University) ○Sumio Kato · Sho Suzuki · Masataka Ogasawara
- 2R05 The study of the surface activity of silicon based inorganic material and the application (Nagoya Institute of Technology) ○Hiromichi Ikeuchi · Razavi Khosroshahihadi · Masayoshi Fuji · Takashi Shirai

(10 : 40) (Chairman 稲田幹)

- 2R06 Preparation and hydrophobicity of solid/liquid bulk composite using porous glass and fluorinated oil (Tokyo Institute of Technology) Yasuhiro Takada · Toshihiro Isobe · Sachiko Matsushita · ○Akira Nakajima · (Tokyo University of Science, Yamaguchi) Munetoshi Sakai
- 2R07 Comparison of photocatalytic activity and surface friction force variation on Ti-doped hydroxyapatite and anatase under UV illumination (Tokyo Institute of Technology) ○Ayumi Tsuruoka · Toshihiro Isobe · Sachiko Matsushita · Akira Nakajima
- 2R08 Underwater oil wettability of titania-silica composite thin film (Okayama University) ○Yuta Sano · Shunsuke Nishimoto · (Industrial Technology Center of Okayama Prefecture) Eiji Fujii · (Okayama University) Yoshikazu Kameshima · Michihiro Miyake
- 2R09 Effect of alcohol solvents on intercalation of picolinic acid to layered double hydroxides (Okayama University) ○Daiki Kawada · Yoshikazu Kameshima · Shunsuke Nishimoto · Michihiro Miyake

(14 : 20) (Chairman 勝又健一)

- 2R17 ★Adsorbability and photocatalytic activity of mesoporous silica/titania (Kyushu University) ○Miki Inada · Katsuro Hayashi · Junichi Hojo
- 2R19 Synthesis of Zeolite using Underutilized Amakusa Pottery Stone — a process without pretreatment at elevated temperature— (Kumamoto University) Fumiya Jinnouchi · ○Motohide Matsuda
- 2R20 Synthesis of zeolite from perlite and evaluation of heavy metal adsorption capacity (MITSUI MINING & SMELTING CO., LTD. · Osaka Prefecture University) ○Makoto Kasai · (MITSUI MINING & SMELTING CO., LTD.) Yosei Kobayashi · (MAKINO CORPORATION) Masataka Kamitani · Mitsunori Kondo · (Osaka Prefecture University · Tohoku University) Atsushi Nakahira
- 2R21 Preparation of zeolite composites by a hydrothermal method (Nagoya Institute of Technology) ○Kazuya Suzumura · Hirotaka Maeda · Masanobu Nakayama · Toshihiro Kasuga

(16 : 00) (Chairman 龜島欣一)

- 2R22 ★Effective utilization of construction and demolition waste: porous ceramsite development (Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences) ○Fu-Shen Zhang · Chuan Wang
- 2R23 Development of rapid debinding process for ceramics molded bodies using high temperature superheated steam (JFCC) ○Masashi Wada · Kazuhiko Kawai · Kazumi Hayashi · Satoshi Kitaoka · (Daido) Takahiro Nagai · (Takasago Industry) Motoharu Suzuki · Toshiaki Nakamura · (Maruwai Yano Seitajo) Jin Yano · Yoshinobu Takashima
- 2R24 Pore structure and capacitive property of carbon spheres synthesized by hydrothermal carbonization (Kyushu University) ○Ryota Okazaki · Miki Inada · Naoya Enomoto · Katsuro Hayashi
- 2R25 Ce:($\text{Y}_{1-x}\text{Gd}_x$) $_2\text{Al}_5\text{O}_{12}$ single-crystals phosphors for High-Brightness white LED/LD (National Institute for Materials Science · Waseda University) ○Stelian Arjoca · (National Institute for Materials Science) Encarnación G. Villora · (Tamura Co.,Ltd. · Koha Co.,Ltd.) Daisuke Inomata · (Koha Co.,Ltd.) Kazuo Aoki · (National Institute for Materials Science · Waseda University) Kiyoshi Shimamura

■■ September 17 (Thu) (Room S) ■■

13. Ceramic sensors and transducers – basic researches and their applications

(9 : 20) (Chairman 坂井雄一)

- 2S02 ★Development of lead-free PTC thermistor (Hitachi Metals) ○Takeshi Shimada · Itaru Ueda · Yuutaro Terakado · Shigeo Fujii
- 2S04 ☆Growth and electrical characterization of mellilite-type piezoelectric crystals (Tokyo Institute of Technology) ○Hiroaki Takeda · Kenta Takizawa · Kyohei Yoshida · Takuya Hoshina · Takaaki Tsurumi

(10 : 20) (Chairman 浅田隆昭)

- 2S05 ☆Piezoelectric ceramics and their applications to sensors (National Institute of Advanced Industrial Science and Technology) ○Ruiping Wang · Naoto Kikuchi · Yoshihiro Aiura · Kazuhiko Tonooka · Kazuhisa Kasukawa · Koichi Awazu
- 2S06 Preparation of Piezoelectric Power Generation Elements and Application to Power Source of Wireless Sensor Node (COSEL CO.,LTD.) ○Yohei Urayama · (HOKURIKU ELECTRIC INDUSTRY CO., LTD.) Tomoyasu Nakada · (Toyama Industrial Technology Center) Yuichi Sakai
- 2S07 Offset control and heat transfer of micro thermoelectric gas sensors using catalytic combustor for gas detection (National Institute of Advanced Industrial Science and Technology) Tomoyo Goto · Woosuck Shin · ○Toshio Itoh · Takafumi Akamatsu · (National Institute of Advanced Industrial Science and Technology · Aichi Institute of Technology) Yoshitaka Sasaki · (Aichi Institute of Technology) Kazuo Sato

(11 : 20) (Chairman 伊藤敏雄)

- 2S08 ★Comprehensive Development of Nanomechanical Sensor (MSS) towards Mobile Breath/Blood Diagnostics (NIMS) ○Genki Yoshikawa

(14 : 20) (Chairman 赤松貴文)

- 2S17 Potentiometric CO sensors using an anion-conducting polymer -Effects of noble-metal loading to the oxide sensing electrode- (Nagasaki University) ○Taro Ueda · Toshiyuki Goto · (Figaro Engineering Inc.) Kazunari Kaneyasu · (Nagasaki University) Kai Kamada · Takeo Hyodo · Yasuhiro Shimizu
- 2S18 CO-sensing properties of NASICON-based gas sensors at low temperature operation - Effects of oxide additives to Pt sensing electrode- (Nagasaki University) ○Taro Ueda · Hirotaka Takeda · Kai Kamada · Takeo Hyodo · Yasuhiro Shimizu
- 2S19 Response characteristics of NOx sensors with porous ($\text{La}_{0.8}\text{Sr}_{0.2}$) MnO_3 sensing electrode (JFCC) ○Seiji Takahashi · Satoshi Suehiro · Hajime Okawa · Teiichi Kimura · (Nagasaki University) Taro Ueda

(15 : 20) (Chairman 上田太郎)

- 2S20 Structural change and oxygen desorption of La-Sr-Co-Fe perovskite-type oxides under varying oxygen partial pressure (Kyushu University) ○Maiko Nishibori · Naoki Ankei · Tomoki Uchiyama · Yasutake Teraoka
- 2S21 New-type gas sensor combined of solid electrolyte and semiconducting metal oxide (The University of Kyushu) ○Ryohei Kato · Nang Ma · (Fukuoka Industrial Technology Center) Koichi Suematsu · (The University of Kyushu) Kengo Shimano
- 2S22 Gas sensor properties of hybrid materials derived from zinc phosphate glass and organic matter (National Institute of Advanced Industrial Science and Technology) ○Takafumi Akamatsu · Toshio Itoh · Woosuck Shin

September 18 (Fri) (Room A)

03. Powder and Particle Design for High Quality Advanced Ceramics

粉体/樹脂複合材料

(9 : 00) (Chairman 高橋拓実)

- 3A01 Flexural properties and rapid resin curing by microwave irradiation of carbon-based ceramics short fiber powder oriented epoxy resin composites (National Institute of Advanced Industrial Science and Technology) ○Daisuke Shimamoto · Yuichi Tominaga · Kimiyasu Sato · Yusuke Imai · Yuji Hotta
- 3A02 Physical properties of CFRTP filled with high aspect ratio hexagonal boron nitride (National Institute of Advanced Industrial Science and Technology) ○Yuichi Tominaga · Daisuke Shimamoto · Kimiyasu Sato · Yusuke Imai · Yuji Hotta

焼結プロセスによる材料の微構造制御と機能化

(9 : 40) (Chairman 打越哲郎)

- 3A03 Effect of sintering condition on transmittance and fluorescence properties of Eu^{2+} doped (Y, Ca)- α SiAlON bulk ceramics (Yokohama National University) ○Sayuri Watanabe · Junichi Tatami · Motoyuki Iijima · (Kanagawa Academy of Science and Technology) Takuma Takahashi · (Kanagawa Industrial Technology Center) Masahiro Yokouchi
- 3A04 Fundamental study on sintering behavior by use of integrated composite powder (Toyoashi University of Technology) ○Shinya Oda · Satoshi Kato · Go Kawamura · Atsunori Matsuda · Hiroyuki Muto
- 3A05 Anisotropic sintering shrinkage and microstructure development of c -axis oriented silicon nitride ceramics (Kanagawa Academy of Science and Technology) ○Takuma Takahashi · (Yokohama National University) Junichi Tatami · (Nagaoka University of Technology) Satoshi Tanaka · (Toyoashi University of Technology) Hiromi Nakano

September 18 (Fri) (Room B)

02. Innovative Materials Processing, Properties and Reliability of Bulk Ceramics based on Stress and Strain

圧子圧入法と応力・ひずみ

(9 : 00) (Chairman 宮崎広行)

- 3B01 Real-time measurement of elasto-plastic and high-pressure electrical resistance utilizing the indentation induced local stress (Nagoya Institute of Technology) ○Junki Kato · Yusuke Daiko · Sawao Honda · Yuji Iwamoto
- 3B02 ★Development of measurement technique for structure-dependent mechanical properties by indentation test (Toyoashi University of Technology) ○Hiroyuki Muto

構造形成と応力・ひずみ

(10 : 20) (Chairman 安田公一)

- 3B05 ★Present State and Future Prospects on Development of Functional Materials Using Additive Manufacturing Technology (Kinki University) ○Hideki Kyogoku
- 3B07 ★Improvement of mechanical strength of machinable mica/zirconia composites (Shinshu University) ○Seiichi Taruta

エンジニアリングセラミックスと応力・ひずみ

(13 : 00) (Chairman 武藤浩行)

- 3B13 Microstructure development of zirconia-coated CNTs/alumina composites (Shinshu University) ○Ayaka Suzuki · Tomohiko Yamakami · Tomohiro Yamaguchi · Naoto Saito · Seiichi Taruta
- 3B14 Degradation evaluation of Si_3N_4 ceramic surface in contact with molten aluminum by using microcantilever beam specimens (Yokohama National University) ○Saho Fujita · Junichi Tatami · Motoyuki Iijima · (Kanagawa Academy of Science and Technology) Tsukaho Yahagi
- 3B15 Influence of sintering aid on wear property and local strength of AlN ceramics (Yokohama National University) ○Tatami Junichi · Yuuta Amano · Motoyuki Iijima · (Kanagawa Academy of Science and Technology) Tsukaho Yahagi · (Sumitomo Electric Industries Ltd.) Hideyuki Ohguni

(14 : 20) (Chairman 多々見純一)

- 3B17 Effect of machining condition of the test piece on the bending strength of ceramic substrate (National Institute of Advanced Industrial Science and Technology) ○Hiroyuki Miyazaki · Yu-ichi Yoshizawa · Kiyoshi Hirao · Tatsuki Ohji
- 3B18 Round Robin Test on Bending Strength Distribution of Porous Ceramics (Tokyo Tech.) ○Kouichi Yasuda · (Nagoya Univ.) Hideki Kita · (Ehime Univ.) Manabu Takahashi · (Noritake Company Limited) Yosuke Takahashi · (Yokohama Nat'l Univ.) Junichi Tatami · (Nagaoka Univ.Tech.) Satoshi Tanaka · (Nagoya Tech.) Sawao Honda · (NTK) Ken Mitsuoka · (Toyoashi Univ.Tech.) Hiroyuki Muto · (Asuzac) Syuichi Yamamoto · (AIST) Yuichi Yoshizawa

September 18 (Fri) (Room D)

06. Science and Technology for Densification—Development of Microstructure and Function of ceramics synthesized by Powder Forming and Sintering—

ジルコニアの焼結

(9 : 00) (Chairman 西村聡之)

- 3D01 ★Story of the dawn of zirconia development -The truth of the investigation of low temperature degradation mechanism and tetragonal zirconia development (NGK INSULATORS, LTD.) ○Tadashi Otagiri
- 3D04 Densification Behavior during Isothermal Sintering of 8YSZ (National Institute for Materials Science) ○Byung-Nam Kim · Tohru Suzuki · Koji Morita · Hidehiro Yoshida · Y. Sakka · (Tohoku University) Hideaki Matsubara

放電プラズマ焼結

(10 : 20) (Chairman 西村聡之)

- 3D05 Sintering of ZnO Ceramics for Thermoelectric Applications by Conventional Sintering and Spark Plasma Sintering (SPS) (University of Tokyo · National Institute of Materials Science (NIMS)) ○Joshua Patrick Hoemke · (National Institute of Materials Science (NIMS)) Atta Ullah Khan · Hidehiro Yoshida · (University of Tokyo) Eita Tochigi · (National Institute of Materials Science (NIMS)) Takao Mori · (University of Tokyo) Naoya Shibata · (National Institute of Materials Science (NIMS)) Yoshio Sakka · (University of Tokyo) Yuichi Ikuhara
- 3D06 Microstructure and mechanical properties of TiCN–ZrCN composite by SPS and subsequent heat treatment (Institute for Materials Research, Tohoku University) ○Ying Li · Hirokazu Katsui · Takashi Goto
- 3D07 Effects of Surfactants for Transparent Polycrystalline Alumina by Two-Step PECS (Nagaoka University of Technology) ○Hien Huu Nguyen · Makoto Nanko · (Hanoi University of Science and Technology) Khanh Quoc Dang

(13 : 00) (Chairman 後藤孝)

- 3D13 ★Fabrication of Advanced Ceramics by ECAS (SPS) (NIMS) ○Yoshio Sakka

酸化物の焼結

(14 : 00) (Chairman 吉田英弘)

- 3D16 Coercivity improvement of Dy-free NdFeB sintered magnets (TDK Corporation) ○Masashi Miwa · Takuro Iwasa · Tamotsu Ishiyama · Wakako Ohkawa · Yoshitomo Tanaka · Yasushi Enokido
- 3D17 Structural analysis and simulation of Dy free NdFeB sintered magnet (TDK Corporation) ○Yuji Umeda · Hideaki Yokota · Wakako Okawa · Yoshitomo Tanaka · Masashi Miwa · Yasushi Enokido
- 3D18 Sintering of aluminum titanate ceramics using nano-grained alumina and titania powder (Tokyo Institute of Technology) ○Yutaka Shinoda · (University of Tsukuba) Yoshikazu Suzuki
- 3D19 Fabrication of highly-textured lanthanum silicate oxyapatite ceramics and characterization of their anisotropic properties (Hosei University) ○Kenya Hirai · (Materials Processing Unit, National Institute for Materials Science) Kiyoshi Kobayashi · Tohru Suzuki · Tetsuo Uchikoshi · Yoshio Sakka · (Hosei University) Takaya Akashi

フラッシュ焼結

(15 : 20) (Chairman 南口誠)

- 3D20 Nitridization phenomenon of YSZ during flash sintering (Nagoya University) ○Nobuhiro Morisaki · Tomoharu Tokunaga · Katsuhiko Sasaki · Takahisa Yamamoto · (TOSOH) Kouji Matsui · (National Institute for Materials Science) Hidehiro Yoshida
- 3D21 Current Controlled Flash Sintering of BaTiO₃ (Nagoya University) ○Yu Nakagawa · Akinori Uehashi · Tomoharu Tokunaga · Katsuhiko Sasaki · Takahisa Yamamoto · (National Institute for Materials Science) Hidehiro Yoshida
- 3D22 3D analysis of pore form in viscous sintering of glass particles by X-ray microtomography. (Tokyo Institute of Technology) ○Daiki Kadowaki · Gaku Okuma · Fumihiko Wakai · (Nagaoka University of Technology) Tsuyoshi Hondo · Akihiro Sato · Satoshi Tanaka
- 3D23 Size determination of representative volume in microstructure evolution during sintering (Tokyo institute of technology) ○Gaku Okuma · Daiki Kadowaki · Yutaka Shinoda · (Saga university) Takashi Akatsu · (Tokyo institute of technology) Fumihiko Wakai

■■ September 18 (Fri) (Room E) ■■

12. Random Materials—Function and Physical Property Correlated with the Structure—

ガラス転移・構造変化

(09 : 00) (Chairman 正井博和)

- 3E01 ★Statistical Mechanics of the Glass Transition—Does “Ideal Glass” exist? (Kyoto University) ○Atsushi Ikeda
- 3E03 Laser-induced structural relaxation in silicate glasses (Tohoku University) ○Shohei Uchida · Nobuaki Terakado · Yoshihiro Takahashi · Takumi Fujiwara

(10 : 00) (Chairman 岸哲生)

- 3E04 Relationship between local condition around bismuth ions and optical properties on bismuth phosphate glasses (National Institute of Advanced Industrial Science and Technology) ○Naoyuki Kitamura · Kohei Fukumi · Tomoko Akai
- 3E05 Synthesis and optical property of nanoporous silica composed of high density crystalline phase (Nagoya University) ○Ken Niwa · Genta Sasaki · (Shinshu University) Satoshi Yoneda · Hisanao Usami · Shigeru Yamanaka · (Nagoya University) Yuichi Shirako · Masashi Hasegawa
- 3E06 Influence of oxidation curing method and structural evaluation of white and photoluminescent Si-O-C(-H) ceramics from polycarbosilane powder (Osaka Prefecture University) ○Hiroki Hokazono · Masaki Narisawa · Hirohumi Inoue · (SR center of Ritsumeikan University) Masahiro Ogawa · Tosiaki Oota

(11 : 00) (Chairman 北村直之)

- 3E07 Influence of Molecular Structures of Polysiloxanes on Decarbonization Process (Osaka Prefecture University) ○Masaki Narisawa · Kenta Sasagawa · Hirofumi Inoue
- 3E08 ☆Effects of Actual and Fictive Temperatures on the Thermal Conduction of Some Glasses (The University of Shiga Prefecture) ○Jun Matsuoka · Risa Oomori · Taro Kimura · (Akita University) Toru Sugawara · (The University of Shiga Prefecture) Satoshi Yoshida · Akihiro Yamada

(13 : 00) (Chairman 岸哲生)

- 3E13 ☆CSTI, SIP Program, Development of Advanced Glass Processing Technologies—Outline and Status— (Kyoto University) ○Kiyotaka Miura · Yasuhiko Shimotsuma · Masaaki Sakakura · Naoki Fukuda · Hirokazu Masai · (National Institute of Advanced Industrial Science and Technology) Tomoko Akai · Kohei Fukumi · Naoyuki Kitamura · Kenji Kintaka

レーザー加工

(13 : 40) (Chairman 本間剛)

- 3E15 Structural change in CaO-Al₂O₃-SiO₂ glass by Continuous-wave laser backside irradiation (Tokyo Institute of Technology) ○Tetsuto Kokan · Tetsuo Kishi · Tetsuji Yano · (Chiba University) Hirofumi Hidai · Tatsuki Iwamoto
- 3E16 Formation of BiFeO₃ crystals on glass surface by CW laser irradiation (Tohoku University) ○Akie Kumagai · Nobuaki Terakado · Yoshihiro Takahashi · Takumi Fujiwara
- 3E17 Effect of phase separated structure in glass ceramics with In₂O₃ crystals on improvement of electrical conductivity (University of Hyogo) ○Yuri Shibuya · Atsushi Mineshige · Tetsuo Yazawa

物質移動

(14 : 40) (Chairman 大幸裕介)

- 3E18 Investigation of melting behavior of silver into glass by emission spectra (Kyoto Institute of Technology) ○Yuuya Higashide · Takashi Yumura · kohei Kadono · Takashi Wakasugi
- 3E19 Structures and proton conductivities of alkali-proton substituted phosphate glasses by corona discharge treatment (Hokkaido University) ○Takuya Kinoshita · Atsushi Miyazaki · Hideo Kaiju · Junji Nishii · (Osaka University) Takuya Yamaguchi · Takahisa Omata
- 3E20 Structural analyses of $\text{Li}_2\text{S-P}_2\text{S}_5\text{-LiBr}$ glasses by X-ray photoelectron spectroscopy (Osaka Prefecture University) ○Gigun Oh · Takuya Matsuyama · Minako Deguchi · (RIKEN) Aiko Nakao · (Osaka Prefecture University) Akitoshi Hayashi · Masahiro Tatsumisago

(15 : 40) (Chairman 福味幸平)

- 3E21 H^+ emission by utilizing proton conducting glass and functionalization via H^+ implantation (Nagoya Institute of Technology) ○Satoshi Mizutani · Yusuke Daiko · Sawao Honda · Yuji Iwamoto
- 3E22 Cathode active materials for sodium ion batteries by sodium iron phosphate glass (Nagaoka University of Technology) ○Tsuyoshi Honma · Satoshi Nakata · Kenji Shinozaki · Takayuki Komatsu
- 3E23 CStructural Analysis of $\text{ZnO-P}_2\text{O}_5$ Glass (Kyoto University) ○Hirokazu Masai · Yuki Ueda · (Ritsumeikan University) Akitoshi Koreeda · Yasuhiro Fujii

■■ September 18 (Fri) (Room F) ■■

07. Synthesis and Functional Properties of Mixed Ion Compounds

(9 : 00) (Chairman 廣瀬靖)

- 3F01 Synthesis and Magnetic Properties of A-site Ordered Perovskite LnMnFeTiO_6 (Nagoya University) ○Gen Shimura · Yuichi Shirako · Ken Niwa · Masashi Hasegawa
- 3F02 Synthesis and structural analysis of $\text{PbO-PbF}_2\text{-TiO}_2$ oxyfluoride system (Chuo University) ○Kengo Oka · Katsuyoshi Oh-ishi
- 3F03 Synthesis of new vanadium oxynitrides by topochemical reaction (Kyoto University) ○Nana Izumo · Takahumi Yamamoto · Fumitaka Takeiri · Hiroshi Kageyama
- 3F04 Electron-density distribution and disordered crystal structure of 20H-AlON , $\text{Al}_{10}\text{O}_3\text{N}_8$ (Nagoya Institute of Technology · Research Fellow of Japan Society for the Promotion of Science) ○Hiroki Banno · (National Institute for Materials Science) Shiro Funahashi · Naoto Hirotsuki · (Nagoya Institute of Technology) Toru Asaka · Koichiro Fukuda
- 3F05 Annealing effect of amorphous $\text{Zr}_{1-x}\text{Six}$ oxynitride thin films ($x = 0, 0.4, 0.5$) and their color variation (Hokkaido University) ○Yuko Miyamoto · Yuji Masubuchi · Shinichi Kikkawa
- 3F06 High-Temperature Topochemical Synthesis of Perovskite Oxynitrides (Kyoto University) ○Riho Mikita · Tomoko Aharen · Takafumi Yamamoto · Fumitaka Takeiri · Wataru Yoshimune · Koji Fujita · Katsuhisa Tanaka · Hiroshi Kageyama

(11 : 00) (Chairman 陰山洋)

- 3F07 ◆Synthesis and Properties of Mixed Anion Compounds in Epitaxial Thin Film Form (The University of Tokyo · KAST · JST-CREST) ○Tetsuya Hasegawa

(13 : 00) (Chairman 田部勢津久)

- 3F13 ★Theoretical chemistry approach for LED phosphors : examples from some (oxy)nitrides (MCHC R&D Synergy Center, Inc.) ○Masayoshi Mikami · (Université Catholique de Louvain) Samuel Poncé · Xavier Gonze
- 3F15 Near-infrared multi-wavelengths long persistent luminescence of Nd^{3+} ion through persistent energy transfer in Ce^{3+} , Cr^{3+} co-doped YAGG for the first and second bio-imaging windows (Kyoto University) ○Jian Xu · Jumpei Ueda · Setsuhisa Tanabe
- 3F16 Control of physical properties of layered Bismuth oxysulfides by topotactic reaction (The University of Tokyo) ○Hiraku Ogino · Yuki Chiba · Kouji Kishio · (Aoyama Gakuin University) Jun-ichi Shimoyama · (National Institute of Advanced Industrial Science and Technology) Akira Iyo · Hiroshi Eisaki
- 3F17 ☆Layered bismuth-chalcogenide superconductors (Tokyo Metropolitan University) ○Yoshikazu Mizuguchi

(15 : 00) (Chairman 荻野拓)

- 3F19 Band gap engineering of wurtzite-type narrow band gap oxide semiconductor $\beta\text{-CuGaO}_2$ (Osaka University) ○Yuki Mizuno · Hiraku Nagatani · Issei Suzuki · (Toyama National College of Technology) Masao Kita · (Osaka University) Takahisa Omata
- 3F20 Impurity doping into wurtzite-type oxide $\beta\text{-CuGaO}_2$, $\beta\text{-AgGaO}_2$ (Osaka University) ○Hiaraku Nagatani · Issei Suzuki · Takahisa Omata · (Toyama National College of Technology) Masao Kita
- 3F21 Synthesis of quaternary narrow gap oxide semiconductor $\text{Cu}_2\text{ZnGeO}_4$ with wurtzite related structure (National Institute of Technology, Toyama College) ○Masao Kita · (Osaka University) Issei Suzuki · Hiraku Nagatani · Yuki Mizuno · Takahisa Omata
- 3F22 Synthesis and Infrared Shielding Property of Nb Doped TiO_2 by Solvothermal Approach (Tohoku University) ○Makoto Hamanaka · Xiaoyong Wu · Shu Yin · Tsugio Sato

■■ September 18 (Fri) (Room G) ■■

14. New Evolution of Dielectrics: Creation of Innovative Technology and Contribution to New Fields

新分野/新機能

(9 : 00) (Chairman 渡邊隆之)

- 3G01 ★New Approach in Elastic-Luminescence Materials (National Institute of Advanced Industrial Science and Technology) ○Chao-Nan Xu
- 3G03 Impedance of K^+ , Sr^{2+} - and La^{3+} -substituted single-crystalline BaTi_2O_5 by a FZ method (Tohoku University) ○Keiji Shiga · Hirokazu Katsui · Takashi Goto
- 3G04 High-rate capabilities on BaTiO_3 based ferroelectrics—active materials composite cathodes (Okayama University) ○Takashi Teranishi · Yumi Yoshikawa · Hidetaka Hayashi · Akira Kishimoto · (Kogakuin University) Hideki Hashimoto

(10 : 20) (Chairman 上野慎太郎)

- 3G05 Electrocaloric properties of PLZT and BaTiO_3 -based ceramics (Shonan Institute of Technology) ○Hiroshi Maiwa
- 3G06 Elastic Constants Evaluated by Sound Velocities and Piezoelectric Properties in Relaxor Single-Crystal Plates Applying to Ultrasonic Probe for Medical Uses (Shizuoka Institute of Science and Technology) ○Toshio Ogawa · (Fuji Ceramics Co.) Taiki Ikegaya

(11 : 00) (Chairman 藤井一郎)

- 3G07 ★Application of ultrasonic sensor to predict slope failure caused by heavy rainfall (Ritsumeikan University) ○Katsuhiko Tanaka

★ = Guest ☆ = Invited ◆ = Plenary ○ = Presenter

3G09 Heat control of the asymmetry band structure of Cr_2O_3 thin film with ferroelectric tunnel layers inserted (Nagoya institute of technology) ○Izuna Tsuboi · Takeshi Yokota · Kazuki Hiramatsu · Manabu Gomi

有機/ハイブリッド

(13 : 00) (Chairman 保科拓也)

3G13 ★ Emergent phenomena in organic ferroelectrics (RIKEN CEMS) ○Fumitaka Kagawa

3G15 Ferroelectric charge separation effect in organic-inorganic hybrid perovskite solar cells (Kagawa University) ○Qi Feng · Galhenage A. Sewvandi

薄膜 2

(14 : 00) (Chairman 眞岩宏司)

3G16 ☆ Exploration of New Functionalities in BiFeO_3 Thin Films (University of Hyogo) ○Seiji Nakashima · Hironori Fujisawa · Masaru Shimizu

3G17 Preparation of ScFeO_3 thin films and their ferroelectricity (Tokyo Institute of Technology) ○Shintaro Yasui · Yosuke Hamasaki · Tomoyasu Taniyama · Mitsuru Itoh

3G18 Preparation of NaYTlO_4 epitaxial thin films (Kyoto University) ○Tsukasa Matsubara · Kouji Fujita · Shunsuke Murai · Katsuhisa Tanaka · (The Pennsylvania State University) Hirofumi Akamatsu · Venkatraman Gopalan

キャパシタ

(15 : 00) (Chairman 天田英之)

3G19 ☆ Theoretical analysis for migration of oxygen vacancies in Zr doped BaTiO_3 (TDK Corporation) ○Yuji Umeda · (JFCC) Akihide Kuwabara · Hiroki Moriwake

3G20 ☆ Charge-based DLTS Characterization of BaTiO_3 -based dielectrics for Ceramic Capacitor (Murata Mfg. · Pennsylvania State Univ.) ○Takafumi Okamoto · Akira Ando · (Pennsylvania State Univ.) Long Jeffrey · Wilke Rudeger · Stitt Joseph · Randall Clive

3G21 Dielectric Properties of Metal/Insulator Composite Capacitors Prepared by Utilizing Core-Shell Particles (University of Yamanashi) ○Shintaro Ueno · Yasunao Sakamoto · Hiroyuki Kakiuchi · Kouichi Nakashima · Satoshi Wada

September 18 (Fri) (Room H)

15. Ceramics for Next-Generation Power Electronics

(9 : 20) (Chairman 平尾喜代司)

3H02 Development of SiC powder for high-speed sublimation growth (Taiheiy Cement Corporation) ○Hironori Ishida · Kiyoshi Nonaka · Kenta Masuda · (National Institute of Advanced Industrial Science and Technology) Kazuma Eto · Tomohisa Kato · Tomonori Miura

3H03 Development of High Thermal Conductivity Silicon Nitride Substrate (JFCC) ○Dai Kusano · (National Institute of Advanced Industrial Science and Technology) Hideki Hyuga · You Zhou · Kiyoshi Hirao

3H04 Development of Silicon Nitride Substrate for SiC Power Device (Denki Kagaku Kougyo Kabushiki Kaisya) ○Shoji Iwakiri · Hideki Hirotsuru · (National Institute of Advanced Industrial Science and Technology) Kiyoshi Hirao

(10 : 20) (Chairman 草野大)

3H05 Effect of Thermal Cycles on Residual Stress in Copper Paste Films on Alumina Substrates (National Institute of Advanced Industrial Science and Technology) ○Shinji Fukuda · Noriya Izu · Hiroyuki Miyazaki

3H06 Observation of damage process of the metallized ceramic substrate due to severe heat cycle (National Institute of Advanced Industrial Science and Technology) ○Hiroyuki Miyazaki · (Denki Kagaku Kougyo Kabushiki Kaisya) Shoji Iwakiri · (National Institute of Advanced Industrial Science and Technology) Kiyoshi Hirao · Yu-ichi Yoshizawa

3H07 Investigation of the thermal conductivity of the sample which joined aluminum to ceramic boards (National Institute of Advanced Industrial Science and Technology) ○Ken'ichiro Kita · Naoki Kondo

(11 : 20) (Chairman 中島智彦)

3H08 Fabrication of insulating Ceramic Layers by Aerosol Deposition for Heat Dissipation Boards of High Power Devices (National Institute of Advanced Industrial Science and Technology) ○Hiroki Tsuda · Muneyasu Suzuki · Jun Akedo

3H09 Coefficients of thermal expansion for ceramic materials around room temperature (National Institute of Advanced Industrial Science & Technology (AIST)) ○Kiyoshi Hirao · You Zhou · Shinji Fukuda · Mutsuo Sandou

September 18 (Fri) (Room I)

09. Frontiers of structural science and the development of novel materials

(9 : 00) (Chairman 手塚慶太郎)

3I01 Crystal Structure and Physical Properties of Ternary Rhodium Chalcogenides (Hokkaido University) ○Takanori Sato · Makoto Wakeshima · Yukio Hinatsu

3I02 Crystal structures and magnetic properties of novel pseudo-one-dimensional rare earth-molybdenum oxides (Hokkaido University) ○Masayuki Miura · Makoto Wakeshima · Yukio Hinatsu

(9 : 40) (Chairman 山根久典)

3I03 Synthesis and Characterization of New NASICON type compounds $\text{LiXY}_{0.5}\text{Z}_{0.5}(\text{PO}_4)_3$ ($X=\text{Ti}, \text{Zr}$ $Y=\text{In}$ $Z=\text{Nb}, \text{Ta}$) (The University of Utsunomiya) ○Keita Sugawara · Yue Jin Shan · Keitaro Tezuka

3I04 Evaluation of crystal structures and ionic conductivities of new compounds AHTeO_4 ($A=\text{Rb}, \text{Cs}$) prepared by the hydrothermal synthesis method (Utsunomiya University) ○Kenta Muranaka · Yue Jin Shan · Keitaro Tezuka

(10 : 40) (Chairman 加藤丈晴)

3I06 ★ Microstructure control and TEM/STEM analysis of complex oxide thin films (Nagoya University) ○Takahisa YAMAMOTO

3I08 Neighboring structure of MPB composition of PMN-PT epitaxial thin films (Tohoku University) ○Cangyu Fan · Takanori Kiguchi · Takahisa Shiraishi · Akihiro Akama · Toyohiko Konno · (Spectris, co., Ltd. PANalytical) Shuji Kusano · Koichi Seo

3I09 Analysis of polarization structure of the orthorhombic hafnium oxide structure using ABF-STEM method (The University of Tohoku) ○Shogo Nakamura · Cangyu Fan · Takahisa Shiraishi · Takanori Kiguchi · Toyohiko Konno · (Tokyo Institute of Technology) Kiriha Katayama · Takao Shimizu · Tatsuhiko Yokouchi · Takahiro Oikawa · Hiroshi Funakubo

(13 : 00) (Chairman 松田晃史)

3I13 Atomic-resolved structure analysis in wurtzite nitride using aberration corrected STEM and EDS (The University of Tokyo) ○Akihito Kumamoto · Nathan Lugg · Naoya Shibata · Yuichi Ikuhara

- 3I14 TEM Observations of Hollow Particle Formation during Crystal Growth in Calcium Carbonate (Shiraishi Central Lab.) ○Yuki Kezuka · Maya Yoshida · (The University of Tokyo) Eita Tochigi · Yuichi Ikuhara · (Shiraishi Central Lab.) Masahiko Tajika
(13 : 40) (Chairman 籠宮功)
- 3I15 Effect of dopant concentration on grain boundary segregation behavior in alumina bicrystals (The University of Tokyo) ○Tetsuya Tohei · Masahiro Sakai · Naoya Shibata · Yuichi Ikuhara
- 3I16 ☆Design of Crystal Structure for Ionic Conductors from Materials Simulation (Nagoya Institute of Technology · National Institute of Materials Science · Kyoto University · Japan Science and Technology Agency) ○Masanobu Nakayama
(14 : 40) (Chairman 浅香透)
- 3I18 ☆Correlation between crystal structures and ionic conduction in proton-conducting oxides (Nagoya University) ○Kazuaki Toyoura · Atsutomo Nakamura · Katsuyuki Matsunaga
- 3I19 Crystal structure and electrical properties of $\text{Ca}_2\text{Fe}_2\text{O}_5$ (Nagoya Institute of Technology) ○Isao Kagomiya · Yuki Hirota · Ken-ichi Kakimoto · (Tokyo Institute of Technology) Kotaro Fujii · Masahiro Shiraiwa · Masatomo Yashima · (Teikyo University · Waseda University) Shin-ichi Nakamura · (Waseda University) Akio Fuwa
(15 : 20) (Chairman 中山将伸)
- 3I20 Supercritical hydrothermal synthesis and first-principles calculation for new nanomaterials (The University of Tokyo) ○Akira Yoko · (National Institute for Materials Science) Naoto Umezawa · Takahisa Ohno · (The University of Tokyo) Yoshito Oshima
- 3I21 Crystal structure analysis of the ferroelectric layered perovskite $\text{Bi}_4\text{Ti}_3\text{O}_{12}$ (Nagoya Institute of Technology) ○Daisuke Urushihara · Mai Komabuchi · Makoto Iwata · Koichiro Fukuda · Toru Asaka

September 18 (Fri) (Room J)

18. Chemical Design- Key processes for fabrication of novel functional materials-

- (9 : 00) (Chairman 岩本雄二)
- 3J01 ☆Submicrometer-sized sphere fabrication by pulsed laser melting in liquid (National Institute of Advanced Industrial Science and Technology) ○Yoshie Ishikawa · (Hokkaido University) Naoto Koshizaki
- 3J02 Pulsed electrophoretic deposition of polyacrylic acid-titanium oxide composite films (Okayama University) ○Tomohiko Yoshioka · Tatsuki Katayama · Toshiisa Konishi · (University of Erlangen-Nuremberg) Boccaccini Aldo R. · (Okayama University) Satoshi Hayakawa
- 3J03 Fabrication of laminated alumina films with pearly luster by anodization (NIMS) ○Hiroyo Segawa · Kenji Wada
- 3J04 Application of finebubbles for growth of oxide microparticle (Kyoto University) ○Yomei Tokuda · Hiroaki Matsuki · Yoshikatsu Ueda · Hirokazu Masai · Toshinobu Yoko
(10 : 20) (Chairman 石川善恵)
- 3J05 ☆Preparation of cross-correlation functional materials using atomic layer sputtering method (Nagoya Institute of Technology) ○Takeshi Yokota
- 3J06 Effects on magnetic property and microstructure of ZnFe_2O_4 by the difference of heating method (Tohoku University) ○Daisuke Nagao · Jun Fukushima · Yamato Hayashi · Hirotsugu Takizawa
(11 : 00) (Chairman 徳田陽明)
- 3J07 Synthetic process of graphite-like carbon nitride (Kyushu University) ○Takumi Takenaka · Miki Inada · Naoya Enomoto · Katsuro Hayashi
- 3J08 Hydrothermal synthesis of titanium phosphate particles with controlled crystal structures and morphologies (Kyoto University) ○Yang Zhu · George Hasegawa · Kazuyoshi Kanamori · Kazuki Nakanishi
- 3J09 Synthesis and evaluation of olivine-type cathode material (Osaka prefecture university) ○Masakazu Togo · Shunsuke Yagi · Atsushi Nakahira

September 18 (Fri) (Room L)

20. Hybrid Materials for Next Generation

- (09 : 00) (Chairman 林大和)
- 3L01 High-throughput screening of fluorescent nanocrystal surface treatment process for their dispersion (National Institute of Advanced Industrial Science and Technology) ○Hiroyuki Nakamura · (National Institute of Advanced Industrial Science and Technology · NS Materials Co.LTD.) Maki Saeki · (NS Materials Co.LTD.) Masanori Tanaka · Eiichi Kanaumi
- 3L02 Comparison of Physical Properties of Silsesquioxane Aerogels with Different Substituent Groups (Kyoto University) ○Taiyo Shimizu · Kazuyoshi Kanamori · Kazuki Nakanishi
- 3L03 Synthesis and Characterization of Hybrid Intercalation Compounds Consisting of tris(hydroxymethyl)aminomethane and $\text{Mg}(\text{OH})_2$ (Waseda University) ○Tastuyuki Koichi · Yoshiyuki Kuroda · Yuki Saito · Atsushi Shimojima · Hiroaki Wada · (The University of Tokyo) Kazuya Yamaguchi · Noritaka Mizuno · (Waseda University) Kazuyuki Kuroda
(10 : 00) (Chairman 大幸裕介)
- 3L04 Electrochemical reduction of Porous SiOC derived from Polysilsesquioxanes (Kyoto University) ○George Hasegawa · Xiao Yang · Tsutomu Kiyomura · Kazuyoshi Kanamori · Hiroki Kurata · Kazuki Nakanishi · Toshiyuki Nohira · Takeshi Abe
- 3L05 Synthesis of layered ceramics with metal for dehydrogenation of ammonia complex (Nagoya University) ○Shingo Kanehira · Tetsuya Nagasaki · Koichi Kikuta
- 3L06 Surface modification of mesoporous silica with bifunctional hydrosilanes and formation of metal nanoparticles (Kyoto University) ○Takahiro Nakanishi · Kazuyoshi Kanamori · Kazuki Nakanishi · (Rutgers University) Tewodros Asefa · (Nara National College of Technology) Syun Ichii · Toyosi Shimada
- 3L07 ★Preparation of inorganic hollow particles using polymer aggregates (University of Hyogo) ○Shin-ichi Yusa · (Saga University) Kenichi Nakashima

September 18 (Fri) (Room N)

11. Advent and Development of Advanced Photonic Materials

- (9 : 00) (Chairman 松嶋雄太)
- 3N01 Novel synthesis method for nano-phosphors and its reaction mechanism (Niigata University) ○Sun Woog Kim · Takuya Hasegawa · Tatsuro Kaneko · Ayano Toda · Kazuyoshi Uematsu · Kenji Toda · Mineo Sato · (N-Luminescence Corporation) Junko Koide · Masako Toda · Yoshiaki Kudo
- 3N02 Preparing oxynitride phosphor using solution technique (Samsung R&D institute Japan) ○Takuya Kitabatake · Hiroko Endo · Fusaki Fujibayashi
- 3N03 Study on defect structure in ZrO_2 with long persistence (Tokyo university of Science) ○Kenichiro Iwasaki · Atsuo Yasumori · (Tohoku University) Yoshihiro Takahashi · Takumi Fujiwara

(10 : 00) (Chairman 増井敏行)

- 3N04 Synthesis and structural study of phosphorescence materials $\text{Sr}_{1-x}\text{Eu}_x\text{Al}_2\text{O}_4$ (Chuo University) ○Noriko Kobayashi · Keita Suzuki · Kengo Oka · Katuyoshi Oh-ishi
- 3N05 Near-infrared Emission Mechanism of BaSn_xO_3 (Nagaoka University of Technology) ○Tomoichiro Okamoto · (Salesian polytechnic) Yuichiro Kuroki · (JFCC) Masasuke Takata
- 3N06 Preparation of red phosphors using Fe^{3+} for the luminescent center (Yamagata University) Hide-aki Takahashi · (Shizuoka University) Yuko Kominami · Kazuhiko Hara · (Yamagata University) ○Yuta Matsushima

(11 : 00) (Chairman 岡元智一郎)

- 3N07 Synthesis and characterization of manganese-substituted red oxide phosphor (Utsunomiya University) ○Takuya Otsuki · Keitaro Tezuka · Yue Jin Shan
- 3N08 Synthesis and photoluminescence properties of Mn^{4+} -doped spinel-type solid-solution $\text{Mg}_2\text{TiO}_4\text{-MgAl}_2\text{O}_4$ phosphor (Tohoku University) ○Takuya Sasaki · Jun Fukushima · Yamato Hayashi · Hirotsugu Takizawa
- 3N09 Photoluminescence properties of perovskite-type titanates activated with Mn^{4+} (Tohoku University) ○Yohei Takeda · Hideki Kato · Makoto Kobayashi · (Kyoto Institute of Technology) Hisayoshi Kobayashi · (Tohoku University) Masato Kakihana

■■ September 18 (Fri) (Room O) ■■

22. Development and evaluation of ceramics producing harmony with living body

(9 : 00) (Chairman 杉浦悠紀)

- 3O01 Activity evaluation of lipase encapsulated on various mesoporous silicate materials (Osaka City University) ○Yoshiyuki Yokogawa · Yuki Minakuchi · Ryota Fumimoto
- 3O02 Meaning of water during sintering in surface characteristics of polarized hydroxyapatite (Tokyo Medical and Dental University) ○Miho Nakamura · Naoko Hori · Saki Namba · (Tokyo Medical and Dental University · Nihon University) Hiroshi Ando · (Tokyo Medical and Dental University) Naohiro Horiuchi · (Nihon University) Takeshi Toyama · Nobuyuki Nishimiya · (Tokyo Medical and Dental University) Kimihiro Yamashita
- 3O03 Preparation of composite materials for cell culture by the electro-spinning method and culture characteristics of periodontal ligament cell (Hokkaido Research Organization) ○Toshiyuki Akazawa · Katsumi Konno · (Hokkaido University) Naoto Okubo · (Health Sciences University of Hokkaido) Masaru Murata · (HOYA Technosurgical) Takehiko Nakajima

(10 : 00) (Chairman 堀内尚紘)

- 3O04 Functionalization of a hydroxyapatite using screened peptide (National Institute for Materials Science) ○Tomohiko Yamazaki · Nobutaka Hanagata
- 3O05 Preparation of titanium oxide nanotube sheet and its behavior in Simulated Body Fluid (Osaka City University) ○Yoshiyuki Yokogawa · Keita Nakaie · Masahiro Sakamoto

(10 : 40) (Chairman 赤澤敏之)

- 3O06 Effects of soluble silicate ions on mineralization process of osteoblast-like cells (Nagoya Institute of Technology) ○Akiko Obata · Arisa Terada · Norihiko Iwanaga · Toshihiro Kasuga
- 3O07 Improvement of osteoconductivity of tricalcium phosphate by addition of silicate (Tohoku University) ○Masanobu Kamitakahara · (Nagasaki University) Eri Tatsukawa · Yasuaki Shibata · (Tohoku University) Shota Umemoto · Taishi Yokoi · (Keio University) Koji Ioku · (Nagasaki University) Tohru Ikeda

■■ September 18 (Fri) (Room Q) ■■

16. Research topics on advanced ceramics for energy conversion and storage devices

(9 : 00) (Chairman 木嶋倫人)

- 3Q01 First principles calculations on average voltage of Mg battery with $\text{Cu}_3\text{Mn}_3\text{O}_8$ -type crystal cathode (Osaka City University) ○Ippei Kishida · Kouta Nakano · Keiji Osada · Yoshiyuki Yokogawa
- 3Q02 Design of electrode-solid electrolyte interface by using aerosol deposition method (Tokyo Metropolitan University) ○Hirokazu Munakata · Kyoko Kozuka · Keiko Nitta · Naoto Saito · Mao Shoji · Takeshi Kimura · Takashi Narushima · Kiyoshi Kanamura
- 3Q03 Preparation of $\text{Li}_6\text{PS}_3\text{Br}$ solid electrolytes using a liquid-phase technique and their application to all-solid-state lithium batteries (Osaka Prefecture University) ○So Yubuchi · Akitoshi Hayashi · Masahiro Tatsumisago

(10 : 00) (Chairman 藤代芳伸)

- 3Q04 Garnet-type Lithium-ion Conductor Densified by Spark Plasma Sintering (Nagasaki University) ○Hirotohi Yamada · Shuya Matsushita
- 3Q05 Neutron powder diffraction study of lithium ion conductors $\text{Li}_6\text{MLa}_2\text{Ta}_2\text{O}_{12}$ (M=Ca, Sr, Ba) with garnet-related type structure (National Institute of Advanced Industrial Science and Technology) ○Norihito Kijima · Kunimitsu Kataoka · Naoki Hamao · Junji Akimoto

(10 : 40) (Chairman 岩崎航太)

- 3Q06 Phononic Structure Engineering: the Realization of Einstein Oscillation for Suppression of Thermal Conductivity in Calcium Cobaltate (Toyota Physical and Chemical Research Institute, Japan and University of New South Wales) ○Ruoming Tian · (The University of Sydney) Gordon J Kearley · (Australian Nuclear Science and Technology Organisation) Dehong Yu · (The University of Sydney) Chris D Ling · (Paul Scherrer Institute) Jan Peter Embs · (University of the Witwatersrand) Elvis Shoko · (University of New South Wales) Sean Li
- 3Q07 Formation of nano network structure on the surface of titanium metal electrodes by chemical and heat treatments (Chubu University) ○Hideki Hashimoto · Seiji Yamaguchi · Yoshinori Naruta · Hiroaki Takadama
- 3Q08 Changes of thermal conductivity of WO_3 films due to metal-insulator transition (Nagoya University) ○Ayano Nakamura · Kenta Aoyagi · Shunta Harada · Miho Tagawa · Toru Ujihara
- 3Q09 Microstructure and high-temperature behavior of ZnO-based oxide thermoelectric materials (Kyushu University) ○Michitaka Ohtaki · Taiga Kuragaki

■■ September 18 (Fri) (Room R) ■■

21. Novel development of eco-solutions approaching from ceramic science and technologies

(9 : 00) (Chairman 武井貴弘)

- 3R01 ★Preparation and application development of macro-porous ceramics (Okayama University) ○Yoshikazu Kameshima · Ayaka Sasaki · Eisaku Igi · Shunsuke Nishimoto · Michihiro Miyake
- 3R03 Preparation of Nafion / Al_2O_3 porous composite for H_2 gas separation (Tokyo Institute of Technology) ○Hirokazu Takahashi · Toshihiro Isobe · Sachiko Matsushita · Akira Nakajima

- 3R04 Preparation of subnanoporous zirconia membranes via the sol-gel process and its application to the hydrogen separation (Utsunomiya University)
○Yoshinori Harada · Taki Matsumoto · Naotsugu Itoh · (Shinshu University) Takaaki Sato
- 3R05 Surface basic properties of Y_2O_3 catalyst prepared by hydrothermal method and its catalytic performance (Nagoya Institute of Technology) ○Makoto Tanaka · Yasuyuki Doi · Masatomo Hattori · Masaaki Haneda
- (10 : 40) (Chairman 松田元秀)
- 3R06 Surface acid properties of mesoporous ZrO_2 including sulfate ions and its application as support oxide for Pd catalyst (Nagoya Institute of Technology)
○Kenji Takamura · Masatomo Hattori · Masaaki Haneda
- 3R07 Hydrothermal synthesis of nanostructured WO_x/SnO_2-CeO_2 with high thermal tolerant (Toyota Central R&D Lab., Inc.) ○Tsuayoshi Hamaguchi · Masaaki Iwasaki · Toshiyuki Tanaka · (TOYOTA INDUSTRIES CORPORATION) Kenji Mori · Yasushi Satake
- 3R08 Complete Oxidation of Methane of $PdO/CeO_2-ZrO_2-Fe_2O_3/\gamma-Al_2O_3$ Catalysts (Osaka University) ○Naoyoshi Nunotani · Minchan Jeong · Naoki Moriyama · Nobuhito Imanaka
- 3R09 Application of the zeolite bulk body for methane to benzene reaction (Okayama University) ○Kenta Goto · Shunsuke Nishimoto · Yoshikazu Kameshima · Michihiro Miyake
- (13 : 00) (Chairman 白井孝)
- 3R13 Fabrication of HAp catalysis filter and its evaluation (Nagoya Institute of Technology) ○Kouhei Miyazaki · Daisuke Asai · Harumitsu Nishikawa · Khosroshahihadi Razavi · Masayoshi Fuji · Takashi Shirai
- 3R14 Morphological design of Al_2O_3 applied to diesel oxidation catalyst (DOC) (N.E. CHEMCAT CORPORATION) ○Tomoaki Ito · Makoto Nagata
- 3R15 Characterization for Catalyst by EUPS (N.E. CHEMCAT Corporation) ○Insu Kim · Takashi Yamada · Ryuji Ando · Makoto Nagata · (National Institute of Advanced Industrial Science and Technology) Toshihisa Tomie
- (14 : 00) (Chairman 前田浩孝)
- 3R16 Synthesis and evaluation of cesium and strontium adsorbent using dry gel conversion method (University of Hyogo) ○Ken Isogami · Hiroshi Nishioka · (Hitachi Chemical Co., Ltd.) Akihito Iwai · Masayoshi Johmen
- 3R17 Exploration of the dominant factor for the volatile behavior of cesium (Okayama University) ○Fukuto Nagai · S. Sakida · Y. Benino · T. Nanba
- 3R18 Adsorption properties of strontium ion of hydroxyapatite beads prepared from gypsum waste (Shinshu University) ○Takuma Hikida · Akari Takeuchi · Atsushi Ishikawa · Hiroshi Ohki · (Department of Applied Chemistry and Chemical Engineering, National Institute of Technology, Toyama college) Masamoto Tafu