\bigcirc = Speaker

The symbol that attached to the end of the presentation number

A = Award lecture

F = Frontiers of industrial research

M = Mixing session

S = Elemental strategy

The Ceramic Society of Japan Annual Meeting 2016 Program

General (Presentation 10 min. Discussion 4 min. Alternation 1 min.) Award/Invited (Presentation 25 min. Discussion 4 min. Alternation 1 min.)

★★ March 14 (Mon) (Room A) ★★

	相プロセス Vapor phase process
CVD	
(13:30)	
1A19	Strontium oxide films synthesized on single crystalline magnesia substrate by atmospheric chemical vapor deposition (Nagaoka University of Technology) (Negiji Komatsu · Hidetoshi Saitoh
1 A 20	Preparation of ZnO films using electrospray-laser CVD
	(Japan Fine Ceramics Center) OSatoshi Suehiro · Teiichi Kimura · Hajime Okawa · Seiji Takahashi
(14:00)	(Chairman 木村禎一)
1 A 21	Microstructure of Al ₂ O ₃ –ZrO ₂ nanocomposite films prepared by laser chemical vapor deposition
MDE	(Tohoku University) ○Akihiko Ito·Fumiyoshi Kobayashi·Masaru Kaneta·Takashi Goto
MBE (14: 15)	(Chairman 木村禎一)
1A22S	Analysis of transition metal nitrides thin films by thermal decomposition and first principle calculation
111220	(University of Hiroshima) ONeota Furuichi · Tomohito Uno · Kei Inumaru
受賞講演	
	(Chairman 後藤孝)
1A23A	[The 70th CerSJ Awards] Preparation of dielectric-metal nano composite films and their new multi-functional properties
	(Tohoku University) OHiroshi Masumoto
	★★ March 14 (Mon) (Room B) ★★
13. 液	相プロセス Liquid phase process
ナノシー	· <u> </u>
(13:00)	(Chairman 金森主祥)
1B17	Fabrication of mesoporous LHS nanocrystalline films and thermal conversion to mesostructural transition metal compounds
	(Osaka Prefecture University) ONaoki Tarutani · Yasuaki Tokudome · (Universidad de Buenos Aires) Matias Jobbágy ·
	(Comisión Nacional de Energia Atómica) Federico Viva · (Universisdad Nacional de General San Martin) Galo Soler-Illia ·
1 D 10	(Osaka Prefecture University) Masahide Takahashi
1B18	Fabrication of Layered Hydroxide Zinc Carbonate Films by a Chemical Bath Deposition Method with Suppressing Homogeneous Nucleation (Keio University) OHisasuke Kajihara · Manabu Hagiwara · Shinobu Fujihara
1B19	Preparation of TiS _{2x} Se _x nanosheets and their assembly
1010	(The University of Utsunomiya) ○Yuki Nakamura · Kazushi Funaki · Takamori Igarashi · Ketaro Tezuka · Yue Jin Shan
(13:45)	(Chairman 高橋雅英)
1B20	Exfoliation and light-absorption properties of surface-functionalized layered titanate
	(Keio University) ⊝Gentoku Nakada · Yuya Oaki · Hiroaki Imai
1B21	Synthesis and application of metal oxide monolayers through surface modification with hydrophobic organic molecule
	(Keio University) ○Yuna Yamamoto · Yuya Oaki · Hiroaki Imai
その他/	
	(Chairman 高橋雅英)
1B22 (14:30)	Influence of the Reduction Temperature to Titanium Suboxide (Meijo University) Keishi Iwata · ○Takahiro Saida (Chairman 緒明佑哉)
1B23	Synthesis of CaCo ₂ O ₄ by Pyrolysis of Hydroxide Precursors (Keio University) ORina Shimonishi · Manabu Hagiwara · Shinobu Fujihara
1B24	Synthesis of C12A7 fine particles by liquid phase process and preparing of electride
1221	(The University of Kyushu) OShizuka Moriya · Miki Inada · Naoya Enomoto · Katsuro Hayashi
1B25	Synthesis of heterogeneous Metal Organic Frameworks via stepwise growth on oriented Cu(OH) ₂
	(Osaka Prefecture University) ○Ken Ikigaki · Takaaki Hara · Kenji Okada · Yasuaki Tokudome · Masahide Takahashi
	★★ March 14 (Mon) (Room C) ★★
05. ガ	ラス・フォトニクス材料 Glass and photonic materials
	クス理論
	(Chairman 小林亮)
1C17	Optimization of trap depth in $Y_3Al_{5y}Ga_yO_{12}Ce^{3+}$ -based persistent phosphors by Yb^{3+} codopong
	(Kyoto University) OShun Miyano · Jumpei Ueda · Setsuhisa Tanabe
1C18	Insight into Luminescent Mechanism of Pr-doped (Ca,Sr)TiO ₃ from Binding Energy Diagram
	(Kyoto University) ○Kotaro Yasuda · Jumpei Ueda · Setsuhisa Tanabe

1C19 Design of novel persistent phosphors using vacuum referred binding energy (VRBE) diagram in yttrium aluminum gallium garnet (YAGG) host (Kyoto University) OJian Xu · Jumpei Ueda · Setsuhisa Tanabe Systematic First-Principles Calculations of Charge Transfer Transitions of Transition Metal Ions in \(\alpha - Al_2 O_3 \) and optimization of the computational 1C20 (Kansai Gakuin University) OShota Takemura · Kazuyoshi Ogasawara 周期構造 (14:00)(Chairman 上田純平) Fabrication of anisotropic plasmonic meso-structures by oblique metal deposition onto mesoporous silica thin films 1C21 (Kyoto University) OShiguma Uno · (Kyoto University · JST-PRESTO) Shunsuke Murai · (Kyoto University) Koji Fujita · Katsuhisa Tanaka 波長変換材料 (14:15) (Chairman 上田純平) 1C22 Investigation of up-conversion phosphors for full-color three-dimensional volumetric display (Tokai University) OMasaki Tanaka · Sayaka Tamura · Satoshi Ogawa · Noriyuki Naruse · Koji Tomita · (Tohoku University) Masato Kakihana 1C23 Preparation of upconversion phosphor SrZrO_3 and evaluation of its fluorescent characteristic (Utsunomiya University) OTatsuya Kawatani · Yue Jin Shan · Keitarou Teduka 1C24 Investigation of the influence of host crystal on up-conversion luminescence (Tokai University) OSayaka Tamura · Satoshi Ogawa · Koji Tomita · (Tohoku University) Makoto Kobayashi · Masato Kakihana Sol-gel synthesis and Bi³⁺-assisted Pr³⁺ luminescence of Pr³⁺ doped Ca_{1-x}Bi_xTiO₃ thin films 1C25 (Nagoya Institute of Technology) OHiroshi Nakamori · Tomokatsu Hayakawa ★★ March 14 (Mon) (Room D) ★★ 05. ガラス・フォトニクス材料 Glass and photonic materials 企業フロンティア講演 (13:00) (Chairman 矢野哲司) [Frontiers] Development of radio wave transmitting heat shielding automotive glass (Central Glass Co., Ltd.) OKensuke Izutani · Naoya Mori 1D17F 受賞講演 (13:30) (Chairman 矢野哲司) Simultaneous Removal of SO_x and NO_x for Glass Manufacturing System (Nihon Yamamura Glass Co., Ltd. · Osaka Prefecture University) OHashira Yamamoto · (Osaka Prefecture University) Tomoyuki Kuroki · Hidekatsu Fujishima · Masaaki Okubo ガラス形成(核燃料再処理) (14:15) (Chairman 赤井智子) Structural Role of Vanadium Ions in Synthesized High-level Nuclear Waste Glass $(Osaka\ University)\ \bigcirc Masanori\ Suzuki\cdot Norimasa\ Umesaki\cdot Toshihiro\ Tanaka\cdot (Chiba\ University)\ Takahiro\ Ohkubo\cdot Varanori\ Suzuki\cdot Norimasa\ Umesaki\cdot Toshihiro\ Tanaka\cdot (Chiba\ University)\ Takahiro\ Ohkubo\cdot Varanori\ Suzuki\cdot Norimasa\ Umesaki\cdot Toshihiro\ Tanaka\cdot (Chiba\ University)\ Takahiro\ Ohkubo\cdot Varanori\ Suzuki\cdot Norimasa\ Umesaki\cdot Toshihiro\ Tanaka\cdot (Chiba\ University)\ Takahiro\ Ohkubo\ Varanori\ Suzuki\cdot Norimasa\ Umesaki\cdot Toshihiro\ Tanaka\cdot (Chiba\ University)\ Takahiro\ Ohkubo\ Varanori\ Suzuki\cdot Norimasa\ Umesaki\cdot Norimasa\ Umesaki Umesa$ (IHI Corporation) Toshiaki Kakihara · Taku Hashimoto 1D23 Effect of Al₂O₃/B₂O₃ ratio on the loading capacity of HLW in aluminoborosilicate glass system using a new combinatorial approach $(\textbf{Tokyo Institute of Technology}) \quad \bigcirc \textbf{Koudai Mori} \cdot \textbf{Shinya Ohashi} \cdot \textbf{Tetsuo Kishi} \cdot \textbf{Tetsuji Yano} \cdot \textbf{Kenji Takeshita} \cdot \textbf{Shinya Ohashi} \cdot \textbf{Tetsuo Kishi} \cdot \textbf{Tetsuji Yano} \cdot \textbf{Kenji Takeshita} \cdot \textbf{Shinya Ohashi} \cdot \textbf{Shinya Oha$ (Japan Nuclear Fuel Limited) Yoshiyuki Miura · Norio Kanehira カルコゲン化物ガラス (14:45) (Chairman 赤井智子) (Kyoto Institute of Technology) ○Kayo Hosoya · Arifumi Okada · Takashi Wakasugi · Kohei Kadono 1D24 Ag Photodoping in Ge-Sb-S bulk glasses 1D25 Preparation of glasses based on Ga₂S_xSb₅S_xMX (M=Ag, Cs, X=Halogen) systems and compositional dependences of the optical transmission spectra (Kyoto Institute of Technology) ⊙Tomoyo Ashida · Arifumi Okada · Takashi Wakasugi · Kohei Kadono ★★ March 14 (Mon) (Room E) ★★ 03. 導電性材料 Electroconductive material デバイス材料 (13:00) (Chairman 柳博) 1E17 Effect of microstructure on Conductance Quantization in Ta_2O_5 thin films for RRAM (Tokyo Institute of Technology) O
Tomoya Kubo · Ryo Shirata · Hiroaki Minami · Tadashi Shiota · Akio Nishiyama · Osamu Sakurai · Kazuo Shinozaki 1E18 Fabrication and pressure sensitive property evaluation of stacked cup carbon nanotubes (SCCNTs)/polymer nanocomposite micro-films (Extreme Energy-Density Research Institute (EDI), Nagaoka University of Technology) OMinh Triet Tan Huynh · Tadachika Nakayama · Thanh Son Nguyen · Hisayuki Suematsu · Tsuneo Suzuki · Koichi Niihara · (Institute of Nanosensor Technology, Hanyang University) Hong-Baek Cho エピタキシャル薄膜 (13:30) (Chairman 柳博) High electron mobility of Nb-doped SrTiO₃ films with a strain field induced by Sr vacancy clusters 1E19 (Japan Fine Ceramics Center) OShunsuke Kobayashi · (National Institute for Materials Science) Tsuyoshi Ohnishi · (The University of Tokyo) Naoya Shibata \cdot (The University of Tokyo \cdot Japan Fine Ceramics Center) Yuichi Ikuhara \cdot (Nagoya University · Japan Fine Ceramics Center) Takahisa Yamamoto 1E20 Low temperature epitaxy of wide bandgap β -Ga₂O₃ thin films by laser processing (Tokyo Institute of Technology) ○Akifumi Matsuda · Daishi Shiojiri · Daiji Fukuda · Hiroki Uchida · Mamoru Yoshimoto · $(To shima\ Manufacturing)\ Nobuo\ Tsuchimine \cdot \ (Kanagawa\ Industrial\ Technology\ Center)\ Satoru\ Kaneko$ 1E21 $Preparation \ of \ CuAlO_2 \ thin \ films \ by \ rf-sputtering \ using \ CuAlO_2 \ target \\ \qquad (Ishinomaki \ Senshu \ University) \ \bigcirc Takashi \ Ehara \cdot Ryo \ lizaka \cdot Marina \ Abe$

酸化物導電体 (14:15) (Chairman 小林俊介) 1E22 Influence of post annealing conditions on electrical properties of amorphous Cd-Ga-O thin films (University of Yamanashi) OChiyuki Sato · Yota Kimura · Hiroshi Yanagi Synthesis and Characterization of Transparent ZnO Thin Films by Solution Process 1E23S (IMRAM, Tohoku University) OShu Yin · Saki Fukui · Xiaoying Wu · Tsugio Sato 1E24 A H⁻/O² exchangeability in titanium perovskite oxides (Kyoto University) ○Fumitaka Takeiri · Kohei Aidzu · Riho Mikita · Takafumi Yakamoto · Yoji Kobayashi · Hiroshi Kageyama · (University of Tokyo) Takeshi Yajima 1E25 Synthesis and Electrical Conductivity of La-Sr-Al-Mg-O Perovskite Solid Solution (Kagoshima University) OYumemi Iwaida · Yusuke Miyata · Yoshihiro Hirata · Soichiro Sameshima · Taro Shimonosono ★★ March 14 (Mon) (Room F) ★★ 02. 誘電性材料 Dielectric material プロセス (13:00) (Chairman 藤原忍) 1F17 Densification of Dielectric Ceramics by Solvothermal Solidification Method and Their Dielectric Properties (University of Yamanashi) OKazuki Fukasawa · Shintaro Ueno · Kouichi Nakashima · Satoshi Wada 1F18 Preparation of Barium Titanate Ceramics by Solvothermal Solidification Method in External Fields (University of Yamanashi) OYuichi Endo · Shintaro Ueno · Kouichi Nakashima · Satoshi Wada · (National Institute for Materials Science) Tohru Suzuki · Tetsuo Uchikoshi 1F19 Preparation of insulator/conductor nano-composite ceramics by solvothermal solidification method and their dielectric properties (University of Yamanashi) ○Yasunao Sakamoto · Shintaro Ueno · Kouichi Nakashima · Satoshi Wada · (Hiroshima University) Yoshihiro Kuroiwa · Chikako Moriyoshi · Eisuke Magome 1F20 Preparation of Barium Titanate/Bismuth-based Piezoelectrics Nanocomplex Ceramics by Solvothermal Solidification Method and Their Dielectric (University of Yamanashi) ○Ken Matsumoto · Yuichi Endo · Shintaro Ueno · Kouichi Nakashima · Satoshi Wada Properties (14:15)(Chairman 加藤一実) 1F22 Fabrication of BaTiO₃ Piezoelectric Ceramics with Mn-Doped Grain Boundaries (The University of Keio) OAkira Miyaura · Manabu Hagiwara · Shinobu Fujihara 1F23 Preparation of (111)-oriented Barium Titanate Ceramics by an Electrophoretic Deposition in a High Magnetic Field with Hexagonal-Tetragonal Biphase Barium Titanate Particles (University of Yamanashi) OKazuki Nukumizu · S. Ueno · K. Nakashima · N. Kumada · S. Wada · (National Institute for Materials Science) T. S. Suzuki · T. Uchikoshi, Y. Sakka · (Hiroshima University) E. Magome · C. Moriyoshi · Y. Kuroiwa 1F24 Preparation of Bi-system Complex Ceramics by Spark Plasma Sintering Method for DC-bias-free and Temperature-dependence-free Dielectrics (University of Yamanashi) ○Haruki Maruyama · Shintaro Ueno · Kouichi Nakashima · Satoshi Wada · (Ryukoku University) Ichiro Fujii 1F25 Evaluation of elastic properties on piezoelectric materials with various oriented composite structures (Nagoya Institute of Technology) O
Takahiro Fujiwara · Teruaki Fuchigami · Ken-ichi Kakimoto · (National Institute of Advanced Industrial Science and Technology) Manabu Fukushima · (Friedrich-Alexander University of Erlangen-Nuremberg) Tobias Fey ★★ March 14 (Mon) (Room G) ★★ 09. 環境・資源関連材料 Environment and energy related material 学術賞受賞講演 (13:00) (Chairman 中島章) [The 70th CerSJ Awards] Design of functions of nano-structures and interfaces in composites and crystals of inorganic compounds (Hiroshima University) OKei Inumaru 光触媒 (13:30)(Chairman 西本俊介) 1G19 Preparation of $Y_3Fe_{5-x}M_xO_{12}$ (M = Al, Ga) and their photocatalytic degradations of acetic acid and methanol (The University of Utsunomiya) $\,\,\bigcirc$ Masaru Tsukada \cdot Keitaro Tezuka \cdot Yue Jin Shan 1G20 Hydrothermal synthesis of TiO₂-modified hydroxyapatite with various morphology and its photocatalytic property (Osaka University) OTomoyo Goto · Sung Hun Cho · Tohru Sekino 1G21 Controlling Shape and Size of BaNbO₂N Crystals by Flux Grown Ba₅Nb₄O₁₅ Crystals and Their Application to Visible-Light-Active Photocatalyst (Shinshu University) ○Yukinori Murata · Tetsuya Yamada · Hajime Wagata · Shuji Oishi · Katsuya Teshima 1G22 Investigation of photocatalytic properties by cocatalyst loading on brookite TiO2 (The University of Tokai) \bigcirc Katsuki Iwasaki \cdot Koji Tomita \cdot (The University of Tokyo Science) Ken-ichi Katsumata \cdot (The University of Tohoku) Makoto Kobayashi · Masato Kakihana 濡れ性 (14:30)(Chairman 勝又健一) 1G23 Surface modification and self-cleaning property of TiO2 thin film (Okayama University) OShunsuke Nishimoto · Hiroaki Tomono · Yoshikazu Kameshima · Michihiro Miyake · (Industrial Technology Center of Okayama Prefecture) Eiji Fujii 1G24 Influence of oxide coatings on wetting properties of snail's shell (Nagoya Institute of Technology) ORyota Yamagishi · Hirotaka Maeda · Toshihiro Kasuga · (Hokkaido University) Yasutaka Matuo

(Kogakuin University) OYuki Okutomi · Naoya Yoshida · (Hokkaido University) Qiling Peng · Shen Ye · (Kogakuin University) Toshinori Okura

Effect of viscosity and polar term of droplet on dynamic hydrophobicity on self-assembled monolayer surface

1G25

★★ March 14 (Mon) (Room H) ★★

06. 生体関連材料 Bioceramics コンポジット・合成 (13:30) (Chairman 城崎由紀) 1H19 Fabrication of PLGA/Tricalcium Phosphate Cement Composite for Generating Pores with Time (Tokyo Institute of Technology) OShota Ishii · Tomoaki Sugiyama · Toshiyuki Ikoma 1H20 Preparation of HAp-coated Tissue Culture Polystyrene Substrates Using Simulated Body Fluids (Tokyo University of Science) OKazutoshi Iijima · Ryo Suzuki · Ayako Iizuka · (National Center for Child Health and Development) Nobutaka Kiyokawa \cdot (Tokyo University of Science) Mineo Hashizume 1H21 Ductile silica/methacrylate hybrids for bone regeneration: Correlation between structure and properties (Nagoya Institute of Technology) OAnthony L. B. Macon · Toshihiro Kasuga · (Warwick University) Samuel J. Page · John V. Hanna · (Imperial College London) Siwei Li · Julian R. Jones コンポジット・評価 (14:15) (Chairman 生駒俊之) Biological evaluations of hydroxyapatite/collagen-(3-glycidoxypropyl)trimethoxysilane self-setting paste (Meiji University) OTaira Sato · (Kyushu Institute of Technology) Yuki Shirosaki · (Meiji University) Masaki Nagaya · Yoshinori Asano · Kazuaki Nakano · Hiroshi Nagashima · Mamoru Aizawa · (National Institute for Materials Science) Masanori Kikuchi 1H23 The evaluation of mechanical property and bone compatibility of chitosan-HAp composite mono-fiber (Kyushu Institute of Technology) OTakuma Okada · Toshiki Miyazaki · Yuki Shirosaki 1H24 Osteogenesis Penetration into Semipermeable Tough Hydrogel for Strong Bonding Takayuki Kurokawa · Tasuku Nakajima · Kazunori Yasuda · Jian Ping Gong ★★ March 14 (Mon) (Room I) ★★ 01. エンジニアリングセラミックス Enginieering ceramics 非酸化物 (13:00)(Chairman 中山忠親) 1I17 Ceramization Process of Polysilsesquioxanes in a Hydrogen Gas flow (Osaka Prefecture University) OMasaki Narisawa · Kenta Sasakawa · Hiroshi Inoue · (Synchrotron Analysis L.L.C.) Takayuki Hasegawa · (University of Hyogo) Norimasa Umesaki · Kazuhiro Kanda 1I18 Effect of nitriding parameters and thickness of Si powder compacts on nitridation (National Institute of Advanced Industrial Science and Technology) Ochika Matsunaga · You Zhou · (Japan Fine Ceramics Co., Ltd.) Dai Kusano · $(National\ Institute\ of\ Advanced\ Industrial\ Science\ and\ Technology)\ Hideki\ Hyuga\ \cdot\ Yu\text{-}ichi\ Yoshizawa\ \cdot\ Kiyoshi\ Hirao\ (National\ Institute\ of\ Advanced\ Industrial\ Science\ and\ Technology)\ Hideki\ Hyuga\ \cdot\ Yu\text{-}ichi\ Yoshizawa\ \cdot\ Kiyoshi\ Hirao\ (National\ Institute\ of\ Advanced\ Industrial\ Science\ and\ Technology)\ Hideki\ Hyuga\ \cdot\ Yu\text{-}ichi\ Yoshizawa\ \cdot\ Kiyoshi\ Hirao\ (National\ Institute\ of\ Advanced\ Institute\ of\ Advanced\ Institute\ (National\ Institute\ of\ Advanced\ Institute\ Only Institute\ (National\ Institute\ Only Institute\ Only Institute\ Only Institute\ (National\ Institute\ Only Institute\ Only Institute\ Only Institute\ (National\ Institute\ Only Institute\ Only Institute\ Only Institute\ Only Institute\ (National\ Institute\ Only Institute\ Only Institute\ Only Institute\ (National\ Institute\ Only Institute\ Only Institute\ Only Institute\ Only Institute\ (National\ Institute\ Only Institute\ Only Institute\ Only Institute\ Only Institute\ (National\ Institute\ Only Institute$ Effect of Ti Metal Powder Addition on Hot-Press Sintering of $\mathrm{Si}_3\mathrm{N}_4$ 1119 Three-dimensional observation of Yb_2O_3 doped Si_3N_4 ceramics by FIB-SEM serial sectioning technique 1120 (Kanagawa Academy of Science and Technology) (Takuma Takahashi · Tsukaho Yahagi · (Yokohama National University) Daisuke Kawai · Junichi Tatami · Motoyuki Iijima ナノコンポジット (14:00) (Chairman 関野徹) 1121 Fabrication of Silicon-Nitride Hybrid System with Highly Regulated Structures Tadachika Nakayama · Tsuneo Suzuki · Hisayuki Suematsu · Koichi Niihara 1I22 Microstructure and Mechanical Properties of Y2Ti2O7/SiC nanocomposites (Nagaoka University of Technology) ○Son Thanh Nguyen · Tadachika Nakayama · Hisayuki Suematsu · Tsuneo Suzuki · Koichi Niihara 1123Crystallization and Formation Mechanism of a Glass with Y2Si2O7-Mullite Eutectic Composition (Nihon Universty) ○Shunkichi Ueno · Yohei Suzuki · Tomoe Tada · Tetsuya Yanai · (NIMS) Byung Koog Jang Self-healing Ability on 5 vol%Ni/Al $_2\mathrm{O}_3$ Nano-composites at High-temperatures Oxidation 1124 (Nagaoka University of Technology) OAkinori Dake · Makoto Nanko Evaluation of Environment Resistance of White Si-O-C(-H) Ceramics at High Temperatures 1125 (Osaka Prefecture University) OShu Takeuchi · Masaki Narisawa · Hirohumi Inoue ★★ March 14 (Mon) (Room K) ★★ 10. エネルギー関連材料 Energy reference material ナトリウムイオン二次電池 (13:15) (Chairman 日比野高士) 1K18 High pressure synthesis, Crystal chemistry and charge-discharge characteristics of CaFe₂O₄ type Na(Mn_{1-x}Fe_x)₂O₄ (The University of Nagoya) OEiichi Hirose · Yuichi Shirako · Ken Niwa · Masashi Hasegawa · (Panasonic corporation) Kensuke Nakura · Ryuichi Natsui 1K19S Preparation and characterization of sodium ion conducting glass-ceramics in the system Na₃PS₄·Na₄SnS₄ (Osaka Prefecture University) OYuta Nakamura · Naoto Tanibata · Masahiro Tatsumisago · (Osaka Prefecture University · Kyoto University) Akitoshi Hayashi 1K20 Low temperature sintering of NASICON solid electrolyte by the addition of Na₂BO₂ glass

(Osaka Prefecture University) OKenji Suzuki · Kousuke Noi · Akitoshi Hayashi · Masahiro Tatsumisago

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(14:15) (Chairman 細野英司)
1K22
               Electrochemical Properties as an Anode Material in the Sodium-Ion Battery of Morphologically Controlled TiO<sub>2</sub> Particles
                                                                          (Saga University) ○Takashi Miura · Toshio Trikai · Takanori Watari · Hideyuki Noguchi · Mitsunori Yada
1K23
              A sulfur/carbon composite synthesized by selective extraction of titanium from Ti<sub>2</sub>SC
                                                                                            (The University of Kyushu) \bigcircKei Kawahara \cdot Miki Inada \cdot Naoya Enomoto \cdot Katsuro Hayashi
電極材料
(14:45) (Chairman 細野英司)
1K24
              Synthesis of pore size controlled vertically oriented graphene film by electrophoretic deposition and freeze drying
                                                                                                     (Shinshu University) ORyo Tanaka · Yusuke Ayato · Dai Mochizuki · Wataru Sugimoto
(15:00) (Chairman 細野英司)
1K25
              Material Design of a Fuel-Cell type Battery Using Porous Carbon and Air Electrodes
                                                                                                                   (Nagoya University) OTakashi Hibino · Kazuyo Kobayashi · Masahiro Nagao
                                                                       ★★ March 14 (Mon) (Room P) ★★
                                                                                                     15:30~17:30
01. エンジニアリングセラミックス Enginieering ceramics
              Development of low temperature formation technology of high gas barrier film on PET using photo irradiation and polysilazane coating method
                                                                            (Shibaura Institute of Technology) \bigcircYoshimi Yamasaki \cdot Tomoji Ohishi \cdot (NIMS)Toshihide Nabatame \cdot
                                                                                                                                                         (Osaka University) Kazuhiro Ito · Makoto Takahashi
1P002
              Fabrication of magnesia ceramics with low electrical resistivity and excellent plasma resistance
                                                                       (The University of Kagawa) ○Kazuki Okada · Takafumi Kusunose · (The University of Osaka) Tohru Sekino
1P003
              Microstructures and mechanical properties of mica/zirconia composites fabricated using fine mica composition glass powder
                                                                                                                (Shinshu University) OSyunya Iwasawa · Tomohiro Yamaguchi · Seiichi Taruta
1P004
              High-Strength Pseudobrookite-Type MgTi<sub>2</sub>O<sub>5</sub> by Spark Plasma Sintering
                         (University of Tsukuba) ○Hyoung-Won Son·Ryosuke Maki·Yoshikazu Suzuki·(National Institute for Materials Science) Byung-Nam Kim
1P005
              Preparation and thermal expansion properties of ZrW<sub>2</sub>xMoxO<sub>8</sub> by spark plasma sintering method combined with hydrothermal process
                                                                                                                        (Tokyo University of Science) OHui Wei · Marin Hasegawa · Keshi Nishio
1P006
              Evaluation of internal structure in alumina ceramics fabricated by centrifugal casting with well-dispersed slurry
                                                                                                               (Nagaoka University of Technology) OAkihiro Sato · Zenji Kato · Satoshi Tanaka
1P007
              Fabrication and some properties of textured Ti<sub>2</sub>AlN by slip casting in a strong magnetic field
                 (Tokyo University of Science · National Institute for Materials Science) OShotaro Musha · (National Institute for Materials Science) Akira Kasahara ·
                  Masahiro\ Tosa\cdot Tohru\ Suzuki\cdot Toshiyuki\ Nishimura\cdot (Tokyo\ University\ of\ Science\cdot\ National\ Institute\ for\ Materials\ Science)\ Kenjiro\ Fujimoto\cdot National\ Institute\ for\ Materials\ Science)
                                                                                                                                                       (National Institute for Materials Science) Yoshio Sakka
1P008
              Fabrication and mechanical properties of textured Ti<sub>3</sub>SiC<sub>2</sub> MAX phase systems
                                                                       (\textbf{Tokyo University of Science} \cdot \textbf{National Institute for Materials Science}) \quad \bigcirc \textbf{Yuichi Uchida} \cdot \textbf{Shotaro Musha} \cdot \textbf{Sh
                                                                                               (National Institute for Materials Science)
 Koji Morita · Tohru Suzuki · Toshiyuki Nishimura ·
                                                                                                  (Tokyo University of Science \cdot National Institute for Materials Science) Kenjiro Fujimoto \cdot
                                                                                                                                                       (National Institute for Materials Science) Yoshio Sakka
1P009
              Fabrication of highly electrically resistive ZrN with metallic conductivity
                                                                     (The University of Kagawa) OHiroaki Fujisawa · Takafumi Kusunose · (The University of Osaka) Toru Sekino
1P010
              Influence of humidity on wear behavior of AlN ceramics
                  (Yokohama National University) OAyuka Matsugami · Junichi Tatami · Motoyuki Iijima · (Sumitomo Electric Industries, Ltd.) Hideyuki Ohguni
1P011
              Dopant Dependence of Microstructure for BT-BMT-BF Piezoelectric Ceramics
                   (The University of Yamanashi) Sarah Najwa Zamalik · Gopal Prasad Khanal · Ryo Iizuka · Shintaro Ueno · Kouichi Nakashima · Satoshi Wada
1P012
               Development of Metal Oxide composited Transparent Thick Ceramics film by Aerosol Deposition Method
                                                   (Toyohashi University of Technology) ○Yuichi Araki · Syun Ueyama · Go Kawamura · Atsunori Matsuda · Hiroyuki Muto
1P013
              Effect of Reaction Condition on the Formation of Zinc Phosphate
                                                                                                                (Chiba Institute of Technology) OYuka Yamamoto · H. Shibata · K. Hashimoto
1P014
              Evaluation of deformation of packed granules in powder compact by direct observation
                                 (Nagaoka University of Technology) ○Tatsuaki Shibuya · Zenzi Kato · Satoshi Tanaka · (Tokyo Institute of Technology) Koichi Yasuda
1P015
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(National Institute for Materials Science) OYutaka Adachi · Ken Watanabe · Noriko Saito · Taku Suzuki · Isao Sakaguchi

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                                                                                                        (Kanagawa Industrial Technology Center) Satoru Kaneko
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                                                                (Ryukoku University) Yuuki Sawada · OYuusuke Hashimoto · Fumihiro Yanagi · Yoshifumi Aoi
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                                                                (Tohoku\ University\cdot DENJIKEN)\ Shigehiro\ Ohnuma\cdot (Tohoku\ University)\ Hiroshi\ Masumoto
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                                       (Tohoku University) ○Yiwen Zhang·Hiroshi Masumoto·Hiroyuki Kosukegawa·Hiroyuki Miki·Toshiyuki Takagi·
                                                                     (DENJIKEN) Nobukiyo Kobayashi · (Tohoku University · DENJIKEN) Shigehiro Ohnuma
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                                                      (Toho University) ○Norihisa Tanikawa · Miyuki Hori · Eiji Wada · Daisuke Akahoshi · Toshiaki Saito ·
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                                                                                                             (Sophia University) Ryo Kajihara · Hideki Kuwahara
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                                                                 (Tohoku University · DENJIKEN) Shigehiro Ohnuma · (University of Toyama) Masateru Nose
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             Fabrication of porous hydroxyapatite ceramics using agarose as template
                                                                                                      (Shinshu University) OShyuhei Yamazaki · Tomohiro Yamaguchi · Seiichi Taruta
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(Saga University) (Shintaro Imamura · Ayako Sakamoto · Yuuki Hanakawa · Toshio Torikai · Takanori Watari · Mitsunori Yada
1P192
              Crystal Growth and Properties of Chromium Silicides by Ga Flux
                                              (Kokushikan University) 🔾 Takashi Yamasaki · Yuta Suzuki · Shigeru Okada · Hamed Mofid Tabatabaei · Tamio Nishihara ·
                                                                                                (Tohoku University) Kunio Yubuta · Akiko Nomura · Toetsu Shishido · (NIMS) Takao Mori
1P193
               Gas sensing properties of mesoporous tungsten oxide thin films by solution method
                                                                                                                          (The University of Gifu) ○Hiroyuki Yanase · Takayuki Ban · Yutaka Oya
1P194
              Studies on formation process of Fe containing Ge-imogolite by DLS and UV-Vis spectroscopy
                                (National Institute of Technology, Numazu College) ○Eiji Kato · Minami Watanabe · Kaho Osada · Setsuko Yamane · Masashi Ookawa
1P195
              Crystallographic orientation analysis of yttrium aluminum garnet thin films prepared on reactive sapphire substrates
                                                        (Toyota Technological Institute) \bigcircShuichi Arakawa \cdot (Toyota Central R&D Labs) Hiroaki Kadoura \cdot Takeshi Uyama \cdot
                                                             Kazumasa\ Takatori\ \cdot\ Yasuhiko\ Takeda\ \cdot\ (Toyota\ Technological\ Institute\ \cdot\ Toyota\ Central\ R\&D\ Labs) Toshihiko\ Taning Toshihik
1P196
              Low temperature liquid phase synthesis of ZnO nanostructured films
                                     (Toyohashi University of Technology) ○Takuya Ito·Xing Wei·Wai Kian Tan·Go Kawamura·Hiroyuki Muto·Atsunori Matsuda
1P197
              Direct fabrication of Fe<sub>2</sub>O<sub>3</sub>:Ca film on Fe substrate by hydrothermal method
                                                                                                                      (Meiji University) OHideyuki Tanaka · Chihiro Izawa · Tomoaki Watanabe
1P198
              Investigation of factor determining crystal phases of rare earth nitrate hydroxides
                                                                                                                                                       (Ehime University) OFumiya Sato · Ryoji Takahashi
1P199
              Electrical conductivity of Gd<sub>2</sub>O<sub>3</sub> doped CeO<sub>2</sub> thin films by solution method
                                                                                                                                                  (Gifu University) ODaisuke Shimizu · T. Ban · Y. Ohya
              Effect of Ge substitution on <sup>29</sup>Si and <sup>27</sup>Al NMR spectra of imogolite
1P200
                                                                            (National Institute of Technology, Numazu College)
 Takuya Noaki · Hiroki Sugisawa · \bigcircMasashi Ookawa
1P201
              Exfoliation and intercalation properties of single crystal of HCa<sub>2</sub>Nb<sub>3</sub>O<sub>10</sub>
               (Kyushu University) OYusuke Fukae (Kyushu University · International Institute for Carbon-Neutral Energy Research(I2CNER)) Shintaro Ida ·
                   (Kyushu University) Syota Koga · (Kyushu University · International Institute for Carbon-Neutral Energy Research (I2CNER)) Hidehisa Hagiwara ·
                                                                                            (International Institute for Carbon-Neutral Energy Research (I2CNER)) Motonori Watanabe ·
                                               (Kyushu University · International Institute for Carbon-Neutral Energy Research(I2CNER)) Takaaki Sakai · Tatsumi Ishihara
1P202
              Synthesis of Inorganic-Organic Hybrids from Polycyclic-aromatic-ring-bridged Diphosphonic Acids and a Copper (II) Salt via Hydrothermal Reactions
                             (Waseda\ university)\ Hiroyoshi\ Tobise \cdot \bigcirc Koichiro\ Shimegi \cdot Ryo\ Sugiura \cdot Julian\ Zapico \cdot (Kagami\ Memorial\ Res.\ Inst.\ Mater.\ Sci.\ Tech.)
                                                                                       Naokazu Idota \cdot (Hokkaido university) Akira Miura \cdot (Yamanashi university) Nobuhiro Kumada \cdot
                                                                                                     (Waseda university · Kagami Memorial Res. Inst. Mater. Sci. Tech.) Yoshiyuki Sugahara
1P203
              Development of Preparation Technique for Porous Ceramics Materials via Composite Particles
                                                  (Toyohashi University of Technology) ○Naoto Kimura · Binbin Sun · Gou Kawamura · Atsunori Matsuda · Hiroyuki Muto
1P204S
              Synthesis and characteristics of nano-sized 2D iron oxide with molecular assembly template
                                                                                                                                   (The University of kyushu) OShin-ichi Hayano · Michitaka Ohtaki
14. 気相プロセス Vapor phase process
1P205
              Preparation of low melting point zinc complex and development of low temperature formation method for transparent zinc oxide thin film
                                                                                                                               1P206
              Influence of V/III ratio on nucleation and growth of InN by atmospheric pressure halide chemical vapor deposition
                                                                                       15. パウダープロセス Process of powder
1P207
              Fabrication \ of \ c\text{-axis-oriented} \ Ba_2NaNb_5O_{15} \ ceramics \ using \ colloid \ processing \ in \ high \ magnetic \ field
                                                                                                                                         (Nagaoka University of Technology) OYuta Kamo · S. Tanaka
1P208
              Hot pressing sintering process of ZrB2 with SiBCN as a sintering aid
                                                                             (School of Materials Science and Engineering, Beihang University) Bo Feng ⋅ Bingyang Li ⋅ ○Yue Zhang
1P209
              Preparation of polyethyleneimine-fatty acid complex in IPM and their application toward stability improvement of TiO2 nanoparticles
                                                                                                                (Yokohama National University) OYasuhuro Kawaharada · M. Iijima · J. Tatami
1P210
              Synthesis\ of\ Plate-like\ NaNbO_3\ Crystal\ Particles\ Using\ Single-Step\ Molten\ Salt\ Method\ with\ Mixed\ Salt\ Method\ William (Salt\ Method\ William (Salt))))))))
                                                                                                                                 (The National Defense Academy) OKeisuke Ishii · Shinjiro Tashiro
1P211
              Effect of acrylic latex addition on the resistance properties of hardened cement against sulfuric acid
                                                                                             (Yokohama National University) OShunsuke Mizumoto · Motoyuki Iijima · Junichi Tatami ·
                                                                                              (Asahikasei Chemicals Corporation) Tuyet Nga Nguyen · Yasuyuki Kamiyama · Motoyosi Mori
1P212
              Continuous observation of granule compaction
                                                                                                   1P213
              Fabrication of gas seal with high electric resistivity for solid oxide fuel cells by oxidation sintering of NiAl<sub>3</sub> particles
                                                                                                                                             (Hosei University) OTakafumi Yamaguchi · Takaya Akashi
1P214
              Preparation of c-axis oriented AIN by CaF2 sintering additive and a rotating magnetic field
                             (Shibaura Institute of Technology) OKento Imai · Hajime Kiyono · (National Institute for Materials Science) Tohru Suzuki · Yoshio Sakka
1P215
              Study on Fabrication and Evaluation of Iron Silicides by Mechanical Alloying
                                                                                                                          1P216
              Fabrication of Tin-doped Indium Oxide Thin Films by Aerosol Deposition Method
                                                                                                                        (Doshisha University) OYutaka Hasegawa · Yuki Sato · Shinzo Yoshikado
1P217
              The feasibility study of a process controlling for a spray drying process for industrial using by data acquired from real-time particle size analysis
                                                                                                 (Malvern) OFumiaki Sato · Daisuke Sasakukra · (Preci) Hayato Kato · Shinya Kawaguchi
              A Study for Operation Optimization of The Spray Drying Process Used for Fine Ceramics by Real Time Particle Size Distribution Analysis
1P218
                                                        (PRECI Co.,Ltd.) OShinya Kawaguchi · Yuichi Misumi · Hayato Kato · (Malvern Instruments ,Div of Spectris Co.Ltd.)
                                                                                                                                                           Fumiaki Sato · Daisuke Sasakura · Miyuki Funato
              The effect of the surface physicochemical characteristics of the Almina particles in slurry concerning the process behavior and the particle morphology
1P219
              of granule on the spray drying
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Synthesis of Nanostructured Titanium Dioxide Thin Films Formed on Titanium Plates

1P191

(Spectris co., Ltd.) ○Miyuki Funato · Fumiaki Sato · Daisuke Sasakura · (Prici co., Ltd.) Shinya Kawaguchi · Hayato Kato

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composite particles
                                   (Yokohama National University) OMariko Sado · (Kanagawa Academy of Science and Technology) Takuma Takahashi ·
                                                                                       (Yokohama National University) Junichi Tatami · Motoyuki Iijima
1P221
         Low magnetic field orientation of glass fiber in epoxy resin by coating multilayer graphene
                                    (Kanagawa Academy of Science and Technology) ○Takuma Takahashi · (Yokohama Natioal University) Junichi Tatami
1P222
         Fabrication of porous honeycomb alumina with controlled pore structure through molding in a magnetic field using a small resin mold prepared by
                                                                          (Yokohama National University) Emi Takahashi · OJunichi Tatami · Shoji Moti
16. キャラクタリゼーション Characterization
1P223
         Cathodoluminescence properties on High-pressure Phase of SrO:Ce phosphors synthesized on single crystalline magnesia
                   (Nagaoka University of Technology) ○Keiji Komatsu · (Chubu Chelest Co. Ltd · Nagaoka University of Technology) Atsushi Nakamura ·
                                                                                                  (Nagaoka University of Technology) Hidetoshi Saitoh
1P224
         Synthesis and crystal structure of a new aluminum oxycarbide in the system Al<sub>2</sub>C<sub>2</sub>-Al<sub>2</sub>O<sub>2</sub>
                                       (Nagova Institute of Technology · Research Fellow of Japan Society for the Promotion of Science) OHiroki Banno ·
                                                                                         (Nagoya Institute of Technology) Toru Asaka · Koichiro Fukuda
1P225
         Discovery of a New Oxide-Ion Conductor SrNdInO<sub>4</sub>
                                                        (Tokyo Institute of Technology) ○Ayaka Fujimoto · Kotaro Fujii · Eiki Niwa · Masatomo Yashima
1P226
         Interplay among structure, magnetic and electron transport properties in Fe-based double perovskites
                                                      (Nagoya Institute of Technology) ○Tomoki Matsumumra · Daisuke Urushihara · Tatsuya Suzuki ·
                                                                   Toru Asaka · Koichiro Fukuda · (Kyoto University) Shinya Konishi · Katsuhisa Tanaka
1P227
         Determination of the crystal structure of α-SrGa<sub>2</sub>O<sub>4</sub> at 1480 °C
                                                            (Tokyo Institute of Technology) ○Keita Saito · Kotaro Fujii · Eiki Niwa · Masatomo Yashima
1P228
         Discovery of a new type of oxide-ion conductor containing ZnO<sub>5</sub>-pyramids BaZnHo<sub>2</sub>O<sub>5</sub>
                                                                  (Tokyo Inst. Tech.) OKeigo Nakamura · Kotaro Fujii · Eiki Niwa · Masatomo Yashima
1P229
         Electrical Properties and Crystal Structure of the Zircon ZrSiO<sub>4</sub>
                                                      (Tokyo Institute of Technology) ○Takahiko Morise · Eiki Niwa · Kotaro Fujii · Masatomo Yashima
1P230
         Anisotropy of Thermal Expansion of Ruddlesden-Popper Phases Sr<sub>3</sub>Ti<sub>2</sub>O<sub>7</sub> and La<sub>2</sub>SrAl<sub>2</sub>O<sub>7</sub>
                                                       (Tokyo Institute of Technorogy) OShota Nagamine · Kotaro Fujii · Eiki Niwa · Masatomo Yashima
1P231
         Electrical Conductivity and Crystal Structure of Ca_2R_3Ta_3O_{14} (R = Y, Ho, Dy)
                     (Tokyo Institute of Technology) ○Wataru Uno·Kotaro Fujii · Eiki Niwa· Naoki Yamamoto · Takumi Sannomiya · Masatomo Yashima
                                              ★★ March 15 (Tue) (Room A) ★★
15. パウダープロセス Process of powder
合成
(9:00)
         (Chairman 鈴木達)
2A01
         Synthesis of Ti<sub>4</sub>O<sub>7</sub> nanoparticles by carbothermal reduction using microwave heating
                                                     (Tohoku University) ○Tomohiro Takeuchi · Jun Fukushima · Yamato Hayashi · Hirotsugu Takizawa
         One-step mechanical synthesis of LiCoPO<sub>4</sub>/C composite granules
2A02
                                                             (Toyota Motor Corporation) Hideyuki Koga · Toshiya Saito · Hideki Iba
2A03
         Microwave Solid-state Synthesis of Lithium titanate / Carbon Nanocomposite Powder for Electrode of Lithium Ion batteries
                                          (Tohoku University) ○Yamato Haysahi · Dohyeong Kim · Hiromi Suzuki · Jun Fukushima · Hirotsugu Takizawa
2A04
         Flux Growth of One-dimensional Li<sub>2</sub>NiPO<sub>4</sub>F Single Crystal by using Mixed Halide Flux
                                                            スラリー
(10:00)
         (Chairman 藤正督)
2A05
         Influence of slurry properties on three-dimensional alumina ceramics by stereolithography
                                                                           (Kagawa Industrial Technology Center) OKozo Yokota · Shigeyuki Takahara
2A06
         Expression factors of shear-thinning behavior in mono-dispersed slurry
                                                                (Nagaoka University of Technology) OYoshihiro Nagasawa · Zenji Kato · Satoshi Tanaka
         Fabrication of Porous Substrate for Oxide-ion-conductor Thin Film by Direct Foaming Method
2A07
                                               Tadashi Shiota · Kazuo Shinozaki · (The university of shizuoka) Naoki Wakiya
2A08
         Microstructures and properties of highly porous thermal insulators through gelation freezing route
                                      (National Institute of Advanced Industrial Science and Technology (AIST)) OManabu Fukushima · Yu-ichi Yoshizawa
焼結
(11:00)
         (Chairman 北憲一郎)
2A09
         Effect of Current Density on Flash Sintering of Zirconia at Isothermal Furnace Temperature
                                      (Gifu University) OMichiyuki Yoshida · (University of Oxford) Richard I. Todd · (Gifu University) Osamu Sakurada ·
                                                                                              (Gifu Prefectural Ceramics Research Institute) Seizo Obata
2A10
         Spark plasma sintering of Si<sub>3</sub>N<sub>4</sub> using nanocomposite particles
                                                                 (Yokohama National University) OKwangjin Jeong · Junichi Tatami · Motoyuki Iijima ·
                                                                                          (National Institute for Materials Science) Toshivuki Nishimura
2A11
         Microscopic stress distribution in Viscous Sintering of Two Spheres
                                  (Tokyo Institute of Technology) ○Shun Kanchika · Yutaka Shinoda · Fumihiro Wakai · (Saga University) Takashi Akatsu
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Fabrication of high thermal conductive c-axis-oriented Si₂N₄ ceramics by molding in a low and static magnetic field using multilayer graphene-coated

1P220

(Tohoku University) ○Shunsuke Kurosawa · Koichi Harata · Hiroaki Chiba · Rikito Murakami · Takahiko Horiai · Akihiro Yamaji · Pejchal Jan · Yuji Ohashi · Kei Kamada · Yuui Yokota · Akira Yoshikawa バルク特性 (15:15) (Chairman 吉田英弘) Fabrication of lead-free alkali niobate ceramics with various kinds of niobium pentoxide powders as raw material 2A26 (Nagoya Institute of Technology) OEiko Matsumura · Teruaki Fuchigami · Ken-ichi Kakimoto 2A27 Preparation of lunar monolith using lunar regolith by geopolymer method (Yamaguchi University) ORyuichi Komatsu · Junya Satoh · Ryo Tsutsuura 微構造 (15:45) (Chairman 白井孝) Analysis on orientation behavior for colloidal processing in magnetic field using UV curable resin 2A28 (Nagaoka University of Technology) OShoko Baba · Satoshi Tanaka · (Taiyo Yuden Co. Ltd) Tomohiro Harada · Hiroyuki Shimizu · Yutaka Doshida 2A29 Evaluation of pore structure in porous alumina prepared by pore forming agent by using micro X-ray CT (Nagaoka University of Technology) OShota Okabe · Zenji Kato · Satoshi Tanaka 2A30 The statistically characterization to internal structure of spray dried granule using a liquid immersion method by a particle image analysis. (Malvern Instruments, Div of Spectris Co., Ltd.) \bigcirc Daisuke Sasakura \cdot Miyuki Funato \cdot Fumiaki Sato \cdot (Preci Co.,Ltd.) Shinya Kawaguchi · Yuichi Misumi · Hayato Kato 2A31 Development of Electrically Driven Microcar Using Two-Photon Microfabrication (Nagaoka University of Technology) OMaria Guadalupe del Rocio Herrera-Salazar · Hiroyuki Akiyama · Tadachika Nakayama · Naoto Matsutani ★★ March 15 (Tue) (Room B) ★★ 13. 液相プロセス Liquid phase process その他 (9:00)(Chairman 上野慎太郎) 2B01 SEM observation of wet core-shell type ceria nanoparticles (National Institute of Advanced Industrial Science and Technology (AIST)) ONoriya Izu · Toshi
hiko Ogura · Toshio Uchida · Takafumi Akamatsu · Toshio Itoh · Woosuck Shin 2B02 Strontium collecting behaviors of carbamate-containing calcium carbonate particles from artificial sea water (National Institute for Materials Science) OJin Nakamura · Yoshio Sakka · (Nagoya Institute of Technology) Toshihiro Kasuga 2B03 Surface functionalization of SiO_2 by the formation of calcium silicate hydrate nanostructures (Osaka University) \bigcirc Kenji Okada \cdot Ken-ichi Machida 水熱合成・ソルボサーマル (9:45) (Chairman 朝倉裕介) 2B04 Synthesis of Mordenite Film by Strong Magnetic Field-Assisted Hydrothermal Method $(National\ Institute\ for\ Materials\ Science)\ \bigcirc Tetsuo\ Uchikoshi\cdot (National\ Institute\ of\ Advanced\ Industrial\ Science\ and\ Technology)\ Chika\ Matsunaga\cdot (National\ Institute\ for\ Material\ Science\ Industrial\ Indust$ $(University of \ Tsukuba) \ Kantaro \ Tsuchiya \cdot (National \ Institute \ for \ Materials \ Science) \ Noriyuki \ Hirota \cdot Tohru \ Suzuki \cdot (National \ Institute \ for \ Materials \ Science) \ Noriyuki \ Hirota \cdot Tohru \ Suzuki \cdot (National \ Institute \ for \ Materials \ Science) \ Noriyuki \ Hirota \cdot Tohru \ Suzuki \cdot (National \ Institute \ for \ Materials \ Science) \ Noriyuki \ Hirota \cdot Tohru \ Suzuki \cdot (National \ Institute \ for \ Materials \ Science) \ Noriyuki \ Hirota \cdot Tohru \ Suzuki \cdot (National \ Institute \ for \ Materials \ Science) \ Noriyuki \ Hirota \cdot Tohru \ Suzuki \cdot (National \ Institute \ for \ Materials \ Science) \ Noriyuki \ Hirota \cdot Tohru \ Suzuki \ Noriyuki \ Hirota \cdot Tohru \ Suzuki \ Noriyuki \ Hirota \cdot Tohru \ Suzuki \ Noriyuki \ Hirota \ Noriyuki \ Noriyuki \ Hirota \ Noriyuki \ Nori$ $(Tokyo\ University\ of\ Science)\ Yumi\ Tanaka\ \cdot\ (Kumamoto\ University)\ Motohide\ Matsuda$ 2B05 Hydrothermal Synthesis of Solid Solutions of Rare Earth Niobate 2B06 Hydrothermal Synthesis of Tantalum Oxide and Tantalum-based Composite Oxides Using Uniform Hydrous Tantalum Oxide Particles (Chiba University) OSyunsuke Kobayashi · Takashi Kojima · Naohumi Uekawa (10:30) (Chairman 打越哲郎) 2B07 Hydrothermal Process to Synthesize Ferrite Nanosheets (Tokyo Institute of Technology) (Menichi Wakayama · Yuki Kamei · Nobuhiro Matsushita 2B08 Preparation of iron oxide nanoparticles using urea hydrogen peroxide or pyridine N-oxide as oxygen donor (The University of Waseda) OAtsuo Kamura · (Kagami Memorial Institute for Materials Science and Technology) Naokazu Idota · (The University of Waseda · Kagami Memorial Institute for Materials Science and Technology) Yoshiyuki Sugahara 2B09 Preparation of Sodium Niobate Nanocube Particles by Microwaves-assisted Solvothermal Method with Niobium Oxide Nanoparticles (University of Yamanashi) OChika Kunugi · Kouichi Nakashima · Tsukasa Chikata · Shintarou Ueno · Satoshi Wada 受賞講演 (11:15)(Chairman 殷しゅう) [The 70th CersJ Awards] Synthesis and Performance Improvement of Metal Oxide by a Solvothermal Method (Kyoto University) OSaburo Hosokawa 水溶液プロセス (15:15) (Chairman 上川直文) Synthesis and properties of amorphous materials consisting of oxo-oligomers modified with guaiacol 2B26 (Kansai University) Hiromitsu Kozuka · OShinnosuke Yamazaki 2B27 Fabrication of copper iodide single crystal by Top Seeded Solution Growth method (Tokyo Institute of Technology) OSatoshi Koysu · Etsuo Sakai · Masahiro Miyauchi 2B28 Synthesis of Ce-Zr compound/Surfactant nanocomposite nanotube (Saga University) ○Tatsuya Ayabe · Takashi Miyaguchi · Seiya Higuchi · Toshio Torikai · Takanori Watari · (Kyushu University) Yuko Inou
e \cdot (Saga University) Mitsunori Yada (16:00) (Chairman 今井宏明) 2B29 Synthesis of rare earth-containing spherical particles for structural color by solution process

(15:00) (Chairman 辻本吉廣)

Development of ceramics scintillators prepared by the SPS method V

2A25

(Tokai University) Ochihiro Shoji · Koji Tomita · (Tohoku University) Makoto Kobayashi · Hideki Kato · Masato Kakihana

受賞講演

(16:15) (Chairman 今井宏明)

2B30A [The 70th CersJ Awards] Synthesis of titania with controlled structures and its development

(Tohoku University) OMakoto Kobayashi

★★ March 15 (Tue) (Room C) ★★

05. ガラス・フォトニクス材料 Glass and photonic materials

新材料・プロセス

(9:00) (Chairman 篠崎健二)

2C01 Synthesis of single crystalline La₂O₃ nanosheet and La₂O₃:Eu³⁺ nanosheet by templating graphite oxide nanosheet

 $(Shinshu\ University)\ \bigcirc Ryota\ Saito\cdot (Shinshu\ University\cdot Center\ for\ Energy\ \&\ Environmental\ Science) Yusuke\ Ayato\cdot (Shinshu\ University)\ Order (Shins$

Dai Mochizuki · Wataru Sugimoto

2C02 Synthesis and luminescence property of new mixed-anion compounds with halide layer

(Aoyama Gakuin University) Junichi Shimoyama
 \cdot (The University of Tokyo) Kohji Kishio

2C03 Luminescence properties of Ca₃Ln(AlO)₃(BO₃)₄ activated with Ce³⁺, Tb³⁺ and Mn²⁺

(Tohoku University) ODawei Wen · Hideki Kato · Makoto Kobayashi · Masato Kakihana

受賞講演

(9:45) (Chairman 本間剛)

2C04A [The 70th CerSJ Awards]Development of Transparent Ceramic Phosphors based on ABO₃ Perovskite and A₂B₂O₇ Pyrochlore Structures

 $(Murata\ Manufacturing.\ Co.,\ Ltd.)\ \bigcirc Satoshi\ Kuretake\cdot Atsushi\ Honda\cdot Takashi\ Oyama\cdot Koji\ Murayama\cdot Nobuhiko\ Tanaka\cdot Noriyuki\ Kubodera$

EL 材料

(10:30) (Chairman 河村剛)

2C07 AC electroluminescent properties of Ca_{0.6}Sr_{0.4}TiO₃:Pr/In₂O₃:Sn thin film electroluminescent devices

 $(Gunma\ University)\ \bigcirc Toru\ Kyomen\ \cdot\ Minoru\ Hanaya\ \cdot\ (National\ Institute\ of\ Advanced\ Industrial\ Science\ and\ Technology)\\ Hiroshi\ Takashima\ Advanced\ Industrial\ Science\ and\ Technology)\\ Hiroshi\ Takashima\ Advanced\ Industrial\ Science\ Industrial\ Industria$

 $2C08 \qquad \text{Fabrication of ultraviolet electroluminescent devices using YAlO}_3\text{:}Gd^{3+} \text{ thin films}$

(Kyushu Institute of Technology) \bigcirc Yuhei Shimizu \cdot Kazushige Ueda

長残光

(11:00) (Chairman 大幸裕介)

2C09 Investigation of optimum co-dopant for Ca₃Si₂O₇:Eu²⁺-based orange persistent phosphors

(Kyoto University) ○Ryomei Maki · Jumpei Ueda · Setsuhisa Tanabe

2C10 Long Afterglow in β-SrAl₂O₄ Synthesized by Crystallization of Glass and Solidification of Supercooling Melts

 $(Nagaoka\ University\ of\ Technology)\ \bigcirc Kenji\ Shinozaki\ \cdot\ Mikiya\ Kotaka\ \cdot\ Tsuyoshi\ Honma\ \cdot\ Takayuki\ Komatsu\ \cdot\ } \\ (Coe\ College)\ Mario\ Affatigato$

2C11 Red persistent luminescent properties of Ln₃GaO₆:Eu³⁺ (Ln=Y, Gd)

(Tokyo Institute of Technology) ○Takuro Dazai · Yousuke Hamasaki · Shintaro Yasui · Tomoyasu Taniyama · Mitsuru Itoh

粒子状発光体

(14:45) (Chairman 安井伸太郎)

 $2\text{C}24 \qquad \text{Fabrication of SiO}_2/\text{CePO}_4\text{:}\text{Tb}^{3+}\text{ Core-Shell Phosphor Particles and Their Redox Responsivity}$

(Keio University) OShuhei Takasu · Manabu Hagiwara · Shinobu Fujihara

2C25 Nano-sized synthesis and photoluminescence characterization of Eu²⁺ doped Ba₂SiO₄ phosphors

(Nagoya Institute of Technology) OMasato Furuta · Tomokatsu Hayakawa

 $2C26 \qquad \text{Fabrication of Redox-Responsive Hollow CeO}_2\text{:Sm}^{3+} \text{ Particles} \qquad \qquad \text{(Keio University)} \quad \bigcirc \text{Takashi Umehara} \cdot \text{Manabu Hagiwara} \cdot \text{Shinobu Fujihara}$

2C27 Wavelength conversion composite particle (SUMITOMO OSAKA CEMENT Co.,Ltd) (STsutomu Nozoe · Takeshi Ootsuka · Tooru Kinoshita

蛍光体(Ce, Eu)

(15:45) (Chairman 萩原学)

2C28 Ce:YAG single-crystal powder phosphors for white LEDs

(National Insitute for Materials Science · Waseda University) OStelian Arjoca · (National Insitute for Materials Science) Encarnación G. Villora · (Tamura Corporation) Daisuke Inomata · Yusuke Arai · (National Insitute for Materials Science · Tsukuba University) Yujin Cho · Takashi Sekiguchi · (National Insitute for Materials Science · Waseda University) Kiyoshi Shimamura

2C29 Stabilization of α -Ca $_2$ SiO $_4$ by element substitution and its luminescence property

2C30 Host luminescence properties of layered mixed-anion compounds $AE_3RE_2Cl_2O_5$

(The University of Tokyo) Makoto Tatsuda · ○Hiraku Ogino · (NAIST) Takayuki Yanagida · (Aoyama Gakuin University) Jun-ichi Shimoyama · (The University of Tokyo) Kohji Kishio

★★ March 15 (Tue) (Room D) ★★

05. ガラス・フォトニクス材料 Glass and photonic materials

強化ガラス

(9:00) (Chairman 吉田智)

2D01 Structural investigation of chemically strengthened glass by depth profile analysis in micro-Raman spectroscopy

 $(Tohoku\ University)\ \bigcirc Shohei\ Uchida\cdot Nobuaki\ Terakado\cdot Yoshihiro\ Takahashi\cdot Takumi\ Fujiwara\cdot Mototaka\ Arakawa$

2D02 Observation of crack bifurcation phenomena by Caustics method in tempered glass

(GMS Research Laboratory · Teikyo University) OShini'chi Aratani

2D03 Evaluation of mechanical properties of compressive stress layer in ion-exchanged glass by microcantilever beam specimen

(Kanagawa Academy of Science and Technology) Tsukaho Yahagi

高密度化

(9:45) (Chairman 武藤浩行)

2D04 Fabrication of dense sintered body from Na₂O-ZnO-B₂O₃-P₂O₅ glass through oxygen-supplied hot isostatic pressing and its evaluation

(Delft University of Technology) Hubertus Hintzen · (Sophia University) Kiyoshi Itatani

2D05 Scratch- and Indentation-Induced Deformation Behavior of Soda-Lime Silicate Glass

(The University of Shiga Prefecture) ODaisuke Murata · Satoshi Yoshida · Akihiro Yamada · Jun Matsuoka

イオン拡散

(10:15) (Chairman 武藤浩行)

2D06 In-situ observation of H* implantation via electric field and creep behavior of proton conducting glass

 $(Nagoya\ Institute\ of\ Technology)\ \bigcirc Junki\ Kato\cdot Yusuke\ Daiko\cdot Sawao\ Honda\cdot Yuji\ Iwamoto\cdot (Rennes\ 1) Tanguy\ Rouxel$

2D07 Soret coefficients of alkali metal ions in alkali borate glass melts

(Kyoto University) ⊘Masahiro Shimizu · Daisuke Hanakawa · Hiroshi Kato · Masayuki Nishi · Kohji Nagashima · Kazuyuki Hirao

構造解析(高温ラマン)

(10:45) (Chairman 清水雅弘)

2D08 Raman scattering spectra of alkaline earth borate glasses and levitating melts

(The University of Tokyo) OTomonori Ichimaru · Hiroyuki Inoue · Atsunobu Masuno

2D09 Structual Alteration of Sodium-Aliminosilicate Glass at Batch on Heating by High-temperature Raman Spectroscopy

(Nippon Sheet Glass Co., Ltd.) Koichi Shiraki · Yukihito Nagashima · Chihiro Sakai · Koichi Sakaguchi

受賞講演

(11:15) (Chairman 井上博之)

2D10A [The 70th Cers] Awards] Study on the Structural dynamics of vitirification process and molten glasses at high temperature

(Tokyo Institute of Technology) OTetsuji Yano

構造解析 (NMR)

(14:45) (Chairman 寺門信明)

2D24 Structural analysis of Na₂O-Y₂O₃-B₂O₃-Al₂O₃ glass by using strong magnetic-field solid-state nuclear magnetic resonance (NMR)

(Kyoto University) OShunichi Kaneko · Hirokazu Masai · Yomei Tokuda

構造解析 (MD 計算)

(15:00) (Chairman 北村直之)

2D25 Molecular dynamics modeling of anisotropic drawn glass in calcium phosphate system

(Okayama University) OIkuya Matsui · Yoshiya Ono · Shinichi Sakida · Yasuhiko Benino · Tokurou Nanba

2D26 Molecular dyanmics simulation of the mechanical properties of silicate glasses

(The University of Tokyo) \bigcirc Hiroyuki Inoue \cdot Atsunobu Masuno \cdot Gustavo Alberto Rosales Sosa

ガラス結晶化

(15:30) (Chairman 正井博和)

2D27 Photoinduced periodic nanocrystalline structure inside Al₂O₃-Dy₂O₃ glass

 $(\textbf{Kyoto University}) \quad \bigcirc \textbf{Yasuhiko Shimotsuma} \cdot \textbf{Satoshi Mori} \cdot \textbf{Torataro Kurita} \cdot \textbf{Masaaki Sakakura} \cdot \textbf{Kiyotaka Miura}$

2D28 Crystallization of glass by penetration of alloy electrode

(The University of Okayama) OToshihiko Azuma · Shinichi Sakida · Yasuhiko Benino · Tokuro Nanba

電気伝導

(16:00) (Chairman 岸哲生)

2D29 Crystallization behavior of sodium transition metal phosphate glass

(Nagaoka University of Technology) OChiharu Akatsuka · Kenji Shinozaki · Tsuyoshi Honma · Takayuki Komatsu

2D30 Electrical Ag⁺ emission and formation of Ag nanoparticles utilizing an Ag⁺-ion-conducting glass fiber

(Nagoya Institute of Technology) OKyohei Segawa · Yusuke Daiko · Sawao Honda · Yuji Iwamoto

2D31 Electrical Conductive Properties of Carbon Nanotube dispersing Silicate Glasses

(Tokyo University of Science) ○Tomohiro Miyashita · Kenichiro Iwasaki · Atsuo Yasumori

★★ March 15 (Tue) (Room E) ★★

04. 磁性材料 Magnetic material

ペロブスカイト関連化合物

(9:00) (Chairman 陰山洋)

2E01 Origin of room temperature ferromagnetism in $BiFe_{1,x}Mn_xO_3$

 $(\textbf{Tokyo Institute of Technology}) \quad \bigcirc \textbf{Takeshi Asakura} \cdot \textbf{Hajime Yamamoto} \cdot \textbf{Masaki Azuma} \cdot (\textbf{Nagoya Institute of Technology}) \textbf{Ko Mibu}$

2E02 Phase transitions of $Ca_{0.5}Bi_{0.5}FeO_3$ with unusually high valence $Fe^{3.5+}$

 $(ICR, Kyoto\ University)\ \bigcirc Yoshiteru\ Hosaka\cdot Noriya\ Ichikawa\cdot Takashi\ Saito\cdot (ICR, Kyoto\ University\cdot\ JST\text{-}CREST) Yuichi\ Shimakawa$

 $2\mathrm{E}03$ $\,$ A-site and B-site charge orderings of perovskite $\mathrm{PbCoO_3}$

 $(\textbf{Kanagawa Academy of Science and Technology}) \ \bigcirc \textbf{Yuki Sakai} \cdot (\textbf{Tokyo Institute of Technology}) \\ \textbf{Runze Yu} \cdot \textbf{Hajime Yamamoto} \cdot \textbf{Hajime Hojo} \cdot \textbf{Majime Hojo} \cdot$

Masaki Azuma · (Osaka Prefecture University) Makoto Murakami · Ikuya Yamada · (Chinese Academy of Sciences) Yange Junye · Yin Yunyu ·

Youwen Long· (High Energy Accelerator Research Organization) Ping Miao· SangHyun Lee· Shuki Torii· Takashi Kamiyama

 ${\tt 2E04} \qquad {\tt Structures\ and\ Magnetic\ Properties\ of\ A-site\ Column\ Ordered\ Double\ Perovskite\ \textit{LnMnBTiO}_6}$

2E05 Magnetic properties of 6L-perovskite Ba₃Nd(Ru_{1-x}Ir_x)₂O₉ showing the hexagonal / monoclinic structural phase transition

(Hokkaido University) (Yuri Takagi · Yoshihiro Doi · Makoto Wakeshima · Yukio Hinatsu

(10:30)(Chairman 長谷川正) 2E07 Preparation of hard magnetic composites" a"-Fe₁₆N₂"/FePt through low temperature nitridation (Hokkaido University) OYuji Masubuchi · Ryoji Yamauchi · Shinichi Kikkawa 2E08 MgFe₂O4@SiO₂ core/shell nano-sphere: the silica coating regulations for different shell thickness (Shizuoka University) OHarinarayan Das· Nipa Debnath· Takashi Arai· Naonori Sakamoto· (Tokyo Institute of Technology) Kazuo Shinozaki · (Shizuoka University) Hisao Suzuki · Naoki Wakiya 2E09 Sol-gel Preparation of ZnO-La₂CoMnO₆ Nanocomposite Thin Films (Keio University) OMizuki Saito · Manabu Hagiwara · Shinobu Fujihara 新物質 (11:15) (Chairman 長谷川正) $High-Pressure\ Synthesis,\ Crystal\ Structure\ and\ Magnetic\ Properties\ of\ the\ New\ Layered\ Oxyfluoride\ Perovskite\ Sr_2MnO_3F$ 2E10 (National Institute for Materials Science · Hokkaido University) 🔾 Yu Su · (National Institute for Materials Science) Yoshihiro Tsujimoto · (The University of Tokyo) Tendai Haku · Takatsugu Masuda · (National Institute for Materials Science · Hokkaido University) Kazunari Yamaura 2E11 Synthesis and Magnetic Properties of a New Layered Antimonide (Kyoto University) ⊙Taito Murakami · Takafumi Yamamoto · Cedric Tassel · Hiroshi Takatsu · Hiroshi Kageyama 12. 教育 Education 教育 (12:00) (Chairman 田中功) 2E13 Some Problems in the High School Text Books of Chemistry (Tokyo Institute of Technology) OMasatomo Yashima 2E14 Food education, the environment, ethical, cultural and tableware, program receptive to cross to various curriculum from science field (SANSHIN KAKOH Co,. Ltd.) OSeiji Ebihara · (Saga University) Etsuo Horokawa (12:30) (Chairman 樽田誠一) 2F15 $Mobile\ Classroom\ Laboratory\ in\ China\ and\ Japan: Aiming\ at\ Glocal\ (global+local)\ Action$ $(Okayama\ University)\ \bigcirc Yuri\ Nakamura\ \cdot\ Yukiko\ Kurimoto\ \cdot\ Yoshihisa\ Kogo\ \cdot\ Akiyoshi\ Osaka\ \cdot\ Toshiisa\ Konishi\ \cdot\ Takayuki\ Kudo\ \cdot\ Nakawura\ \cdot\$ Tomohiko Yoshioka · Ichiro Hayakawa · Akira Sakakura · Satoshi Hayakawa · Eiji Tomita · Chiharu Obata · (Poly-Glu Social Business Co., Ltd) Kanetoshi Oda · Hiroko Kishida · (Zhejiang University of Technology) Fan Xiao · (Xiamen University) Lei Ren 2E16 "Teach Science" Carrier House for Study Activity by Development of Teaching Materials - Development of Teaching Materials using Piezoelectric devices (University of Yamanashi) ○Isao Tanaka · Nao Okabe 03. 導電性材料 Electroconductive material センサ (14:30)(Chairman 鈴木真也) 2E23 Gas sensor property of W doped ZnO and Zn doped SnO2 thin films (National Institute for Materials Science) ○Isao Sakaguchi · Yutaka Adachi · Ken Watanabe · Noriko Saito · Taku Suzuki 2E24 Gas Sensor Property of MoO₃ Nanorods synthesized by Metal Organic Decomposition Method 2E25 H₂ response of low-temperature operation type sensors using inorganic/organic hybrid electrolyte (National Institute of Advanced Industrial Science and Technology) OTakafumi Akamatsu · Toshio Itoh · Woosuck Shin 2E26 Stability at low oxygen partial pressure of oxygen sensor using porous GdBa₂Cu₃O_{7,3}-based ceramic rod prepared using naphthalene (Nagaoka University of Technology) OTokuhiro Narihata · Tomoichiro Okamoto · Yasuyuki Yamada · (Salesian Polytechnic) Yuichiro Kuroki · (Japan Fine Ceramics Center) Masasuke Takata 2E27 Sensing properties of Pt, Pd, and Au-loaded tin oxide VOC sensors for breath analysis $(National\ Institute\ of\ Advanced\ Industrial\ Science\ and\ Technology\ (AIST))\ \bigcirc Toshio\ Itoh\cdot Toshio\ Miwa\cdot Takafumi\ Akamatsu\cdot Toshio\ Miwa\cdot Takafumi\ Akamatsu\cdot Toshio\ Miwa\cdot Takafumi\ Akamatsu\cdot Toshio\ Miwa\cdot M$ Woosuck Shin · (Aichi Cancer Center) Toyoaki Hida · (Figaro Engineering inc.) Yasuhiro Setoguchi 企業研究フロンティア (15:45) (Chairman 鶴見敬章) 2E28F [Frontiers] Development and Electrical Properties of New NTC Thermistor Materials (Mitsubishi Materials Corporation) OToshiaki Fujita 技術奨励賞受賞講演 (16:15) (Chairman 鶴見敬章) [The 70th CerSJ Awards] Development of Perovskite La(Cr,Mn)O₃ NTC Materials for Wide Temperature Range Thermistor Sensor (Mitsubishi Materials Corporation) OToshiaki Fujita ★★ March 15 (Tue) (Room F) ★★ 02. 誘電性材料 Dielectric material キャラクタリゼーション (9:00)Piezoelectric properties and fatigue behaviors of lead-free alkali niobate piezoceramics under compressive stress 2F01 (Nagoya Institute of Technology) \bigcirc Kenji Ogo \cdot Teruaki Fuchigami \cdot Ken-ichi Kakimoto \cdot (Friedrich-Alexander-University of Erlangen-Nuremberg) Weiss Manuel · Rupitsch Stefan J. · Lerch Reinhard 2F02 Evaluation of piezoelectric properties for high capacitance $(Na_{0.5}K_{0.5})NbO_3$ - $Ba_2NaNb_5O_{15}$ ceramics (Nagoya Institute of Technology) OKatsuya Yoshida · Teruaki Fuchigami · Ken-ichi Kakimoto · (Friedrich-Alexander-University of Erlangen-Nuremberg) Weiss Manuel · Rupitsch Stefan J. · Lerch Reinhard 2F03 Composition Dependence of Grain Size Effect in $\mathrm{BiFeO_3}\text{-}\mathrm{BaTiO_3}$ Piezoelectric Ceramics (Keio University) OManabu Hagiwara · Yui Sudo · Shinobu Fujihara 2F04 Growth, electrical and mechanical characterization of gehlenite based solid solution single crystals

複合体

(Tokyo Institute of Technology) ○Kyohei Yoshida · Hiroaki Takeda · Takuya Hoshina · Takaaki Tsurumi

Electro-optic measurement of BaTiO₃-based ferroelectric relaxor ceramics (Tokyo Tech) ○Ryuta Yamamoto · Takuya Hoshina · Hiroaki Takeda · Takaaki Tsurumi (10:30)(Chairman 永田肇) 2F07 Electrocaloric Properties of K(Ta,Nb)O₃ Crystals and BaTiO₃-based Ceramics (Shonan Institute of Technology) OHiroshi Maiwa 2F08 Application of ferroelectric interface for Li ion batteries with high rate capability Yumi Yoshikawa · Hidetaka Hayashi · Akira Kishimoto 2F09 Measurement of the electron-trap levels in the SrTiO₃-based grain boundary barrier layer capacitor materials using the DLTS method (Tokyo Institute of Technology) ○Ryouma Ishikawa · Takuya Hoshina · Hiroaki Takeda · Takaaki Tsurumi · Yukio Sakabe 2F10 Development of high-reliability ceramic capacitors with the valence stability of the accepter (Disc type capacitors with lead) (Murata Manufacturing Co., Ltd.) ○Hiroyuki Harano · Kazuji Kushiro · Atsushi Honda · Tomomitsu Yamanishi 2F11 $Capacitance\ increase\ mechanism\ of\ multilayer\ ceramic\ capacitors\ using\ SrBaCaZrTiO_3\ ceramics\ under\ high\ voltage,\ and\ high\ temperature$ (Murata Manufacturing Company) OShinya Isota · Tomotaka Hirata · Kenichi Nada · Harunobu Sano ナノクリスタル (14:45) (Chairman 和田智志) 2F24 Electrical properties of nano-grained SrTiO₃ ceramics fabricated by AD method (Tokyo Institute of Technology) ○Mei Hotate · Kazuki Kanehara · Takuya Hoshina · Hiroaki Takeda · Takaaki Tsurumi 2F25 Oriented Attachment of BaTiO3 Nanocrystals by van der Waals Torque (National Institute of Advanced Industrial Science and Technology (AIST)) OKyuichi Yasui · Kazumi Kato 2F26 Effect of PVP molecules in the synthesis of cubic BaTiO₃-PVP nanoparticles (Nagoya Institute of Technology · AIST) OJinhui Li · Woosuck Shin · (Noritake CO.,Limited) Hiroyuki Inukai · Yosuke Takahashi 進步賞受賞講演 (15:30) (Chairman 和田智志) [The 70th CerSJ Awards] Development of dielectric nanocube ordered assembly for next generation devices 2F27A (National Institute of Advanced Industrial Science and Technology) (Nen-ichi Mimura 強誘電体 (16:00)(Chairman 柿本健一) 2F29S Growth of orientation-controlled HfO₂-based ferroelectric films and their ferroelectric properties (Tokyo Institute of Technology) ○Hiroshi Funakubo · Takao Shimizu · Kiriha Katayama · Takanori Mimura · (Tohoku University) Takanori Kiguchi · Akihiro Akama · Toyohiko Konno · (Sophia University) Hiroshi Uchida 2F30 First-principles study of Ferroelectric Phase Transition of HfO2 Thin Film $(JFCC) \ \bigcirc Hiroki \ Moriwake \cdot Ayako \ Konishi \cdot Akihide \ Kuwabara \cdot (Kyoto \ University) Atsushi \ Togo \cdot$ (Tokyo Tech.) Takao Shimizu · Hiroshi Funakubo 2F31 Fabrication of orthorhombic phase HfO2-ZrO2 thin film with solid-phase epitaxy (Tohoku University) ○Takanori Kiguchi · Shogo Nakamura · Cangyu Fan · Takahisa Shiraishi · Toyohiko J. Konno · (Tokyo Institute of Technology) Takao Shimizu · Hiroshi Funakubo ★★ March 15 (Tue) (Room G) ★★ 09. 環境・資源関連材料 Environment and energy related material ガス吸着・分離 (9:00) (Chairman 殷しゅう) 2G01 Oxygen storage capacity of FeNbO4 (Kyoto University) ORaizo Maeda · (Kyoto University · ESICB Kyoto University) Saburo Hosokawa · Kentaro Teramura · Tsunehiro Tanaka 2G02 Oxygen release property and three way catalytic reaction of Pd catalyst supported on $Sr_3Fe_2O_{7-\delta}$ $(\textbf{Kyoto University}) \bigcirc \textbf{Kosuke Beppu} \cdot (\textbf{Kyoto University} \cdot \textbf{ESICB}, \textbf{Kyoto University}) \\ \textbf{Saburo Hosokawa} \cdot \textbf{Kentaro Teramura} \cdot \textbf{Tsunehiro Tanaka} \\ \textbf{Saburo Hosokawa} \cdot \textbf{Kentaro Teramura} \cdot \textbf{Tsunehiro Tanaka} \\ \textbf{Saburo Hosokawa} \cdot \textbf{Kentaro Teramura} \cdot \textbf{Tsunehiro Tanaka} \\ \textbf{Saburo Hosokawa} \cdot \textbf{Kentaro Teramura} \cdot \textbf{Tsunehiro Tanaka} \\ \textbf{Saburo Hosokawa} \cdot \textbf{Kentaro Teramura} \cdot \textbf{Tsunehiro Tanaka} \\ \textbf{Saburo Hosokawa} \cdot \textbf{Kentaro Teramura} \cdot \textbf{Tsunehiro Tanaka} \\ \textbf{Saburo Hosokawa} \cdot \textbf{Kentaro Teramura} \cdot \textbf{Tsunehiro Tanaka} \\ \textbf{Saburo Hosokawa} \cdot \textbf{Kentaro Teramura} \cdot \textbf{Tsunehiro Tanaka} \\ \textbf{Saburo Hosokawa} \cdot \textbf{Kentaro Teramura} \cdot \textbf{Tsunehiro Tanaka} \\ \textbf{Saburo Hosokawa} \cdot \textbf{Kentaro Teramura} \cdot \textbf{Tsunehiro Tanaka} \\ \textbf{Saburo Hosokawa} \cdot \textbf{Kentaro Teramura} \cdot \textbf{Tsunehiro Tanaka} \\ \textbf{Saburo Hosokawa} \cdot \textbf{Kentaro Teramura} \cdot \textbf{Tsunehiro Tanaka} \\ \textbf{Saburo Hosokawa} \cdot \textbf{Kentaro Teramura} \cdot \textbf{Tsunehiro Tanaka} \\ \textbf{Saburo Hosokawa} \cdot \textbf{Kentaro Teramura} \cdot \textbf{Tsunehiro Tanaka} \\ \textbf{Saburo Hosokawa} \cdot \textbf{Tsunehiro Tanaka} \\ \textbf{Saburo Hosokawa} \cdot \textbf{Tsunehiro Tanaka} \\ \textbf{Saburo Teramura} \cdot \textbf{Tsunehiro Tanaka} \\ \textbf{Saburo Teramura} \cdot \textbf{Tsunehiro Teramura} \\ \textbf{Tsunehiro Teramura} \\ \textbf{Saburo Teramura} \cdot \textbf{Tsunehiro Teramura} \\ \textbf{Tsunehiro T$ 2G03 Synthesis and oxygen storage property of brownmillerite-type $(Ca_{1:x}Sr_x)_2AlMnO_{5+\delta}$ (Kanagawa University) OMiwa Saito · Masaki Ogikubo · Teruki Motohashi (9:45) (Chairman 輝樹) 2G04 Study of oxygen release speed of ceria-zirconia (10:00)(Chairman 本橋輝樹) 2G05 Fabrication of cerium oxide nanorods with dealloying method for low temperature oxygen storage (Tohoku University) ○Yoshifumi Ishikawa · Maiki Takeda · Susumu Tsukimoto · Koji Nakayama · Naoki Asao 2G06 Oxygen storage and photo-stimulated release function of CuO-supported TiO₂ (Hiroshima University) \bigcirc Kensuke Uemura \cdot Nana Iio \cdot Tomomi Ohashi \cdot Kei Inumaru 2G07 Hydrogen storage capacity of nanoporous carbon treated with different cooling rates in activation process (Nagaoka University Tech.) \bigcirc Yukino Kanma \cdot Jie Zhu \cdot Yoshikuni Ishibashi \cdot Keiji Komatsu \cdot Hidetoshi Saitoh \cdot (Fuse TechnoNet) Yoshinori Tsuda (10:45) (Chairman 武井貴弘) 2G08 Nitrogen monoxide adsorption under high-temperature on alkaline/alkaline-earth metal included oxides (Tokyo University of Science · RIST, Tokyo University of Science) OKenjiro Fujimoto · (Tokyo University of Science) Yuto Ishiduka · ${\it Takaya}\;{\it Kimura}\;\cdot\;({\it Tokyo}\;{\it University}\;{\it of}\;{\it Science}\;\cdot\;{\it RIST}, \\ {\it Tokyo}\;{\it University}\;{\it of}\;{\it Science}) \\ {\it Yuki}\;{\it Yamaguchi}\;$ $Fabrication \ of self-heating \ CO_2 \ absorber \ Li_2 CuO_2 / CuO-Cu_2 O/Cu \ or \ Li_4 SiO_4 / SiO_2 / Si \ layered \ composite, \ and \ its \ application \ possibility$ 2G09 (Chuo University) \bigcirc Katsuyoshi Oh-ishi \cdot Daiki Kotou \cdot Kengo Oka \cdot (Tokyo City University) Ryouta Kobayashi \cdot (Tokyo Institute of Technology) Yutaka Majima 2G10 (Shizuoka University) OSeiichi Suda · Yuuya Minamihata CO₂ fixation by electrolysis with seawater 2G11 Fabrication and CO₂/N₂ separation of oriented L-type zeolite film (Kumamoto University) Shohei Nishida · Kentaro Shin · OMotohide Matsuda

2F05

水環境 (13:45)(Chairman 手束聡子) 2G20 Water purification with H₂O₂ and WO₃ photocatalyst under visible light irradiation (Okayama University) OKazuki Kawata · Shunsuke Nishimoto · Yoshikazu Kameshima · Michihiro Miyake 2G21 Effects of carbonate inclusion on fluoride ion removal by hydroxyapatite (Tohoku University) ○Sota Terasaka · Masanobu Kamitakahara · Taishi Yokoi · Hideaki Matsubara 2G22 Cesium and strontium ion removal characteristics of silicotitanate synthesized by dry gel conversion method (University of Hyogo) OHiroshi Nishioka · Ken Isogami · (Hitachi Chemical Co., Ltd.) Akihito Iwai · Masayoshi Johmen · Koichi Saitou 触媒 (15:30)(Chairman 松田元秀) 2G27 Theoretical and experimental study on correlation between Ru-anion chemical bonds and Ru particle sizes on supports (Tokyo Institute of Technology) ○Takuya Nakao · Tomofumi Tada · Masaaki Kitano · Hideo Hosono 2G28 Soot combustion behavior of thallium oxide (National Institute of Technology, Niihama College) Susumu Nakayama · (Yamagata University) Masatomi Sakamoto 2G29 Direct Decomposition of Nitrous Oxide on Lanthanum Silicate Based Catalysts (Osaka University) ONaoyoshi Nunotani · Ryosuke Nagai · Nobuhito Imanaka 2G30 Effect of particle size of zeolite bulk body for methane to benzene reaction (Okayama University) ○Kenta Goto · Eisaku Igi · Shunsuke Nishimoto · Yoshikazu Kameshima · Michihiro Miyake ★★ March 15 (Tue) (Room H) ★★ 06. 生体関連材料 Bioceramics 企業研究フロンティア (9:30) (Chairman 相澤守) 2H03F [Frontiers] Development of Calcium Phosphate Bone Graft Substitutes with Unidirectional Porous Structure (Kuraray Co., Ltd.) OYuji Hotta · Takashi Matsuo · Tomoya Kuwayama · Tatsuhiko Higaki 多孔体 (10:00)(Chairman 杉浦悠紀) 2H05 Preparation of porous calcium phosphates using starfish-derived calcium carbonate as a precursor (Shinshu University) OTomohito Tsuge · Akari Takeuchi · (Kyushu University) Kunio Ishikawa · (National Institute for Materials Science) Masanori Kikuchi 2H06 Fabrication of porous scaffolds using calcium phosphate granules derived from sea urchin tests with collagen or gelatin as a binder (Hokkaido University, National Institute for Materials Science) ONaga Vijaya Lakshmi Manchinasetty · Masanori Kikuchi リン酸カルシウム 1 (10:45) (Chairman 堀内尚紘) 2H08Fabrication of high mechanical strength CO₃Ap foam from PO₄-hemihydrate compact 2H09 Fabrication of dense ceramics using potassium-substituted hydroxyapatite powder synthesized via ultrasonic spray-pyrolysis route and their evalua-(Meiji University) OTomohiro Yokota · Michiyo Honda · Mamoru Aizawa (11:15) (Chairman 竹内あかり) 2H10 Structural characterization and in vitro biodegradability of thermally treated hydroxyapatite powder (Okayama University) OSatoshi Hayakawa · Toshiisa Konishi · Tomohiko Yoshioka 2H11 Material properties of injectable chelate-setting β -tricalcium phosphate cement with bioresorbability (Meiji University) OKohei Nagata · Michiyo Honda · (Okayama University) Toshiisa Konishi · (Meiji University) Mamoru Aizawa リン酸カルシウム 2 Controlled surface charges of β-tricalcium phosphate doped with Na ion through electrical polarization process (Chiba Institute of Technology · Tokyo Medical and Dental University) OTakayuki Endo · (Tokyo Medical and Dental University) Kosuke Nozaki · Naohiro Horiuchi · Kimihiro Yamashita · (Chiba Institute of Technology) Kazuaki Hashimoto · (Tokyo Medical and Dental University) Akiko Nagai 2H21Orientations of hydroxide ions in monoclinic hydroxyapatite (Tokyo Medical and Dental University) Naohiro Horiuchi · Kosuke Nozaki · Miho Nakamura · Akiko Nagai · Kimihiro Yamashita · (Chiba Institute of Technology) Yuki Iwasaki · Kazuaki Hashimoto 2H22 Physicochemical study of polarized calcium phosphate for biomedical applications —surface free energy and surface tension— (Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University) Miho Nakamura · Naohiro Horiuchi · Norio Wada · (Department of Materials and Applied Chemistry, Nihon University) Takeshi Toyama · Nobuyuki Nishimiya · (Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University) Kosuke Nozaki · Akiko Nagai · ○Kimihiro Yamashita 進歩賞受賞講演 [The 70th CerSJ Awards] Synthesis of multifunctional hybrid nanoparticles for imaging and therapy (Nagoya University) ○Koichiro Hayashi · Yusuke Sato · Takuma Maruhashi · Wataru Sakamoto · Toshinobu Yogo ナノ医療 (16:15) (Chairman 永井亜希子) Thermoresponsive iron oxide nanoparticle-assembly designed for immunomagnetic cell separation 2H30 (Nagoya Institute of Technology) OTeruaki Fuchigami · Kenichi Kakimoto 2H31 Fabrication of 3D Graphene and 3D Graphene Oxide Devices for Sensing VOCs (Tokyo Institute of Technology) So Matsuyama · Jeffrey S Cross · Tomoaki Sugiyama · Toshiyuki Ikoma

★★ March 15 (Tue) (Room I) ★★

04 -	NOTE THE STATE CONTRACTOR OF THE STATE OF TH
01. 工 酸化物	ンジニアリングセラミックス Enginieering ceramics
	(Chairman 且井宏和)
2 I 01	Aluminum-alumina mixed powders featuring control of the contraction and expansion of powders during pyrolysis $(National\ Institute\ of\ Advanced\ Industrial\ Science\ and\ Technology)\ \bigcirc Ken'\ ichiro\ Kita\cdot Manabu\ Fukushima\cdot Naoki\ Kondo$
2I02	Inhomogeneous sintering of powder compact prepared by dry-pressing granules and occurrence of coarse pores (Nagaoka University of Technology) OTsuyoshi Hondo · Zenji Kato · Satoshi Tanaka · (Tokyo Institute of Technology) Fumihiro Wakai · Koichi Yasuda
2103	Fabrication of Al ₂ O ₃ ceramics with low resistivity by an addition of ITO
2 I 04	$(\mbox{Kagawa University}) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
2I05	$(Sumitomo\ Osaka\ Cement\ CO., LTD)\ \ \bigcirc Hironori\ Kugimoto\ \cdot\ Shintaro\ Hayashi\ \cdot\ Kazuto\ Ando\ \cdot\ Masayuki\ Ishiduka\ Sintering\ of\ TiO_2\ doped\ ZrO_2\ in\ reducing\ conditions\ and\ their\ structure\ development$
焼結	(Osaka University) ○Yuki Rikiso · Hisataka Nishida · Tomoyo Goto · Tohru Sekino
(10:15)	(Chairman 楠瀬尚史)
2I06	$\label{eq:consolidation} \mbox{Consolidation of diamond-SiO}_2 \mbox{ by SPS using bimodal size SiC-coated diamond} \\ \mbox{(IMR} \cdot \mbox{Tohoku University)} \mbox{\bigcircMettaya Kitiwan} \cdot \mbox{Hirokazu Katsui} \cdot \mbox{Takashi Goto}$
2I07	Phase decomposition of Ti-Zr carbonitride prepared by SPS
2 I 08	(Institute for Materials Research · Tohoku University) Ying Li · ○Hirokazu Katsui · Takashi Goto Control for volume-shrinkage of porous MgTi ₂ O ₅ in reactive sintering by TiO ₂ anatase/rutile mixture
2 I 09	$(University\ of\ Tsukuba)\ \bigcirc Yuta\ Nakagoshi\cdot Yoshikazu\ Suzuki\cdot (Quantachrome\ Instruments\ Japan\ G.K.)\ \ Jun\ Sato\cdot Masahumi\ Morimoto\ Fabrication\ of\ denser\ layer\ on\ surface\ of\ porous\ alumina\ ceramics$
	(National Institute of Advanced Industrial Science and Technology) ○Akihiro Shimamura · Manabu Fukushima · Mikinori Hotta · Tatsuki Ohji · Naoki Kondo
2I10F	[Frontiers] Development of low-temperature saving energy joining technology of boron carbide ceramics using super permeation of melting metal (Mino Ceramic Co.,Ltd.) (Miyoto Sekine · Yoshiyuki Sensui · Mikichika Haga
(13:30)	(Chairman 福島学)
2I19	Evaluation of Anisotropic Properties on the Porous Alumina Fabricated by Alumina Platelets (Nagoya Institute of Technology) OSawao Honda · Shizuka Yase · Yusuke Daiko · Shinobu Hashimoto · Yuji Iwamoto
2I20	Effects of Sintering Additives on Microstructure of Porous SiC Ceramics with In-situ Grain Growth (Tokyo Institute of Technology) OMakoto Takahashi · Katsumi Yoshida · Toyohiko Yano
材料基礎	
(14:00)	(Chairman 福島学)
2I21	$\label{eq:misorientation-dependent} \behavior\ of\ structure\ units\ in\ ZnO[0001]\ symmetric\ tilt\ grain\ boundaries \\ (The\ University\ of\ Tokyo)\ \bigcirc Jiyoung\ Roh\cdot (The\ University\ of\ Tokyo\ \cdot\ Tohoku\ University\ Univers$
	Japan Fine Ceramics Center) Yuichi Ikuhara · (Kyusyu University) Yukio Sato
2I22	Formation Mechanism of Damaged Layer Due to Mass Transfer in Mullite Film (JFCC) OTsuneaki Matsudaira · Satoshi Kitaoka · Daisaku Yokoe · Takeharu Kato · Masasuke Takata
	(Chairman 堀田幹則)
2I27A	[The 70th CerSJ Awards] Application of first principles calculations to the study of structural ceramics (Kyoto University · Japan Fine Ceramics Center) OIsao Tanaka
2I29	Development of composite feedback filament for fusion deposition modeling (Toyohashi University of Technology) Karen Horikoshi · Shinya Oda · Atsushi Yokoi · Go Kawamura · Atsunori Matsuda · ○Hiroyuki Muto
2I30	Microstructure control of Polymer/TiO2 hybrid material by Electrical field and particle aspect rate and Observation of microstructure formation process (Extreme Energy-Density Research Institute, Nagaoka University of Technology) ONaoto Matsutani · Tadachika Nakayama · Masanao Kanno · Tan Minh Triet Huynh · Maria Guadalupe del Rocio Herrera Salazar · Tsuneo Suzuki · Hisayuki Suematsu · Koichi Niihara · (Institute of Nanosensor Technology, Hanyang University) Hong-Baek Cho
	★★ March 15 (Tue) (Room J) ★★
16. +	ャラクタリゼーション Characterization
	ロセラミックス材料解析
(9:30) 2J03	(Chairman 橋本拓也) The crystal structure and physical property of pyrochlore oxyfluoride $Pb_2Ti_2O_{6\vartheta}F_{2\delta}$
2 J 04	$(Chuo\ University)\ \bigcirc Kengo\ Oka\cdot\ Katsuyoshi\ Oh-ishi\cdot\ (Tokyo\ Institute\ of\ Technology)\ Hajime\ Hojo\cdot\ Masaki\ Azuma\ Crystal\ structure\ analysis\ of\ the\ electronic\ ferroelectric\ TmFe_2O_4$
	(Nagoya Insutitute of Technology) ⊘Daisuke Urushihara · Tomoki Matsumura · Toru Asaka · Koichiro Fukuda · Nobuo Ishizawa · (Kyoto University) Shinya Konishi · Katsuhisa Tanaka
2 J 05	First-principles Calculations of Defects Structures and Ferroelectric Behavior in BaTiO _{3x} N _{2x/3} (Japan Fine Ceramics Center) (Kazuki Shitara · Takafumi Ogawa · Akihide Kuwabara · Hiroki Moriwake · Kazuki Shitara · Takafumi Ogawa · Akihide Kuwabara · Hiroki Kazuki Shitara · Takafumi Ogawa · Akihide Kuwabara · Hiroki Kazuki Shitara · Takafumi Ogawa · Akihide Kuwabara · Hiroki Kazuki Shitara · Takafumi Ogawa · Akihide Kuwabara · Hiroki Moriwake · Kazuki Shitara · Takafumi Ogawa · Akihide Kuwabara · Hiroki Moriwake · Kazuki Shitara · Takafumi Ogawa · Akihide Kuwabara · Hiroki Moriwake · Kazuki Shitara · Takafumi Ogawa · Akihide Kuwabara · Hiroki Moriwake · Kazuki Shitara · Takafumi Ogawa · Akihide Kuwabara · Hiroki Moriwake · Kazuki Shitara · Takafumi Ogawa · Akihide Kuwabara · Hiroki Moriwake · Kazuki Shitara · Takafumi Ogawa · Akihide Kuwabara · Hiroki Moriwake · Kazuki Shitara · Takafumi Ogawa · Akihide Kuwabara · Hiroki Moriwake · Kazuki Shitara · Takafumi Ogawa · Akihide Kuwabara · Hiroki Moriwake · Kazuki Shitara · Takafumi Ogawa · Akihide Kuwabara · Hiroki Moriwake · Kazuki Shitara · Takafumi Ogawa · Akihide Kuwabara · Hiroki Kazuki Shitara · Takafumi · Kazuki Shitara · Takafumi · Najaki · Kazuki Shitara · Takafumi · Najaki ·
(10:30)	(Kyoto University) Fumitaka Takeiri· Hiroshi Kageyama (Chairman 北條元)
2J07	First-Principles Calculations of the Stability and Battery Properties of Layered LiMO ₂ (M = Cr, Fe, Co, Ni) Polytypes

 $(Japan\ Fine\ Ceramics\ Center)\ \bigcirc Craig\ Fisher\ \cdot\ Takafumi\ Ogawa\ \cdot\ Akihide\ Kuwabara\ \cdot\ Hiroki\ Moriwake$

(Kyoto University) OPeng Xiong · Noriya Ichikawa · Takashi Saito · Daisuke Kan · Yoshitetu Hosaka · $(\textbf{Kyoto University} \cdot \textbf{JST-CREST}) \textbf{Yuichi Shimakawa}$

★★ March 15 (Tue) (Room K) ★★

10. エネルギー関連材料 Energy reference material

受賞講演

(9:00) (Chairman 大瀧倫卓)

[The 70th CersJ Awards] Research on low thermal conductivity materials

(Tsinghua University) OChunlei Wan

熱電/熱伝導材料

(9:30) (Chairman 大瀧倫卓)

Line patterning of spinon thermal conductivity crystal by polarized CW laser light irradiation in sputtered Sr-Cu-O films 2K03

(Tohoku University) ○Ryosuke Takahashi · Nobuaki Terakado · Yoshihiro Takahashi · Takumi Fujiwara

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2K04
         Inorganic/Organic Hybrid Film for Flexible Thermoelectric Devices
                                               (Toyota Physical and Chemical Research Institute) ORuoming Tian · (Tsinghua University) Chunlei Wan ·
                                                        (National Institute of Advanced Industrial Science and Technology) Qingshuo Wei · Takao Ishida ·
                                                                    Woosuck Shin · (Toyota Physical and Chemical Research Institute) Kunihito Koumoto
                                                                                             (Kyushu University) OKohei Mizuta · Michitaka Ohtaki
2K05
         Thermoelectric properties of \beta-pyrochlore oxides with trivalent metal elements
受賞講演
(10:15)
         (Chairman 手嶋勝弥)
2K06A
         [The 70th CerSJ Awards] Nanostructure Design of Transition Metal Oxides by Low-Temperature Reduction
                                                                                        (National Institute for Materials Science) OYoshihiro Tsujimoto
光材料
(10:45) (Chairman 手嶋勝弥)
         Synthesis of needle shaped anatase TiO2 with high specific surface area for dye-sensitized solar cells
2K08
                               (Tokai University) ○Takahiro Kikuchi · Koji Tomita · Akie Seki · Yoshihito Kunugi · (Waseda University) Shinjiro Umezu ·
                                                                                             (Tohoku University) Makoto Kobayashi · Masato Kakihana
(11:00) (Chairman 冨田恒之)
2K09
         Photocatalytic activity of bismuth oxyhalide
                 (Kyoto university) ⊙Daichi Kato· Hironobu Kunioku· Hironoti Fujito· Hajime Suzuki· Masanobu Higashi· Ryu Abe· Hiroshi Kageyama
2K10
         Influence of potassium ions on electrical conductivity of the nano network structures on the surface of titanium metals formed by KOH treatment
                                                       (Chubu University) OHideki Hashimoto · Seiji Yamaguchi · Yoshinori Naruta · Hiroaki Takadama
         Broadband sensitive Ni<sup>2+</sup> - Er<sup>3+</sup> based upconverters for c-Si solar cells
2K11
                               (Toyota Central Research & Developmen Labs.) OHom Nath Luitel · Yashuhiko Takeda · Shintaro Mizuno · Toshihiko Tani
酸素分離・発生材料
(13:30) (Chairman 福田功一郎)
2K19
         Enhancement of the OER catalytic activity by the suppression of Jahn-Teller distortion
                  (Kitami Institute of Technology) OShigeto Hirai · (Osaka Prefecture University) Shunsuke Yagi · (Hokkaido University) Masaya Fujioka ·
                                                                                      (Kitami Institute of Technology) Tomova Ohno · Takeshi Matsuda
2K20
         Effect of Pd-loading on oxygen desorption layer of La_{1x}Sr_xFeO_{3,\delta} for high-performance oxygen permeable membranes
                                                             (Kyushu University) OKohei Momii · Yasuhito Mitani · Maiko Nishibori · Kengo Shimanoe
2K21
         Oxygen sorption-desorption characteristics and structural change of La-Sr-Co-Fe perovskite-type oxide under varying oxygen partial pressure
                                       (Kyushu University) \bigcircTomoya Kaneko \cdot Maiko Nishibori \cdot Tomoki Uchiyama \cdot Masaru Nagano \cdot Kengo Shimanoe
アニオン伝導体
(14:15) (Chairman 福田功一郎)
2K22
         Preparation of Mg-Al LDH electrolyte membrane by reconstruction method
                                                             (Hokkaido University) OKohei Igarashi · Akira Miura · Mikio Higuchi · Kiyoharu Tadanaga
(14:30) (Chairman 田中優実)
2K23S
         Characterization of calcium hydride crystals grown by flux technique
                                                    (Tokyo Institute of Technology)   ORyo Nishimura · Satoru Matsuishi · Satoru Fujitsu · Hideo Hosono
酸化物イオン伝導体/薄膜及び結晶配向
(14:45) (Chairman 田中優実)
2K24
         Ionic conductive property of oriented films with apatite-type lanthanum silicate from laminated sputtered films
                                                     (Hyogo Prefectural Institute of Technology) OMitsumasa Sakao · Tsuguo Ishihara · Hideki Yoshioka
2K25
         Electrical properties of Gd<sub>2</sub>O<sub>3</sub> doped CeO<sub>2</sub> thin films on anodic alumina substrate
                                  (Tokyo Institute of Technology)
 Jeffrey S. Cross · Akio Nishiyama · Kazuo Shinozaki
2K26
         Facile synthesis of highly grain-aligned polycrystalline lanthanum silicate oxyapatite by reactive diffusion between solid La<sub>2</sub>SiO<sub>5</sub> and gases
         [SiO+1/2O<sub>2</sub>]
                                (Nagoya Institute of Technology) ○Koichiro Fukuda · Takuya Kitagawa · Ryo Hasegawa · Hiroshi Nakamori · Toru Asaka
イオン伝導体/解析
(15:30) (Chairman 浅香透)
2K27
         Crystal Structure Analysis of Ln_2Zr_2O_7 (Ln = La, Eu) with a Pyrochlore Composition
                                          (Kanagawa University) OTakeshi Hagiwara · (National Institute of Advanced Industrial Science and Technology)
                                                                                                              Katsuhiro Nomura · Hiroyuki Kageyama
         Local\ structure\ analysis\ of\ Na_{0.5}Bi_{0.5}TiO_3 based\ oxide\ ion\ conductor\ by\ DFT\ calculations\ and\ RMC\ method
2K28
                                                      (Tokyo University of Science) ○Naoya Hayashi · Naoto Kitamura · Naoya Ishida · Yasushi Idemoto
2K29
         Structure of Na<sub>2</sub>S-P<sub>2</sub>S<sub>5</sub> superionic conducting glasses
               (Kyoto University) 🔾 Yohei Onodera · Hiroshi Nakashima · Kazuhiro Mori · (KEK) Toshiya Otomo · (Kyoto University) Toshiharu Fukunaga
受賞講演
         (Chairman 忠永清治)
(16:15)
         [The 70th CersJ Awards] Development of Ceramics and Glass for Solid Oxide Fuel Cell
                                                                                                    (NORITAKE CO., LIMITED) OYosuke Takahashi
                                               ★★ March 15 (Tue) (Room L) ★★
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09. 環境・資源関連材料 Environment and energy related material

リサイクル

(9:00) (Chairman 稲田幹)

(9:45) (Chairman 鱒渕友治)

2L01 Fabrication and pore property of Carbide-Derived Carbon from Rice-Husk starting Material.

(Sumitomo Electric Industries,LTD.) OShinji Ishikawa · Takahiro Saito

2L02 Electrochemical property for capacitor Electrode of The Carbide-Derived Carbon from Rice-Husk starting Material. (Sumitomo Electric Industries,LTD.) (Shinji Ishikawa · Takahiro Saito 2L03 Effect of Milling Processing of Fly Ash on the Compressive Strength of Geopolymers Fabricated by a Warm Press Method (Nagoya Institute of Technology) ○Kosuke Kubota · Shinobu Hashimoto · Kotaro Ando · Yusuke Daiko · Shigeo Honda · Yuzi Iwamoto 2L04 Dissolution behavior of the constituent elements of gasification melting slag (Okayama University) OYosuke Takase · Sinichi Sakida · Yasuhiko Benino · Tokuro Nanba エコマテリアル (10:00) (Chairman 難波徳郎) 21.05 Novel Environment-friendly Inorganic Yellow Pigments Based on Ca₂Al₂SiO₇ 21.06Incorporation and deposition behavior of Cu ion into apatite-type phosphate (Akita University) OSumio Kato · Tomoyuki Endo · Masataka Ogasawara 2I.07Preparation and properties of silica/chitosan organic-inorganic hybrid gas barrier membranes with cross-linked structure (Kobe University) OKoji Kuraoka · Risako Yamamoto (10:45) (Chairman 前田浩孝) 2L08 Fabrication of rapid-hardening alumina cement derived from blast furnace slag (Nagoya Institute of Technology) OHirokazu Kato · Shinobu Hashimoto · Yusuke Daiko · Sawao Honda · Yuji Iwamoto · (NICHIHA Co, Ltd.) Yuji Yamazaki 2L09 Fabrication of Dense Calcium Carbonate using a Warm Press Method (Nagoya Institute of Technology) OShinobu Hashimoto · Shohei Kusawake · Yusuke Daiko · Sawao Honda · Yuji Iwamoto 2L10 Synthesis and evaluation of properties of porous silica particles for use in high performance thermal insulation material $(\textbf{Tohoku University}) \ \bigcirc \textbf{Kei Tsukada} \cdot \textbf{Masanobu Kamitakahara} \cdot \textbf{Hideaki Matsubara} \cdot (\textbf{JFCC}) \textbf{Taishi Yokoi} \cdot \textbf{Seiji Takahashi}$ 2**I** 11 Fabrication of Novel Humidity Self-controlling Materials using HAS-Clay powder (Nagoya Institute of Technology) OTomoki Matsuoka · Shinobu Hashimoto · Yusuke Daiko · Sawao Honda · Yuji Iwamoto · (National Institute of Advanced Industrial Science and Technology) Masaki Maeda · Keiichi Inukai 07. セメント Cement 混和材 (13:30) (Chairman 大宅淳一) 21.19 Initial strength improvement of fly ash cement with high C₃S clinker (Tokyo Institute of Technoligy) (Toshinari Mukai · (D.C) Nobukazu Nito · (TAIHEIYO CEMENT Co.) Osamu Kubota · (Ashikaga Tech) Singo Miyazawa · (Housei Unv.) Toshiaki Mizobuchi · (Tokyo Institute of Technoligy) Masahiro Miyauchi · Etsuo Sakai 2L20 Influence of amine-based activater on the initial hydration of cement (Shimane University) OTakahiro Ohnishi · Daiki Atarashi · Hidekazu Tanaka · (Grace Chemicals CO.,LTD) Miho Miyagawa · (Kyusyu University) Tomoyuki Koyama $\label{thm:condition} \mbox{Hydrothermal Synthesis in Cement-Silica powder-fused silica system.}$ 2L21 $(Tokyo\ Institute\ of\ Technology)\ \bigcirc Yusuke\ Yamamoto\cdot (SUMITOMO\ METAL\ MINING\ SIPOREX) Sumio\ Shibata\cdot Tadashi\ Kasai\cdot Tadashi\ Masai\cdot Tadashi\ Masai\cdot Tadashi\ Masai\cdot Masa$ (The Glass Recycling Committee of Japan) So Kato · (Tokyo Institute of Technology) Masahiro Miyauchi · Etsuo Sakai キャラクタリゼーション・解析手法 (14:15) (Chairman 新大軌) 21.22Quantifying two amorphous phases in three-component blended cements (Taiheiyo Cement Corporation) OTomoyuki Hikida · Yoshifumi Ohgi · Yoshifumi Hosokawa · Shunichiro Uchida 2L23 Application of Cement Quality Predictive System (Taiheiyo Cement) ○Ayuka Nakaguchi · Ryoichi Suematsu · Maiko Ohno · Daisuke Kurokawa · Hiroshi Hirao 耐久性・水和物 (14:45) (Chairman 小泉公志郎) 2L24 Change in Hydration Products of Cement at High Temperature Environment $(Shimane\ University)\ \bigcirc Syu\ Takahashi\cdot Daiki\ Atarashi\cdot Hidekazu\ Tanaka\cdot (Nihon\ University) Junichi\ Ohya\cdot (Nihon\ University) Junichi Ohya \cdot (Nihon\$ (General Building Research Corporation of Japan) Natsuki Yoshida · Akari Tawara 21.25Development of cementitious material with a multi-barrier function in the salt damage environment $(\textbf{Tokyo Institute of Technoligy University}) \quad \bigcirc \textbf{Masashi Shinsugi} \cdot (\textbf{Shimane University}) \\ \textbf{Daiki Atarashi} \cdot (\textbf{Denka Co. Ltd.})$ Takayuki Higuchi · Minoru Morioka · (Tokyo Institute of Technoligy University) Masahiro Miyauchi · Etsuo Sakai 21.26Hydrated products in 4CaO · Al₂O₂ · Fe₂O₂-CaSO₄ · 2H₂O-CaI₂ system (Tokyo Institute of Technology) \bigcirc Toru Ota \cdot (Shimane University) Daiki Atarashi \cdot (Nihon University) Junichi Ohya \cdot (Tokyo Institute of Technology) Masahiro Miyauchi · Etsuo Sakai 2L27 Immobilization of SeO₄²⁻ ions using calcium aluminate hydrated products (Nihon University) OJunichi Ohya · Hiroyuki Sango 受賞講演 (15:45) (Chairman 三五弘之) [The 70th CerSJ Awards] Carbonation additive of highly durability and environmental consideration (Denka Co., Ltd.) OMakoto Shoji 08. 陶磁器 Pottery, Porcelain enamel 陶磁器 (16:15) (Chairman 大宅淳一)

(National Institute of Advanced Industrial Science and Technology) OMasayoshi Ohashi · Keiji Kusumoto · Toyohiko Sugiyama · Katsuya Kato

Effect of planetary ball millings for oxide precursors on chromaticity of tantalum(V)-based oxynitrides

21.30

★★ March 16 (Wed) (Room B) ★★

	** Warch 16 (Wed) (Room B) **
13. 液	相プロセス Liquid phase process
薄膜	
(9:00) 3B01	(Chairman 幸塚広光) Synthesis of Al-N-Codoped ZnO Films with Patterning Properties (Kinki University) ○Naoki Noma·Shoki Okubo
3B02	Charge-discharge performance and sensing ability of MnO ₂ thin films that were chemical-bath deposited from aqueous solutions (Yamagata University) ○Terukazu Kondo · Hidero Unuma
3B03	Synthesis of silica films by cosolvent-free method a TEOS-water binary system and the characterization of coating solutions by liquid NMR method (Tokyo Metropolitan University) Keiichi Hiruta · Koichi Kajihara · Kiyoshi Kanamura
(9:45)	
3B04 3B05	Transfer of sol-gel-derived, fired silica thin films to plastic substrates (Kansai University) Hiromitsu Kozuka · OTakashi Tominaga Effects of the thickness of the release layer on the processability of ceramic thin films prepared on plastic substrates by sol-gel transfer technique (Kansai University) Hiromitsu Kozuka · OKota Niinuma
粒子/酸	
3B06	(Chairman 鵜沼英郎) Synthesis of TiO ₂ sols by stirring metal chloride solutions in air with aid of dialysis
3 D 00	(Chiba University) ©Eri Asano · Naohumi Uekawa · C.M. Wen · Takashi Kojima
(10:30)	· · · · · · · · · · · · · · · · · · ·
3B07	Effect of catalysts on properties of polysilsesquioxanes prepared by a cosolvent-free method
	(Tokyo Metropolitan University) ○Yusuke Omata · Koichi Kajihara · Kiyoshi Kanamura
3B08	One-pot preparation of colloidal hollow organosiloxane-based nanoparticles through silica dissolution-redeposition processes
3B09	(Waseda University · Kagami Memorial Research Institute for Materials Science and Technology) ○Saki Uchida · Eisuke Yamamoto · Koya Nagata · Atsushi Shimojima · Hiroaki Wada · Kazuyuki Kuroda Control of organosiloxane coating on colloidal mesoporous silica nanoparticles
2009	(Waseda University) OYukino Ishikawa · Naoko Hirooka · Eisuke Yamamoto · Atsushi Shimojima · Hiroaki Wada · (Waseda University ·
	Kagami Memorial Research Institute for Materials Science and Technology, Waseda University) Kazuyuki Kuroda
(11:15)	(Chairman 野間直樹)
3B10	Ambient Temperature Synthesis of Spherical YVO ₄ :Eu ³⁺ Particles Utilizing Biphasic Solution Systems
	(Keio University) ○Kazuya Sugita · Manabu Hagiwara · Shinobu Fujihara
<u>ナノ粒子</u> (11:30)	
3B11	Area-selective electroless deposition of gold nanostructures on silicon carbide
3B12	$(Kyoto\ University)\ \bigcirc Hiroki\ Itasaka\cdot Masayuki\ Nishi\cdot Masahiro\ Shimizu\cdot Kazuyuki\ Hirao\ Synthesis\ of\ silver\ nanoparticles\ using\ specific\ reaction\ groups\ of\ the\ cellulose$
	(Industrial Technology Center of Okayama Prefecture) ⊖Mitsuaki Furutani · Eiji Fujii
(13:00)	
3B17	Anti-oxidation property of copper nanoparticles dispersion synthesized by supercritical water reduction method. (National Institute of Advanced Industrial Science and Technology)
3B18	Preparation of Porous Titania Using Silver-Deposited Needle-like Particles (Chiba University)
3B19	Microstructures and Thermoelectric Properties of Ag/ZnO Sintered Bodies Prepared from Soft-Chemical Precursors
	(Kyushu University) ○Kosuke Watanabe · Michitaka Ohtaki
(13:45)	
3B20	Preparation of Perovskite Catalyst by Chemical Solution Deposition with Selective Partial Reduction Process (Kitami Institute of Technology)
3B21	Synthesis and photoluminescence of Core-Shell Structures of ZrO ₂ :Eu ³⁺ -deposited Metal Nanoparticles (Nagoya Institute of Technology) ○Kenichiro Ueno · Yuta Noda · Tomokatsu Hayakawa
3B22	Low-Temperature Synthesis of Au-Photodeposited Titania Composite Coating and Its LSPR Sensing Characteristics (Kanto Gakuin University) OAoi Endo · Jun-ichi Hamagami
多孔体	
(14:30)	(Chairman 大野智也)
3B23	Comparison of the properties of transparent polymethylsiloxane aerogels with similar molecular structures (Kyota University) (Taiva Shimigu - Kaguyashi Kanamori - Kaguki Nakanishi
3B24	(Kyoto University) ○Taiyo Shimizu · Kazuyoshi Kanamori · Kazuki Nakanishi Synthesis of Mesoporous Silica Nanofibers Having Pore-Openings on the Surface
*	(Waseda University) Takuya Tsumura · ○Kota Ozawa · Yuki Oba · Eisuke Yamamoto · Atsushi Shimojima · Hiroaki Wada ·
	$(Waseda\ University\cdot Kagami\ Memorial\ Research\ Institute\ for\ Materials\ Science\ and\ Technology)\ Kazuyuki\ Kuroda$
3B25	Fabrication of V_2O_5 : nH_2O xerogel having a high specific surface area with characterization of development of nanofibers
3B26	$(\text{Keio University}) \bigcirc (\text{Kanji Ishii} \cdot \text{Yuya Oaki} \cdot \text{Hiroaki Imai} \\ \text{Synthesis of Porous MgNiMnO}_4 \qquad (\text{Keio University}) \bigcirc (\text{Yoh Kotani} \cdot \text{Hiroyuki Kageyama} \cdot \text{Yuya Oaki} \cdot \text{Hiroaki Imai} \\ \text{Synthesis of Porous MgNiMnO}_4 \qquad (\text{Keio University}) \bigcirc (\text{Yoh Kotani} \cdot \text{Hiroyuki Kageyama} \cdot \text{Yuya Oaki} \cdot \text{Hiroaki Imai} \\ \text{Synthesis of Porous MgNiMnO}_4 \qquad (\text{Keio University}) \bigcirc (\text{Yoh Kotani} \cdot \text{Hiroyuki Kageyama} \cdot \text{Yuya Oaki} \cdot \text{Hiroaki Imai} \\ \text{Synthesis of Porous MgNiMnO}_4 \qquad (\text{Keio University}) \bigcirc (\text{Yoh Kotani} \cdot \text{Hiroyuki Kageyama} \cdot \text{Yuya Oaki} \cdot \text{Hiroaki Imai} \\ \text{Synthesis of Porous MgNiMnO}_4 \qquad (\text{Keio University}) \bigcirc (\text{Yoh Kotani} \cdot \text{Hiroyuki Kageyama} \cdot \text{Yuya Oaki} \cdot \text{Hiroaki Imai} \\ \text{Synthesis of Porous MgNiMnO}_4 \qquad (\text{Keio University}) \bigcirc (\text{Yoh Kotani} \cdot \text{Hiroyuki Kageyama} \cdot \text{Yuya Oaki} \cdot \text{Hiroaki Imai} \\ \text{Synthesis of Porous MgNiMnO}_4 \qquad (\text{Keio University}) \bigcirc (\text{Yoh Kotani} \cdot \text{Hiroyuki Kageyama} \cdot \text{Yuya Oaki} \cdot \text{Hiroaki Imai} \\ \text{Synthesis of Porous MgNiMnO}_4 \qquad (\text{Keio University}) \bigcirc (\text{Yoh Kotani} \cdot \text{Hiroaki Imai} \\ \text{Synthesis of Porous MgNiMnO}_4 \qquad (\text{Keio University}) \bigcirc (\text{Yoh Kotani} \cdot \text{Hiroaki Imai} \\ \text{Synthesis of Porous MgNiMnO}_4 \qquad (\text{Keio University}) \bigcirc (\text{Yoh Kotani} \cdot \text{Hiroaki Imai} \\ \text{Synthesis of Porous MgNiMnO}_4 \qquad (\text{Keio University}) \bigcirc (\text{Yoh Kotani} \cdot \text{Hiroaki Imai} \\ \text{Synthesis of Porous MgNiMnO}_4 \qquad (\text{Keio University}) \bigcirc (\text{Yoh Kotani} \cdot \text{Hiroaki Imai} \\ \text{Synthesis of Porous MgNiMnO}_4 \qquad (\text{Keio University}) \bigcirc (\text{Yoh Kotani} \cdot \text{Hiroaki Imai} \\ \text{Synthesis of Porous MgNiMnO}_4 \qquad (\text{Keio University}) \bigcirc (\text{Yoh Kotani} \cdot \text{Hiroaki Imai} \\ \text{Synthesis of Porous MgNiMnO}_4 \qquad (\text{Keio University}) \bigcirc (\text{Yoh Kotani} \cdot \text{Hiroaki Imai} \\ \text{Synthesis of Porous MgNiMnO}_4 \qquad (\text{Keio University}) \bigcirc (\text{Yoh Kotani} \cdot \text{Hiroaki Imai} \\ \text{Synthesis of Porous MgNiMnO}_4 \qquad (\text{Keio University}) \bigcirc (\text{Yoh Kotani} \cdot \text{Hiroaki Imai} \\ \text{Yoh MgNiMnO}_4 \qquad (\text{Keio University}) \bigcirc (\text{Yoh MgNiMnO}_4) \\ \text{Yoh MgNiMnO}_4 \qquad (\text{Yoh MgNiMnO}_4) \\ \text{Yoh MgNiMnO}_4 \qquad$

★★ March 16 (Wed) (Room C) ★★

05. ガラス・フォトニクス材料 Glass and photonic materials 光触媒 (9:15)(Chairman 梶原浩一) 3C02 Effects of Raw Materials and Composition of Glass Substrates on Photocatalytic Activity of Titania Coated Glass (Tokyo University of Science) OYuki Nakamura · Ken-ichiro Iwasaki · Atsuo Yasumori 青色発光体 (9:30) (Chairman 梶原浩一) 3C03 Laser-induced coloration of glaserite-type silicate (University of Yamanashi) OYoshinori Yonezaki · Shino Takei · Kazuya Ogawa 3C04 Local structure analysis by Raman spectroscopy and blue emission mechanism of alunite compounds (Salesian Polytechnic) OYuichiro Kuroki · Kazuki Kimura · (Nagaoka University of Technology) Tomoichiro Okamoto · (JFCC) Masasuke Takata 蛍光体分散ガラス (10:15) (Chairman 岡元智一郎) 3C06 Luminescence from SiAlON phosphor dispersed in sodium borosilicate glasses (NIMS) OHiroyo Segawa · (NIMS · University of Tsukuba) Yujin Cho · Takashi Sekiguchi · (NIMS) Naoto Hirosaki 3C07 Rare-earth compositional dependence of ultraviolet photoluminescence of sol-gel-derived silica-(Gd,Pr)PO₄ glass-ceramics (TMU) OMayu Suda · Koichi Kajihara · Kiyoshi Kanamura フォトニクスガラス (10:45) (Chairman 岡元智一郎) 3C08 Effect of addition of alkali ions on the emission of Eu-V doped silica excited near UV (AIST) OTomoko Akai · Masaki Murakami · Masaru Yamashita (11:00) (Chairman 西正之) 3C09 Evaluation of Thermal Structural Change of Soda-Lime Silicate Glass using Photoluminescence of Eu ion (Tokyo University of Science) ODaiki Tabei · Ken-ichiro Iwasaki · Atsuo Yaumori Luminecsence lifetime and quantum efficiency of $\rm Er^{3+}$ in $\rm Ga_2S_3\text{-}GeS_2\text{-}CsCl}$ glasses 3C10 (Kyoto Institute of Technology) ⊙Masaki Kimata · Arifumi Okada · Takashi Wakasugi · Kohei Kadono · (Institute of Laser Engineering, Osaka University) Yasushi Fujimoto 受賞講演 (11:30) (Chairman 西正之) [The 70th Cers] Awards] Photo-related properties of nanocomposites consisting of metal oxides and metal nanoparticles (13:00) (Chairman 瀬川浩代) 3C17A [The 70th CerSJ Awards] On-chip fabrication of micrometer-size spherical optical devices from molten glass droplet (Tokyo Institute of Technology) OTetsuo Kishi 蛍光体 (Cu) (13:30) (Chairman 林大和) 3C19 Afterglow of ZnS:Cu Nanoparticles in water and Cu-doping ratio dependency (Kyoto University) ORyo Matsumoto · Masahiro Shimizu · Shuta Taniguchi · Masayuki Nishi · Visbal Heidy · Kohji Nagashima · Kazuyuki Hirao 3C20 Role of trap states for mechanical quenching and mechanoluminescence in phosphorescent CaZnOS:Cu (National Institute of Advanced Industrial Science and Technology) ODong Tu · (National Institute of Advanced Industrial Science and Technology) Kyushu University · WPI-12CNER) Chao-Nan Xu · (National Institute of Advanced Industrial Science and Technology) Yuki Fujio · Akihito Yoshida 3C21 Effects of Glass Composition and Melt-Stirring on Photoluminescence of Cu, Sn Ions Co-doped Soda-Lime Glasses (Tokyo University of Science) OEri Tomioka · Atsuo Yasumori · Kenichiro Iwasaki 3C22 The effect of cooling rate during sintering on the fluorescence of Ca₃(PO₄)₂:Cu (Nagaoka University of Technology) OMasaya Nakata · Tomoichiro Okamoto · Yasuyuki Yamada · (Salesian Polytechnic) Yuichiro Kuroki · (Japan Fine Ceramics Center) Masasuke Takata 蛍光体 (Mn) (14:45) (Chairman 安盛敦雄) 3C24 Synthesis of Mn⁴⁺-doped spinel-type Mg₂GeO₄ red phosphor under high pressure and high oxygen partial pressure (Tohoku University) ○Takuya Sasaki · Jun Fukushima · Yamato Hayashi · Hirotsugu Takizawa 3C25 Photoluminescence properties of perovskite-type tantalates activated with Mn (Tohoku University) ○Yohei Takeda · Hideki Kato · Makoto Kobayashi · (Kyoto Institute of Technology) Hisayoshi Kobayashi · (Tohoku University) Masato Kakihana 3C26 Investigation of Optical Property in Mn²⁺ and Mn⁴⁺-Doped CaAl₁₂O₁₉ Phosphors (Kyoto University) OAtsushi Hoshino · Jumpei Ueda · Setsuhisa Tanabe 蛍光体(希土類フリー) (15:30) (Chairman 黒木雄一郎) Synthesis and Photoluminescence Properties of Ti-doped SrLa₃Al₃O₁₀ Greenish-blue Phosphor 3C27 (Tohoku University) ONaoto Watanabe • Jun Fukushima • Yamato Hayashi • Hirotsugu Takizawa 3C28 FABRICATION OF POTASSIUM-DOPED ZINC TUNGSTATE AND ITS PHOTOLUMINESCENCE PROPERTY (Nagaoka University of Technology) OPrinya Lorchirachoonkul · Masaya Nakata · Yasuyuki Yamada · Tomoichiro Okamoto Optical Properties of Cr-doped Al₂O₃ and MgAl₂O₄ Prepared by Two-step Pulsed Electric Current Sintering 3C29S (Nagaoka University of Technology) OHuu Hien Nguyen · Makoto Nanko · Tomoichiro Okamoto · (Hanoi University of Science and Technology) Quoc Khanh Dang

★★ March 16 (Wed) (Room E) ★★

03. 導電性材料 Electroconductive material ガラス (9:00)(Chairman 岸本昭) 3E01 Influence of Li⁺ or K⁺ doping on structure and properties of ionic conductivity of Narpsio glass-ceramics (Kogakuin University) OYuki Ota · Naoya Yoshida · (Tokyo Medical and Dental University) Kimihiro Ymashita · (Kogakuin University) Toshinori Okura 3E02 Synthesis and ionic conductivity of H*-conductive Narpsio glass-ceramics partially substituted with various rare earth elements. (Kogakuin University) ○Yoshiko Takahashi · Naoya Yoshida · (Tokyo Medical and Dental University) Kimihiro Yamashita · (Kogakuin University) Toshinori Okura 超伝導 (9:30)(Chairman 岸本昭) 3E03 Study of Physical Property and Conductivity at Low Temperature for (Ba,Sr)₂NbO₄ and Sr₂(Nb,V)O₄ (Tokyo University of Science) ○Yoshiki Mori · Naoya Ishida · Naoto Kitamura · Yasushi Idemoto 02. 誘電性材料 Dielectric material 薄膜材料 (9:45) (Chairman 井手本康) Preparation and the dielectric properties of uniaxial BiFeO₃-LaAlO₃ thin films 3E04 (Hyogo Prefectural Institute of Technology) OHirokazu Izumi · (Osaka Prefectural University) Takeshi Yoshimura · Norifumi Fujimura 3E05 Fabrication and characterization of ferroelectric BiFeO₃ films by Metal Oxide Decomposition method (Nagoya Institute of Technology) ○Ryuichi Takai · Yusaku Kiba · Toshitaka Ota · Nobuyasu Adachi 3E06 Ferroelectric BaTiO₃ deposited LiCoO₂ cathode films for Li ion batteries with high rate capability (Tokyo Institute of Technology) Sou Yasuhara · Shintarou Yasui · Mitsuru Itou 結晶構造 (10:45)(Chairman 泉宏和) 3E08 Newly found piezoelectric perovskite compound $Bi_2ZnTi_{1,r}Mn_rO_6$ with suppressed c/a ratio (Tokyo Institute of Technology) ○Narumi Matsuda · Runze Yu · Ken Tominaga · Keisuke Shimizu · Hajime Hojo · Masaki Azuma · (Kanagawa Academy of Science and Technology) Yuki Sakai · (Chuo University) Kengo Oka 3E09 Growth of high-quality $AgNbO_3$ single crystals via Czochralski method under high-pressure oxygen atmosphere 3E10 Average and local structure analyses on $\mathrm{Bi}_{0.5}(\mathrm{Na}_{0.7}\mathrm{K}_{0.25}\mathrm{Li}_{0.05})_{0.5}\mathrm{TiO}_3$ x $\mathrm{Bi}(\mathrm{M}_{0.5}\mathrm{Ti}_{0.5})\mathrm{O}_3$ (M=Zn, Mg) ferroelectric materials by neutron and synchrotron X-(Tokyo University of Science) ○Yu Onodera · Naoya Ishida · Naoto Kitamura · Yasushi Idemoto 3E11 Investigation of ferroelectric characteristics and crystal structure of (K,Na,Li) (Nb,W)O₃-based ferroelectric ceramics sintered by spark plasma sinter-★★ March 16 (Wed) (Room F) ★★ 02. 誘電性材料 Dielectric material 強誘電体 (9:00)(Chairman 溝口照康) 3F01 First-Principles Calculations of Phase Transition in GaFeO3-type Ferroelectrics (Japan Fine Ceramics Center) OAyako Konishi · Takafumi Ogawa · Craig A. J. Fisher · Akihide Kuwabara · Hiroki Moriwake · (Tokyo Institute of Technology) Yosuke Hamasaki · Shintaro Yasui · Mitsuru Itoh 3F02 Polarization switching and ferroelectricity of κ -Al₂O₃ type oxide thin films (I) (Tokyo Tech. MSL) Yosuke Hamasaki · Shintaro Yasui · Tomoyasu Taniyama · ○Mitsuru Itoh · (Tokyo Tech. TIES) Takao Shimizu · (JFCC) Ayako Konishi · Hiroki Moriwake · (Tohoku University IMR) Takahisa Shiraishi · Akihiro Akama · Takenori Kiguchi 3F03 Polarization switching and ferroelectricity of κ -Al₂O₃ type oxide thin films (II) $(\textbf{Tokyo Tech. MSL}) \textbf{Yosuke Hamasaki} \cdot \bigcirc \textbf{Shintaro Yasui} \cdot \textbf{Tomoyasu Taniyama} \cdot \textbf{Mitsuru Itoh} \cdot (\textbf{Tokyo Tech. TIES}) \textbf{Takao Shimizu} \cdot \textbf{Mitsuru Itoh} \cdot (\textbf{Tokyo Tech. TIES}) \textbf{Takao Shimizu} \cdot \textbf{Mitsuru Itoh} \cdot (\textbf{Tokyo Tech. TIES}) \textbf{Takao Shimizu} \cdot \textbf{Mitsuru Itoh} \cdot (\textbf{Tokyo Tech. 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Ties Shimizu} \cdot \textbf{Mitsuru Itoh} \cdot \textbf{M$ $(JFCC) Ayako \ Konishi \cdot Hiroki \ Moriwake \cdot (Tohoku \ University \ IMR) Takahisa Shiraishi \cdot Akihiro \ Akama \cdot Takenori \ Kiguchi \ Akama \cdot Takenori \ \ Kiguchi \ Akama \cdot Takenori \ Akama \cdot Takenori \ Akama \cdot Takenor$ 3F04 Environmental Spaces of Ions in Doubled-Perovskite Crystals and The Effective Charges (Fukuoka University) ONaohisa Takesue · Shin Nanri · Kouki Furukawa · Tetsurou Takazono インフォマティクス (10:15) (Chairman 森分博紀) 3F06MU (UserSide2016) Materials Informatics and high throughput experimentations (National Institute for Materials Science) OToyohiro Chikyow · Takahiro Nagata · Yoshiyuki Yamashita · Michiko Yoshitake · Shinjiro Yagyu · (COMET Inc.) Keiji Ishibashi · Kenichiro Takahashi · Seiki Ri · Setsu Suzuki 3F08MU (UserSide2016)Efficient materials discovery through first principles calculations (Kyoto University) OIsao Tanaka · Atsuto Seko · Atsushi Togo 3F10MS Ion Transport Property Survey in Oxide-based Materials by DFT+Informatics $(NIMS\text{-}GREEN \cdot NIMS\text{-}MI2I) \quad \bigcirc Randy \ Jalem \cdot (NIMS\text{-}GREEN \cdot NIMS\text{-}MI2I \cdot NITech \cdot JST\text{-}PRESTO \cdot Kyoto \ U. - ESICB) \ Masanobu \ Nakayama$ 3F11M Acceleration of most stable crystal interface structure using a informatics approach (University of Tokyo) Shin Kiyohara · Hiromi Oda · OTeruyasu Mizoguchi

(The University of Tokyo) OHiromi Oda · Shin Kiyohara · Teruyasu Mizoguchi

Prediction of MgO and Fe Grain Boundary Structures Using Informatics Approach

3F12M

	(University of Yamanashi) OShintaro Ueno · Yasunao Sakamoto · Hiroyuki Kakiuchi · Kouichi Nakashima · Satoshi Wada
3F18	Preparation of Al ₂ TiO ₅ -Based Paraelectrics/Paraelectrics Complex Ceramics and Their Dielectric Properties
	$(University \ of \ Yamanashi) \ \bigcirc Hiroyuki \ Kakiuchi \cdot Shintaro \ Ueno \cdot Koichi \ Nakashima \cdot Satoshi \ Wada \cdot$
	(Hiroshima University) Eisuke Magome \cdot Chikako Moriyoshi \cdot Yoshihiro Kuroiwa
3F19	A Study of High Permittivity Material Using Lithium Lanthanum Titanate and semiconductive ceramics
	(Tokyo Institute of Technology) ○Naoya Nohara · Yukio Sakabe · Takuya Hoshina · Hiroaki Takeda · Takaaki Tsurumi
3F20	$Preparation \ and \ electrical \ properties \ of \ BaTi_2O_5-Ba_6Ti_{17}O_{40} \ eutectic \ composite \ by \ a \ FZ \ method$
	(Tohoku University) ○Keiji Shiga · Hirokazu Katsui · Takashi Goto
TEM, ST	<u>EM</u>
(14:15)	(Chairman 武田博明)
3F22	Effect of residual strain on structure formation of PMN-PT epitaxial thin films
	(Tohoku University) ○Takanori Kiguchi · Cangyu Fan · Takahisa Shiraishi · Akihiro Akama · Toyohiko J. Konno
3F23	Structural analysis of phase interphase in relaxor ferroelectricity composed near of MPB
	(Tohoku University) ○Cangyu Fan·Takanori Kiguchi·Takahisa Shiraishi·Akihiro Akama·Toyohiko Konno
3F24	Dislocation structures and electrical conduction properties of $(0001)/<11\overline{2}0>$ low-angle tilt grain boundaries in LiNbO $_3$
	$(Nagoya\ University)\ \bigcirc Yuho\ Furushima\cdot Atsutomo\ Nakamura\cdot (The\ University\ of\ Tokyo)\ Eita\ Tochigi\cdot Yuichi\ Ikuhara\cdot (The\ University\ of\ Tokyo)\ Eita\ Tochigi\ Of\ Tochigi\ Of$
	(Nagoya University) Kazuaki Toyoura · Katsuyuki Matsunaga
3F25	Charged domain wall structures in improper ferroelectric (Ca,Sr) ₃ Ti ₂ O ₇
	$(Osaka\ Prefecture\ University)\ \bigcirc Shigeo\ Mori\cdot Wataru\ Yoshimoto\cdot Hirofumi\ Tsukasaki\cdot Yui\ Ishii\cdot (Toray\ Research\ Center)\ Kousuke\ Kurushima$
欠陥制御	
(15:30)	(Chairman 木口賢紀)
3F27	Detection of oxygen vacancies in $BaTiO_3$ sintered pellets using optical reflectance spectroscopy
	(Yamagata University) ○Yuta Matsushima · Rina Horikoshi
3F28	Control of Oxygen-related Defects and Characterization for BaTiO ₃ -based Ferroelectric Ceramics
	(The University of Tokyo) ○Masashi Utsunomiya · Yuki Kitanaka · Yuji Noguchi · Masaru Miyayama
3F29	Effects of oxygen vacancy and doped nitrogen on the electric properties of $SrTiO_3$
	(Tokyo Institute of Technology) ○Yuka Morimoto · Kazuki Kanehara · Takuya Hoshina · Hiroaki Takeda · Takaaki Thurumi
3 F 30	Defect control in Bi-based piezoelectric ceramics by doping and piezoelectric properties
	(University of Yamanashi) ○Ryo Iizuka · Gopal Prasad Khanal · Sarah Najwa · Shintaro Ueno · Kouichi Nakashima · Satoshi Wada ·
	$(Ryukoku\ University)\ Ichiro\ Fujii\ \cdot\ (Hiroshima\ University)\ Eisuke\ Magome\ \cdot\ Chikako\ Moriyoshi\ \cdot\ Yoshihiro\ Kuroiwa$
	★★ March 16 (Wed) (Room G) ★★
	き・資源関連材料 Environment and energy related material
学術賞受	き・資源関連材料 Environment and energy related material
学術賞受 (9:00)	き・資源関連材料 Environment and energy related material 賞講演 (Chairman 勝又健一)
学術賞受 (9:00)	管・資源関連材料 Environment and energy related material 賞講演 (Chairman 勝又健一) [The 70th CersJ Awards] Multifunction Development of Ceramics based on the Low-dimensional Nanostructure Design
学術賞受 (9:00) 3G01AS	き・資源関連材料 Environment and energy related material 賞講演 (Chairman 勝又健一)
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学術賞受 (9:00) 3G01AS 資源回収	管・資源関連材料 Environment and energy related material 賞講演 (Chairman 勝又健一) [The 70th CersJ Awards] Multifunction Development of Ceramics based on the Low-dimensional Nanostructure Design (Osaka University) ○Tohru Sekino (Chairman 田村真治) Development of Recovery Technique of Li from Processing Residue of Spent Lithium Secondary Battery
学術賞受 (9:00) 3G01AS <u>資源回収</u> (9:30)	管・資源関連材料 Environment and energy related material (Chairman 勝又健一) [The 70th CersJ Awards] Multifunction Development of Ceramics based on the Low-dimensional Nanostructure Design (Osaka University) ○Tohru Sekino (Chairman 田村真治) Development of Recovery Technique of Li from Processing Residue of Spent Lithium Secondary Battery (Shimane University) ○Ryo Sasai· Midori Saito· (Taiheiyo Cement Co.) Katsumi Matsui· Kazuhiko Tokoyoda·
学術賞受 (9:00) 3G01AS 資源回収 (9:30) 3G03	管・資源関連材料 Environment and energy related material 西瀬濱 (Chairman 勝又健一) [The 70th CersJ Awards] Multifunction Development of Ceramics based on the Low-dimensional Nanostructure Design (Osaka University) ○Tohru Sekino (Chairman 田村真治) Development of Recovery Technique of Li from Processing Residue of Spent Lithium Secondary Battery (Shimane University) ○Ryo Sasai・Midori Saito・(Taiheiyo Cement Co.) Katsumi Matsui・Kazuhiko Tokoyoda・ Noritoshi Tamura・Takashi Hanada・Yasuyuki Ishida
学術賞受 (9:00) 3G01AS 資源回収 (9:30) 3G03	意識演 (Chairman 勝又健一) [The 70th CersJ Awards] Multifunction Development of Ceramics based on the Low-dimensional Nanostructure Design (Osaka University) ○Tohru Sekino (Chairman 田村真治) Development of Recovery Technique of Li from Processing Residue of Spent Lithium Secondary Battery (Shimane University) ○Ryo Sasai · Midori Saito · (Taiheiyo Cement Co.) Katsumi Matsui · Kazuhiko Tokoyoda · Noritoshi Tamura · Takashi Hanada · Yasuyuki Ishida Efficient use of resources including aluminum in used straight tube type LED lightings and development of equipment for separation and recovery of
学術賞受 (9:00) 3G01AS 資源回収 (9:30) 3G03	管護演 (Chairman 勝又健一) [The 70th CersJ Awards] Multifunction Development of Ceramics based on the Low-dimensional Nanostructure Design (Osaka University) ○Tohru Sekino (Chairman 田村真治) Development of Recovery Technique of Li from Processing Residue of Spent Lithium Secondary Battery (Shimane University) ○Ryo Sasai · Midori Saito · (Taiheiyo Cement Co.) Katsumi Matsui · Kazuhiko Tokoyoda · Noritoshi Tamura · Takashi Hanada · Yasuyuki Ishida Efficient use of resources including aluminum in used straight tube type LED lightings and development of equipment for separation and recovery of gallium oxide from discarded LED devices
学術賞受 (9:00) 3G01AS 資源回収 (9:30) 3G03	管う演演 Environment and energy related material 画演演 (Chairman 勝又健一) [The 70th CersJ Awards] Multifunction Development of Ceramics based on the Low-dimensional Nanostructure Design (Osaka University) ○Tohru Sekino (Chairman 田村真治) Development of Recovery Technique of Li from Processing Residue of Spent Lithium Secondary Battery (Shimane University) ○Ryo Sasai·Midori Saito·(Taiheiyo Cement Co.) Katsumi Matsui·Kazuhiko Tokoyoda· Noritoshi Tamura·Takashi Hanada·Yasuyuki Ishida Efficient use of resources including aluminum in used straight tube type LED lightings and development of equipment for separation and recovery of gallium oxide from discarded LED devices (Hosei University) ○Takaya Akashi·(IRIS Ohyama Inc.) Takashi Ishida·(Harita Metal Co., Ltd.) Makoto Harita·
学術賞受(9:00) 3G01AS 資源回収(9:30) 3G03	管:資源関連材料 Environment and energy related material (Chairman 勝又健一) [The 70th CersJ Awards] Multifunction Development of Ceramics based on the Low-dimensional Nanostructure Design (Osaka University) ○Tohru Sekino (Chairman 田村真治) Development of Recovery Technique of Li from Processing Residue of Spent Lithium Secondary Battery (Shimane University) ○Ryo Sasai·Midori Saito·(Taiheiyo Cement Co.) Katsumi Matsui·Kazuhiko Tokoyoda· Noritoshi Tamura·Takashi Hanada·Yasuyuki Ishida Efficient use of resources including aluminum in used straight tube type LED lightings and development of equipment for separation and recovery of gallium oxide from discarded LED devices (Hosei University) ○Takaya Akashi·(IRIS Ohyama Inc.) Takashi Ishida·(Harita Metal Co., Ltd.) Makoto Harita· (Hosei University) Hiroyuki Nakae
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学術賞受(9:00) 3G01AS 資源回収(9:30) 3G03 3G04	(Chairman 勝又健一) [The 70th Cers] Awards] Multifunction Development of Ceramics based on the Low-dimensional Nanostructure Design (Osaka University) ○Tohru Sekino (Chairman 田村真治) Development of Recovery Technique of Li from Processing Residue of Spent Lithium Secondary Battery (Shimane University) ○Ryo Sasai · Midori Saito · (Taiheiyo Cement Co.) Katsumi Matsui · Kazuhiko Tokoyoda · Noritoshi Tamura · Takashi Hanada · Yasuyuki Ishida Efficient use of resources including aluminum in used straight tube type LED lightings and development of equipment for separation and recovery of gallium oxide from discarded LED devices (Hosei University) ○Takaya Akashi · (IRIS Ohyama Inc.) Takashi Ishida · (Harita Metal Co., Ltd.) Makoto Harita · (Hosei University) Hiroyuki Nakae Reaction conditions of gallium recycling process based on carbothermal vaporization-oxidation method with gas permeable plates (Shibaura Institute of Technology) ○Hajime Kiyono · Natsumi Tobioka · Sae Matsubara · Kaori Sakuragi · Yuka Kuboki · (Hosei University) Takaya Akashi
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学術賞受(9:00) 3G01AS 資源回収(9:30) 3G03 3G04 3G05 企業フロ(10:30) 3G07F	(Chairman 勝又健一) [The 70th CersJ Awards] Multifunction Development of Ceramics based on the Low-dimensional Nanostructure Design (Osaka University) ○Tohru Sekino (Chairman 田村真治) Development of Recovery Technique of Li from Processing Residue of Spent Lithium Secondary Battery (Shimane University) ○Ryo Sasai · Midori Saito · (Taiheiyo Cement Co.) Katsumi Matsui · Kazuhiko Tokoyoda · Noritoshi Tamura · Takashi Hanada · Yasuyuki Ishida Efficient use of resources including aluminum in used straight tube type LED lightings and development of equipment for separation and recovery of gallium oxide from discarded LED devices (Hosei University) ○Takaya Akashi · (IRIS Ohyama Inc.) Takashi Ishida · (Harita Metal Co., Ltd.) Makoto Harita · (Hosei University) Hiroyuki Nakae Reaction conditions of gallium recycling process based on carbothermal vaporization-oxidation method with gas permeable plates (Shibaura Institute of Technology) ○Hajime Kiyono · Natsumi Tobioka · Sae Matsubara · Kaori Sakuragi · Yuka Kuboki · (Hosei University) Takaya Akashi
学術賞受(9:00) 3G01AS 資源回収(9:30) 3G03 3G04 3G05 企業フロ(10:30) 3G07F 微粒子	(Chairman 勝又健一) [The 70th Cers] Awards] Multifunction Development of Ceramics based on the Low-dimensional Nanostructure Design (Osaka University) ○Tohru Sekino (Chairman 田村真治) Development of Recovery Technique of Li from Processing Residue of Spent Lithium Secondary Battery (Shimane University) ○Ryo Sasai · Midori Saito · (Taiheiyo Cement Co.) Katsumi Matsui · Kazuhiko Tokoyoda · Noritoshi Tamura · Takashi Hanada · Yasuyuki Ishida Efficient use of resources including aluminum in used straight tube type LED lightings and development of equipment for separation and recovery of gallium oxide from discarded LED devices (Hosei University) ○Takaya Akashi · (IRIS Ohyama Inc.) Takashi Ishida · (Harita Metal Co., Ltd.) Makoto Harita · (Hosei University) Hiroyuki Nakae Reaction conditions of gallium recycling process based on carbothermal vaporization-oxidation method with gas permeable plates (Shibaura Institute of Technology) ○Hajime Kiyono · Natsumi Tobioka · Sae Matsubara · Kaori Sakuragi · Yuka Kuboki · (Hosei University) Takaya Akashi
学術賞受(9:00) 3G01AS 資源回収(9:30) 3G03 3G04 3G05 企業フロ(10:30) 3G07F 微粒子(11:00)	(Chairman 勝又使一) [The 70th Cers] Awards] Multifunction Development of Ceramics based on the Low-dimensional Nanostructure Design (Osaka University) ○Tohru Sekino (Chairman 田村真治) Development of Recovery Technique of Li from Processing Residue of Spent Lithium Secondary Battery (Shimane University) ○Ryo Sasai · Midori Saito · (Taiheiyo Cement Co.) Katsumi Matsui · Kazuhiko Tokoyoda · Noritoshi Tamura · Takashi Hanada · Yasuyuki Ishida Efficient use of resources including aluminum in used straight tube type LED lightings and development of equipment for separation and recovery of gallium oxide from discarded LED devices (Hosei University) ○Takaya Akashi · (IRIS Ohyama Inc.) Takashi Ishida · (Harita Metal Co., Ltd.) Makoto Harita · (Hosei University) Hiroyuki Nakae Reaction conditions of gallium recycling process based on carbothermal vaporization-oxidation method with gas permeable plates (Shibaura Institute of Technology) ○Hajime Kiyono · Natsumi Tobioka · Sae Matsubara · Kaori Sakuragi · Yuka Kuboki · (Hosei University) Takaya Akashi
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学術賞受(9:00) 3G01AS 資源回収(9:30) 3G03 3G04 3G05 企業フロ(10:30) 3G07F 微粒子(11:00) 3G09	(Chairman 勝又健一) [The 70th Cers] Awards] Multifunction Development of Ceramics based on the Low-dimensional Nanostructure Design (Osaka University)
学術賞受(9:00) 3G01AS 資源回収(9:30) 3G03 3G04 3G05 企業フロ(10:30) 3G07F 微粒子(11:00) 3G09	(Chairman 勝又健一) [The 70th Cers] Awards] Multifunction Development of Ceramics based on the Low-dimensional Nanostructure Design (Osaka University) ○Tohru Sekino (Chairman 田村真治) Development of Recovery Technique of Li from Processing Residue of Spent Lithium Secondary Battery (Shimane University) ○Ryo Sasai · Midori Saito · (Taiheiyo Cement Co.) Katsumi Matsui · Kazuhiko Tokoyoda · Noritoshi Tamura · Takashi Hanada · Yasuyuki Ishida Efficient use of resources including aluminum in used straight tube type LED lightings and development of equipment for separation and recovery of gallium oxide from discarded LED devices (Hosei University) ○Takaya Akashi · (IRIS Ohyama Inc.) Takashi Ishida · (Harita Metal Co., Ltd.) Makoto Harita · (Hosei University) Hiroyuki Nakae Reaction conditions of gallium recycling process based on carbothermal vaporization-oxidation method with gas permeable plates (Shibaura Institute of Technology) ○Hajime Kiyono · Natsumi Tobioka · Sae Matsubara · Kaori Sakuragi · Yuka Kuboki · (Hosei University) Takaya Akashi
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学術賞受(9:00) 3G01AS 資源回収(9:30) 3G03 3G04 3G05 企業フロ(10:30) 3G07F 微粒子(11:00) 3G09 3G10	(Chairman 勝又健一) [The 70th Cers] Awards] Multifunction Development of Ceramics based on the Low-dimensional Nanostructure Design (Osaka University) ○Tohru Sekino (Chairman 田村真治) Development of Recovery Technique of Li from Processing Residue of Spent Lithium Secondary Battery (Shimane University) ○Ryo Sasai · Midori Saito · (Taiheiyo Cement Co.) Katsumi Matsui · Kazuhiko Tokoyoda · Noritoshi Tamura · Takashi Hanada · Yasuyuki Ishida Efficient use of resources including aluminum in used straight tube type LED lightings and development of equipment for separation and recovery of gallium oxide from discarded LED devices (Hosei University) ○Takaya Akashi · (IRIS Ohyama Inc.) Takashi Ishida · (Harita Metal Co., Ltd.) Makoto Harita · (Hosei University) Hiroyuki Nakae Reaction conditions of gallium recycling process based on carbothermal vaporization-oxidation method with gas permeable plates (Shibaura Institute of Technology) ○Hajime Kiyono · Natsumi Tobioka · Sae Matsubara · Kaori Sakuragi · Yuka Kuboki · (Hosei University) Takaya Akashi
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 $Influence\ of\ Microstructural\ Control\ of\ Metal-Insulator\ Core-Shell\ Components\ in\ Boundary\ Layer\ Capacitors\ on\ Dielectric\ Properties$

複合体 (13:00) (Chairman 内田寛)

3F17

(13:00) (Chairman 中西和樹) 3G17 Influence on hydrolysis of ammonia borane by anion exchanged layered double hydroxide (LDH) (Nagoya University) OMasakazu Tanino · Singo Kanehira · Tetsuya Nagasaki · Koichi Kikuta 3G18 Structural characteristics of ternary hydrotalcite and its catalytic activity (Nagoya University) OShingo Kanehira · Tetsuya Nagasaki · Masakazu Tanino · Koichi Kikuta 3G19 Photocatalytic conversion of CO2 in H2O using layered double hydroxides (Kyoto University) ○Kentaro Teramura · Shoji Iguchi · Hirotaka Ishii · Yudai Hasegawa · Soichi Kikkawa · Saburo Hosokawa · Tsunehiro Tanaka (13:45)(Chairman 菊田浩一) Hybridization of Zn-Al Layered Double Hydroxide (LDH) with Metal Nanoparticle and Its Photocatalyst Behaviour 3G20 3G21 Intercalation of aminobenzoic acid to hydrotalcite in alcohol (Okayama University) OYoshikazu Kameshima · Daiki Kawada · Shunsuke Nishimoto · Miyake Michihiro 3G22 Synthesis of exfoliated nanosheets by rehydration reaction (Osaka Prefecture University) Omomoko Iida · Kohei Yoshikawa · Masakazu Togo · Atsushi Nakahira 3G23 Anion-exchange property of formate-type hydrotalcite 多孔体 (15:00) (Chairman 袋布昌幹) Hierarchically Porous Titanium Phosphate Monoliths and Its Crystallization Behavior in Ethylene Glycol 3G25 (Kyoto University) OYang Zhu · Koji Yoneda · Kazuyoshi Kanamori · Kazuki Nakanishi 3G26 Preparation of mesoporous materials including vanadium from 4-(EtO)₂OP-C₆H₄-Si(OEt)₃ $(\textbf{Tokyo University of Agriculture and Technology}) \quad \bigcirc \textbf{Masafumi Nomi} \cdot \textbf{Atsushi Kondo} \cdot \textbf{Kazuyuki Maeda}$ 3G27 Preparation and properties of transparent aerogels from chloromethyltrimethoxysilane (15:45) (Chairman 中平敦) 3G28 Preparation of hierarchically porous vanadium phosphate monoliths (Kyoto University) OAyumu Tanaka · Yang Zhu · Kazuyoshi Kanamori · Kazuki Nakanishi 3G29 Synthesis of zeolite from perlite and evaluation (MITSUI MINING & SMELTING CO.,LTD · Osaka Prefecture University) OMakoto Kasai · $(MITSUI\ MINING\ \&\ SMELTING\ CO., LTD)\ Yosei\ Kobayashi\cdot (MAKINO\ CORPORATION)\ Masataka\ Kamitani\cdot Mitsunori\ Kondo\cdot Masataka\ Manitani\cdot Mitsunori\ Kondo\cdot Masataka\ Manitani\cdot Mitsunori\ Masataka\ Manitani Mitsunori\ Mitsunori\ Mitsunori\ Mitsunori\ Masataka\ Manitani Mitsunori\ Masataka\ Manitani Mitsunori\ Mitsunori$ $(Osaka\ Prefecture\ University\cdot\ Tohoku\ University)\ Atsushi\ Nakahira$ 3G30 Preparation of monolithic macroporous manganese oxides from manganese salt (Kyoto university) OKeisuke Matuura · Yang Zhu · Kazuhiro Kanamori · Kazuki Nakanishi ★★ March 16 (Wed) (Room H) ★★ 06. 生体関連材料 Bioceramics アパタイト形成能 (9:30) (Chairman 川下将一) 3H03 (Tohoku University) (Hirokazu Katsui · Daichi Uraie · Takashi Goto Microstructure of bioactive $CaAl_{12}O_{19}$ film by laser CVD 3H04 Enhancement of HAp formation on surface charge-controlled TiO₂ (Japan Fine Ceramics Center) OMasami Hashimoto · Satoshi Kitaoka · (Tohoku University) Hiroyasu Kanetaka 3H05 Precipitation of Calcium Phosphate on Titanium Dioxide Surfaces Subjected to Surface Treatments (Japan Advanced Institute of Science and Technology) ○Akira Sasahara · Tatsuya Murakami · Le Tran Uyen Tu · Kentaro Tsukuda · Masahiko Tomitori ガラス (10:15) (Chairman 小西敏功) 3H06 The structure of phospho-silicate glass and their dissolution behavior (Nagoya Institute of Technology) OAtsuhiro Miura · Sungho Lee · Anthony L. B. Macon · Hirotaka Maeda · Toshihiro Kasuga 3H07 Preparation of antibacterial ZnO-containing phosphate invert glasses $(Nagoya\ Institute\ of\ Technology)\ \bigcirc Sungho\ Lee\cdot Hirotaka\ Uehara\cdot Anthony\ L.B.\ Macon\cdot Hirotaka\ Maeda\cdot Akiko\ Obata\cdot Toshihiro\ Kasuga\cdot Maeda\cdot Akiko\ Obata\cdot Toshihiro\ Maeda\cdot Maeda\cdot Akiko\ Obata\cdot Toshihiro\ Maeda\cdot Maeda$ (Tohoku University) Kyosuke Ueda · Takayuki Narushima シリカ (10:45)(Chairman 横川善之) 3H08 Synthesis of Porous Silica through Biomimetic Process Using Two Kinds of Peptides (Nagoya University) ○Takuya Asano · Duc H. T. Le · Ayae Sugawara-Narutaki · Chikara Ohtsuki · (Toyohashi University of Technology) Hiromi Nakano 3H09 Preparation of silica-protein composites by an electro-assisted sol-gel process (Okayama University) ○Maki Shimomae · Toshiisa Konishi · Tomohiko Yoshioka · Satoshi Hayakawa 材料と細胞 (11:15) (Chairman 小幡亜希子) 3H10 Localization of osteoblasts and endothelial cells in apatite-fiber scaffold (AFS) (Meiji University) OMichiyo Honda · Mamoru Aizawa 3H11 MC3T3-E1 Cell Response to Fibronectin-Adsorbed Hydroxyapatite and Alumina (Tohoku University) ⊝Masakazu Kawashita · Maki Hasegawa · Tada-aki Kudo · Hiroyasu Kanetaka · $(Kyushu\ Institute\ of\ Technology) Toshiki\ Miyazaki\ \cdot\ (Japan\ Fine\ Ceramics\ Center)\ Masami\ Hashimoto$ 吸着 (11:45) (Chairman 小幡亜希子)

層状複水酸化物

(Osaka City University) OYoshiyuki Yokogawa · Shouta Namba · Junichi Kinoshita

VSC adsorption capability of Fe layered double hydroxide containing fluorine

3H12

★★ March 16 (Wed) (Room I) ★★

01. エンジニアリングセラミックス Enginieering ceramics コーティング 1 (9:00) (Chairman 田中諭) (Waseda University) ONorihiro Murakawa · Ding Li · Kohei Tatsumi 3101 Synthesis of SiC from SiO by CVD Process 3**I**02 Erosion Behavior of Yttrium Oxide film prepared by Aerosol Deposition Method in the Plasma Process (TOTO) OHiroaki Ashizawa · Masakatsu Kiyohara 3103 Reaction of Al₂O₃-ZrO₂ Eutectic with SiC Substrate at Ultra High Temperatures (Nihon Universty) OTetsuya Yanai · Kyosuke Seya · Shunkichi Ueno · (NIMS) Byung Koog Jang 3104 Sintering behavior of porous structure of zirconia film for thermal barrier coating (Tohoku University) ○Takashi Shirato · Masanobu Kamitakahara · Hideaki Matubara · (JFCC) Norio Yamaguchi · Taishi Yokoi 3105 Mass Transfer Mechanism of Polycrystalline Yb₂Si₂O₃ under Oxygen Potential Gradients at High Temperatures (Japan Fine Ceramics Center) OMasashi Wada · Tsuneaki Matsudaira · Naoki Kawashima · Daisaku Yokoe · Takeharu Kato · Satoshi Kitaoka · Masasuke Takata コーティング 2 (10:30) (Chairman 桐原聡秀) [The 70th CersJ Awards] Control of mass-transfer in protective oxide films at high temperatures (Japan Fine Ceramics Center) OSatoshi Kitaoka Measurement of residual stress between room temperature and 1200°C in Si bond coat layer EBC system 3I09 (The University of Tokyo) OYutaro Arai · Kaoru Yonekura · Yutaka Kagawa 3I10 Effect of local residual stress distribution on micro damage evolution behavior of discontinuous carbon fiber-dispersed SiC matrix composite (The University of Tokyo) ○Kouki Kajihara · Yujiro Atsumi · Yutaka Kagawa 3**I**11 Thermal Behavior and Mechanical Properties of Y_2SiO_5 Coatings after Isothermal Heat Treatment $(National\ Institute\ for\ Materials\ Science)\ \bigcirc Byung\text{-}Koog\ Jang\ \cdot\ Fan\text{-}Jie\ Feng\ \cdot\ (Kookmin\ university)\ Kee\text{-}Sung\ Lee}$ 3I12 A method for measurement of delamination toughness in EBC system (The University of Tokyo) ○Yuto Aoki · Y. Arai · Y. Kagawa 複合材料 (13:00)(Chairman 宮崎広行) 3I17 Fabrication of SiCf/SiC composites with boron nitride interphase formed by EPD and their mechanical properties (Tokyo Institute of Technology) ○Naoki Mizuta · Katsumi Yoshida · Toyohiko Yano · (Japan Aerospace eXploration Agency) Masaki Kotani · Takuya Aoki · (Tokyo University of Agriculture and Technology) Toshio Ogasawara 3I18 High temperature wet oxidation behavior of SiC fiber-reinforced composites fabricated by melt infiltration using Si-Ti alloy (Tokyo Institute of Technology) ○Toru Tsunoura · Katsumi Yoshida · Toyohiko Yano · (Tokyo University of Agriculture and Technology) Toshio Ogasawara · (Japan Aerospace Exploration Agency) Takuya Aoki 3I19 Development of SiC Composites for Light Water Reactor Application (Kyoto University) OTatsuya Hinoki · Moonhee Lee · Sosuke Kondo 機械的性質 1 (13:45) (Chairman 多々見純一) 3120 Quantitative evaluation of crack deflection effect on toughening of nano-polycrystalline stishovite $(\textbf{Tokyo Institute of Technology}) \\ \bigcirc \textbf{Kimiko Yoshida} \cdot \textbf{Fumihiro Wakai} \cdot (\textbf{Deutsches Elektronen-Synchrotron}) \\ \textbf{Norimasa Nishiyama} \cdot \textbf{Nor$ $(Tokyo\ Institute\ of\ Technology)\ Risako\ Sekine\ \cdot\ Yutaka\ Shinoda\ \cdot\ (Saga\ University)\ Takashi\ Akatsu$ 3I21 Development of virtual test for carbon fiber-SiC matrix composites: Effect of anisotropic properties on the interaction between crack in brittle phase and (The University of Tokyo) OYujiro Atsumi minicomposite phase. 3I22 Theoretical prediction of compressive strength, Young's modulus and strain at fracture of sintered porous alumina compacts (Kagoshima University) Yoshihiro Hirata · OTaro Shimonosono 3I23 Slip deformation behavior of strontium titanate single crystals deformed by compression for [001] at room temperature (The University of Nagoya) ○Kensuke Yasufuku · Atsutomo Nakamura · Yuho Furushima · Kazuaki Toyoura · Katsuyuki Matsunaga 3124 International Round Robin Test on Fracture Toughness of Ceramic Substrates (National Institute of Advanced Industrial Science and Technology) ○Hiroyuki Miyazaki · Yu-ichi Yoshizawa · Kiyoshi Hirao · Tatsuki Ohji · Hideki Hyuga 機械的性質 2 (15:00)(Chairman 宮崎広行) 3I25S Thermal Oxidation-Induced Crack-healing of 5 vol% SiC Particle Dispersed Y₂SiO₅ Composites (Nagaoka University of Technology) ODinh Huy Vu · Makoto Nanko 3126 Oxidation behavior and mechanical properties of BN particle dispersion SiC composites (Kyoto University) OShohei Yanagawa · Tatsuya Hinoki · (National Institute for Materials Science) Kazuya Shimoda 3127 Mechanical properties and cutting characteristics of cast iron for WC-FeAl composites including α-Al₂O₃ (National Institute of Advanced Industrial Science and Technology) ORyoichi Furushima · Koji Shimojima · Hiroyuki Hosokawa · Kiyotaka Katou · Akihiro Matsumoto 3128 Triboluminescence of AlN:Mn ceramics (Yokohama National University) ○Junichi Tatami · Kentaro Iwai · Motoyuki Iijima 3I29 Verification of Easy-to-use Test Method of Torsion Strength for Porous Bioceramics (Tokyo Institute of Technology) ○Kouichi Yasuda · (Kanazawa Institute of Technology) Sadami Tsutsumi ★★ March 16 (Wed) (Room J) ★★

11. その他材料 Others

触媒

(9:00) (Chairman 山根久典)

3J01 Preparation of the selectively deposited Pd and LaMnO₃ with in/outside pore of alumina-support and their catalytic activity

(Kyushu University) ○Akihiro Tou·Hikaru Saito·Hisahiro Einaga·Maiko Nishibori·Kengo Shimanoe

(Osaka Prefecture University) OSo Yubuchi · Akitoshi Hayashi · Masahiro Tatsumisago

3K07 Preparation of Li₄P₂S₆ fine powders by the freeze-drying process and their ionic conductivity

 $(Osaka\,Prefecture\,University)\ \ \bigcirc Yosuke\,Ukawa\cdot Takashi\,Hakari\cdot Akitoshi\,Hayashi\cdot Masahiro\,Tatsumisago$

 $3K08 \qquad \text{Preparation of highly conductive Li}_{7}P_{2}S_{8}I \text{ solid electrolytes by liquid-phase shaking}$

Mitsuhiro Totani · Hitoyuki Muto · Atsunori Matsuda

 $3K09 \qquad \text{Preparation and Characterization of Li}_2S-P_2S_5 \\ \text{Solid Electrolyte Thick Films by Electrophoretic Deposition}$

Reiko Matsuda · Hiroyuki Muto · Atsunori Matsuda

リチウム二次電池/評価

(11:15) (Chairman 北村尚斗)

3K10 Evaluation of mechanical properties of solid electrolytes for all-solid-state lithium ion battery by indentation technique

 $(Toyohashi\ University\ of\ Technology)\ \bigcirc Mitsuhiro\ Totani\ \cdot\ Kei\ Morikawa\ \cdot\ Phuc\ Nguyen\ Huu\ Huy\ \cdot\ Hiroyuki\ Muto\ \cdot\ Atsunori\ Matsuda$

3K11 Development of the high functional software for electrochemical impedance analysis

(National Institute for Materials Science) OKiyoshi Kobayashi · Yoshio Sakka

3K12 Development of electrode chips of Li-ion batteries for soft X-ray emission spectroscopy and operando measurements (National Institute of Advanced Industrial Science and Technology) ○Eiji Hosono · Daisuke Asakura · (The University of Tokyo) Hideharu Niwa · Hisao Kiuchi · Jun Miyawaki · (National Institute of Advanced Industrial Science and Technology) Yusuke Nanba · Masashi Okubo · Hirofumi Matsuda · (The University of Tokyo) Masaharu Oshima · Yoshihisa Harada リチウム二次電池/薄膜電極 (13:00) (Chairman 秋本順二) Particle design of LiCoO2 for the formation of good LiCoO2-Li7La3Zr2O12 interface by aerosol deposition method 3K17 (Tokyo Metropolitan University) ○Mao Shoji · Kyoko Kozuka · Keiko Nitta · Takeshi Kimura · Hirokazu Munakata · Kiyoshi Kanamura 3K18 Microstructural characterization of solution derived cathodic thin films for Lithium ion battery (Japan Fine Ceramics Center) ○Yumi Ikuhara · Xiang Gao · Yoshiyuki Sugawara · Craig Fisher · Akihide Kuwabara · Hiroki Moriwake · (Japan Fine Ceramics Center · The University of Tokyo) Yuichi Ikuhara · (Toyota Motor Corporation) Keiichi Kohama リチウム二次電池/正極材料 (13:30) (Chairman 秋本順二) 3K19 The Effect of Post Annealing on Local Structure of Li(Ni_{0.5}Co_{0.2}Mn_{0.3})O₂ Crystals Prepared by Using Flux Method $(Shinshu\ University)\ \bigcirc Kazuhiro\ Yoshino\cdot Takeshi\ Kimijima\cdot Tetsuya\ Yamada\cdot Nobuyuki\ Zettsu\cdot Katsuya\ Teshima$ 3K20 Flux Growth of Layered-Li(Ni, Co, Mn, Oo, Crystal Layers Directly on Current Collector Substrates (Shinshu University) OTakeshi Kimijima · Nobuyuki Zettsu · Katsuya Teshima (14:00) (Chairman 是津信行) $Establishment of reaction phase diagrams of pseudo-ternary LiNi_{0.8}Ti_{0.2}O_z LiCo_{0.8}Ti_{0.2}O_z LiFe_{0.8}Ti_{0.2}O_z and charge-discharge properties of the contraction of the$ (Tokyo University of Science) \bigcirc Kohei Nanbu \cdot (Tokyo Metropolitan Hiroo High School) Daiki Yoshino \cdot $LiNi_{0.4}Co_{0.2}Fe_{0.2}Ti_{0.2}O_2$ (Tokyo University of Science · Reserch Institute for Science and Technology) Yuki Yamaguchi · Kenjiro Fujimoto 3K22 Average and local structure analysis of metastable Li_xMn_{0.9}Ti_{0.1}O₂ by synchrotron X-ray (Tokyo University of Science) OKazuki Miyazawa · Naoya Ishida · Naoto Kitamura · Yasushi Idemoto · (National Institute of Advanced Industrial Science) Junji Akimoto 3K23 Investigation of Structural Changes of Li-rich Solid Solution Cathode during Charge-discharge Cycles (Tokyo Metropolitan University) OKen Sasaki · Hirokazu Munakata · Kiyoshi Kanamura 3K24 Fabrication of nanowire electrodes for secondary batteries by an electrospinning method and measurement of soft X-ray absorption spectra (National Institute of Advanced Industrial Science and Technology) (Seiji Hosono · Satoshi Kajiyama · Masashi Okubo · Daisuke Asakura · (National Institute for Materials Science) Jun Kikkawa (15:00) (Chairman 松田厚範) 3K25 Hydrothermal Synthesis of Metal-substituted LiCoPO₄ for High Voltage Cathode Material (DENSO CORPORATION) Koji Ohira · Shuuhei Yoshida · Daisuke Shibata Synthesis and evaluation of olivine-type cathode material 3K26 (Osaka Prefecture University) OMasakazu Togo · Atsushi Nakahira リチウム二次電池/硫化物系電極材料 (15:30) (Chairman 松田厚範) Rock-salt/Amorphous Reversible Phase Transition of Li₂TiS₃ During Charging And Discharging 3K27 (National Institute of Advanced Industrial Science and Technology) OAtsushi Sakuda · Tomonari Takeuchi · Masahiro Shikano · Hikari Sakaebe · (Kyoto University) Zempachi Ogumi 3K28 Evaluation of mechanical properties of SnX-P₂X₅ (X = O, S) glassy electrode materials

(Osaka Prefecture University) ○Masashi Nose· Atsutaka Kato· (National Institute of Advanced Industrial Science and Technology)

Atsushi Sakuda· (Osaka Prefecture University) Akitoshi Hayashi · Masahiro Tatsumisago