

Program

Tuesday, December 7, 2021

JST (UTC+9)

16:50-17:00 Opening Remarks

Chairperson: **Kazuhiko Maeda** *Tokyo Institute of Technology*

17:00-17:30 I-1 **Hiroshi Kageyama**

Kyoto University, Japan

A five-year summary of mixed-anion project and recent progress

17:30-18:00 I-2 **Alain Demourgues**

ICMCB-CNRS-University of Bordeaux, France

Jean-Baptiste Vaney, Fouad Alassani, Sophie Tencé, Baptiste Vignolle, Etienne Gaudin, Etienne Durand, Mathieu Duttine, Stan Pechev, Jacinthe Gamon, Jean-Marc Bassat and Alain Demourgues

Design of mixed anions compounds containing fluorine to improve ionic/electronic conductivity for energy applications

18:00-18:30 I-3 **Yoshiharu Uchimoto**

Kyoto University, Japan

TBA

18:30-19:00 Break

Chairperson: **Hiraku Ogino**

National Institute of Advanced Industrial Science and Technology (AIST)

19:00-19:30 I-4 **Mats Johnsson**

Stockholm University, Sweden

Mixed anions working together with lone-pairs to form low-dimensional arrangements of transition metals

19:30-20:00 I-5 **Michael A. Hayward**

University of Oxford, UK

Low-temperature Topochemical Reactions as a Route to Novel Mixed-Anion Materials

20:00-20:30 I-6 **Bernard Dam**

Delft University of Technology, Netherlands

Bernard Dam, Giorgio Colombi, Diana Chaykina, Zying Wu, Gilles A. De Wijs, Shresta Banerjee, Arno P. M. Kentgens, Stephan W. H. Eijt

Photochromism in Rare-Earth Oxyhydride thin films

Wednesday, December 8, 2021

JST (UTC+9)

10:00-12:00 Poster Session 1
1P-1 ~ 1P-52

12:00-13:00 Lunch Break

Chairperson: Katsuro Hayashi *Kyushu University*

13:00-13:30 I-7 **Satoru Matsuishi**
Tokyo Institute of Technology, Japan
Hydride ligand effect in rare-earth activated oxyhydride phosphors

13:30-14:00 I-8 **Kang Min Ok**
Sogang University, South Korea
Chiral Template-Assisted Synthesis of Coordination Compounds with Noncentrosymmetric Structures

14:00-14:30 I-9 **Yuji Masubuchi**
Hokkaido University, Japan
Crystal growth of ferroelectric BaTaO₂N perovskite using a BaCN₂ flux

14:30-15:00 Break

Chairperson: Satoru Matsuishi *Tokyo Institute of Technology*

15:00-15:30 I-10 **Akihide Kuwabara**
Japan Fine Ceramics Center, Japan
Akihide Kuwabara and Susumu Fujii
Local structure and anion diffusion in mixed anion compounds

15:30-16:00 I-11 **Hiraku Ogino**
National Institute of Advanced Industrial Science and Technology (AIST), Japan
Development of a series of functional materials by layered mixed-anion compounds

16:00-16:30 I-12 **Katsuro Hayashi**
Kyushu University, Japan
Point Defects and Unique Behaviors in Hydride Agent-Reduced Simple Perovskites

16:30-17:00 Break

Chairperson: Akihide Kuwabara *Japan Fine Ceramic Center (JFCC)*

17:00-17:30 I-13 Setsuhisa Tanabe
Kyoto University, Japan
Setsuhisa Tanabe, Jumpei Ueda, Yuuki Kitagawa
Unique luminescence of lanthanides in mixed-anion ligand fields

17:30-18:00 I-14 Tatsumi Ishihara
Kyushu University, Japan
Tatsumi Ishihara and Maksymilian Kluczny
Oxide Ion Conductivity in Bismuth Niobium Oxychloride, $\text{Bi}_4\text{NbO}_8\text{Cl}$

18:00-18:30 I-15 Nobuhito Imanaka
Osaka University, Japan
Monovalent Bromide Anion Conducting Solids Based on LaOBr

18:30-19:00 Break

Chairperson: Takafumi Yamamoto *Tokyo Institute of Technology*

19:00-19:30 I-16 J. Paul Attfield
University Edinburgh, UK
Simon D. Kloß and J. Paul Attfield
New High Oxidation State Transition Metal Nitrides

19:30-20:00 I-17 Kazunari Domen
The University of Tokyo, Japan
Particulate Photocatalysts for Solar Hydrogen Production using Mixed-Anion & -
Cation Compounds

20:00-20:30 I-18 Gang Liu
Shenyang National Laboratory for Materials Science, Chinese Academy of Sciences, China
Visible Light Responsive Titanium Oxides by Homogeneous Anion Doping

Thursday, December 9, 2021

JST (UTC+9)

10:00-12:00 Poster Session 2
2P-1 ~ 2P-53

12:00-13:00 Lunch Break

13:00-16:30 Young Oral Session

Chairperson: Yasuto Noda *Kyoto University*

13:00-13:20 O-1 **Congling Yin**
Guilin University of Technology, China
Ji Ruiwen, Cécile Genevois, Wenda Zhang, Mathieu Allix, Congling Yin, Xiaojun Kuang
Multiple Anion Chemistry for Ionic Layer Thickness Tailoring in $\text{Bi}_{2+2n}\text{O}_{2+2n}\text{Se}_n\text{X}_2$ ($\text{X} = \text{Cl}, \text{Br}$) van der Waals Semiconductors

13:20-13:40 O-2 **Daichi Kato**
Kyoto University, Japan
Daichi Kato, Akinobu Nakada, Ryky Nelson, Hikaru Takahira, Masayoshi Yabuuchi, Masanobu Higashi, Hajime Suzuki, Maria Kirsanova, Naoji Kakudou, Cédric Tassel, Takafumi Yamamoto, Craig M. Brown, Richard Dronskowski, Akinori Saeki, Artem Abakumov, Hiroshi Kageyama, and Ryu Abe
Conduction Band Control of Oxyhalides with a Triple-Fluorite Layer for Visible Light Photocatalysis

13:40-14:00 O-3 **Akinobu Miyoshi**
Tokyo Institute of Technology, Japan
Akinobu Miyoshi, Junie Jhon M. Vequizo, Akihide Kuwabara, Shunta Nishioka, Shunsuke Nozawa, Akira Yamakata, Koji Kimoto, Kazuhiko Maeda
Effect of Nitrogen/Fluorine Codoping on the Photocatalytic Activity of Rutile TiO_2

14:00-14:20 O-4 **Sandy AL Bacha**
Université de Lille, CMRS, France
Sandy AL Bacha, Sébastien Saitzek, Emma McCabe, Houria Kabbour
Polar oxysulfides for water splitting photocatalysis

14:20-14:40 O-5 **Kosuke Nakano**
Japan Advanced Institute of Science and Technology (JAIST), Japan
Genki I. Prayogo, Andrea Tirelli, Keishu Utimula, Kenta Hongo, Ryo Maezono, and Kousuke Nakano
Generation of disordered crystal structure models based on combinatorial group theory

14:40-14:50 Break

Chairperson: Yoshihiro Tsujimoto *National Institute for Materials Science (NIMS)*

- 14:50-15:10 O-6 Hirofumi Akamatsu**
Kyushu University, Japan
Hirofumi Akamatsu, Keisuke Ishibuchi, Suguru Yoshida, Saneyuki Ohno, Katsuro Hayashi
Fluorination-Induced Rotations of Anion Coordinated Octahedra in a Layered Perovskite NaLaTiO₄
- 15:10-15:30 O-7 Jacob Olchowka**
CNRS, Université de Bordeaux, France
Jacob Olchowka, Long H. B. Nguyen, Runhe Fang, Rafaël Bianchini Nuernberg, Chloé Pablos, Dany Carlier, Sophie Cassaignon, Christian Masquelier, and Laurence Croguennec
Impact of F⁻ for O²⁻ substitution in Na₃V³⁺_{2-y}V⁴⁺_y(PO₄)₂F_{3-y}O_y on their structural and electrochemical properties
- 15:30-15:50 O-8 Edouard Boivin**
Université de Lille, CMRS, France
Edouard Boivin, Frédérique Pourpoint, Sébastien Saitzek, Marielle Huvé, Pascal Roussel, Houria Kabbour
Manipulation of the anionic and cationic sub-lattices of pyrochlores
- 15:50-16:10 O-9 Giorgio Colombi**
Delft University of Technology, Netherlands
Giorgio Colombi, Rens Stigter, Diana Chaykina, Shresta Banerjee, Arno P. M. Kentgens, Stephan W. H. Eijt, Bernard Dam, Gilles A. De Wijs
A strategy to model stability, optical properties, and H-mobility in anion-disordered oxyhydrides
- 16:10-16:30 O-10 Ziying Wu**
Delft University of Technology, Netherlands
Ziying Wu, Tom de Krom, Giorgio Colombi, Diana Chaykina, Gijs van Hattem, Henk Schut, Marcel Dickmann, Werner Egger, Christoph Hugenschmidt, Ekkes H. Brück, Bernard Dam, Stephan W. H. Eijt
Photochromism of oxyhydride films studied by Positron Annihilation Spectroscopy
- 16:30-17:00 Break**

Chairperson: Yuji Masubuchi *Hokkaido University*

- 17:00-17:30 I-19 Kengo Oka**
Kindai University, Japan
Kengo Oka, Yusuke Nambu, Masayuki Ochi, Naoaki Hayashi, Yoshihiro Kusano, Takuya Aoyama, Yui Ishii, Kazuhiko Kuroki, Shigeo Mori, Mikio Takano, Naoki Noma, Mitsunobu Iwasaki and Hiroshi Kageyama
Spin reorientation in layered perovskite oxyfluoride Pb₃Fe₂O₅F₂

- 17:30-18:00 I-20 Tetsuya Hasegawa**
The University of Tokyo, Japan
Tetsuya Hasegawa, Tsukasa Katayama, Akira Chikamatsu, Yasushi Hirose
Topochemical Fluorination and Electric Conductivity of Perovskite Nickelate Epitaxial Thin Films
- 18:00-18:30 I-21 Laurent Cario**
Université de Nantes, France
Laurent Cario, Shunsuke Sasaki, Louis Béni Mvélé, Catherine Guillot-Deudona, Maria Teresa Caldesa, Isabelle Braems, Benoît Corrazea, Etienne Janoda and Stéphane Jobica
Chalcogenide topochemistry and the design of metastable oxy-chalcogenide materials
- 18:30-19:00 Break**
- Chairperson: Kengo Oka** *Kindai University*
- 19:00-19:30 I-22 Amparo Fuertes**
Institut de Ciència de Materials de Barcelona (ICMAB-CSIC), Spain
Polar Hexagonal Oxynitride Perovskites
- 19:30-20:00 I-23 Richard Dronskowski**
RWTH Aachen University, Germany
Novel nitrogen-based solids by means of synthetic and theoretical approaches
- 20:00-20:30 I-24 Joke Hadermann**
University of Antwerp, Belgium
Maria Batuk, Daphne Vandemeulebroucke, Joke Hadermann
3D ED for determining anion order, ex situ and in situ

Friday, December 10, 2021

JST (UTC+9)

Chairperson: Hiroshi Kageyama *Kyoto University*

- 10:00-10:30 I-25 John B. Wiley**
University of New Orleans, USA
Topochemical Modification of Layered Perovskites
- 10:30-10:30 I-26 James M. Rondinelli**
Northwestern University, USA
Structure and Function of Heteroanionic Ruddlesden-Popper Oxyfluorides
- 11:00-11:30 I-27 Hans-Conrad zur Loye**
University of South Carolina, USA
Gregory Morrison, Allison Latshaw, Darren Carone, Vladimir Klepov, Luiz Jacobson, Adrian Hines, Gyanendra Ayer, Mark Smith, Hans-Conrad zur Loye
Anion-Directed Design of Functional Solid-State Materials
- 11:30-12:00 I-28 Kenneth R. Poeppelmeier**
Northwestern University, USA
Fenghua Ding, Nenian Charles, Jaye K. Harada, Christos D. Malliakas, Chi Zhang, Roberto dos Reis, Kent J. Griffith, Matthew L. Nisbet, Weiguo Zhang, P. Shiv Halasyamani, Vinayak P. Dravid, James M. Rondinelli and Kenneth R. Poeppelmeier
Perovskite-like K_3TiOF_5 Exhibits (3+1)-Dimensional Commensurate Structure Induced by Octahedrally Coordinated Potassium Ions
- 12:00-12:20 Closing**

Poster Session 1 (Online)

Wednesday, December 8, 2021

10:00-12:00 JST (UTC+9)

- 1P-01 Haobo Li** *Kyoto University, Japan*
Hao-Bo Li, Shunsuke Kobayashi, Chengchao Zhong, Morito Namba, Yu Cao, Daichi Kato, Yoshinori Kotani, Qianmei Lin, Maokun Wu, Wei-Hua Wang, Masaki Kobayashi, Koji Fujita, Cédric Tassel, Takahito Terashima, Akihito Kuwabara, Yoji Kobayashi, Hiroshi Takatsu, Hiroshi Kageyama
Dehydration of electrochemically protonated oxide
- 1P-02 Takafumi Yamamoto** *Tokyo Institute of Technology, Japan*
Mixed-Anion Chemistry of Vanadium-Based Oxyhydrides
- 1P-03 Kazuhiko Matsumoto** *Kyoto University, Japan*
Kazuhiko Matsumoto, Hiroki Yamamoto, Daigorou Hirai, Zenji Hiroi, Rika Hagiwara
Mechanism of the Fluorination Reaction of WO₃ and Poly(tetrafluoroethylene)
- 1P-04 Hiroshi Takatsu** *Kyoto University, Japan*
Hiroshi Takatsu, Masayuki Ochi, Morito Namba, Haobo Li, Aurelien Daniel, Takahito Terashima, Kazuhiko Kuroki and Hiroshi Kageyama
Strain-Assisted Topochemical Synthesis of La-Doped SrVO₂H Films
- 1P-05 Yang Yang** *Kyoto University, Japan*
Yang Yang, Tong Zhu, Yuki Matsumoto, Tomohiro Hayashi and Hiroshi Kageyama
High-pressure Synthesis and Order-disorder Transition of Layered Oxytelluride Ba₂ZnO₂Ag₂Te₂
- 1P-06 Akira Miura** *Hokkaido University, Japan*
Akira Miura, Shinji Noguchi, Hayato Sakai, Yu Nomata, Nataly Carolina Rosero-Navarro, Kiyoharu Tadanaga
Metathesis reactions for producing nitrides, oxynitrides and composites
- 1P-07 Ya Tang** *Shanghai University, China*
Ya Tang, Qingshang Xu
Synthesis of titanium oxyfluoride CsTi₂O_{2.85}F_{3.15} from a layered oxide
- 1P-08 Peng Song** *Japan Advanced Institute of Science and Technology (JAIST), Japan*
Peng Song, Yuji Masubuchi, Kousuke Nakano, Ryo Maezono, Kenta Hongo
Evolutionary crystal structure search for high-pressure phases of alkali-metal carbodiimide
- 1P-09 Sara A. Lopez-Paz** *Universidad Complutense de Madrid, Spain*
S.A. López Paz, H. Kageyama, M.A. Alario-Franco
Topochemical modification of complex iron oxides with perovskite related structure
- 1P-10 Cédric Bourgès** *National Institute for Materials Science (NIMS), Japan*
Yanan Wang, Cédric Bourgès, Ralph Rajamathi, C. Nethravathi, Michael Rajamathi, Takao Mori
The effect of reactive electric field-assisted sintering of MoS₂/Bi₂Te₃ on the phase integrity of Bi₂Te₃: Formation of Bi₂Te₂S mixed anion phase

- 1P-11** **Miki Inada** *Kyushu University, Japan*
Miki Inada, K. Hongo, R. Maezono, K. Hayashi
Synthesis and Structural Analysis of $\text{BaTiO}_{3-x}(\text{OH})_x$ tetragonal nanorods via hydrothermal precipitation method
- 1P-12** **Kantaro Murayama** *Kyoto University, Japan*
Kantaro Murayama, Morito Namba, Hiroshi Takatsu, Hiroshi Kageyama
Ca substitution effect in the two-dimensional electron system $\text{SrVO}_{2.2}\text{N}_{0.6}$ with superlattices of anion vacancy
- 1P-13** **Yusuke Chiba** *Kanagawa University, Japan*
Yusuke Chiba, Kengo Shibata, Hiroshi Takatsu, Kotaro Fujii, Miwa Saito, Hiroshi Kageyama, Kazuhiko Maeda, Masatomo Yashima, Teruki Motohashi
High-Temperature Electrochemical Crystal Growth of Titanium Oxyfluorides
- 1P-14** **Angela Möller** *Johannes Gutenberg-Universität Mainz, Germany*
Anna Katharina Weber and Angela Möller
Multi-Anionic Systems of the Salt Inclusion Type
- 1P-15** **Peter Lemmens** *Technische Universität Braunschweig, Germany*
Peter Lemmens, Dirk Wulferding, Angela Möller, Reinhard K. Kremer, F. C. Chou and Robert Glaum
Mixed versus complex anions as mediators and control of cooperativity
- 1P-16** **Kyohei Koyama** *Hokkaido University, Japan*
Kyohei Koyama, Yuji Masubuchi, Mikio Higuchi
Morphology design of perovskite-type oxynitride BaTaO_2N prepared using $\text{BaCN}_2 / \text{Ta}_2\text{O}_5$
- 1P-17** **Genki Imam Prayogo** *Japan Advanced Institute of Science and Technology (JAIST), Japan*
Genki I. Prayogo, Andrea Tirelli, Keishu Utimula, Kenta Hongo, Ryo Maezono and Kousuke Nakano
Application of canonical augmentation to disordered crystal structure generation
- 1P-18** **Yoshiyuki Inaguma** *Gakushuin University, Japan*
Yoshiyuki Inaguma, Ken Sugimoto, Narumi Yamada, Mana Iwaoka, Takuya Takami, Kevin Lemoine, Kazuhiro Yamamoto, Koichiro Ueda, Tetsuhiro Katsumata, Yasuhiro Yoneda
Synthesis of Oxyfluorides: An Approach Adopting the HSAB Principle
- 1P-19** **Fumitaka Takeiri** *Institute for Molecular Science, Japan*
Fumitaka Takeiri, Tasuku Uchimura, Takashi Saito, Takashi Kamiyama, Genki Kobayashi
Mechanochemical preparation of oxyhydride $\text{BaTiO}_{3-x}\text{H}_x$ for use as a hydrogen permeable electrode
- 1P-20** **Naoki Tarutani** *Hiroshima University, Japan*
Naoki Tarutani, Yuki Kinoshita, Souta Urushidani, Eiki Kikuchi, Kiyofumi Katagiri, Kei Inumaru
A Comparative Study of Formation Process of Metal Oxynitrides Using Various Solid-State Nitriding Agents and Metal Compound Precursors

- 1P-21 Shunsuke Sasaki** *University of Oxford, UK*
Shunsuke Sasaki, Souvik Giri, Simon Cassidy, Sunita Dey, Maria Batuk, Daphne Vandemeulebroucke, Clare Grey, Joke Hadermann, Simon Clarke
Topochemistry of $\text{Sr}_2\text{MnO}_2(\text{Li,Cu})_x\text{S}_2$ ($x = 0.5-1.9$); Anion Redox and Collapse of Their Metal Sulphide Layers
- 1P-22 Koji Okada** *Kyoto University, Japan*
Koji Okada, Shenghan Gao, Cédric Tassel, Susumu Fujii, Akihide Kuwabara, Hiroshi Kageyama
Synthesis of potassium-rich antiperovskites
- 1P-23 Morito Namba** *Kyoto University, Japan*
Morito Namba, Haobo Li, Takahito Terashima, Hiroshi Takatsu, Hiroshi Kageyama
 $\text{SrCoO}_{2.5}\text{F}_{0.5}$ Thin Films Synthesized by the Ionic-Liquid-Gating Fluorine Insertion
- 1P-24 Hiroki Yamaguchi** *Tokyo University of Science, Japan*
Hiroki Yamaguchi, Syotaro Yuzawa, Kenta Kuramochi, S. Pavan Kumar Naik, Taichiro Nishio, Hiroshi Eisaki, Hiraku Ogino
Substitution effect in LaFe_2Ge_2 with anti-fluorite FeGe layers
- 1P-25 Louis Mvélé** *Université de Nantes, CNRS, France*
Louis Mvélé, S. Sasaki, M.T. Caldes, C. Guillot-Deudon, E. Gautron, I. Braems, J. Etienne, B. Corraze, Stephane Jobic, Laurent Cario
Topochemical deinsertion of sulfur to form new metastable rare earth oxysulfides materials
- 1P-26 Zefeng Wei** *Kyoto University, Japan*
Zefeng Wei, Hiroki Ubukata, Cédric Tassel, Kageyama Hiroshi
High-pressure Synthesis of $\text{Sr}_2\text{LiCl}_2\text{HO}$ with In-plane Anion Disorder
- 1P-27 Masayuki Ochi** *Osaka University, Japan*
Masayuki Ochi, Naoya Kitamine, Kazuhiko Kuroki
First-principles study on transition metal oxyhydrides: stability of anion ordering and possible unconventional superconductivity
- 1P-28 Naoki Sato** *National Institute for Materials Science (NIMS), Japan*
Naoki Sato, Norihide Kuroda, Shun Nakamura, Yukari Katsura, Ikuzo Kanazawa, Kaoru Kimura, Takao Mori
Bonding Heterogeneity in Mixed-Anion Compounds Realizes Ultralow Lattice Thermal Conductivity
- 1P-29 Takuya Hoshina** *Tokyo Institute of Technology, Japan*
Takuya Hoshina, Takahiro Yamada, Shicheng Peng, Sou Yasuhara, Takaaki Tsurumi
Fabrication and Dielectric Properties of N-doped BaTiO_3 Single Crystals
- 1P-30 Shunsaku Kitagawa** *Kyoto University, Japan*
Shunsaku Kitagawa, Takeshi Kawamura, Kenji Ishida, Yuta Mizukami, Shigeru Kasahara, Takasada Shibauchi, Takahito Terashima and Yuji Matsuda
Antiferromagnetic fluctuations as a pairing interaction in iron-based superconductor $\text{BaFe}_2(\text{As}_{1-x}\text{P}_x)_2$

- 1P-31** **Ryo Ohtani** *Kyushu University, Japan*
Polarity switchable mixed-anion skeleton constructed by penta-coordinate metal complex units
- 1P-32** **Daigorou Hirai** *The University of Tokyo, Japan*
Daigorou Hirai, Takeshi Yajima, Kazuhiro Nawa, Mitsuaki Kawamura and Zenji Hiroi
Frustrated magnetism of 5d transition metal mixed-anion compound $A_3\text{ReO}_5\text{Cl}_2$ (A = Ba, Sr, Ca)
- 1P-33** **Shicheng Peng** *Tokyo Institute of Technology, Japan*
Shicheng Peng, Sou Yasuhara, Takaaki Tsurumi, Takuya Hoshina
Fabrication and Dielectric Properties of $\text{Ba}(\text{Ti},\text{Nb})(\text{O},\text{N})_3$ Epitaxial Thin Films
- 1P-34** **Takuya Aoyama** *Tohoku University, Japan*
Takuya Aoyama, Rinto Nojima, Yoshinori Imai and Kenya Ohgushi
Pressure-induced orbital switching in iron-based ladder material $\text{BaFe}_2(\text{S}_{1-x}\text{Se})_3$
- 1P-35** **Ksenia Denisova** *Technical University of Braunschweig, Germany*
Ksenia Denisova, Peter Lemmens, Kantaro Murayama, Xiangyu Gu, Hiroshi Takatsu, Cedric Tassel, Hiroshi Kageyama
Ferroelectric-like structural transitions in metallic materials: a comparison of LiOsO_3 and LiReO_3 based on Raman scattering
- 1P-36** **Ryota Shimizu** *Tokyo Institute of Technology, Japan*
Ryota Shimizu, Yuya Komatsu and Taro Hitosugi
Repeatable Photoinduced Insulator-to-Metal Transition in Yttrium Oxyhydride Epitaxial Thin Films
- 1P-37** **Takahiro Baba** *National Institute for Materials Science (NIMS), Japan*
Takahiro Baba, Tetsuya Baba, Takao Mori
Development of the thermo-reflectance method for thermal conductivity measurement of thin films and small crystals
- 1P-38** **Takuma Nishimura** *The University of Tokyo, Japan*
Takuma Nishimura, Tsukasa Katayama, Shishin Mo, Akira Chikamatsu, Tetsuya Hasegawa
Improvement of electric insulation in dielectric layered perovskite nickelate films via fluorine doping
- 1P-39** **Wenhao Zhang** *National Institute of Materials Science (NIMS), Japan*
Justin Mark, Wenhao Zhang, Kazuhiko Maeda, Takafumi Yamamoto, Hiroshi Kageyama, Takao Mori
Lattice Dynamics and Low Thermal Conductivity of Mixed Anion Compound $\text{Sn}_2\text{SbS}_{2-x}\text{Se}_x\text{I}_3$ ($x = 0, 0.2, 0.5$)
- 1P-40** **Hiroaki Hayashi** *National Institute for Materials Science (NIMS), Japan*
Hiroaki Hayashi, H. Yoshida, Y. Matsushita, K. Yamaura
Magnetic Properties of $S = 21/2$ Frustrated Ferromagnetic Trimer $\text{Gd}_3\text{Os}_4\text{Al}_{12}$
- 1P-41** **Masato Tsuchii** *The University of Tokyo, Japan*
Masato Tsuchii, Zhen Chen, Yasushi Hirose and Tetsuya Hasegawa
Large potential fluctuation in conduction band minimum of amorphous zinc oxysulfide thin films

- 1P-42 Ryo Maezono** *Japan Advanced Institute of Science and Technology (JAIST), Japan*
Ryo Maezono, Kousuke Nakano, Kenta Hongo, Peng Song
Ternary high- T_c superconducting hydrides with clathrate structure formed by LaH_{24} and YH_{24} cages
- 1P-43 Asahi Kato** *National Institute for Materials Science (NIMS), Japan*
Asahi Kato, Daniel Gutiérrez, Cédric Bourguès, Yanan Wang, Takeaki Sakurai, Takao Mori
Developing polymer hybrid thermoelectric materials based on mixed anion skutterudite
- 1P-44 Yusuke Nambu** *Tohoku University, Japan*
How to analyse magnetic structure through neutron diffraction
- 1P-45 Kang Xun** *National Institute for Materials Science (NIMS), Japan*
Kang Xun, Kazunari Yamaura
High-Pressure Synthesis and Ferrimagnetism of Perovskites Mn_2VMO_6 ($\text{M}=\text{Nb}, \text{Ta}$)
- 1P-46 Tong Zhu** *Kyoto University, Japan*
Tong Zhu, Fabio Orlandi, Pascal Manuel, Alexandra Gibbs, Weiguo Zhang, Shiv Halasyamani and Michael Hayward
Directed Synthesis of a Hybrid Improper Magnetoelectric Multiferroic Material
- 1P-47 Kenji Oqmhula** *Japan Advanced Institute of Science and Technology (JAIST), Japan*
Kenji Oqmhula, Kenta Hongo, Ryo Maezono, Kousuke Nakano
First-principles-based search for new ThCr_2Si_2 -type superconductors
- 1P-48 Yatsu Yudai** *Shibaura Institute of Technology, Japan*
Yudai Yatsu, Sugali Pavan Kumar Naik, Shigeyuki Ishida, Naomichi Sakai, Tetuo Oka, Masato Murakami, Hiraku Ogino
Single crystals growth of iron-based superconductors with perovskite-type blocking layers
- 1P-49 Masaya Usuda** *Shibaura Institute of Technology, Japan*
M. Usuda, N. Sakai, T. Oka, M. Murakami, K. Kuramochi, T. Nishio, K. Horigane, J. Akimitsu, T. Uchiyama, Y. Uchimoto, H. Fujihisa, Y. Gotoh, H. Ogino
Synthesis and physical properties of Ba-based iridium oxyfluoride by topochemical reaction
- 1P-50 Hongcheng Lu** *Huazhong University of Science and Technology, China*
Hongcheng Lu, Hiroshi Kageyama
Experimental Realization of Low Dimensional Quantum Magnets
- 1P-51 Yagisawa Masaya** *Tokyo Institute of Technology, Japan*
Masaya Yagisawa, Satoru Matsuishi
Computational and experimental study of inverse perovskite oxides Yb_3TtO ($\text{Tt} = \text{Si}, \text{Ge}$) as candidates for thermoelectric materials
- 1P-52 Yuta Tsuji** *Kyushu University, Japan*
Yuta Tsuji, Kazunari Yoshizawa
Mixed Anion Control of Catalytic Activity

Poster Session 2 (Online)

Thursday, December 9, 2021

10:00-12:00 JST (UTC+9)

- 2P-01 Takuya Ohmi** *Tokyo Institute of Technology, Japan*
Takuya Ohmi, Tomoaki Miura, Tadaaki Ikoma, Masaki Azuma and Takafumi Yamamoto
Structural Transition and Photophysical Properties of Mixed-Anion Layered Perovskite (MA)₂PbI_{2-x}Br_x(SCN)₂
- 2P-02 Tomoko Yoshida** *Osaka City University, Japan*
Muneaki Yamamoto, Yuma Kato, Tetsuo Tanabe, Tomoko Yoshida
Application of nitrogen doping to the fabrication of visible light response metal oxide photocatalysts
- 2P-03 Jingwen Wang** *Tohoku University, Japan*
Jingwen Wang, Takuya Hasegawa, Yusuke Asakura, Shu Yin
Effects of morphology tuning and oxide defect on photocatalytic activity of calcium stannate
- 2P-04 Shunta Nishioka** *Tokyo Institute of Technology, Japan*
Shunta Nishioka, Miki Inada, Kazuhiko Maeda
Microwave Assisted Synthesis and Photocatalytic Water Splitting of Nitrogen and Tantalum Codoped Rutile Titanium Dioxide
- 2P-05 Chengchao Zhong** *Kyoto University, Japan*
Chengchao Zhong, Daichi Kato, Kanta Ogawa, Cédric Tassel, Fujio Izumi, Hajime Suzuki, Shogo, Kawaguchi, Takashi Saito, Akinori Saeki, Ryu Abe and Hiroshi Kageyama
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- 2P-10** **Yuuki Kitagawa** *Kyoto University, Japan*
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- 2P-19 Makoto Kobayashi** *Nagoya University, Japan*
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- 2P-29 Takuya Kimura** *Osaka Prefecture University, Japan*
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- 2P-39** **Toshiyuki Matsunaga** *Kyoto University, Japan*
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- 2P-46** **Kotaro Fujii** *Tokyo Institute of Technology, Japan*
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