

MI<sup>2</sup>I最終成果報告会 ポスターセッション/Final debrief meeting Poster session

Group A 2月19日(水) 12:30-13:30 中会議室 1~4

Group B 2月20日(木) 12:30-13:30 中会議室 1~4

Group	No.	Title	Author
<b>Battery Materials Group/蓄電池材料グループ</b>			
A	BMG01	Activity report of Battery Materials Group, FY2019	M. Nakayama, Y. Tateyama, K. Sodeyama
B	BMG02	Machine-learning Algorithms for Efficient Exploration of Interface Structures	Masayuki Karasuyama, Tomohiro Yonezu, Tomoyuki Tamura, and Ichiro Takeuchi
A	BMG03	Liquid electrolyte informatics for secondary batteries	Keitaro Sodeyama
B	BMG04	High-throughput construction of force-fields for solid state electrolyte materials	Ryo KOBAYASHI, Y. Miyaji, K. Nakano, M. Nakayama
A	BMG05	Search for oxide-based solid electrolytes	Kazunori Takada
B	BMG06	Li+ Transport Mechanism at the Heterogeneous Cathode/Solid Electrolyte Interface in an All-Solid-State Battery via the First- Principles Structure Prediction Scheme	GAO BO, Randy Jalem, Yanming Ma, Yoshitaka Tateyama
A	BMG07	Investigating the effects of local chemistry on diffusion in Spinel; simulating cooperative diffusion in MgAl <sub>2</sub> O <sub>4</sub>	Robyn E. Ward, Masanobu Nakayama
B	BMG08	Machine learning prediction of coordination energies for alkali group elements in battery electrolyte solvents	Atsushi Ishikawa, Keitaro Sodeyama, Yasuhiko Igarashi, Tomofumi Nakayama, Yoshitaka Tateyama and Masato Okada
A	BMG09	Active-learning-based efficient prediction of ab initio atomic energy	Tomoyuki Tamura, Masayuki Karasuyama
B	BMG10	Bayesian Optimization Technology for Efficient Battery Material Discovery	Ichiro Takeuchi, Kosei Sato, Kenta Kanamori, Yu Inatsu, Kazuaki Toyoura, Masanobu Nakayama
<b>Magnet Materials Group/磁石材料グループ</b>			
A	MMG01	Magnet Materials Group	Takashi Miyake and Hiori Kino
B	MMG02	Automation of the first-principles calculation to search functional materials in high entropy alloys	Hiori Kino
A	MMG03	Structuring knowledge – Case study for magnetic materials	Riichiro Mizoguchi and Hiori Kino
B	MMG04	Estimation of materials parameters based on the information from microstructure	Toshiyuki Koyama, Shun Suzuki, Daiki Kato, Yuhki Tsukada
<b>Thermal Management Materials Group/伝熱制御材料グループ</b>			
A	TMMG01	Progresses in thermal management materials accelerated by MI	Yibn XU
B	TMMG02	Corelation between Thermoelectric Properties of Si-Au Thin Films and Process Parameters	Yoshikazu Shinohara
A	TMMG03	Ultra-narrowband wavelength-selective thermal emitter with multilayered metamaterials designed by Bayesian optimization	Atsushi Sakurai, Kyohei Yada, Tetsushi Simomura, Shenghong Ju, Makoto Kashiwagi, Hideyuki Okada, Tadaaki Nagao, Koji Tsuda, Junichiro Shiomi
B	TMMG04	Designing Thermal Function Materials via Materials Informatics	Yuxuan Liao, Shenghong Ju, Atsushi Sakurai, Ryo Yoshida, Koji Tsuda, and Junichiro Shiomi

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A	TMMG05	High-Throughput Screening of Novel Functional Thin Films by Combinatorial Sputter Coating System (COSCOS).	Masahiro Goto, Sasaki Michiko, Yibn XU
B	TMMG06	Combinatorial Gradient Material Screening	Sasaki Michiko, Yibn XU, Masahiro Goto
A	TMMG07	Machine Learning Assisted Synthesis of Fe-Al-Si Thermoelectric Material (FAST)	Yoshiki Takagiwa, Zhufeng Hou, Yoshikazu Shinohara, Yibin Xu, Koji Tsuda
B	TMMG08	Thermal Management and Development of Composite Thin Films by Material Informatics	Yen-Ju Wu, Yibin Xu, Michiko Sasaki, Masahiro Goto
A	TMMG09	The summary of the our themes in the past five years 1. New absolute measurement method for thermal conductivity 2. New production method of nanodots	Yoichi Okamoto,
B	TMMG10	Development of thermophysical property database for materials informatics	Tetsuya Baba,
A	TMMG11	Data driven approach to materials design for high thermal conductivity materials	Kenta Hongo,
B	TMMG12	Preparation of Processable High Thermal Conductive Polyimide films	Yuka Tamao, Masa-aki Kakimoto, Stephen Wu, Ryo Yoshida, Yibin Xu and Junko Morikawa
<b>Data Science Group/データ科学グループ</b>			
B	DSG01	Overview of Data Science Group	Koji Tsuda, Ryo Tamura
A	DSG02	Phase diagram construction by machine learning	Ryo Tamura, Kei Terayama and Koji Tsuda
B	DSG03	Structure determination of catalytic nanomaterials based on genetic algorithm	Toshiaki Taniike
A	DSG04	Development and Application of Computational Methods for Data-Driven Exploration of Electronic Materials	Fumiyasu Oba, Akira Takahashi, Yu Kumagai
B	DSG05	Construction of neural network potential to examine complicated systems and phenomena	Satoshi Watanabe
A	DSG06	Media Platform for Materials Informatics	Jun Fujima
B	DSG07	Development of unexplored materials by combining DFT calculation, machine learning and experiment	Isao Ohkubo, Zhufeng Hou, Koji Tsuda
A	DSG08	Correlation analysis of local quantities in disordered alloys	Shoji Ishibashi
B	DSG09	Objective and Rapid Crystal Structure Analysis by Integration of Measurement Informatics and Database	Masashi Ishii, Testuya Ozawa
A	DSG10	Symmetry-based segmentation of heterogeneous data sets of inorganic crystal materials into homogeneous ones for better regression	Yuzuru Tanaka, Jun Fujima, Keisuke Takahashi
B	DSG11	Data science application for exploration of 2D magnets, analysis on XAS, and identification of OCM reaction	Itsuki Miyazato, Keisuke Takahashi
A	DSG12	Development of a linear-scaling DFT code and machine-learning forces	Tsuyoshi Miyazaki, Ryo Tamura
B	DSG13	Sparse modeling for a data-driven approach in material sciences	Yasuhiko Igarashi,
A	DSG14	Sparse phase retrieval algorithm for coherent x-ray diffraction imaging	Yuichi Yamasaki, Y. Yokoyama, T. Arima, and M. Okada

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Group	No.	Title	Author
B	DSG15	Monte Carlo tree search for materials design	Dieb Sae, Tsuda Koji
A	DSG16	Ontology and Materials Informatics: Scientists's Cognitive Representation and Standardization of Materials Data and Knowledge	Lauren Nicole Takahashi,
B	DSG17	Materials and Catalyst Informatics: Searching for Novel Materials and Catalysts	Keisuke Takahashi
A	DSG18	Data-driven spectral analysis method in electron-beam based techniques	Da Bo, J.W. Liu, H. Yoshikawa, and S. Tanuma
B	DSG19	Automated generation of reconstructed nonpolar stoichiometric slab models	Yoyo Hinuma, Takashi Kamachi, and Nobutsugu Hamamoto
A	DSG20	Development of explainable material informatics core technologies	Dam Hieu-Chi, Hiori Kino, Takashi Miyake, and Kiyoyuki Terakura
B	DSG21	MateriApps - A Portal to Materials Science Simulation	Synge Todo
<b>Topological Analysis Group/トポロジカル解析グループ</b>			
A	TAG01	Overview of Topological Analysis Team	Kazuto Akagi, Shinji Kohara, Yasuaki Hiraoka
B	TAG02	Topological data analysis of magnetic domain structure	Masato Kotsugi, Yohei Onodera, Shinji Kohara, Shuta Tahara, Motoki, Shiga, Akihiko Hirata, Ippei Obayashi, Yasuaki Hiraoka, Osami Sakata
A	TAG03	Understanding diffraction patterns of glassy, liquid and amorphous materials via persistent homology analyses	Atsunobu Masuno
A	TAG04	Very sharp diffraction peak in liquid Er <sub>2</sub> O <sub>3</sub> with crystal-like homology	Shuta Tahara, Yohei Onodera, Shinji Kohara, Atsunobu Masuno, Ippei Obayashi, Yasuaki Hiraoka, Osami Sakata
A	TAG05	Origin of mixed alkali effect in silicate glass	Yohei Onodera, Ippei Obayashi, Yasuaki Hiraoka, Shinji Kohara
A	TAG06	Ring persistency in permanently densified silica glass	Shinji Kohara, Motoki, Shiga, Yohei Onodera, Akihiko Hirata, Ippei Obayashi, Yasuaki Hiraoka
B	TAG07	Topological data analysis of Grain Boundary structures	Fumiko Ogushi, Kazutoshi Inoue, Yasuaki Hiraoka, and Kazuto Akagi
<b>Materials Exploration Group/マテリアルズ探索グループ</b>			
B	MEG01	Research Activity in Materials Exploration Group	Tamio Oguchi and Koji Nakamura
A	MEG02	Development of Crystal Structure Prediction Method	Tomoki Yamashita, Shinichi Kanehira, Nobuya Sato, Hiori Kino, Koji Tsuda, Takashi Miyake, Tamio Oguchi
B	MEG03	Data analysis and prediction of structural and magnetic properties in metal multilayer films	Kohji Nakamura
A	MEG04	First-principles calculations on the thermodynamic stability of High Entropy Alloy	Masanori Enoki, Hiroshi Ohtani
B	MEG05	Machine learning potential and structure optimization	Atsuto Seko
A	MEG06	Accurately predicting grain boundary thermal conductivities in MgO from local atomic structures	Susumu Fujii, Tatsuya Yokoi, Craig A. J. Fisher, Hiroki

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Group	No.	Title	Author
B	MEG07	Recommender system of processing conditions for inorganic compounds based on a parallel	Hiroyuki Hayashi, Atsuto Seko, Isao Tanaka
A	MEG08	Experimental search for perpendicular magnetic anisotropy heterostructures	Seiji Mitani
B	MEG09	MLCC material exploration with private company	HIROKI MORIWAKE, Hiroki MORIWAKE, Hiroyuki HAYASHI, Isao TANAKA
A	MEG10	CALPHAD thermodynamics prepared for open science	TAICHI ABE
B	MEG11	Solid States in Mixed Anion Compounds: A First-Principles Study	SHITARA Kazuki
A	MEG12	Voltage control of magnetism	Yoshishige Suzuki
<b>Materials Descriptor Platform Group/物質・材料記述基盤グループ</b>			
A	MDPG01	XenonPy: Python Platform for Materials Informatics	Liu, C., Koyama, Y., and Yoshida, R.
B	MDPG02	Machine Learning of Crystal Growth Simulation	Yukinori Koyama
A	MDPG03	SPACIER: designing molecules using iQSPR coupled with first-principles calculation	Liu Chang, Yoh, Noguchi, Wu, Stephen, Ryo, Yoshida
B	MDPG04	iQSPR in XenonPy: a Bayesian molecular design algorithm and its application to polymer design	Stephen Wu, Yoh Noguchi, Wu Stephen, Ryo Yoshida, Chang Liu, Hironao Yamada, Yoh Noguchi, Guillaume Lambard, Ryo Yoshida
<b>Data Platform Group/データプラットフォームグループ</b>			
B	DPFG01	MI2I data infrastructure	Yibin XU, Junko Hosoya, Yuta Sakairi, Hiroyuki Yamasato
A	DPFG02	Report of Mi2i Data Platform	Hiroyuki Yamasato, Junko Hosoya, Isao Kuwajima, Yuta Sakairi, Yibin Xu
B	DPFG03	Inorganic Materials Database "AtomWork-Adv"	Yuta Sakairi, Yibin Xu, Junko Hosoya, Isao Kuwajima
A	DPFG04	Specific Heat Prediction On Web	Yuta Sakairi, Yibin XU, Tetsuya BABA, Erina FUJITA
B	DPFG05	Template Oriented Atomic Simulation Toolkit (TOAST): A python-based automatic framework for high-throughput electronic structure calculations	Junko Hosoya, Masao Arai, Nobutaka Nishikawa, Isao Kuwajima and Yibin Xu
<b>Cooperation Organization, Consortitium WWG, MaDIS/連携, コンソーシアム, MaDIS</b>			
A	CO01	データ駆動材料開発パートナーシップ	Uchibori Chihiro
B	CO02	Intellectual property issues in Materials Informatics	TAKADA Masahide
A	CO03	MI2 approach to modeling atmospheric corrosion of steel using synchrotron measurement	小澤 敬祐, 山本 慎太郎, 漆原 良昌, 芦 聡, 李 雷, 横山 和司, 高山 裕貴, 福山 直樹
B	CO04	Automatic translation of measurement data on materials data platform: M-DaC (Materials Data Conversion Tools)	Mineharu Suzuki, Hiroko Nagao, Shigeyuki Matsunami, and Hideki Yoshikawa

都合により発表はありません。

※ポスター発表は予告なく変更される場合があります。 V11