

- Yang, P.; Yoshimura, T.; Sasamori, T.; Tokitoh, N.; Morisaki, K.; Kawabata, T., Protonation-assisted Conjugate Addition of Axially Chiral Enolates: Asymmetric Synthesis of β -Lactams with Contiguous Tetrasubstituted Stereocenters from α -Amino Acids via Memory of Chirality, *Heterocycles*, **101**, 664-678 (2020).
- Takeuchi, H.; Fujimori, Y.; Ueda, Y.; Shibayama, H.; Nagaishi, M.; Yoshimura, T.; Sasamori, T.; Tokitoh, N.; Furuta, T.; Kawabata, T., Solvent-dependent Mechanism and Stereochemistry of Mitsunobu Glycosylation with Unprotected Pyranoses, *Org. Lett.*, **22**, 4754-4759 (2020).
- Gondo, N.; Tanigaki, Y.; Ueda, Y.; Kawabata, T., γ -Selective Vinylogous Aza-Morita-Baylis-Hillman Reaction with *N*-Carbamoylimines, *Synlett*, **31**, 398-402 (2020).
- Hamada, S.; Wang, S.; Murai, T.; Xing, Y.; Inoue, T.; Ueda, Y.; Sasamori, T.; Kawabata, T.; Furuta, T., Synthesis of Axially Chiral Binaphtho thiophene δ -Amino Acid Derivatives Bearing Chalcogen Bonds, *Heterocycles*, **101**, 328-338 (2020).
- Ninomiya, R.; Arai, K.; Chen, G.; Morisaki, K.; Kawabata, T.; Ueda, Y., β -Silicon-effect-promoted Intermolecular Site-selective C(sp³)-H Amination with Dirhodium Nitrenes, *Chem. Commun.*, **56**, 5759-5762 (2020).
- Nishino, R.; Hamada, S.; Elboray, E. E.; Ueda, Y.; Kawabata, T.; Furuta, T., Axial Chirality in Biaryl *N,N*-Dialkylaminopyridine Derivatives Bearing an Internal Carboxy Group, *Chirality*, **32**, 588-593 (2020).
- Kondo, Y.; Kadota, T.; Hirazawa, Y.; Morisaki, K.; Morimoto, H.; Ohshima, T., Scandium(III) Triflate Catalyzed Direct Synthesis of *N*-Unprotected Ketimines, *Org. Lett.*, **22**, 120-125 (2020).
- Morisaki, K.; Morimoto, H.; Ohshima, T., Recent Progress on Catalytic Addition Reactions to *N*-Unsubstituted Imines, *ACS Catal.*, **10**, 6924-6951 (2020).
- Sakai, H.; Inoue, H.; Murata, K.; Toba, T.; Takemoto, N.; Matsumoto, T.; Kawabata, T., Second Basic pKa: An Overlooked Parameter in Predicting Phospholipidosis-inducing Potential of Diamines, *Bioorg. Med. Chem. Lett.*, **30**(9), 126933 (2020).
- Advanced Inorganic Synthesis —
- Kuwa, M.; Harada, M.; Sato, R.; Teranishi, T., Ligand-stabilized CoO and NiO Nanoparticles for Spintronic Devices with Antiferromagnetic Insulators, *ACS Appl. Nano Mater.*, **3**, 2745-2755 (2020).
- Kim, S.; Mizuno, H.; Saruyama, M.; Sakamoto, M.; Haruta, M.; Kurata, H.; Yamada, T.; Domen, K.; Teranishi, T., Phase Segregated Cu_{2-x}Se/Ni₃Se₄ Bimetallic Selenide Nanocrystals Formed through the Cation Exchange Reaction for Active Water Oxidation Precatalysts, *Chem. Sci.*, **11**, 1523-1530 (2020).
- Kobiyama, E.; Tahara, H.; Sato, R.; Saruyama, M.; Teranishi, T.; Kanemitsu, Y., Reduction of Optical Gain Threshold in CsPbI₃ Nanocrystals Achieved by Generation of Asymmetric Hot biexcitons, *Nano Lett.*, **20**, 3905-3910 (2020).
- Zhang, J.; Kouno, H.; Yanai, N.; Eguchi, D.; Nakagawa, T.; Kimizuka, N.; Teranishi, T.; Sakamoto, M., Number of Surface-attached Acceptors on a Quantum Dot Impacts Energy Transfer and Photon Upconversion Efficiencies, *ACS Photonics*, **7**, 1876-1884 (2020).
- Liu, Z.; Jung, K. O.; Takahata, R.; Sakamoto, M.; Teranishi, T.; Fujitsuka, M.; Pratz, G.; Osakada, Y., Hard X-ray Excited Optical Luminescence from Protein-directed Au_{~20} Clusters, *RSC Advances*, **10**, 13824-13829 (2020).
- Masada, S.; Yamada, T.; Tahara, H.; Hirori, H.; Saruyama, M.; Kawakami, T.; Sato, R.; Teranishi, T.; Kanemitsu, Y., Effect of A-site Cation on Photoluminescence Spectra of Single Lead Bromide Perovskite Nanocrystals, *Nano Lett.*, **20**, 4022-4028 (2020).
- Shi, J.; Ge, W.; Zhu, J.; Saruyama, M.; Teranishi, T., Core–Shell CsPbBr₃@CdS Quantum Dots with Enhanced Stability and Photoluminescence Quantum Yields for Optoelectronic Devices, *ACS Appl. Nano Mater.*, **3**, 7563-7571 (2020).
- Nishino, T.; Saruyama, M.; Li, Z.; Nagatsuma, Y.; Nakabayashi, M.; Shibata, N.; Yamada, T.; Takahata, R.; Yamazoe, S.; Hisatomi, T.; Domen, K.; Teranishi, T., Self-activated Rh-Zr Mixed Oxide as a Nonhazardous Cocatalyst for Photocatalytic Hydrogen Evolution, *Chem. Sci.*, **11**(26), 6862-6867 (2020).
- Harada, M.; Kuwa, M.; Sato, R.; Teranishi, T.; Takahashi, M.; Maenosono, S., Cation Distribution in Monodispersed MFe₂O₄ (M = Mn, Fe, Co, Ni, and Zn) Nanoparticles Investigated by X-ray Absorption Fine Structure Spectroscopy: Implications for Magnetic Data Storage, Catalysts, Sensors, and Ferrofluids, *ACS Appl. Nano Mater.*, **3**, 8389-8402 (2020).
- DIVISION OF MATERIALS CHEMISTRY**
— Chemistry of Polymer Materials —
- Hsu, S.-Y.; Kayama, Y.; Ohno, K.; Sakakibara, K.; Fukuda, T.; Tsujii, Y., Controlled Synthesis of Concentrated Polymer Brushes with Ultralarge Thickness by Surface-Initiated Atom Transfer Radical Polymerization under High Pressure, *Macromolecules*, **53**, 132-137 (2020).
- Sakakibara, K.; Wakiuchi, A.; Murata, Y.; Tsujii, Y., Precise Synthesis of Double-armed Polymers with Fullerene C₆₀ at the Junction for Controlled Architecture, *Polym. Chem.*, **11**, 4417-4425 (2020).
- Tadokoro, C.; Sato, K.; Nagamine, T.; Nakano, K.; Sasaki, S.; Sato, T.; Sakakibara, K.; Tsujii, Y., Concentrated Polymer Brush as Reciprocating Seal Material for Low Leakage and Low Friction, *Tribology Transactions*, **63**, 20-27 (2020).
- Hsu, S.-Y.; Ohno, K.; Sakakibara, K.; Tsujii, Y., Convenient Synthesis of Very-Thick Concentrated Polymer Brushes by Atom Transfer Radical Polymerization in an Ionic Liquid, *Macromolecules*, **53**, 7936-7943 (2020).
- Sakakibara, K.; Moriki, Y.; Tsujii, Y., Simultaneous Nanofibrillation and Compounding of Wood Pulp Fibers Using Polyols as Plasticizers: Fabricating High-performance Cellulose-nanofiber-reinforced Polyethylene Composites, *J. Fiber Sci. Technol.*, **76**, 23-31 (2020).
- Beheshti, A.; Huang, Y.; Ohno, K.; Blakey, I.; Stokes, J. R., Improving Tribological Properties of Oil-based Lubricants Using Hybrid Colloidal Additives, *Tribol. Int.*, **144**, 106130 (2020).
- Safaie, N.; Rawal, B.; Ohno, K.; Ferrier, R. C., Aluminum-Based Initiators from Thiols for Epoxide Polymerizations, *Macromolecules*, **53**, 8181-8191 (2020).

- Kobiyama, E.; Tahara, H.; Sato, R.; Saruyama, M.; Teranishi, T.; Kanemitsu, Y., Reduction of Optical Gain Threshold in CsPbI₃ Nanocrystals Achieved by Generation of Asymmetric Hot-biexcitons, *Nano Lett.*, **20**, 3905-3910 (2020).
- Masada, S.; Yamada, T.; Tahara, H.; Hirori, H.; Saruyama, M.; Kawakami, T.; Sato, R.; Teranishi, T.; Kanemitsu, Y., Effect of A-site Cation on Photoluminescence Spectra of Single Lead Bromide Perovskite Nanocrystals, *Nano Lett.*, **20**, 4022-4028 (2020).
- Yamada, T.; Yamada, Y.; Kanemitsu, Y., Photon Recycling in Perovskite CH₃NH₃PbX₃ (X = I, Br, Cl) Bulk Single Crystals and Polycrystalline Films, *J. Lumin.*, **220**, 116987 (2020).
- Dave, K.; Bao, Z.; Nakahara, S.; Ohara, K.; Masada, S.; Tahara, H.; Kanemitsu, Y.; Liu, R.-S., Improvement in Quantum Yield by Suppression of Trions in Room Temperature Synthesized CsPbBr₃ Perovskite Quantum Dots for Backlight Displays, *Nanoscale*, **12**, 3820-3826 (2020).
- Qin, C.; Matsushima, T.; Potscavage, W. J.; Sandanayaka, A. S. D.; Leyden, M. R.; Bencheikh, F.; Goushi, K.; Mathevett, F.; Heinrich, B.; Yumoto, G.; Kanemitsu, Y.; Adachi, C., Triplet Management for Efficient Perovskite Light-emitting Diodes, *Nat. Photonics*, **14**, 70-75 (2020).
- Kanemitsu, Y.; Yamada, Y., Band-edge Luminescence from Oxide and Halide Perovskite Semiconductors, *Chem. Asian J.*, **15**, 709-717 (2020).
- Kanemitsu, Y.; Yamada, T.; Handa, T.; Nagai, M., Optical Responses of Lead Halide Perovskite Semiconductors, *Semicond. Sci. Technol.*, **35**, 093001 (2020).
- Handa, T.; Tahara, H.; Aharen, T.; Shimazaki, A.; Wakamiya, A.; Kanemitsu, Y., Large Thermal Expansion Leads to Negative Thermo-optic Coefficient of Halide Perovskite CH₃NH₃PbCl₃, *Phys. Rev. Mater.*, **4**(7), 074604 (2020).
- Tahara, H.; Kanemitsu, Y., Quantum Interference Measurements and Their Application to Analysis of Ultrafast Photocarrier Dynamics in Semiconductor Solar Cell Materials, *Adv. Quantum Technol.*, **3**, [1900098-1]-[1900098-12] (2020).
- Sanari, Y.; Hirori, H.; Aharen, T.; Tahara, H.; Shinohara, Y.; Ishikawa, K. L.; Otobe, T.; Xia, P.; Ishii, N.; Itatani, J.; Sato, S. A.; Kanemitsu, Y., Role of Virtual Band Population for High Harmonic Generation in Solids, *Phys. Rev. B*, **102**(4), [041125(R)-1]-[041125(R)-7] (2020).
- BIOINFORMATICS CENTER**
— Chemical Life Science —
- Endo, H.; Blanc-Mathieu, R.; Li, Y.; Salazar, G.; Henry, N.; Labadie, K.; de Vargas, C.; Sullivan, M. B.; Bowler, C.; Wincker, P.; Karp-Boss, L.; Sunagawa, S.; Ogata, H., Biogeography of Marine Giant Viruses Reveals Their Interplay with Eukaryotes and Ecological Functions, *Nat. Ecol. Evol.*, doi: 10.1038/s41559-020-01288-w (2020).
- Aramaki, T.; Blanc-Mathieu, R.; Endo, H.; Ohkubo, K.; Kanehisa, M.; Goto, S.; Ogata, H.; Valencia, A., KofamKOALA: KEGG Ortholog Assignment Based on Profile HMM and Adaptive Score Threshold, *Bioinformatics*, **36**, 2251-2252 (2020).
- Cheung, S.; Nitani, R.; Tsurumoto, C.; Endo, H.; Nakaoka, S.-I.; Cheah, W.; Lorda, J. F.; Xia, X.; Liu, H.; Suzuki, K., Physical Forcing Controls the Basin-scale Occurrence of Nitrogen-fixing Organisms in the North Pacific Ocean, *Global Biogeochem. Cycle*, **34**, e2019GB006452 (2020).
- Prodinger, F.; Endo, H.; Gotoh, Y.; Li, Y.; Morimoto, D.; Omae, K.; Tominaga, K.; Blanc-Mathieu, R.; Takano, Y.; Hayashi, T.; Nagasaki, K.; Yoshida, T.; Ogata, H., An Optimized Metabarcoding Method for Mimiviridae, *Microorganisms*, **8**, 506 (2020).
- Sakurai, T.; Nishiyama, H.; Nagai, T.; Goto, S.; Ogata, H.; Kudo, M., Deficiency of Gankyrin in the Small Intestine is Associated with Augmented Colitis Accompanied by Altered Bacterial Composition of Intestinal Microbiota, *BMC Gastroenterol.*, **20**(1), 12 (2020).
- Miyazaki, K.; Watanabe, H.; Yoshikawa, G.; Chen, K.; Hidaka, R.; Aitani, Y.; Osawa, K.; Takeda, R.; Ochi, Y.; Tani-ichi, S.; Uehata, T.; Takeuchi, O.; Ikuta, K.; Ogawa, S.; Kondoh, G.; Lin, Y. C.; Ogata, H.; Miyazaki, M., The Transcription Factor E2A Activates Multiple Enhancers that Drive *Rag* Expression in Developing T and B Cells, *Sci. Immunol.*, **5**(51), eabb1455 (2020).
- Sunagawa, S.; Acinas, S. G.; Bork, P.; Bowler, C.; Eveillard, D.; Gorsky, G.; Guidi, L.; Iudicone, D.; Karsenti, E.; Lombard, F.; Ogata, H.; Pesant, S.; Sullivan, M. B.; Wincker, P.; de Vargas, C., Tara Oceans: Towards Global Ocean Ecosystems Biology, *Nat. Rev. Microbiol.*, **18**, 428-445 (2020).
- Martinez-Hernandez, F.; Luo, E.; Tominaga, K.; Ogata, H.; Yoshida, T.; DeLong, E. F.; Martinez-Garcia, M., Diel Cycling of the Cosmopolitan Abundant Pelagibacter Virus 37-F6: One of the Most Abundant Viruses on Earth, *Environ. Microbiol. Rep.*, **12**(2), 214-219 (2020).
- Sandaa, R.-A.; Dahle, H.; Brussaard, C. P. D.; Ogata, H.; Blanc-Mathieu, R., Algal Viruses Belonging to a Subgroup Within the Mimiviridae Family, *Reference Module in Life Sciences*, doi: 10.1016/B978-0-12-809633-8.21318-6 (2020).
- Tominaga, K.; Morimoto, D.; Nishimura, Y.; Ogata, H.; Yoshida, T., In Silico Prediction of Virus-host Interactions for Marine Bacteroidetes With the Use of Metagenome-assembled Genomes, *Fron. Microbiol.*, **11**, 738 (2020).
- Nishiyama, H.; Endo, H.; Blanc-Mathieu, R.; Ogata, H., Ecological Structuring of Temperate Bacteriophages in the Inflammatory Bowel Disease-affected Gut, *Microorganisms*, **8**, 1663 (2020).
- Sakurai, T.; Nishiyama, H.; Sakai, K.; De Velasco, M. A.; Nagai, T.; Komeda, Y.; Kashida, H.; Okada, A.; Kawai, I.; Nishio, K.; Ogata, H.; Kudo, M., Mucosal Microbiota and Gene Expression are Associated with Long-term Remission after Discontinuation of Adalimumab in Ulcerative Colitis, *Sci. Rep.*, **10**, 19186 (2020).
- [Others]
- Endo, H.; Blanc-Mathieu, R.; Li, Y.; Salazar, G.; Henry, N.; Labadie, K.; de Vargas, C.; Sullivan, M. B.; Bowler, C.; Wincker, P.; Karp-Boss, L.; Sunagawa, S.; Ogata, H., Biogeography of Marine Giant Viruses Reveals Their Interplay with Eukaryotes and Ecological Functions, *ISME Virtual Microbial Ecology Summit*, **4**, 1639-1649 (2020).

— Mathematical Bioinformatics —

- Chen, Z.; Zhao, P.; Li, F.; Marquez-Lago, T. T.; Leier, A.; Revote, J.; Zhu, Y.; Powell, D. R.; Akutsu, T.; Webb, G. I.; Chou, K.-C.; Smith, A. I.; Daly, R. J.; Li, J.; Song, J., *iLearn: An Integrated Platform and Meta-learner for Feature Engineering, Machine-learning Analysis and Modeling of DNA, RNA and Protein Sequence Data*, *Brief. Bioinform.*, **21**, 1047-1057 (2020).
- Mei, S.; Li, F.; Leier, A.; Marquez-Lago, T. T.; Giam, K.; Croft, N. P.; Akutsu, T.; Smith, A. I.; Li, J.; Rossjohn, J.; Purcell, A. W.; Song, J., A Comprehensive Review and Performance Evaluation of Bioinformatics Tools for HLA Class I Peptide-binding Prediction, *Brief. Bioinform.*, **21**, 1119-1135 (2020).
- Li, F.; Chen, J.; Leier, A.; Marquez-Lago, T.; Liu, Q.; Wang, Y.; Revote, J.; Smith, A. I.; Akutsu, T.; Webb, G. I.; Kurgan, L.; Song, J., DeepCleave: A Deep Learning Predictor for Caspase and Matrix Metalloprotease Substrates and Cleavage Sites, *Bioinformatics*, **36**, 1057-1065 (2020).
- Chen, Z.; Zhao, P.; Li, F.; Wang, Y.; Smith, A. I.; Webb, G. I.; Akutsu, T.; Baggag, A.; Bensmail, H.; Song, J., Comprehensive Review and Assessment of Computational Methods for Predicting RNA Post-transcriptional Modification Sites from RNA Sequences, *Brief. Bioinform.*, **21**, 1676-1696 (2020).
- Zhang, Y.; Yu, S.; Xie, R.; Li, J.; Leier, A.; Marquez-Lago, T. T.; Akutsu, T.; Smith, A. I.; Ge, Z.; Wang, J.; Lithgow, T.; Song, J.; Hancock, J.; PeNGaRoo, A Combined Gradient Boosting and Ensemble Learning Framework for Predicting Non-classical Secreted Proteins, *Bioinformatics*, **36**, 704-712 (2020).
- Chiewvanichakorn, R.; Wang, C.; Zhang, Z.; Shurbevski, A.; Nagamochi, H.; Akutsu, T., A Method for the Inverse QSAR/QSPR Based on Artificial Neural Networks and Mixed Integer Linear Programming, *ACM International Conference Proceeding Series*, 40-46 (2020).
- Azam, N. A.; Chiewvanichakorn, R.; Zhang, F.; Shurbevski, A.; Nagamochi, H.; Akutsu, T., A Novel Method for the Inverse QSAR/QSPR Based on Artificial Neural Networks and Mixed Integer Linear Programming with Guaranteed Admissibility, *BIOINFORMATICS 2020 - 11th International Conference on Bioinformatics Models, Methods and Algorithms, Proceedings; Part of 13th International Joint Conference on Biomedical Engineering Systems and Technologies, BIOSTEC 2020*, 101-108 (2020).
- Zhu, J.; Wang, C.; Shurbevski, A.; Nagamochi, H.; Akutsu, T., A Novel Method for Inference of Chemical Compounds of Cycle Index Two with Desired Properties Based on Artificial Neural Networks and Integer Programming, *Algorithms*, **13**, 124 (2020).
- Li, F.; Leier, A.; Liu, Q.; Wang, Y.; Xiang, D.; Akutsu, T.; Webb, G. I.; Smith, A. I.; Marquez-Lago, T.; Li, J.; Song, J., Procleave: Predicting Protease-specific Substrate Cleavage Sites by Combining Sequence and Structural Information, *Genomics Proteomics Bioinformatics*, **18**, 52-64 (2020).
- Guo, W.-F.; Zhang, S.-W.; Zeng, T.; Akutsu, T.; Chen, L., Network Control Principles for Identifying Personalized Driver Genes in Cancer, *Brief. Bioinform.*, **21**, 1641-1662 (2020).
- Zhang, F.; Zhu, J.; Chiewvanichakorn, R.; Shurbevski, A.; Nagamochi, H.; Akutsu, T., A New Integer Linear Programming Formulation to the Inverse Qsar/qspr for Acyclic Chemical Compounds Using Skeleton Trees, *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, **12144**, 433-444 (2020).
- Akutsu, T.; Melkman, A. A.; Tamura, T., Improved Hardness of Maximum Common Subgraph Problems on Labeled Graphs of Bounded Treewidth and Bounded Degree, *International Journal of Foundations of Computer Science*, **31**, 253-273 (2020).
- Zeng, J.; Cai, H.; Akutsu, T., Breast Cancer Subtype by Imbalanced Omics Data through A Deep Learning Fusion Model, *ACM International Conference Proceeding Series*, 78-83 (2020).
- Wang, F.; Akutsu, T.; Mori, T., Comparison of Pseudoknotted RNA Secondary Structures by Topological Centroid Identification and Tree Edit Distance, *J. Comput. Biol.*, **27**, 1443-1451 (2020).
- Zeng, J.; Cai, H.; Peng, H.; Wang, H.; Zhang, Y.; Akutsu, T., Causalecall: Nanopore Basecalling Using a Temporal Convolutional Network, *Front. Genet.*, **10**, 01332 (2020).
- Liu, P.; Melkman, A. A.; Akutsu, T., Extracting Boolean and Probabilistic Rules from Trained Neural Networks, *Neural Netw.*, **126**, 300-311 (2020).
- Nakashima, S.; Nacher, J. C.; Song, J.; Akutsu, T., An Overview of Bioinformatics Methods for Analyzing Autism Spectrum Disorders, *Curr. Pharm. Des.*, **25**(43), 4552-4559 (2020).
- [Others]
- Nakajima, N.; Akutsu, T.; Nakato, R., Identifying Gene Co-expression Networks and Mutually Exclusive Gene Sets from scRNA-seq Data, *The Cell*, **52**(13), 758-760 (2020) (in Japanese).
- ## — Bio-knowledge Engineering —
- Dai, S.; You, R.; Lu, Z.; Huang, X.; Mamitsuka, H.; Zhu, S., FullMeSH: Improving Large-scale MeSH Indexing with Full Text, *Bioinformatics*, **36**, 1533-1541 (2020).

Wimalawarne, K.; Yamada, M.; Mamitsuka, H., Scaled Coupled Norms and Coupled Higher-order Tensor Completion, *Neural Comput.*, **32**, 447-484 (2020).

Liu, L.; Huang, X.; Mamitsuka, H.; Zhu, S., HPOLabeler: Improving Prediction of Human Protein-phenotype Associations by Learning to Rank, *Bioinformatics*, **36**, 4180-4188 (2020).

Nguyen, C. H., Structured Learning in Biological Domain, *J. Syst. Sci. Syst. Eng.*, **29**, 440-453 (2020).

Nakamura, A.; Takigawa, I.; Mamitsuka, H., Efficiently Enumerating Substrings with Statistically Significant Frequencies of Locally Optimal Occurrences in Gigantic String, *Proc. Conf. AAAI Artif. Intell.*, **34**(4), 5240-5247 (2020).

You, R.; Liu, Y.; Mamitsuka, H.; Zhu, S., BERTMeSH: Deep Contextual Representation Learning for Large-scale High-performance MeSH Indexing with Full Text, *Bioinformatics*, **36**(14), 4180-4188 (2020).

Strahl, J.; Peltonen, J.; Mamitsuka, H.; Kaski, S., Scalable Probabilistic Matrix Factorization with Graph-based Priors, *Proc. Conf. AAAI Artif. Intell.*, **34**(4), 5851-5858 (2020).
- 98
- PUBLICATIONS

HAKUBI PROJECT

**—Synthesis and Exploration of Novel Charge Transition
Oxide Materials for Future Multifunctional Devices—**

Denis Romero, F.; Amano Patino, M. E.; Haruta, M.; Kurata, H.; Attfield, J. P.; Shimakawa, Y., Conversion of a Defect Pyrochlore into a Double Perovskite via High-pressure, High-temperature Reduction of Te⁶⁺, *Inorg. Chem.*, **59**, 343-349 (2020).