

[006]附属環境工学研究教育センター研究活動報告

<https://doi.org/10.15017/7183565>

出版情報：附属環境工学研究教育センター研究活動報告. 6, 2024-07-16. Center for Research and Education of Environmental Technology, Faculty of Engineering, Kyushu University

バージョン：

権利関係：

4. 研究業績

4-1. 学術論文

グローバル課題研究ハブ

- (1) Development of a Passive Reactor Shutdown Device to Prevent Core Disruptive Accidents in Fast Reactors: (1) Safety Analysis of Device-loaded Cores with Different Fuel Materials
Koji MORITA, Wei LIU, Tatsumi ARIMA, Yuji ARITA, Isamu SATO, Yoshihiro SEKIO, Hiroshi SAGARA, Masatoshi KAWASHIMA
Proceedings of the 30th International Conference on Nuclear Engineering (ICONE30), ICONE30-1582, May 2023
- (2) Development of a Passive Reactor Shutdown Device to Prevent Core Disruptive Accidents in Fast Reactors: (2) A study on Selecting Candidate Fuel Materials for the Basic Device Specifications
Hiroshi SAGARA, Masatoshi KAWASHIMA, Koji MORITA, Wei LIU, Tatsumi ARIMA, Yuji ARITA, Isamu SATO, Yoshihiro SEKIO
Proceedings of the 30th International Conference on Nuclear Engineering (ICONE30), ICONE30-1811, May 2023
- (3) Experimental Study on Accident Source Terms Transport and Deposition Behavior in Nuclear Power Plants
Md. Iqbal HOSAN, Mizuki KOGA, A. KAKOI, Koji MORITA, Wei LIU, Xu CHENG
Proceedings of the 30th International Conference on Nuclear Engineering (ICONE30), ICONE30-1806, May 2023
- (4) A Large-Scale Particle-Based Simulation of Heat and Mass Transfer Behavior in EAGLE ID1 In-Pile Test
Ting ZHANG, Yao YAO, Koji MORITA, Xiaoxing LIU, Wei LIU, Yuya IMAIZUMI, Kenji KAMIYAMA
Proceedings of the 30th International Conference on Nuclear Engineering (ICONE30), ICONE30-1062, May 2023
- (5) Development of a Simplified One-Dimensional CDA Bubble Model for Source Term Evaluation
Zeren ZOU, Koji MORITA, Wei LIU
Proceedings of the 30th International Conference on Nuclear Engineering (ICONE30), ICONE30-1048, May 2023
- (6) Preliminary Analysis of Severe Accident in Sodium-Cooled Fast Reactor Using Eutectic Reaction Model of Boron-Carbide Control-Rod Material
Hidemasa YAMANO, Koji MORITA
Proceedings of 20th International Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-20), No.41341, Aug. 2023

- (7) 高速炉における炉心損傷事故の発生を防止する受動的炉停止デバイスの開発 – デバイス集合体の仕様選択拡張性とプラントにおける核不拡散性の検討 –
川島正俊, 相楽 洋, 守田幸路
第 44 回日本核物質管理学会年次大会論文集, #4412, 2023 年 11 月
- (8) Investigations on Aerosol Transport and Deposition Behavior during Severe Reactor Accident
Md. Iqbal HOSAN, Kohei TAKANISHI, Koji MORITA, Wei LIU, Xu CHENG
Mechanical Engineering Journal, 11(2), Paper No. 23-00423, 2024
- (9) Confirmation of Ferroelectricity, Piezoelectricity, and Crystal Structure of the Electronic Dielectric TmFe_2O_4
Shinya KONISHI, Daisuke URISHIHARA, Tatsuya HAYAKAWA, Koichiro FUKUDA, Toru ASAKA, Koji ISHII, Noriaki NAODA, Mari OKADA, Hirofumi AKAMATSU, Hajime HOJO, Masaki AZUMA, and Katsuhisa TANAKA
Physical Review B, 108, 14105, 2023 年 7 月
- (10) Hydrogarnet-Derived Porous Polyhedral Particles of $\text{SrFeO}_{3-\delta}$ Perovskite
Hikaru OTAGURO, Tomoki TANEKO, Ryosuke SUGIMOTO, Saburo HOSOKAWA, Hirofumi AKAMATSU, Takahisa YAMAMOTO, Kazuki NAKANISHI, Katsuro HAYASHI, and George HASEGAWA
Chemistry of Materials, 35, 16, 6423-6436, 2023 年 8 月
- (11) NASICON-based all-solid-state Na-ion Batteries: A Perspective on Manufacturing via Tape-casting Process
George HASEGAWA, Katsuro HAYASHI
APL Energy, 1,2, 2023 年 7 月
- (12) In-situ Infrared Spectroscopy Analysis of Proton-conducting Oxy-hydroxides $\text{Ba}(\text{Zn}, \text{M})\text{O}_{2.9-y}(\text{OH})_{2y}$ (M = Ta or W)
Kenji ARAI, Yusuke ASAI, Yoko KOKUBO, Miwa SAITO, Miki INADA, Katsuro HAYASHI, Teruki MOTOHASHI
Journal of Solid State Chemistry, 323, 124026, 2023 年 7 月
- (13) $\text{La}_2\text{SrSc}_2\text{O}_7$: A-Site Cation Disorder Induces Ferroelectricity in Ruddlesden–Popper Layered Perovskite Oxide
Wei YI, Tatsushi KAWASAKI, Yang ZHANG, Hirofumi AKAMATSU, Ryo OTA, Shuki TORII, Koji FUJITA
Journal of the American Chemical Society, 146, 7, 4570-4581, 2024 年 2 月

- (14) Mineralogical and Sulfur Isotopic Characteristics of Archean Greenstone Belt Hosted Gold Mineralization at the Tau deposit of the Mupane Gold Mine, Botswana
Onameditse Lulu SEABA, Akira IMAI, Kotaro YONEZU and Kemmonye BALIKI
Resource Geology, <https://doi.org/10.1111/rge.12305>, 2023
- (15) Nature and Conditions of Gold Mineralization at the Tau Deposit, Mupane Mine, Tati Greenstone Belt, Botswana: Evidence from Fluid Inclusion and Arsenopyrite Geothermometer
Onameditse Lulu SEABA, Akira IMAI, Kotaro YONEZU, Manuel NOPEIA and Kemmonye BALIKI
Resource Geology, <https://doi.org/10.1111/rge.12316>, 2023
- (16) Role of Boiling for the Formation of Vertical Metal Zoning and Bonanza Zone in Low-Sulfidation Epithermal Gold-Silver Deposits: A Geochemical Modeling Approach
Michitaka ARUGA and Akira IMAI
Journal of Geochemical Exploration, <https://doi.org/10.1016/j.gexplo.2023.107378>, 2023
- (17) Rapid Determination of Chromium Species in Environmental Waters Using a Diol-bonded Polymer-stationary Column under Water-rich Conditions Coupled with ICPMS
Akane ITO, Yuhei MORISHITA, Takahiro MORIMOTO and Masaharu TANIMIZU
Analytical Sciences, 40, 359-366, <https://doi.org/10.1007/s44211-023-00475-6>, 2024
- (18) Geology, Geochemistry, and Genesis of Gold Mineralization in the Chifumbazi Deposit of the Tete Province, Irumide Belt, Mozambique
Euclesia P. F. COSSA, Andrea AGANGI, Ryohei TAKAHASHI, Pearlyn MANALO, Akira IMAI and Vicente MANJATE
Resource Geology, 73, e12308, <https://doi.org/10.1111/rge.12308>, 2023
- (19) Lateral Variations in the Hosen 8-2 Vein in the Hishikari Deposit, Japan: Implications for High Au-grade Zone
Jonathan MACUROY, Ryohei TAKAHASHI, Akira HARA, Yoshinori OKAUE, Akira IMAI, Pearlyn MANALO, Hinako SATO and Andrea AGANGI
Resource Geology, 73, e12318, <https://doi.org/10.1111/rge.12318>, 2023
- (20) Geology and Geochemistry of Gold Mineralization at the Namicupo Prospect, Mozambique Belt, Northeastern Mozambique
Manuel NOPEIA, Akira IMAI, Ryohei TAKAHASHI, Kotaro YONEZU, Pearlyn MANALO, Thomas TINDELL, Hinako SATO, Daud JAMAL and Andrea AGANGI
Journal of Geochemical Exploration, Volume 249, Article number 107220, <https://doi.org/10.1016/j.gexplo.2023.107220>, 2023

- (21) Geology, Mineralization and Magma Evolution of the Zuun Mod Mo-Cu Deposit in Southwest Mongolia
Gankhuyag ALTANKHUYAG, Enkhjargal BOLDBAATAR, Bolorchimeg N. TUNNELL, Jargalan SEREENEN, Marek LOCMELIS, Xiaofeng LI and Akira IMAI
Journal of Asian Earth Sciences, Volume 257, Article number 105857,
<https://doi.org/10.1016/j.jseas.2023.105857>, 2023
- (22) Geochemical Study on the Deposition of Silica Scale at Olkaria Well OW-35: A Key to Understanding the Formation Mechanisms of Silica Scale at the Olkaria Geothermal Field, Kenya
Edwin WANYONYI, Kotaro YONEZU, Akira IMAI, Takushi YOKOYAMA, Kizito OPONDO and Kenneth KOECH
Geothermics Volume 117, Article number 102871,
<https://doi.org/10.1016/j.geothermics.2023.102871>, 2024
- (23) Hydro-geochemistry and Related Processes Controlling the Composition of Thermal Waters in the Lake Natron Basin, Northern Tanzania
Edista A. ABDALLAH1, Charles H. KASANZU, Crispin P. KINABO and Akira IMAI
Tanzania Journal of Science, 49(3): 677-689, <https://doi.org/10.4314/tjs.v49i3.11>, 2023
- (24) Petrogenesis of Sn–W Mineralized Granites in the Dawei and Mawchi, Regions of Myanmar
Aung Zaw MYING, Yue Cai, Laurence ROBB and Kotaro YONEZU
Geological Journal, 59, <https://doi.org/10.1002/gj.4918>, 2024
- (25) Uptake Mechanism of Silicic Acid by Schwertmannite and its Stabilization
Gaowa NAREN, Hironori OHASHI, Shuqin BAI, Kotaro YONEZU and Takushi YOKOYAMA
Environmental Chemical Engineering, 10, <https://doi.org/10.1016/j.jece.2023.111136>, 2023
- (26) Compositional Variation and Sn Isotope Fractionation of Cassiterite during Magmatic-hydrothermal Processes
Jinghua WU, Huan LI, Ryan MATHUR, Audrey BOUVIER, Wayne POWELL, Kotaro YONEZU and Dapeng ZHU
Earth and Planetary Science Letters, 613, <https://doi.org/10.1016/j.epsl.2023.118186>, 2023
- (27) Diverse Scale Deposition in Response to the Change in Chemical Properties of Geothermal Water at the Dieng Geothermal Power Plant, Indonesia
Saefudin JUHRI, Kotaro YONEZU, Agung HARIJOKO, Muhammad Istiawan

NURPRATAMA and Takushi YOKOYAMA

Geothermics, 111, <https://doi.org/10.1016/j.geothermics.2023.102717>, 2023

- (28) Distinct Pumice Populations in the 74 ka Youngest Toba Tuff: Evidence for Eruptions from Multiple Magma Chambers

Gabriela Nogo Retnaningtyas BUNGA NAEN, Atsushi TORAMARU, Saefudin JUHRI, Kotaro YONEZU, Haryo Edi WIBOWO, Rachmi Mustika Pertiwi Putri Gunawan and Tabegra DISANDO

Journal of Volcanology and Geothermal Research 437, <https://doi.org/10.1016/j.jvolgeores.2023.107804>, 2023

- (29) Low-Temperature Thermochronological Perspective on Geodynamic Evolution of the Cathaysia Block Since Early Mesozoic

Jinghua WU, Huan LI, Martin Danišik, Kotaro YONEZU, Han ZHENG and Zhihan LI

Tectonics, 42, <https://doi.org/10.1029/2022TC007662>, 2023

- (30) In-situ Trace Elements and Sulfur Isotopic Analyses of Stibnite: Constraints on the Genesis of Sb/Sb-polymetallic Deposits in Southern China

Zhekai ZHOU, Huan LI, Kotaro YONEZU, Akira IMAI and Thomas TINDELL

Journal of Geochemical Exploration, 247, <https://doi.org/10.1016/j.gexplo.2023.107177>, 2023

- (31) Field Experiments for Evaluation of the Kinetics of Silica Scaling at well OW 707 in the Olkaria Geothermal Field, Naivasha Kenya

Edwin WANYONYI, Kotaro YONEZU, Takushi YOKOYAMA, Akira IMAI, Akane ITO and Stephen ODHIAMBO

Proceedings of International Symposium on Earth Science and Technology 2023, p. 225-231, 2023

- (32) Geological Outline and Mineral Assemblages of the Wigu Hill Carbonatite-related REE Deposits, Kisasi Area, Eastern Tanzania

Almachius Tryphone MUTASINGWA, Akira IMAI, Kotaro YONEZU and Akane ITO

Proceedings of International Symposium on Earth Science and Technology 2023, p. 237-242, 2023

- (33) Geology and Geochemistry of the Nkalonje Hill Carbonatite, Malawi; Insight of REEs Mineralization Potential

Denson MAKWELA, Akira IMAI, Kotaro YONEZU and Akane ITO

Proceedings of International Symposium on Earth Science and Technology 2023, p. 258-263, 2023

- (34) Lithology and Mineralization of Okvau Deposit in Mondulkiri Province, Cambodia: A Preliminary Data Toward the Study on Genesis of Gold Deposit
Sokvireak SAY and Kotaro YONEZU
Proceedings of International Symposium on Earth Science and Technology 2023, p. 310-313, 2023
- (35) Mineralogical Characteristics of Gold Mineralization at the Jim's Luck Deposit, Tati Greenstone Belt, Botswana
Onameditse Lulu SEABA, Akira IMAI, Kotaro YONEZU, Akane ITO and Kemmony BALIKI
Proceedings of International Symposium on Earth Science and Technology 2023, p. 318-322, 2023
- (36) Remote Sensing Analysis of Lineaments and Gas Survey at El Hoyo-Monte Galan Geothermal Area, Central Western Nicaragua, Central America
Lisbeth HERRERA, Kotaro YONEZU, Akira IMAI, Tatsuto INO and Kelym MARTINEZ
Proceedings of International Symposium on Earth Science and Technology 2023, p. 386-390, 2023
- (37) Remote Sensing Techniques Using Advanced Space-Borne Thermal Emission and Reflection (ASTER) and Landsat-8 in the Detection of Alterations in Preah Vihear, North Cambodia
Kakda POV, Kakda KRET, Sirisokha SEANG, Kotaro YONEZU, Koichiro WATANABE, Chanmoly OR, Kimhak NEAK, Chanmaly CHHUN and Seangleng HOEUN
Proceedings of International Symposium on Earth Science and Technology 2023, p. 391-395, 2023
- (38) Ore Mineralization and Fluid Inclusion Microthermometry in the Grasberg Porphyry Deposit, Papua, Indonesia
Yuki ISHIKAWA, Kotaro YONEZU, Akira IMAI, Mega ROSANA and Euis YUNINGSIH
Proceedings of International Symposium on Earth Science and Technology 2023, p. 573-576, 2023
- (39) Hydrothermal Alteration and Fluid Inclusions Microthermometry Analysis of the Geothermal Exploratory Well N1 from EL Hoyo-Monte Galan Geothermal Area, Central Western Nicaragua, Central America
Lisbeth HERRERA, Kotaro YONEZU, Aira IMAI, Akane ITO, Kelym MARTINEZ
Proceedings of 49th Stanford Geothermal Workshop 2024, online
- (40) Revisiting the Kinetic of Polymerization of Silicic Acid: AI-Assisted Prediction of Polymerization and Adsorption Behavior of Silicic Acid

Saefudin JUHRI, Kotaro YONEZU, Eiki WATANABE, Koichiro MORI, Shogo SATO, M. Istiawan NURPRATAMA, Haryo Edi WIBOWO, Agung HARIJOKO, Takushi YOKOYAMA

Proceedings of 49th Stanford Geothermal Workshop 2024, online

- (41) Evaluation of Tiron as a Silica Scale Inhibitor by Metal Plates Immersion Batch Experiment
Ryunosuke TERASHI, Kotaro YONEZU, Saefudin JUHRI, Koichiro MORI, Shogo SATO, Eiki WATANABE, Takushi YOKOYAMA

Proceedings of 49th Stanford Geothermal Workshop 2024, online

- (42) Experiments on the Precipitation Behavior of Silicic Acid and Aluminum in Geothermal Water at the Olkaria Geothermal Field, Naivasha, Kenya

Edwin WANYONYI, Kotaro YONEZU, Yokoyama TAKUSHI, and Mutinda JUMA

Proceedings of 49th Stanford Geothermal Workshop 2024, online

インターフェース課題研究ハブ

- (1) Ionized acrylamide-based copolymer / terpolymer hydrogels for recovery of positive and negative heavy metal ions

Kentaro Fujimoto, Brian Adala Omondi, Shinya Kawano, Yoshiki Hidaka, Kenji Ishida, Hirotaka Okabe, Kazuhiro Hara

PLoS ONE, 19(3), e0298047, 2024 年 3 月

- (2) P(VDF/TrFE) Thin Film Piezoelectric Actuators Sealed Parylene C for Medical Micropumps

Keigo SHIKATA, Yasuko KOSHIBA, Shohei HORIKE, and Kenji ISHIDA

Physica status solidi (a), Vol. 220, No. 14, 2300250-1-6 (2023)

- (3) Fabrication and Local Electrical Characterization of p-n Junction Copper Phthalocyanine Nanorods

Yasuko KOSHIBA, Iori SUGIMOTO, Shohei HORIKE, Tatsuya FUKUSHIMA

Kenji ISHIDA

Physica status solidi (a), Vol. 220, No. 14, 2300243-1-8 (2023)

- (4) Electrochemical charge-carrier modulation of carbon nanotubes using ionic liquids derived from organic superbases for stable thermoelectric materials

Mayuko NISHINAKA, Ikuyo HARADA, Kouki AKAIKE, Qingshuo WEI,

Yasuko KOSHIBA, Shohei HORIKE, Kenji ISHIDA

Carbon, Vol.218, 118667-1-7 (2023)

- (5) Complex chemistry of carbon nanotubes toward efficient and stable p-type doping

Kaho KAWASAKI, Ikuyo HARADA, Kouki AKAIKE, Qingshuo Wei, Yasuko KOSHIBA,

Shohei HORIKE and Kenji ISHIDA
Communications Materials, Vol.5, 21-1-7 (2024)

- (6) Contribution of the Seebeck effect to liquid-flow-induced voltage generation in carbon nanotubes

Shohei HORIKE, Kaho KAWASAKI, Mayuko NISHINAKA, Qingshuo WEI,
Yasuko KOSHIBA and Kenji ISHIDA
Materials Today Physics, Vol. 41, 101337, 1-6 (2024)

- (7) Voltage detector integrated circuit as versatile toolbox for charge management of thermally chargeable supercapacitor

Shohei HORIKE, Teruo EBIHARA, Ryoko NAKAE, Masakazu MUKAIDA,
Yasuko KOSHIBA, Kenji ISHIDA, and Qingshuo WEI
Advanced Materials Technologies, in press

- (8) Estimation of the Origin of Marine Litter Accumulated on the Coast: Morphological, Elemental, and Compositional Analysis of Debris Samples Collected on the Western Coast of Kyushu, Japan

Yawen SONG, Satoquo SEINO
Proceedings of the 11th International Conference on Asian and Pacific Coasts
Chapter 92, 2024. DOI:10.1007/978-981-99-7409-2

- (9) 筑後川上流河川環境モニタリングの調査地点の変更に対する既存データの連続性の検討

高橋佑太, 清野聡子, 木下英生, 池松伸也, 佐藤光流
第 51 回環境システム研究論文発表会講演論文集, pp.131-136. 2023.10

- (10) 人工海岸の侵食対策における自然地形の影響の検討ー博多湾の名島海岸の事例

LIU JINZUO, 清野聡子, SONG YAWEN, 池松伸也, 木下英生
第 51 回環境システム研究論文発表会講演論文集, pp.151-156. 2023.10

- (11) Pattern Recognition Receptors Involved in The Immune System of Hagfish (*Eptatretus burgeri*)

Kenya ARATA, Tomokazu YAMAGUCHI, Kazufumi TAKAMUNE, Shinya YASUMOTO,
Masakazu KONDO, Shin-ichi KATO, Michiyasu YOSHIKUNI, Kaoru OHNO, Yoko
KATO-UNOKI, Genya OKADA, Tamotsu FUJII
Developmental and Comparative Immunology, 151, 105065, 2024

- (12) The Nuisance Invasive Species *Cymbella Janischii* in Japan: Knowledge from Studies and Monitoring

Yoko KATO-UNOKI, Tamie SUZAWA, Akira KURIHARA, Yuta TAKAHASHI,
Toshifumi MINAMOTO, Yoshitsugu MASUDA, Jun-ichi TSUBOI, Satoquo SEINO,
Shigeki MAYAMA

The 26th International Diatom Symposium, P.26, 2023

- (13) Distribution Analysis of The Invasive Diatom *Cymbella Janischii* Using Environmental DNA from Benthic Diatoms in River Systems

Yoko KATO-UNOKI, Tamie SUZAWA, Tran Thu TRANG, Yoshitsugu MASUDA, Jun-ichi TSUBOI, Satoquo SEINO

The eDNA Society International Meeting 2023, p.104, 2023

- (14) Environmental DNA Monitoring for Marine Protected Areas Designation in Tsushima Island, Japan

Satoquo SEINO, Yukihiro KURATANI, Yoko UNOKI, Mitsuhiro AIZU-HIRANO, Hidefumi HATASHIMA

The eDNA Society International Meeting 2023, p.39, 2023

ローカル課題研究ハブ

- (1) Microplastics in a Solid Waste Landfill in Japan: Concentrations in Landfilled Waste Cover Soil, Rainwater and Leachate

Hirofumi Nakayama, Atsushi Fukuda, Takayuki Shimaoka

Journal of Material Cycles and Waste Management, Vol.26, pp.792-799, 2024.2

- (2) Wireless Communication for Environmental Monitoring at Waste Landfills Using Low-Frequency Electromagnetic Waves

Hirofumi Nakayama, Tomoya Tazoe, Takayuki Shimaoka, Haruichi Kanaya

Journal of Material Cycles and Waste Management, Vol.25, pp.3714-3722, 2023.11

- (3) Utilization of Size-fractionated Pozzolan Bottom Ash to Immobilize Heavy Metals in MSW Incinerator Fly ash, Journal of Environmental Chemical Engineering

Mitali Nag, Dania Labira, Takayuki Shimaoka, Hirofumi Nakayama, Teppei Komiya

Journal of Environmental Chemical Engineering, Vol. 11, Issue 5, 110394, 2023.10

- (4) 特殊橋の維持管理における3次元情報統合プラットフォームの構築とその利活用に関する研究

谷口寿俊, 境田伸哉, 三谷泰浩, 本田博之, 坂上慎一

土木学会論文集 F3 (土木情報学), Vol.80, No.22, pp.1-9, 2024

- (5) 避難所要時間による定量的災害リスク評価と避難判断支援への適用

孟 楽, 三谷泰浩, 川野浩平, 韓 子双, 菅原 巧, 谷口寿俊, 本田博之

地域安全学会論文集, No.43, pp.9-17, 2023

- (6) 予測避難所要時間に基づく災害リスクの新たな評価指標を用いた進行型災害に対する避難判断支援の試み
谷口寿俊, 川野浩平
オペレーションズ・リサーチ, Vol.68, No.9, pp.478-484, 2023
- (7) 福岡市地下鉄七隈線トンネル陥没事故における地下水の変化と事故後の対応
三谷泰浩
地下水学会, 第 65 巻, 第 4 号, pp.333-339, 2023
- (8) Numerical modeling of the failure process of the heterogeneous karst rock mass using the DDA-SPH method
Jingyao Gao, Guangqi Chen, Zhijie Wang, Liping Li, Yasuhiro Mitani, Changze Li, Hongyun Fan, Xinyan Peng, Yifan Jiang
Underground Space, Volume 13, Pages 1-22, 2023
- (9) Coupled hydro-mechanical analysis for water inrush of fractured rock masses using the discontinuous deformation analysis
Jingyao Gao, Siyu Peng, Guangqi Chen, Yasuhiro Mitani, Hongyun Fan
Computers and Geotechnics, Volume 156, 2023
- (10) Study on the effect of hydro-chemical dissolution on shear properties of rock fractures using the improved discontinuous deformation analysis
Jingyao Gao, Guangqi Chen, Yasuhiro Mitani, Shilin Gong, Chaofan Feng
Int. Journal of Numerical Analysis Methods of Geomechanics, Vol.47, pp.1457-1480, 2023
- (11) Extension of discontinuous deformation analysis method for coupled reactive transport problems
Jingyao Gao, Yasuhiro Mitani, Guangqi Chen, Siyu Peng, Changze Li
Computers and Geotechnics, Volume 165, 2024
- (12) GIS Based 3D Data Integration on Highway Tunnel through Lifecycle Management for Advanced Maintenance
Chojijilsuren Batbaatar, Yasuhiro Mitani, Hisatoshi Taniguchi and Hiroyuki Honda
Proceedings of 5th International Conference on Civil and Building Engineering Informatics, pp.147-152, 2023
- (13) Rock slope stability management along the road by machine learning through databasing disaster prevention records
Hiroyuki Honda, Yasuhiro Mitani, Hisatoshi Taniguchi, Ibrahim Djamaluddin and Yurino Kawaura

Proceedings of the 15th ISRM Congress 2023 & 72nd Geomechanics Colloquium,
pp.2832-2837, 2023

- (14) Quantitative assessment of flooding risk based on predicted evacuation time: A case study in Joso city, Japan
Zishuang Han, Yasuhiro Mitani, Kohei Kawano, Hisatoshi Taniguchi, Hiroyuki Honda, Le Meng, Zhiyuan Li
International Journal of Disaster Risk Reduction, Vol.98, 2023.11
- (15) Gold Leaching from Printed Circuit Boards Using a Novel Synergistic Effect of Glycine and Thiosulfate
GODIGAMUWA Kasun, OKIBE Naoko
Minerals, 13(10), 1270, 2023
- (16) Microbiological passive treatment of Mn/Zn-containing mine water
OKIBE Naoko, NONAKA Kohei, KONDO Taiki, SHIMADA Kazuhiko, LIU Peiyu,
Hydrometallurgy, 219, 106084, 2023
- (17) Re-use of passive treatment Fe-sludge for remediation of As-contaminated waters
KAWAZOE Yuika, KIMURA Kazuma, MASAKI Yusei, HORIUCHI Kengo, HAMAI Takaya, OKIBE Naoko
Hydrometallurgy, 221, 106123, 2023
- (18) Bioleaching of tennantite concentrate: influence of microbial community and solution redox potential
KONDO Syota, HAYASHI Kaito, PHANN Idol, OKIBE Naoko
Frontiers in Microbiology, 14, 1339549, 2023
- (19) Selective Flotation of Copper Concentrates Containing Arsenic Minerals Using Potassium Amyl Xanthate and Oxidation Treatment
SUYANTARA Gde Pandhe Wisnu, MIKI Hajime, HIRAJIMA Tsuyoshi, SASAKI Keiko, OCHI Daishi, AOKI Yuji
Materials Transactions, 65(1), 27-36, 2024
- (20) Effect of oxidation treatment on the selective separation of molybdenite from chalcocite using flotation
DANIYAROV Berdakh, MIKI Hajime, HIRAJIMA Tsuyoshi, SASAKI Keiko, AOKI Yuji, SUYANTARA GDE PANDHE WISNU
Powder Technology, 431, 119078, 2024

- (21) Sodium metabisulfite as a copper depressant in the selective flotation of copper-molybdenum concentrate using seawater
SUYANTARA GDE PANDHE WISNU, MIKI Hajime, OCHI Daishi., SASAKI Keiko,
HIRAJIMA Tsuyoshi
Advanced Powder Technology, 34(12), 104258, 2023
- (22) Effect of goethite (α -FeOOH) nanoparticles on the surface properties and flotation behavior of chalcopyrite
SUYANTARA GDE PANDHE WISNU, RIZKI Intan, ULMASZODA Akbarshokh, MIKI Hajime, SASAKI Keiko
Journal of Environmental Chemical Engineering, 11(3), 110006, 2023
- (23) Effect of hydrogen peroxide on selective flotation of chalcocite and enargite
SUYANTARA, GDE PANDHE WISNU, DANIYAROV Berdakh, MIKI Hajime, OCHI Daishi, AOKI Yuji
International Journal of Mining Science and Technology, 33(6), 703-716, 2023
- (24) The Effect of Microwave Pre-treatment on the Magnetic Properties of Enargite and Tennantite and Their Separation from Chalcopyrite
ELMARDY Ahmed, MIKI Hajime, SASAKI Keiko, FARAHAT Mosen
Minerals, 13(3), 334, 2023
- (25) Effect of pH and Precipitations on Copper-Molybdenum Rougher Flotation in Seawater
TANAKA Yoshiyuki, MIKI Hajime, SUYANTARA GDE PANDHE WISNU, URA Kumika, HIRAJIMA Tsuyoshi
Materials Transactions, 64(6), 1225-1231, 2023
- (26) Significance of Fe contents on the surface of the gold ores in gold leaching by thiourea and ethylene thiourea
SASAKI Keiko, SUYAMA Ikumi, AOKI Yuji, MIKI Hajime, HIRAJIMA Tsuyoshi
Minerals Engineering, 191, 107957, 2023

4-2. 著書

グローバル課題研究ハブ

- (1) セラミックス・金属の焼成、焼結技術とプロセス開発（5章14節 酸化物系ナトリウムイオン全固体電池における低温焼結化と電極形成法）
林 克郎，他
技術情報協会編， pp.358-362, 2023

インターフェース課題研究ハブ

(1) 有機半導体の開発と最新動向

第1編：有機半導体各論

第25章 赤外分光法による有機半導体高分子の光安定性評価 を分担執筆

小柴康子，福島達也，石田謙司

(株) エヌ・ティー・エス，2024年3月発刊

(2) 対馬における海洋保護区

清野聡子著

海のジェンダー平等へ（秋道智弥編、海とヒトの関係学；6），P141-P151，2024年

3月

(3) 日本に手つかずのビーチはどれほどありますか？

清野聡子

『海と暮らす～SEAWARD TRIP』，P146-P153，2023年6月

ローカル課題研究ハブ

(1) 廃棄物分野のDX ～災害廃棄物管理におけるドローン技術，遮水シート接合検査へのリモートセンシング技術の適用事例

中山裕文，島岡隆行

タクマ技報，Vol.31, No.1, 2023.06

(2) 遮水シート損傷検知設備における自主基準の設定

海老原正明，小林 剛，坂本 篤，中山裕文

防水ジャーナル，No.618, 2023.05

4-3. 総説・解説

グローバル課題研究ハブ

(1) セラミック・ナトリウム電池の開発 酸化物系全固体電池に向けた汎用的ナシコン系電極膜形成

林 克郎

クリーンエネルギー，32，31-35，2023

(2) 有田焼の歴史と今にふれて —佐賀県立九州陶磁文化館を訪れて—

赤松寛文

セラミックス，58，478-479，2023.

インターフェース課題研究ハブ

(1) 有機超塩基カチオン含有イオン液体の合成とカーボンナノチューブ電気化学ドーピングへの応用

西中菜佑子, 小柴康子, 赤池幸紀, 衛 慶碩, 堀家匠平, 石田謙司
信学技報 IEICE Technical Report, OME2023-78(2024-01), 2024 年

- (2) ドープカーボンナノチューブの錯体化学と安定化技術
河崎佳保, 小柴康子, 赤池幸紀, 衛 慶碩, 堀家匠平, 石田謙司
信学技報 IEICE Technical Report, OME2023-79(2024-01), 2024 年
- (3) 環境 DNA の市民科学で見直す地域の自然 : 技術的課題と解決の可能性 (特集 シチズンサイエンス : 市民との協働による科学の勧め)
清野聡子
水環境学会誌
46 巻 9 号(通号 503), P331-P335, 2023 年 9 月
- (4) 合意形成を目指して (第 6 回) 砂浜海岸での合意形成 : 自然共生地域の発展のための協議の場の重要性
清野聡子
国立公園 = National parks, (通号 815), p.19-22, 2023 年 7 月
- (5) 合意形成を目指して (第 1 回)
中島慶二, 清野聡子, 則久雅司, 中澤圭一, 鳥居敏男
国立公園 = National parks(通号 810), p.19-23, 2023 年 1 月
- (6) 合意形成を目指して (第 10 回)
中島慶二, 清野聡子, 則久雅司, 中澤圭一, 鳥居敏男
国立公園 = National parks(通号 819), p.26-32, 2023 年 12 月
- (7) 世界遺産学習長一海の環境学習編一
「神宿る島」宗像・沖ノ島と関連遺産群保存活動協議会 編集・発行
清野聡子 監修
2024 年 3 月
- (8) 研究会「河川の異変 一外来種ミズワタクチビルケイソウの問題と最新知見一」の開催報告
鵜木陽子
Diatom, 39(56), 2023 年
- (9) 懇話会ニュース 日本水産学会水産環境保全委員会. 研究会「河川の異変 一外来種ミズワタクチビルケイソウの問題と最新知見一」報告
鵜木陽子, 清野聡子, 栗林貴範, 佐藤晋也, 坪井潤一
Nippon Suisan Gakkaishi, 90(2), 156-159 (2024)

(10) これってミズワタクチビルケイソウ? 診断の手順

鵜木陽子 (寄稿)

外来魚に立ち向かう, p23, 水産庁, 2024 年 2 月

(11) 「環境 DNA」による高速高解像度生態系観測と沿岸域での社会実装

清野聡子

2024 海域港湾航空技術報告会 (第 11 回), PIII-4-1-PIII-4-10, 2024 年 2 月

ローカル課題研究ハブ

(1) 持続的な災害復興に向けて

三谷泰浩

土木技術資料, Vol.66, NO.2, 2024

4-4. 特許

グローバル課題研究ハブ

(1) Dielectric Ceramic Composition and Ceramic Capacitor

Tomoki MURATA, Hirofumi AKAMATSU, Fumiyasu OBA, Akira TAKAHASHI

アメリカ合衆国, 申請番号 17498430 (2022 年 1 月) / 特許番号 11837410 (2023 年 12 月)

(2) 高ナトリウムイオン伝導度固体電解質

林 克郎, 名取孝章, 仲野朋子

特願 2023-211395

インターフェース課題研究ハブ

(1) エレクトレット及びその製造方法並びに静電誘導型変換素子

田口吉昭, 石田謙司, 福島達也, 小柴康子, 西本卓馬

日本, 特許第 7280579 号 (2023.5.16)

(2) ミズワタクチビルケイソウの特異的検出

鵜木陽子

日本, 特願 2023-170652 (2023 年 9 月)

4-5. 学術賞受賞リスト

グローバル課題研究ハブ

(1) 第 17 回固体イオニクスセミナー ポスター賞 ゴールドポスターアワード

Huang ZHENG

第 17 回固体イオニクスセミナー (2023 年 8 月)

(2) 「超秩序構造科学が創造する物性科学」セッション優秀講演奨励賞

山田珠光

日本セラミックス協会第36回秋季シンポジウム（2023年9月）

(3) Best Paper Award

Edwin WANYONYI

International Symposium on Earth Science and Technology 2023 (2023年11月)

ローカル課題研究ハブ

(1) 令和5年度廃棄物資源循環学会九州支部研究ポスター発表会優秀ポスター賞

鄧 雨晴

廃棄物資源循環学会九州支部（2023年5月）

(2) 第34回廃棄物資源循環学会研究発表会優秀講演賞

石橋文也

修士

廃棄物資源循環学会九州支部（2023年9月）

(3) Excellent Student Presentation Award

Fumiya Ishibashi

The 12th China-Japan Joint Conference on Material Recycling and Waste Management

（2023年11月）

(4) 令和5年度土木学会西部支部研究発表会優秀講演賞

田中龍吾，川西亮太郎

土木学会西部支部（2024年3月）

(5) SI2023 優秀講演賞

稲川正浩，川辺知人，竹岡年延，末岡裕一郎，遠藤大輔，浅間 一，谷口寿俊，

三谷泰浩

第24回計測自動制御学会システムインテグレーション部門講演会 2023年12月

(6) 令和5年度 西部支部研究発表会 優秀講演賞

八十島歩

令和5年度 西部支部研究発表会 2024年3月

(7) 令和5年度 西部支部研究発表会 優秀講演賞

坂上慎一

令和5年度 西部支部研究発表会 2024年3月

4-6. 報道記事

グローバル課題研究ハブ

- (1) カーボンニュートラルのための蓄電池開発動向

林 克郎

CREET NEWSLETTER 九州大学大学院工学研究院附属環境工学研究教育センター
ニュースレター（2024年2月）

インターフェース課題研究ハブ

- (1) 日本の砂浜・海岸にはビジネスチャンスが埋まっている

清野聡子・九州大学大学院工学研究院准教授に聞く

<https://bizgate.nikkei.com/article/DGXZQOLM31BHG031032023000000>

4-7. 研究誌の発行

ローカル課題研究ハブ

- (1) Proceedings of CJJC2023 the 12th China-Japan Joint Conference on Material Recycling and
Waste management

島岡隆行，中山裕文，小宮哲平 編，2023年11月

4-8. 招待講演、特別講演、基調講演等

グローバル課題研究ハブ

- (1) A Novel Lithium Niobate-Type Fluoride LiCoF_3 Synthesized via Topochemical Reaction

Hirofumi AKAMATSU

招待講演

The 37th International Korea-Japan Seminar on Ceramics（2023年11月）

- (2) NASICON-type electrode active materials in powder and film forms obtained by a glass-ceramic process

Katsuro Hayashi

招待講演

2023 Maritime Silk Road International Conference on the Cooperation and Integration of
Industry（2023/12/14-17）

- (3) 酸化物系ナトリウムイオン全固体電池にむけたガラスセラミック電極形成

林 克郎

招待講演

令和5年度 第3回機能性フレキシブルとインクジェット技術分科会，2024年3月
5日

(4) Preliminary Study on Mineralogical Characteristics of the Heavy Sulfide Zone at the Grasberg Porphyry Cu-Au Deposit, Papua, Indonesia

米津幸太郎

招待講演

AOGS 2023-20th Annual Meeting- (2023.8)

(5) Economic Geology 101

米津幸太郎

基調講演

The 2nd International Conference on Earth Resources and Geo-Environment Technology 2023 (EraGET 2023) (2023.9)

(6) Effective utilization of current geothermal power plant by improving the efficiency of power generation facilities

米津幸太郎

基調講演

The 3rd International Conference on Geological Engineering and Geosciences 2023 (ICGoeS 2023) (2023.9)

インターフェース課題研究ハブ

(1) 弱い乱流とその輸送現象

日高芳樹

特別講演

名古屋工業学大学院工学専攻特別講義「非平衡系物理学の最前線」(2023年10月)

(2) 有機超塩基ドーピングによる高耐熱 n 型カーボンナノチューブの開発

堀家匠平, 衛 慶碩, 赤池幸紀, 桐原和夫, 向田雅一, 小柴康子, 石田謙司
講演奨励賞受賞講演

第 84 回応用物理学学会秋季学術講演会 (2023 年 9 月)

(3) フレキシブルな有機圧電フィルムを用いた心臓拍動検知と心臓発電

石田謙司

依頼講演

高分子学会, 印刷・情報・電子用材料研究会 (2023 年 9 月)

(4) 海洋プラスチック課題の最前線～対馬の現状と企業が果たすべき役割

清野聡子

招待講演

NIKKEI ブルーオーシャン・フォーラム

『産官学で取り組む海洋保全』

2023 年 5 月

(5) 日本に期待される役割

清野聡子

招待講演

NIKKEI ブルーオーシャン・フォーラム

『産官学で取り組む海洋保全』

2023年5月

(6) 対馬の海ごみの特徴

清野聡子

対馬海ごみシンポジウム

2023年7月

(7) 対馬市グローバル大学 環境ゼミ

清野聡子

2023年度

(8) さいとぴあ環境大学 多世代「うまなび」の可能性

清野聡子

招待講演

さいとぴあ（福岡市西区）

2023年6月

(9) 西区地域環境サポーター養成講座「海ごみについて」

清野聡子

招待講演

福岡市西区役所生活環境課

2023年11月

(10) 五島のジオパークの論点

清野聡子

招待講演

五島市ジオパーク推進協議会

2024年1月

ローカル課題研究ハブ

(1) Implementing IoT for Landfill Liner Construction and Environmental Monitoring at Landfill Sites

Hirofumi Nakayama

特別講演

3RINCs 2024 The 3R International Scientific Conference on Material Cycles and Waste Management（2024年3月）