

Peer-Reviewed Papers

- (1) N. Aoyagi, N. Thuy, Y. Kumagai, N. Tung, M. Nakada, Y. Segawa, N. Hung, L. B. Thuan, Spectroscopic Studies of Mössbauer, Infrared, and Laser-Induced Luminescence for Classifying Rare-Earth Minerals Enriched in Iron-Rich Deposits, *ACS Omega*, 5, 7096-7105 (2020).
- (2) B. Guo, Y. Xiong, W. Chen; S. Saslow, N. Kozai, T. Ohnuki, I. Dabo, K. Sasaki, Spectroscopic and First-Principles Investigations of Iodine Species Incorporation into Ettringite: Implications for Iodine Migration in Cement Waste Forms, *J. Hazardous Materials*, 389 (2020), 121880.
- (3) T. Ohishi, Y. Kimura, K. Nakajima, M. Watanabe, N. Aoyagi, High-Efficiency Synthesis and Properties of Latent Pigment Red 272DPP-BOC by Microwave Irradiation, *Materials Sciences and Applications*, 11, 195-203 (2020).
- (4) Y. Ueda, K. Kikuchi, K. Tokunaga, T. Sugita, N. Aoyagi, K. Tanaka, H. Okamura, A Fluorous Phosphate for the Effective Extraction of Ln^{III} from Nitrate Media: Comparison with a Conventional Organic Phosphate, *Solvent Extraction and Ion Exchange*, <https://doi.org/10.1080/07366299.2021.1874115> (2021).
- (5) K. Tokunaga, Y. Takahashi, K. Tanaka, N. Kozai, Effective removal of iodate by coprecipitation with barite: Behavior and mechanism, *Chemosphere*, 226, 129104 (2021).
- (6) Y. Sekine, T. Nankawa, S. Yunoki, T. Sugita, H. Nakagawa, Eco-friendly carboxymethyl cellulose nanofiber hydrogels prepared via freeze crosslinking and their applications, *ACS Applied Polymer Materials*, 2, 5482-5491 (2020).
- (7) Y. Sekine, T. Nankawa, T. Yamada, D. Matsumura, Y. Morohashi, Y. Nemoto, M. Takeguchi, T. Sugita, I. Shimoyama, N. Kozai, S. Morooka, Carbonated apatite nanocrystals from bone waste for removal of toxic ions, 9, 105114 (2021).
- (8) T. Sugita, K Kobayashi, T. Yamazaki, M. Isaka, H. Itabashi, M. Mori, Development of evaluation method for photocatalytic ability by ion chromatography combined with a flow-type reactor: Application to immobilized photocatalyst materials prepared by double-layer coating method, *J. Photochemistry and Photobiology A: Chemistry*, 400, 112662 (2020).
- (9) G. Deng, T. Ma, K. Tanaka, T. Ohnuki, X. Qiu, Q. Yu, Saccharide-mediated transformation of Ce during the formation of manganese (Hydr)oxide, *Geochimica et Cosmochimica Acta*, 286, 143-158 (2020).
- (10) K. Tanaka, T. Kanasashi, C. Takenaka, Y. Takahashi, Speciation of cesium in tree tissues and its implication for uptake and translocation of radiocesium in tree bodies, *Science of the Total Environment*, 755, 142598 (2021).
- (11) 木村建貴、香西直文、坂本文徳、福谷哲、池上麻衣子、植物が生産する有機酸がシデロフォア生産微生物の鉱物溶解促進効果に与える影響、*土木学会論文集 G(環境)*、76, III_375-382 (2020).

(12) H. Okamura, N. Hirayama, Recent progress in ionic liquid extraction for the separation of rare earth elements, *Analytical Sciences*, 37, 119-130 (2021) (Review paper).

(13) Y. Baba, I. Shimoyama, Multi-atom resonant X-ray emission in simple binary compounds, *Nuclear Inst. and Methods in Physics Research*, A 987, 164845 (2021).

Invited Talks at International Conferences

None

Books and Scientific Articles

None

Patents

(1) 下条晃司郎, 長縄弘親, 岡村浩之

“ニッケル元素の回収方法”

登録済 特許第 6693646 号, 登録日 2020 年 4 月 20 日

(2) 下条晃司郎, 長縄弘親, 岡村浩之

“金属元素の分離方法”

登録済 特許第 6693647 号, 登録日 2020 年 4 月 20 日

(3) 長縄弘親、永野哲志

“液液混相流路群を形成させる方法、及び液液混相流路群の形成・消滅を制御する方法並びにそのためのモジュール”

出願日:2020 年 7 月 20 日

(4) Yurina Sekine Takuya Nankawa, Yuko Morohashi, "Method for manufacturing microchannel device and microchannel device" Japanese patent application 2019-186649 (2019.10.10)

(5) Yurina Sekine Takuya Nankawa, ゲル、多孔質体、及びゲル又は多孔質体の製造方法

"Porous materials and method for manufacturing porous materials" Japanese patent application 2020-105534 (2020.6.18). We will write patent for US, china and Switzaland.

Awards

None

Press Release

None