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鉱物に記録された放射線誘起欠陥の定量評価
Quantitative evaluation of radiation-induced defects on minerals

学術論文 (査読あり)

- [1] Nagashima, K., Nishido, H., Kayama, M., Kurosaki, Y., Ohgo, S. and Hasegawa, H.: Composition of Asian dust from cathodoluminescence spectral analysis of single quartz grain, *Geology*, 45, 879-882 (2017).
- [2] Takahashi, M., Tsujimori, T., Kayama, M. and Nishido, H.: Cathodoluminescence petrography of P-type jadeites from the New Idria serpentinite body, California, *Journal of Mineralogical and Petrological Sciences*, 112, 291-299 (2017).
- [3] Tsuchiya, Y., Kayama M., Nishido, H. and Noumi, Y.: Cathodoluminescence of synthetic zircon implanted by He⁺ ion, *Geochronometria*, 44, 129-135 (2017).
- [4] Ohgo, S., Mishima, M., Endo, M., Ninagawa, K. and Nishido, H.: Cathodoluminescence color zonation in the Antarctic meteorite (enstatite chondrite) of Yamato86004, *Geochronometria*, 44, 136-141 (2017).
- [5] Tretiakova, I.G., Belousova, E.A., Malkovets, V.G., Griffin, W.L., Piaolo, S., Pearson, N.J., O'Reilly, S.Y. and Nishido, H.: Recurrent magmatic activity on a lithosphere-scale structure—Crystallization and deformation in kimberlitic zircons, *Gondwana Research*, 42, 126-132 (2017).
- [6] M. Murahashi, S. Toyoda, M. Hoshi, M. Ohtaki, S. Endo, K. Tanaka, Y. Yamada (2017) The sensitivity variation of the radiation induced signal in deciduous teeth to be used in ESR tooth enamel dosimetry, *Rad. Meas.*, 106, 450-454, doi: 10.1016/j.radmeas.2017.06.001.
- [7] V. Stepanenko, T. Rakhypbekov, K. Otani, S. Endo, K. Satoh, N. Kawano, K. Shichijo, M. Nakashima, T. Takatsuji, A. Sakaguchi, H. Kato, Y. Onda, N. Fujimoto, S. Toyoda, H. Sato, A. Dyussupov, N. Chaizhunusova, N. Sayakenov, D. Uzbekov, A. Saimova, D. Shabdarbaeva, M. Skakov, A. Vurim, V. Gnyrya, A. Azimkhanov, A. Kolbayenkov, K. Zhumadilov, Y. Kairikhanova, A. Kaprin, V. Galkin, S. Ivanov, T. Kolyzhenkov, A. Petukhov, E. Yaskova, I. Belukha, A. Khailov, V. Skvortsov, A. Ivannikov, U. Akhmedova, V. Bogacheva, M. Hoshi: Internal exposure to neutron-activated ⁵⁶Mn dioxide powder in Wistar rats: part 1: dosimetry, *Radiation and Environmental Biophysics*, 56 (1) 47-54, doi: 10.1007/s00411-016-0678-x (2017).
- [8] K. Zhumadilov, A. Ivannikov, A. Khailov, S. Orlenko, V. Skvortsov, V. Stepanenko, K. Kuterbekov, S. Toyoda, P. Kazymbet and M. Hoshi: Evaluation of external and internal irradiation on uranium mining enterprise staff by tooth enamel EPR spectroscopy, *E3S Web of Conferences*, 22, 00201, International Conference on Advances in Energy Systems and Environmental Engineering (ASEE17), doi: 10.1051/e3sconf/20172200201 (2017).
- [9] T. Fujiwara, S. Toyoda, A. Uchida and J. Ishibashi: Thermal stability of ESR signals in hydrothermal anhydrite, *Advances in ESR Applications*, 33, 9-13 (2017).
- [10] T. Chuenpee, O. Nishikawa, Y. Kon, K. Ninagawa, S. Toyoda, T. Ogata, T. Uchida, I. Takashima: Gamma radiation-induced thermoluminescence, trace element and paramagnetic defect of quartz from the Sambagawa metamorphic belt, Central Shikoku, Japan, *Applied Radiation and Isotopes*, 120, 30-39, doi: 10.1016/j.apradiso.2016.11.013 (2017).

博士論文

- [1] 藤原泰誠「海底熱水性硫酸塩鉱物を用いた電子スピン共鳴及び放射非平衡年代測定の高精度化と応用」(2017)

[17013]

国際会議

- [1] Ohgo, S. and Nishido, H.: Temperature effects on cathodoluminescence of enstatite, AGU2017 Fall Meeting, New Orleans, USA, Dec. (2017).
- [2] Kiku, K., Kawamoto, K. and Nishido, H.: Evaluation of the grade of mylonitic rocks using cathodoluminescence of quartz, AGU2017 Fall Meeting, New Orleans, USA, Dec. (2017).
- [3] Tani, R., Tomioka, N., Kayama, M., Chang, Y., Nishido, H., Das, K., Rae, A., Ferrière, L., Gulick, S., Morgan, J. and the IODP-ICDP Expedition 364 Scientists: Shock pressure estimation in basement rocks of the Chicxulub impact crater using cathodoluminescence spectroscopy of quartz, AGU2017 Fall Meeting, New Orleans, USA, Dec. (2017).
- [4] Kanemaru, R., Yamaguchi, A. and Nishido, H.: Complex thermal and shock history of the Juvinas eucrites, 8th Symposium on Polar Science, Tachikawa, Tokyo, Dec. (2017).
- [5] Ohgo, S., Mishima, M., Endo, M., Ninagawa, K. and Nishido, H.: Cathodoluminescence color-zoning in the enstatite chondrite of Yamato 86004, 8th Symposium on Polar Science, Tachikawa, Tokyo, Dec. (2017).
- [6] Asai, H., Saneyoshi, M., Nishido, H., Toyoda, S. and Tsogtbaatar, K.: Stratigraphic assignment of eolian and fluvial sediments in Udyn Sayr, Gobi Desert, Mongolia using an indicator of defect centers in quartz composed of sand particle, GSA2017, Geological Society of America Annual Meeting 2017, Washington, USA, Oct. (2017).
- [7] Toyoda, S., Asai, H., Nitta, Y., Saneyoshi, M., Nishido, H., Aoki, K., Imayama, T., Ishigaki, S., Tsogtbaatar, K., and Mainbayar, B.: Comparison and correlation of upper Cretaceous sedimentary sequence in Southern Mongolia with ESR and luminescence, 15th International Conference on Luminescence and Electron Spin Resonance Dating (LED2017), Cape Town, South Africa, Sep. (2017).
- [8] S. Toyoda, A. Shimada, M. Takada (p) ESR signals in quartz for the studies of earth surface processes, 2017 AGU Fall Meeting, Dec. 11-15, 2017, New Orleans Ernest N. Morial Convention Center, Louisiana, U.S.A.
- [9] T. Fujiwara, S. Toyoda, A. Uchida, J. Ishibashi, S. Nakai (p) ESR dating of sulfate minerals in sea-floor hydrothermal deposits in comparison with radioactive disequilibrium ages, 15th International Conference on Luminescence and Electron Spin Resonance Dating, Sep. 11-15, 2017, Cape Town, South Africa.
- [10] M. Murahashi, S. Toyoda, M. Hoshi, M. Ohtaki, N. Fujimoto, S. Endo, K. Tanaka (o) External doses given to the rats in the ⁵⁶Mn inhalation experiments, measured by rat tooth ESR dosimetry, 4th Asian Congress of Radiation Research (ACRR2017), Aug. 16-18, 2017, Astana, Kazakhstan.
- [11] M. Hoshi, V. Stepanenko, T. Rakhypbekov, N. Chaizhunosova, M. Ohtaki, K. Otani, N. Fujimoto, K. Shichijo, D. Shabdarbaeva, K. Zhumadilov, N. Aukenov, N. Sayakenov, D. Uzbekov, A. Saimova, Y. Kairkhanova, S. Mazhin, A. Vurim, V. Gnyrya, A. Azimkhanov, A. Kolbayenkov, B. Toikin, K. Kanapyianov, K. Satoh, N. Kawano, S. Endo, M. Nakashima, T. Takatsuji, N. Takeuchi, Y. Noso, K. Inoue, A. Sakaguchi, H. Kato, Y. Onda, S. Toyoda, H. Sato, A. Kaprin, V. Galkin, S. Ivanov, T. Kolyzhenkov, E. Yaskova, I. Belukha, A. Khailov, A. Petukhov, U. Akhmedova, V. Bogacheva (o) Internal exposure experiments ⁵⁶Mn using rats Simulating Radioactive soil dust exposure in Hiroshima and Nagasaki, 4th Asian Congress of Radiation Research (ACRR2017), Aug. 16-18, 2017, Astana, Kazakhstan.
- [12] K. Zhumadilov, A. Ivannikov, A. Khailov, S. Orlenko, V. Skvortsov, V. Stepanenko, K. Kuterbekov, S. Toyoda, P. Kazymbet, M. Hoshi (o) Estimation of external and internal irradiation on staff of uranium processing plant by tooth enamel EPR spectroscopy, 4th Asian Congress of Radiation Research (ACRR2017), Aug. 16-18, 2017, Astana, Kazakhstan.
- [13] V. Stepanenko, M. Hoshi, N. Fujimoto, N. Kawano, S. Endo, K. Shichijo, M. Nakashima, A. Sakaguchi, S. Toyoda, H. Sato, T. Rakhypbekov, N. Chaizhunosova, D. Shabdarbaeva, N. Aukenov, N. Sayakenov, D. Uzbekov, A. Saimova, Y. Kairkhanova, A. Kaprin, S. Ivanov, T. Kolyzhenkov, A. Petukhov, K. Zhumadilov, A. Azimkhanov, A. Kolbayenkov, U. Akhmedova, V. Bogacheva (o) Dosimetry study of internal exposure to neutron-activated ⁵⁶Mn dioxide powder in wistar rats: results of international cooperative research, 4th Asian Congress of Radiation Research (ACRR2017), Aug. 16-18, 2017, Astana, Kazakhstan.

[17013]

- [14] K. Zhumadilov, A. Ivannikov, S. Toyoda, S. Aya, V. Stepanenko, M. Hoshi (o) Tooth enamel EPR dosimetry study of hiroshima atomic bomb victims, 4th Asian Congress of Radiation Research (ACRR2017), Aug. 16-18, 2017, Astana, Kazakhstan.
- [15] M. Murahashi, S. Toyoda, M. Natsuhori (p) ESR tooth enamel dosimetry with cattle teeth, 4th Asian Congress of Radiation Research (ACRR2017), Aug. 16-18, 2017, Astana, Kazakhstan.