

Noble gas isotopes of groundwater and crustal activity in the Izu Peninsula

Masao Ohno[1], Pedro Hernandez[2], Yoichi Shimoike[3], Tsutomu Sato[4], Hirochika Sumino[5], Kenji Notsu[2]

[1] Graduate School of Social and Cultural Studies, Kyushu Univ., [2] Lab. Earthquake Chem., Univ. Tokyo, [3] LEC, Tokyo Univ, [4] GSJ, [5] Lab. Earthquake Chem., Univ. Tokyo

We analyzed the isotopic compositions of noble gases in hot spring water to investigate the crustal activity in the Izu Peninsula. $^3\text{He}/^4\text{He}$ ratio was as high as $4.0 R_{\text{atm}} \sim 7.6 R_{\text{atm}}$, and its distribution has similar shape as crustal upheaval, which suggests presence of magma.