

## List of Publications

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### [Symbols]

*JE* in Japanese with English abstract

◦ The first author

\* Researchers belonging to University of Tsukuba, not to the Doctoral Program of Earth Evolution Sciences

\*\* Researchers not belonging to University of Tsukuba

\*\*\* Undergraduate students, graduate students and auditors belonging to University of Tsukuba

Agematsu, S. (2013): A new Middle Ordovician conodont fauna from the Thong Pha Phum area of western Thailand. *Paleontological Research*, **17**, 179-188. 2013. (with Sashida, K. and Sardud\*\*).

Anma, R. (2013): Shallow-depth melt eduction due to ridge subduction: LA-ICPMS U-Pb igneous and detrital zircon ages from the Chile Triple Junction and the Taitao Peninsula, Chilean Patagonia. *Geochemical Journal*, **47**, 149-165. (with Orihashi, Y.\*\*)

——— (2013): Geochronological fingerprint revealing the evolution of the crust underlying Cerro Pampa, Argentine Patagonia: Constraint from LA-ICPMS U-Pb ages for exotic zircons in the Mid-Miocene adakite. *Geochemical Journal*, **47**, 235-247. (with Orihashi, Y.\*\*\*, Motoki, A.\*\*, Haller, M. J.\*\*, Hirata, D.\*\*, Iwano, H.\*\*, Sumino, H.\*\* and Ramos, V.\*\*)

——— (2013): Petrogenesis of the ridge subduction-related granitoids from the Taitao Peninsula, Chile Triple Junction area. *Geochemical Journal*, **47**, 167-183. (with Kon, Y.\*\*\*, Komiya, T.\*\*, Hirata, T.\*\*, Shibuya, T.\*\*, Yamamoto, S.\*\* and Maruyama, S.\*\*)

——— (2013): Boron and other trace element composition of the Quaternary volcanic rocks from the Southern Volcanic Zone in Andean Arc: Implication for the slab-derived component. *Geochemical Journal*, **47**, 185-199. (with Shinjoe, H.\*\*\*, Orihashi, Y.\*\*, Naranjo, J. A.\*\*, Hirata, D.\*\*, Hasenaka, T.\*\*, Fukuoka, T.\*\*, Sano, T.\*\*)

——— (2013) Preface: Geoscience dynamics in the Patagonia Archipelago- Southern Pacific Ocean. *Geochemical Journal*, **47**, 93-95. (with Orihashi, Y.\*\*\*, Harada, N.\*\*, Abe, N.\*\*)

——— (2013) Cooling processes and magnetic structure of the oceanic crust. *Fission-Track News Letter*, **26**, 37-42. (with Iwano, H.\*\*, Danhara, T.\*\*, and Hirata, T.\*\*)

Arakawa, Y. (2013): A rare basanite distribution in the

northern part of Izu-Bonin volcanic arc, Japan: Petrological and geochemical constraints. *Journal of Volcanology and Geothermal Research*, **270**, 76-89. (with Oshika, J.\*\*\*, Endo, D.\*\*\*, Shinmura, T.\*\*, Mori, Y.\*\*)

——— (2013): Lateral magma intrusion from a caldera-forming magma chamber: Constraints from geochronology and geochemistry of volcanic products from lateral cones around the Aso volcano, SW Japan. *Chemical Geology*, **352**, 202-210. (with Miyoshi, M.\*\*\*, Shinmura, T.\*\*, Sano, H.\*\*, Miyabuchi, Y.\*\*, Inakura, H.\*\*, Furukawa, K.\*\*, Uno, K.\*\*, Hasenaka, T.\*\*, Nagao, K.\*\*, Yamamoto, J.\*\*)

——— (2013): Generation mechanism of the Nan-zaki basanite in northern part of Izu-Volcanic arc, japan: petrological and petrochemical constraints. *Proceedings of International Association of Volcanology and Chemistry of the Earth's Interior Conference (IAVCEI) (Kagoshima, Japan)*. 1W-IC-P9. (with Oshika, J.\*\*, Endo, D.\*\*\*, Shinmura, T.\*\*, Mori, Y.\*\*).

——— (2013): Magma mixing mechanism of Fujiyama lava dome in Takahara volcano, northeastern Japan. *Proceedings of International Association of Volcanology and Chemistry of the Earth's Interior Conference (IAVCEI) (Kagoshima, Japan)*. 4W-1B-P14. (with Tajima, Y.\*\*\*, Kanai, H.\*\*\*, Ikehata, K\*)

——— (2013): Petrological and petrochemical investigations of Iwanoyama-Iyuzan volcanic chain in Higashi-Izu monogenetic volcano group, Izu-Bonin volcanic arc, Japan. *Proceedings of International Association of Volcanology and Chemistry of the Earth's Interior Conference (IAVCEI) (Kagoshima, Japan)*. 4W-1B-P11. (with Kanai, H.\*\*\*, Tajima, Y.\*\*\*, Ikehata, K\*)

Enescu, B. (2013): Slow slip and aseismic deformation episodes associated with the subducting Pacific plate offshore Japan, revealed by changes in seismicity, *Journal of Geophysical Research: Solid Earth*, **118**, 9, 4900-4909, doi: 10.1002/jgrb.50323. (with Marsan, D.°, Reverso, T.\*\*, and Helmstetter, A.\*\*)

——— (2013): A global search for triggered tremor following the 2011 Mw 9.0 Tohoku earthquake, *Bulletin of the Seismological Society of America*, **103**, 2B, 1551-1571, doi: 10.1785/0120120171. (with Chao, K.°, Peng, Z.\*\*, Gonzalez - Huizar, H.\*\*, Aiken, C.\*\*, Kao, H.\*\*, Velasco, A.A.\*\*, Obara, K.\*\*, and Matsuzawa, T.\*\*)

- Fujino, S. (2013): Sedimentary characteristics of the onshore tsunami deposit formed by the 2011 Tohoku-oki tsunami. *Journal of the Sedimentological Society of Japan*, **72**, 13–25. (with Yamada, M.<sup>o\*\*</sup>) JE.
- Hayashi, K. (2013): Oxygen isotope study of silica sinter from the Osorezan geothermal field, north-east Japan. *International Journal of Geoscience*, **3**, 1438-1446.
- (2014): Mineralogy, sulfur isotope and fluid inclusion studies of hydrothermal ore at the Hakurei deposit, Bayonnaise knoll, Izu-Bonin arc. *Resource Geology*, **64**, 77-90. (with Watanabe, S.<sup>o\*\*</sup>)
- Hisada, K. (2013): U-Pb ages and detrital zircons within the Inthanon Zone of the Paleo-Tethyan subduction zone, northern Thailand: New constrains on accretionary age and arc activity. *Journal of Asian Earth Sciences*, **74**, 50-61. (with Hara, H.<sup>o\*\*</sup>, Kon, Y.<sup>\*\*</sup>, Usuki, T.<sup>\*\*</sup>, Lan, C-Y.<sup>\*\*</sup>, Kamata, Y., Hisada, K., Ueno, K.<sup>\*\*</sup>, Charoentitirat, T.<sup>\*\*</sup> and Charusiri, P.<sup>\*\*</sup>)
- (2014): Paleoearthquake investigations of the Mae Hong Son Fault, Mae Hong Son Region, Northern Thailand. *Journal of Earthquake and Tsunami*, **8**, [35 pages] DOI: 10.1142/S1793431114500079 (with Wiwegwin, W.<sup>o\*\*</sup>, Hisada, K., Charisiri, P.<sup>\*\*</sup>, Koswan, S.<sup>\*\*</sup>, Pailoplee, S.<sup>\*</sup> and Saithon, P.<sup>\*\*</sup>)
- Ikehata, K. (2013): Evaluation of UV-fs-LA-MC-ICP-MS for Precise in situ Copper Isotopic Microanalysis of Cubanite. *Analytical Sciences*, **29**(12), 1213-1217. (with Hirata, T.<sup>\*\*</sup>)
- Kamata, Y. (2013): U–Pb ages of detrital zircons within the Inthanon Zone of the Paleo-Tethyan subduction zone, northern Thailand: New constraints on accretionary age and arc activity. *Journal of Asian Earth Sciences*, **74**, 50–61. (with Hara, H.<sup>o\*\*</sup>, Kon, Y.<sup>\*\*</sup>, Usuki, T.<sup>\*\*</sup>, Lan, C.-Y.<sup>\*\*</sup>, Hisada, K.<sup>\*</sup>, Ueno, K.<sup>\*\*</sup>, Charoentitirat, T.<sup>\*\*</sup>, Punya, C.<sup>\*\*</sup>.)
- (2014): Late Permian and Early to Middle Triassic radiolarians from the Hat Yai area, southern peninsular Thailand: Implications for the tectonic setting of the eastern margin of the Sibumasu Continental Block and closure timing of the Paleo-Tethys. *Marine Micropaleontology*, **110**, 8–24. (with Shirouzu, M.<sup>\*\*</sup>, Ueno, K.<sup>\*\*</sup>, Sardud, A.<sup>\*\*</sup>, Charoentitirat, T.<sup>\*\*</sup>, Charusiri, P.<sup>\*\*</sup>, Koike, T.<sup>\*\*</sup>, and Hisada, K.<sup>\*</sup>)
- Komuro, K. (2013): He+ ion implantation and electron irradiation effects on cathodoluminescence of plagioclase. *Physics and Chemistry of Minerals*, **40**, 531-545. (with Kayama, M.<sup>o\*\*</sup>, Nishido, H.<sup>\*\*</sup>, Toyoda, S.<sup>\*\*</sup>, Finch, A. A.<sup>\*\*</sup>, Lee, M. R.<sup>\*\*</sup> and Ninagawa, K.<sup>\*\*</sup>)
- (2013): Calcium and magnesium-bearing sabugalite from the Tono uranium deposit, central Japan. *Resource Geol.*, **63**, 404-411. (with Sasao, E.<sup>o\*\*</sup> and Nakata, M.<sup>\*\*</sup>).
- (2013): Formation of cerussite from anglesite : an experimental approach with sodium bicarbonate solution. *Shigen-Chishitsu*, **63**, 143-147. (with Hideshima, Y.<sup>o\*\*</sup> and Nakata, M.<sup>\*\*</sup>). JE
- (2013): Response of cathodoluminescence of alkali feldspar to He+ ion implantation and electron irradiation. *Geochronometria*, **40**, 244-249. (with Kayama, M.<sup>o\*\*</sup>, Nishido, H.<sup>\*\*</sup>, Toyoda, S.<sup>\*\*</sup>, Finch, A. A.<sup>\*\*</sup>, Lee, M. R.<sup>\*\*</sup> and Ninagawa, K.<sup>\*\*</sup>)
- (2014): Cathodoluminescence of alkali feldspars and radiation effects on the luminescent properties. *American Mineralogists.*, **99**, 65-75. (with Kayama, M.<sup>o\*\*</sup>, Nishido, H.<sup>\*\*</sup>, Toyoda, S.<sup>\*\*</sup>, Finch, A. A.<sup>\*\*</sup>, Lee, M. R.<sup>\*\*</sup> and Ninagawa, K.<sup>\*\*</sup>)
- Kurosawa, M. (2013): Comparison of calibration curves for a new and old Si (Li) detectors with different energy resolution. *Ann. Rep., Tandem Accelerator Center, Univ. Tsukuba*, **82**, 37-39. (with Sasa, K.<sup>\*</sup> and Ishii, S.<sup>\*</sup>).
- (2014): Microscopic observation of rock samples with a polarizing microscope and scanning electron microscope. In Research Institute for Humanity and Nature Ed., *Manuals of Earth Environmental Sciences*, vol. 2, Asakura Publishing, Tokyo, 54-55.
- (2014): Mineralogical study of pottery from Tappeh Sange-e Chakhmaq. In Tsunaki, A. Ed., *The First Village in Northeast Iran and Turan: Tappeh Sange-e Chakhmaq and Beyond*, Research Center for West Asian Civilization, Tsukuba, 19-22.
- Kyono, A. (2013) Ab initio quantum chemical investigation of arsenic sulfide molecular diversity from As<sub>4</sub>S<sub>6</sub> and As<sub>4</sub>. *Physics and Chemistry of Minerals*, **40**, 717-731.
- (2013) High-pressure phase transitions of Fe<sub>3-x</sub>Ti<sub>x</sub>O<sub>4</sub> solid solution up to 60 GPa correlated with electronic spin transition. *American Mineralogist*, **98**, 736-744. (with Yamanaka, T.<sup>o\*\*</sup>, Nakamoto, Y.<sup>\*\*</sup>, Meng, Y.<sup>\*\*</sup>, Kharlamova, S.<sup>\*\*</sup>, Struzhkin, V.V.<sup>\*\*</sup>, Mao, H.K.<sup>\*\*</sup>)
- Maruoka, T. (2013): Tritium in Japanese precipitation following the March 2011 Fukushima Daiichi Nuclear Plant accident. *Science of The Total Environment*, **445-446**, 365-370 (with Matsumoto, T.<sup>o\*\*</sup>, Shimoda G.<sup>\*\*</sup>, Obata, H.<sup>\*\*</sup>, Kagi, H.<sup>\*\*</sup>, Suzuki, K.<sup>\*\*</sup>, Yamamoto, K.<sup>\*\*</sup>, Mitsuguchi, T.<sup>\*\*</sup>, Hagino, K.<sup>\*\*</sup>, Tomioka, N.<sup>\*\*</sup>, Sambandam, C.<sup>\*\*</sup>, Brummer, D.<sup>\*\*</sup>, Klaus, P. M.<sup>\*\*</sup>, Aggarwal P.<sup>\*\*</sup>)

- (2013) Multi-element isotopic analyses of presolar graphite grains from Orgueil. *Geochimica et Cosmochimica Acta*, **113**, 193-224 (with Jadhava, M.<sup>o\*\*</sup>, Zinner, E.<sup>\*\*</sup>, Amari, S.<sup>\*\*</sup>, Marhas, K.M.<sup>\*\*</sup>, Gallino, R.<sup>\*\*</sup>)
- (2013) Use of soil color meter for aqueous iron and ammonium measurements. *Soil Science and Plant Nutrition*, **59**, 450-454 (with Itai, T.<sup>o\*\*</sup>, Kusakabe, M.<sup>\*\*</sup>, Uesugi, K.<sup>\*\*</sup>, Mitamura M.<sup>\*\*</sup>)
- (2013) Redox conditions in the atmosphere and shallow-marine environments during the first Huronian deglaciation: Insights from Os isotopes and redox-sensitive elements. *Earth and Planetary Science Letters*, **376**, 145-154 (with Goto, K.T.<sup>o\*\*</sup>, Sekine, Y.<sup>\*\*</sup>, Suzuki, K.<sup>\*\*</sup>, Tajika, E.<sup>\*\*</sup>, Senda, R.<sup>\*\*</sup>, Nozaki, T.<sup>\*\*</sup>, Tada, R.<sup>\*\*</sup>, Goto, K.<sup>\*\*</sup>, Yamamoto, S.<sup>\*\*</sup>, Ohkouchi, N.<sup>\*\*</sup>, Ogawa, N.O.<sup>\*\*</sup>)
- Sashida, K. (2013): Morphological variability and phylogeny of the upper Tithonian-Berriasian Vallupinae (radiolarian) from the Mariana Trench. *Journal of Paleontology*, **87**, 1186-1194. (with Li, R.<sup>o\*\*</sup>)
- (2013): Ammonoides from the Sakiyama Formation of the Lower Cretaceous Miyako Group, Iwate Prefecture, Northeast Japan. *Bulletin of the National Museum of Nature and Science*, C, **39**, 43-50. (with Inose, H.<sup>o\*\*</sup> and Maeda, H.<sup>\*\*</sup>)
- Tsunogae, T. (2013): Phase equilibrium modelling of Palaeoproterozoic ultrahigh-temperature sapphirine granulite from the Inner Mongolia Suture Zone, North China Craton: Implications for counterclockwise *P-T* path. *Geological Journal*, **48**, 456-466 (with Shimizu, H.<sup>o\*\*\*</sup>, Santosh, M.<sup>\*\*</sup>, Liu, S.J.<sup>\*\*</sup>, Li, J.H.<sup>\*\*</sup>)
- (2013): Suprasubduction zone ophiolite from Agali hill: Petrology, zircon SHRIMP U-Pb geochronology, geochemistry and implications for Neoproterozoic plate tectonics in southern India. *Precambrian Research*, **231**, 301-324. (with Santosh, M.<sup>o\*\*</sup>, Shaji, E.<sup>\*\*</sup>, Ram Mohan, M.<sup>\*\*</sup>, Satyanarayanan, M.<sup>\*\*</sup>, Horie, K.<sup>\*\*</sup>)
- (2013): Petrology and SHRIMP zircon geochronology of granulites from Vesleknausen, Lützow-Holm Complex, East Antarctica: Neoproterozoic magmatism and Neoproterozoic-Cambrian metamorphism. *Geoscience Frontiers*, doi:10.1016/j.gsf.2013.04.003. (with Dunkley, D.J.<sup>\*\*</sup>, Horie, K.<sup>\*\*</sup>, Endo, T.<sup>\*\*\*</sup>, Miyamoto, T.<sup>\*\*</sup>, Kato, M.<sup>\*\*</sup>)
- (2013): Granulite formation in a Gondwana fragment: petrology and mineral equilibrium modeling of incipient charnockite from Mavadi, southern India. *Mineralogy and Petrology*, **107**, 727-738. (with Endo, T.<sup>o\*\*\*</sup>, Santosh, M.<sup>\*\*</sup>, Shimizu, H.<sup>\*\*\*</sup>, Shaji, E.<sup>\*\*</sup>)
- (2013): Mesoproterozoic arc magmatism in SE India: Petrology, zircon U-Pb geochronology and Hf isotopes of the Bopudi felsic suite from Eastern Ghats Belt. *Journal of Asian Earth Sciences*, **75**, 183-201. (with Dharma Rao, C.V.<sup>o\*\*</sup>, Santosh, M.<sup>\*\*</sup>, Zhang, Z.<sup>\*\*</sup>)
- (2013): Neoproterozoic magmatism and Neoproterozoic high-grade metamorphism in the southern Lützow-Holm Complex, East Antarctica: implications for regional correlation of Gondwana fragments. *International Association for Gondwana Research Conference Series*, **14**, 71-72. (with Dunkley, D.J.<sup>\*\*</sup>, Miyamoto, T.<sup>\*\*</sup>, Kato, M.<sup>\*\*</sup>)
- (2013): Phase equilibrium modelling and pressure-temperature-fluid evolution of retrogressed pelitic granulite from the Neoproterozoic Limpopo Complex, South Africa. *International Association for Gondwana Research Conference Series*, **14**, 73-75. (with Koizumi, T.<sup>o\*\*\*</sup>, van Reenen, D.D.<sup>\*\*</sup>)
- (2013): Petrology, geothermobarometry and geochemistry of mafic-ultramafic rocks from Aniyapuram in the Palghat-Cauvery Suture Zone, Southern India. *International Association for Gondwana Research Conference Series*, **14**, 76-77. (with Koizumi, T.<sup>o\*\*\*</sup>, Santosh, M.<sup>\*\*</sup>, Chetty, T.R.K.<sup>\*\*</sup>)
- (2013): Petrology and phase equilibrium modelling of spinel-sapphirine-bearing mafic granulite from Neoproterozoic-Cambrian Lützow-Holm Complex, East Antarctica. *International Association for Gondwana Research Conference Series*, **14**, 78-79. (with Iwamura, S.<sup>o\*\*\*</sup>, Koizumi, T.<sup>\*\*\*</sup>, Kato, M.<sup>\*\*</sup>, Dunkley, D.J.<sup>\*\*</sup>)
- (2013): Petrology and phase equilibrium modeling of spinel-sapphirine-bearing mafic granulite from Akarui Point, Lützow-Holm Complex, East Antarctica: Implications for the *P-T* path. *Journal of Mineralogical and Petrological Sciences*, **108**, 345-350. (with Iwamura, S.<sup>o\*\*\*</sup>, Kato, M.<sup>\*\*</sup>, Koizumi, T.<sup>\*\*\*</sup>, Dunkley, D.J.<sup>\*\*</sup>)
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- Ujii, K. (2013): Low coseismic shear stress on the Tohoku-Oki megathrust determined from laboratory experiments, *Science* **342**, 1211–1214. (with H.\*\* Tanaka, T. Saito\*\*, A. Tsutsumi\*\*, J. J. Mori\*\*, J. Kameda\*\*, E. E. Brodsky\*\*, F. M. Chester\*\*, N. Eguchi\*\*, S. Toczko\*\*, and Expedition\*\* 343 and 343T Scientists)
- (2013): Structure and composition of the plate-boundary slip zone for the 2011 Tohoku-Oki earthquake, *Science* **342**, 1208–1211. (with Chester, F.\*\* M., C. Rowe\*\*, J. Kirkpatrick\*\*, C. Regalla\*\*, F. Remitti\*\*, J. C. Moore\*\*, V. Toy\*\*, M. Wolfson-Schwehr\*\*, S. Bose\*\*, J. Kameda\*\*, J. J. Mori\*\*, E. E. Brodsky\*\*, N. Eguchi\*\*, S. Toczko\*\*, and Expedition\*\* 343 and 343T Scientists)
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- (2013): Rapid pulses of uplift, subsidence, and subduction erosion offshore Central America: Implications for building the rock record of convergent margins, *Geology* **41**, 995–998. (with Vannucchi\*\*, P., P. B. Sak\*\*, J. P. Morgan\*\*, K. Ohkushi\*\*, and the IODP Expedition\*\* 334 Shipboard Scientists)
- (2013): Geological and frictional aspects of very-low-frequency earthquakes in an accretionary prism, *Geophysical Research Letters* **40**, 703–708, doi:10.1002/grl.50175. (with Saito T.\*\*, A. Tsutsumi\*\*, J. Kameda\*\*, and B. Shibazaki\*\*).
- (2013): An investigation of the sedimentary record, fluid flow and state of stress on top of the seismogenic zone of an erosive subduction margin, *Scientific Drilling* **15**, doi:10.2204/iodp.sd.15.03.2013. (with Vannucchi\*\*, P. N. Stroncik\*\*, and the IODP Exp. 334 Scientific\*\* Party).
- Yagi, Y. (2013): An interpretation of tsunami earthquake based on a simple dynamic model: Failure of shallow megathrust earthquake. *Geophys. Res. Lett.*, DOI: 10.1002/grl.50266. (with Mitsui, Y.\*\*)
- (2013), Theoretical background of back-projection imaging and its relation to time-reversal and inverse solutions, *EGU General Assembly Conference Abstracts*, **15**, 1750. (with Fukahata, Y.\*\* and Rivera, L.\*\*)
- (2013), Detection of High-frequency Seismic Radiation from the Initiation and Termination of Asperity Rupture in the 2010 Chile, Maule Earthquake, *AGU Fall Meeting Abstracts*, **1**, 2488. (with Okuwaki, R.\*\*)