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研究業績 | PUBLICATION LIST 2016

Climate Science (気候システム科学)

- Bakker P., Schmittner A., Lenaerts J.T.M., Abe-Ouchi A., Bi D., van den Broeke M.R., Chan W.-L., Hu A., Beadling R.L., Marsland S.J., Mernild S.H., Saenko O.A., Swingedouw D., Sullivan A. and Yin J. (2016) Fate of the Atlantic Meridional Overturning Circulation: Strong decline under continued warming and Greenland melting. *Geophysical Research Letters*, **43**, 12,252-12,212.
- Belgaman H.A., Ichiyonagi K., Tanoue M., Suwarman R., Yoshimura K., Mori S., Kurita N., Yamanaka M.D. and Syamsudin F. (2016) Intraseasonal variability of $\delta^{18}\text{O}$ of precipitation over the Indonesian maritime continent related to the Madden-Julian Oscillation. *Scientific Online Letters on the Atmosphere*, **12**, 192-197.
- Bhattarai R., Yoshimura K., Seto S., Nakamura S. and Oki T. (2016) Statistical model for economic damage from flood inundation in Japan using rainfall data and socio-economic parameters. *Natural Hazards and Earth System Sciences*, **16**, 1063-1077.
- Boer G.J., Smith D.M., Cassou C., Doblas-Reyes F., Danabasoglu G., Kirtman B., Kushnir Y., Kimoto M., Meehl G.A., Msadek R., Mueller W.A., Taylor K.E., Zwiers F., Rixen M., Ruprich-Robert Y. and Eade R. (2016) The Decadal Climate Prediction Project (DCPP) contribution to CMIP6. *Geoscientific Model Development*, **9**, 3751-3777.
- Chen Y.-W., Seiki T., Kodama C., Satoh M., Noda A.T. and Yamada Y. (2016) High cloud responses to global warming simulated by two different cloud microphysics schemes implemented in the nonhydrostatic icosahedral atmospheric model (NICAM). *Journal of Climate*, **29**, 5949-5964.
- Chikamoto M.O., Timmermann A., Yoshimori M., Lehner F., Laurian A., Abe-Ouchi A., Mouchet A., Joos F., Raible C.C. and Cobb K.M. (2016) Intensification of tropical Pacific biological productivity due to volcanic eruptions. *Geophysical Research Letters*, **43**, 1184-1192.
- Chikamoto Y., Mochizuki T., Timmermann A., Kimoto M. and Watanabe M. (2016) Potential tropical Atlantic impacts on Pacific decadal climate trends. *Geophysical Research Letters*, **43**, 7143-7151.
- Haarsma R.J., Roberts M., Vidale P.L., Senior C., Bellucci A., Corti S., Fučkar N.S., Guemas V., von Hardenberg J., Hazeleger W., Kodama C., Koenigk T., Leung R., Lu J., Luo J.-J., Mao J., Mizielinsky M., Mizuta R., Nobre P., Satoh M., Scoccimarro E., Semmler T., Small J., and von Storch J.-S. (2016) High Resolution Model Intercomparison Project (HighResMIP v1.0) for CMIP6. *Geoscientific Model Development*, **9**, 4185-4208.
- Ham S., Lee J.-W. and Yoshimura K. (2016) Assessing future climate changes in the East Asian summer and winter monsoon using Regional Spectral Model. *Journal of the Meteorological Society of Japan*, **94**, doi: 10.2151/jmsj.2015-051.
- Ham S., Yoshimura K. and Li H. (2016) Historical dynamical downscaling for East Asia with the atmosphere and ocean coupled regional model. *Journal of the Meteorological Society of Japan*, **94**, doi: 10.2151/jmsj.2015-046.
- Hamada A. and Takayabu Y.N. (2016) Convective cloud-top vertical velocity estimated from geostationary satellite rapid-scan measurements. *Geophysical Research Letters*, **43**, 5435-5441.
- Hamada A. and Takayabu Y.N. (2016) Improvements in detection of light precipitation with the Global Precipitation Measurement dual-frequency precipitation radar (GPM DPR). *Journal of Atmospheric and Oceanic Technology*, **33**, 653-667.
- Hashino T., Satoh M., Hagihara Y., Kato S., Kubota T., Matsui T., Nasuno T., Okamoto H. and Sekiguchi M. (2016) Evaluating Cloud Radiative Effects simulated by NICAM with A-train. *Journal of Geophysical Research: Atmospheres*, **121**, 7041-7063.
- Hayashi M. and Watanabe M. (2016) Asymmetry of westerly and easterly wind events: Observational evidence. *SOLA*, **12**, 42-45.
- Haywood A.M., Dowsett H.J., Dolan A.M., Rowley D., Abe-Ouchi A., Otto-Bliesner B., Chandler M.A., Hunter S.J., Lunt D.J., Pound M. and Salzmann U. (2016) The Pliocene Model Intercomparison Project (PlioMIP) Phase 2: scientific objectives and experimental design. *Climate of the Past*, **12**, 663-675.
- Hiraike Y., Tanaka Y. and Hasumi H. (2016) Subduction of Pacific Antarctic Intermediate Water in an eddy resolving model. *Journal of Geophysical Research: Oceans*, **121**, 133-147.
- Hirose H., Yamamoto M.K., Shige S., Higuchi A., Mega T., Ushio T. and Hamada A. (2016) A rain potential map with high temporal and spatial resolutions retrieved from five geostationary meteorological satellites. *SOLA*, **12**, 297-301.
- Hirose M., Takayabu Y.N., Hamada A., Shige S. and Yamamoto M.K. (2016) Impact of long-term observation on the sampling characteristics of TRMM PR precipitation. *Journal of Applied Meteorology and Climatology*, doi: 10.1175/JAMC-D-16-0115.1.
- Hirota N., Takayabu Y.N. and Hamada A. (2016) Reproducibility of summer precipitation over northern Eurasia in CMIP5 multi-climate models. *Journal of Climate*, **29**, 3317-3337.
- Hirota N., Takayabu Y.N., Kato M. and Arakane S. (2016) Roles of an atmospheric river and a cutoff low in the extreme precipitation event in Hiroshima on 19 August 2014. *Monthly Weather Review*, **144**, 1145-1160.
- Hourdin F., Mauritsen T., Gettelman A., Golaz J.-C., Balaji V., Duan Q., Folini D., Ji D., Klocke D., Qian Y., Rauser F., Rio C., Tomassini L., Watanabe M. and Williamson D. (2016) The art and science of climate model tuning. *Bulletin of the American Meteorological Society*, doi: 10.1175/BAMS-D-15-00135.1.
- Howell F.W., Haywood A.M., Otto-Bliesner B.L., Bragg F., Chan W.L., Chandler M.A., Contoux C., Kamae Y., Abe-Ouchi A., Rosenbloom N.A., Stepanek C. and Zhang Z. (2016) Arctic sea ice simulation in the PlioMIP ensemble. *Climate of the Past*, **12**, 749-767.

- Imada Y., Tatebe H., Watanabe M., Ishii M. and Kimoto M. (2016) South Pacific influence on the termination of El Niño in 2014. *Scientific Reports*, **6**, doi: 10.1038/srep30341.
- Iryu Y., Kuramoto K., Satoh M., Matsumoto J., Yoshioka S., Kawahata H. and Tada R. [Editorial] (2016) A review by the chief editors of some of the most popular papers published by PEPS in 2014-2015. *Progress in Earth and Planetary Science*, **3**, doi: 10.1186/s40645-016-0079-4.
- Ishii S., Okamoto K., Baron P., Kubota T., Satoh Y., Sakaizawa D., Ishibashi T., Tanaka T.Y., Yamashita K., Ochiai S., Gamo K., Yasui M., Oki R., Satoh M. and Iwasaki T. (2016) Measurement performance assessment of future space-borne Doppler Wind Lidar for Numerical Weather Prediction. *SOLA*, **12**, 55-59.
- Kamae Y., Ogura T., Shiogama H. and Watanabe M. (2016) Recent progress toward reducing the uncertainty in tropical low cloud feedback and climate sensitivity: A review. *Geoscience Letters*, **3**, doi: 10.1186/s40562-016-0053-4.
- Kamae Y., Ogura T., Watanabe M., Xie S.-P. and Ueda H. (2016) Robust cloud feedback over tropical land in a warming climate. *Journal of Geophysical Research*, **121**, 2593-2609.
- Kamae Y., Shiogama H., Imada Y., Mori M., Arakawa O., Mizuta R., Yoshida K., Takahashi C., Arai M., Ishii M., Watanabe M., Kimoto M., Xie S.-P. and Ueda H. (2016) Forced response and internal variability of summer climate over western North America. *Climate Dynamics*, doi: 10.1007/s00382-016-3350-x.
- Kamae Y., Shiogama H., Watanabe M., Ogura T., Yokohata T. and Kimoto M. (2016) Lower tropospheric mixing as a constraint on cloud feedback in a multiparameter multiphysics ensemble. *Journal of Climate*, **29**, 6259-6275.
- Kawasaki T. and Hasumi H. (2016) The inflow of Atlantic water at the Fram Strait and its interannual variability. *Journal of Geophysical Research: Oceans*, **121**, 502-519.
- Kikuchi K., Kodama C., Nasuno T., Miura H., Satoh M., Noda A.T., Yamada Y. (2016) Tropical intraseasonal oscillation simulated in an AMIP-type experiment by NICAM. *Climate Dynamics*, doi: 10.1007/s00382-016-3219-z.
- Kubokawa H., Satoh M., Suzuki J. and Fujiwara M. (2016) Influence of topography on temperature variations in the tropical tropopause layer. *Journal of Geophysical Research: Atmospheres*, **121**, 11556-11574.
- Laine A., Yoshimori M. and Abe-Ouchi A. (2016) Surface Arctic amplification factors in CMIP5 models: land and oceanic surfaces, seasonality. *Journal of Climate*, **29**, 3297-3316.
- Lebsock M.D. and Suzuki K. (2016) Uncertainty characteristics of total water path retrievals in shallow cumulus derived from a spaceborne radar/radiometer integral constraints. *Journal of Atmospheric and Oceanic Technology*, **33**, 1597-1609.
- Lee H., Kalashnikova O.V., Suzuki K., Braverman A., Garay M.J. and Kahn R. (2016) Climatology of the aerosol optical depth by components from the Multiangle Imaging SpectroRadiometer (MISR) and chemistry models. *Atmospheric Chemistry and Physics*, **16**, 6627-6640.
- Leinonen J., Lebsock M.D., Stephens G.L. and Suzuki K. (2016) Improved retrieval of cloud liquid water from CloudSat and MODIS. *Journal of Applied Meteorology and Climatology*, **55**, 1831-1844.
- Liu Z., Yoshimura K., Buening N. and Jian Z. (2016) The response of winter Pacific North American pattern to the largest volcanic eruptions. *Climate Dynamics*, doi: 10.1007/s00382-016-3287-0.
- Matsui T., Tao W.-K., Chern J., Lang S., Satoh M., Hashino T. and Kubota T. (2016) On the land-ocean contrast of tropical convection and microphysics statistics derived from TRMM satellite signals and global storm-resolving models. *Journal of Hydrometeorology*, **17**, doi: 10.1175/JHM-D-15-0111.1.
- Matsumi Y., Hidemori T., Nakayama T., Imasu R. and Dhaka S.K. (2016) Measuring methane with a simple open-path gas sensor. *SPIE Newsroom*, doi: 10.1117/2.1201601.006283.
- Michibata T., Suzuki K., Sato Y. and Takemura T. (2016) The source of discrepancies in aerosol-cloud-precipitation interactions between GCM and A-Train retrievals. *Atmospheric Chemistry and Physics*, **16**, 15413-15424.
- Mochizuki T., Kimoto M., Watanabe M., Chikamoto Y. and Ishii M. (2016) Interbasin influence of the Indian Ocean on the Pacific decadal climate change. *Geophysical Research Letters*, **43**, 7168-7175.
- Nishikawa Y. and Satoh M. (2016) A conserved topographical representation scheme using a thin-wall approximation in z-coordinates. *SOLA*, **12**, 232-236.
- Niwa Y., Fujii Y., Sawa Y., Iida Y., Ito A., Satoh M., Imasu R., Tsuboi K., Matsueda H. and Saigusa N. (2016) A 4D-Var inversion system based on the icosahedral grid model (NICAM-TM 4D-Var v1.0): 2. Optimization scheme and identical twin experiment of atmospheric CO₂ inversion. *Geoscientific Model Development*, doi: 10.5194/gmd-2016-232.
- Niwa Y., Tomita H., Satoh M., Imasu R., Sawa Y., Tsuboi K., Matsueda H., Machida T., Sasakawa M., Belan B. and Saigusa N. (2016) A 4D-Var inversion system based on the icosahedral grid model (NICAM-TM 4D-Var v1.0): 1. Off-line forward and adjoint transport models. *Geoscientific Model Development*, doi: 10.5194/gmd-2016-231.
- Noda A.T., Seiki T., Satoh M. and Yamada Y. (2016) High cloud size dependency in the applicability of the fixed anvil temperature hypothesis using global non-hydrostatic simulations. *Geophysical Research Letters*, **43**, 2307-2314.
- Nowicki SMJ, Payne A, Larour E, Seroussi H, Goelzer H, Lipscomb W, Gregory J, Abe-Ouchi A, Shepherd A (2016) Ice Sheet Model Intercomparison Project (ISMIP6) contribution to CMIP6. *Geoscientific Model Development*, **9**, 4521-4545, doi:10.5194/gmd-9-4521-2016.
- Ohno T., Satoh M. and Yamada Y. (2016) Warm cores, eyewall slopes, and intensities of tropical cyclones simulated by a 7-km-mesh global nonhydrostatic model. *Journal of the Atmospheric Sciences*, **73**, 4289-4309.

- Okata M., Nakajima T., Suzuki K., Inoue T., Nakajima T.Y. and Okamoto H. (2016) A study on radiative transfer effects in 3D cloudy atmosphere using satellite data. *Journal of Geophysical Research: Atmospheres*, doi: 10.1002/2016JD025441.
- Oouchi K. and Satoh M. (2016) A synoptic-scale cold-reservoir hypothesis on the origin of the mature-stage super cloud cluster: a case study with a global nonhydrostatic model. *Meteorological Monographs*, **56**, Multiscale Convection-Coupled Systems in the Tropics: A tribute to Dr. Michio Yanai, Chapter 14, doi: 10.1175/AMSMONOGRAPHIS-D-15-0008.1.
- Ota Y. and Imasu R. (2016) CO₂ Retrieval using thermal infrared radiation observation by Interferometric Monitor for Greenhouse Gases (IMG) onboard Advanced Earth Observing Satellite (ADEOS). *Journal of the Meteorological Society of Japan*, **94**, doi: 10.2151/jmsj.2016-027.
- Parrenin F., Fujita S., Abe-Ouchi A., Kawamura K., Masson-Delmotte V., Motoyama H., Saito F., Severi M., Stenni B., Uemura R. and Wolff E.W. (2016) Climate dependent contrast in surface mass balance in East Antarctica over the past 216 ka. *Journal of Glaciology*, **62**, 1037-1048.
- Past Interglacials Working Group of PAGES (Berger A., Abe-Ouchi A. et al.) (2016) Interglacials of the last 800,000 years. *Reviews of Geophysics*, **54**, 162-219.
- Saito F., Abe-Ouchi A., Takahashi K. and Blatter H. (2016) SeaRISE experiments revisited: potential sources of spread in multi-model projections of the Greenland ice sheet. *The Cryosphere*, **10**, 43-63.
- Saitoh N., Kimoto S., Sugimura R., Imasu R., Kawakami S., Shiomi K., Kuze A., Machida T., Sawa Y. and Matsueda H. (2016) Algorithm update of the GOSAT/TANSO-FTS thermal infrared CO₂ product (version 1) and validation of the UTLS CO₂ data using CONTRAIL measurements. *Atmospheric Measurement Techniques*, **9**, 2119-2134.
- Satoh M., Aramaki K. and Sawada M. (2016) Structure of tropical convective systems in aqua-planet experiments: Radiative-convective equilibrium versus the Earth-like experiment. *SOLA*, **12**, 220-224.
- Satoh M., Roh W. and Hashino T. (2016) Evaluations of clouds and precipitations in NICAM using the Joint Simulator for Satellite Sensors. *CGER's Supercomputer Monograph Report*, **22**, CGER-1127-2016.
- Shiogama H., Imada Y., Mori M., Mizuta R., Stone D., Yoshida K., Arakawa O., Ikeda M., Takahashi C., Arai M., Ishii M., Watanabe M. and Kimoto M. (2016) Attributing historical changes in probabilities of record-breaking daily temperature and precipitation extreme events. *SOLA*, **12**, 225-231.
- Someya Y., Imasu R., Saitoh N., Ota Y. and Shiomi K. (2016) A development of cloud top height retrieval using thermal infrared spectra observed with GOSAT and comparison with CALIPSO data. *Atmospheric Measurement Techniques*, **9**, 1981-1992.
- Takahashi C. and Watanabe M. (2016) Pacific trade winds accelerated by aerosol forcing over the past two decades. *Nature Climate Change*, **6**, 768-772.
- Takahashi C., Watanabe M., Shiogama H., Imada Y. and Mori M. (2016) A persistent Japanese heat wave in early August 2015: Roles of natural variability and human induced warming. *Bulletin of the American Meteorological Society*, **97**, S107-S110.
- Takayabu Y.N., Kiladis G.N. and Magana V. (2016) Michio Yanai and tropical waves. *Meteorological Monographs*, **56**, Multiscale Convection-Coupled Systems in the Tropics: A tribute to Dr. Michio Yanai, Chapter 3, doi: 10.1175/AMSMONOGRAPHIS-D-15-0019.1.
- Tanoue M., Ichiyanagi K. and Yoshimura K. (2016) Verification of the isotopic composition of precipitation simulated by a regional isotope circulation model over Japan. *Isotopes in Environmental and Health Studies*, **52**, doi: 10.1080/10256016.2016.1148695.
- Tao W.-K., Takayabu Y.N., Lang S., Olson W., Shige S., Hou A., Jiang X., Lau W., Krishnamurti T., Waliser D., Zhang C., Johnson R., Houze R., Ciesielski P., Grecu M., Hagos S., Kakar R., Nakamura K., Braun S., Oki R. and Bhardwaj A. (2016) TRMM latent heating retrieval: applications and comparisons with field campaigns and large-scale analyses. *Meteorological Monographs*, **56**, Multiscale Convection-Coupled Systems in the Tropics: A tribute to Dr. Michio Yanai, Chapter 2, doi: 10.1175/AMSMONOGRAPHIS-D-15-0013.1.
- Uchida J., Mori M., Nakamura H., Satoh M., Suzuki K., Nakajima T. (2016) Error and energy budget analysis of a non-hydrostatic stretched-grid global atmospheric model. *Monthly Weather Review*, **144**, 1423-1447.
- Wei Z., Yoshimura K., Okazaki A., Ono K., Kim W., Yokoi M. and Lai C.-T. (2016) Understanding the variability of water isotopologues in near-surface atmospheric moisture over a humid subtropical rice paddy in Tsukuba, Japan. *Journal of Hydrology*, **533**, 91-102.
- Yang H., Johnson K.R., Griffiths M.L. and Yoshimura K. (2016) Interannual controls on oxygen isotope variability in Asian Monsoon precipitation and implications for paleoclimate reconstructions. *Journal of Geophysical Research: Atmosphere*, **121**, 8410-8428.
- Yoshikane T., Yoshimura K., Chang E.-C., Saya A. and Oki T. (2016) Long-distance transport of radioactive plume by nocturnal local winds. *Scientific Reports*, **6**, doi: 10.1038/srep36584.
- Yoshimori M., Watanabe M., Shiogama H., Oka A., Abe-Ouchi A., Ohgaito R. and Kamae Y. (2016) A review of progress towards understanding the transient global mean surface temperature response to radiative perturbation. *Progress in Earth and Planetary Science*, **3**, doi: 10.1186/s40645-016-0096-3.
- Zakharov V.I., Gribanov K.G., Imasu R. and Noone D. (2016) Method of principal components for inverse problem of satellite sounding of heavy water in the atmosphere. *Atmospheric and Oceanic Optics*, **29**, 608-614.

- 稲津 将・濱田 篤 (2016) 気象学の色遣い ~均等色空間を利用したカラーリング~. 天気, **63**, 803-809.
- 今須良一・山内 恭 (2016) チリ, アタカマの残雪ーベニテンテー. 日本雪氷学会誌「雪氷」, **78**, 1-2.
- 木本昌秀 (2016) 気候モデルの開発を通じた我が国の地球温暖化研究の推進と気候変動にかかわる社会への情報発信. 天気, **63**, 793-801.
- 鳩野美佐子・芳村 圭・荒川 隆・山崎 大・沖 大幹 (2016) 高解像度河川氾濫過程の導入が大気大循環モデルの推計値に及ぼす影響. 土木学会論文集 B1(水工学), **72**, I_115 - I_120.
- 芳村 圭 (2016) 水同位体比情報を用いたデータ同化. 水文科学会誌, **46**, 87-99.
- 芳村 圭・中村晋一郎・鳩野美佐子・向田清峻・石塚悠太・内海信幸・木口雅司・金 炯俊・乃田啓吾・牧野達哉・鼎信次郎・沖 大幹 (2016) 平成 27 年 9 月関東・東北豪雨による茨城県常総市における鬼怒川洪水に関する調査及び考察. 土木学会論文集 B1(水工学), **72**, I_1273-I_1278.

Physical Oceanography (海洋物理)

- Akitomo K., Hirano M., Kinugawa Y., Sakamoto K. and Tanaka K. (2016) Scalings of the tidally-induced bottom boundary layer in a shallow sea under a surface heating. *Journal of Oceanography*, **72**, 541-552.
- Goto Y., Yasuda I. and Nagasawa M. (2016) Turbulence estimation using fast-response thermistors attached to a free-fall vertical microstructure profiler. *Journal of Atmospheric and Oceanic Technology*, **33**, 2065-2078.
- Ito J. and Niino H. (2016) Wind-surface heat flux feedback in dust devils. *Boundary-Layer Meteorology*, **161**, 229-235.
- Ito J. and Niino H. (2016) Atmospheric Kármán vortex shedding from Jeju Island, East China Sea: A numerical study. *Monthly Weather Review*, **144**, 139-148.
- Itoh S., Kaneko H., Ishizu M., Yanagimoto D., Okunishi T., Nishigaki H. and Tanaka K. (2016) Fine-scale structure and mixing across the front between the Tsugaru Warm and Oyashio Currents in summer along the Sanriku Coast, east of Japan. *Journal of Oceanography*, **72**, 23-37.
- Itoh S., Kasai A., Takeshige A., Zenimoto K., Kimura S., Suzuki K.W., Miyake Y., Funahashi T., Yamashita Y. and Watanabe Y. (2016) Circulation and haline structure of a microtidal bay in the Sea of Japan influenced by the winter monsoon and the Tsushima Warm Current. *Journal of Geophysical Research: Oceans*, **121**, 6331-6350.
- Kobashi F., Onikata Y., Iwasaka N., Kawai Y., Oka E., Uehara K., Ito S.-I., Odamaki M. and Sasaki H. (2016) Small meanders of the Kuroshio Extension and associated northward spreading of warm water: Three-vessel simultaneous observations and an eddy-resolving ocean model simulation. *Journal of Geophysical Research: Oceans*, **121**, 5315-5337.
- Komuro Y., Danabasoglu G., Marsland S., Lin X., Minobe S., Pirani A., Suzuki T. and Yasuda I. (2016) Workshop on the Kuroshio current and extension system: Theory, observations, and ocean climate modelling-The workshop overview and outcomes. *CLIVAR Exchanges*, No. 69, Aug.2016, 1-5.
- Saito R., Yasuda I., Komatsu K., Ishiyama H., Ueno H., Onishi H., Setou T. and Shimizu M. (2016) Subsurface hydrographic structures and the temporal variations of Aleutian eddies. *Ocean Dynamics*, **66**, 605-621.
- Sueki K. and Niino H. (2016) Toward better assessment of tornado potential in typhoons: Significance of considering entrainment effects for CAPE. *Geophysical Research Letters*, **43**, doi: 10.1002/2016GL070349.
- Tanaka T., Yasuda I., Kuma K. and Nishioka J. (2016) Evaluation of the biogeochemical impact of iron-rich shelf water to the Green Belt in the southeastern Bering Sea. *Continental Shelf Research*, doi: 10.1016/j.csr.2016.11.008.
- Tochimoto E. and Niino H. (2016) Structural and environmental characteristics of extratropical cyclones that cause a tornado outbreak in the warm sector: A composite study. *Monthly Weather Review*, **144**, 945-969.
- Watanabe S. I., Niino H. and Yanase W. (2016) Climatology of polar mesocyclones over the Sea of Japan using a new objective tracking method. *Monthly Weather Review*, **144**, 2503-2515.
- Yamada H., Nasuno T., Yanase W. and Satoh M. (2016) Role of the vertical structure of a simulated tropical cyclone in its motion: A case study of Typhoon Fengshen (2008). *SOLA*, **12**, 203-208.
- Yanase W., Niino H., Watanabe S.I., Hodges K., Zahn M., Spengler T. and Gurvich I. (2016) Climatology of polar lows over the Sea of Japan using the JRA-55 reanalysis. *Journal of Climate*, **29**, 419-437.
- Yasuda I. (2016) Variability and mixing in the Kuroshio and impact on ecosystem and climate. *CLIVAR Exchanges*, No. 69, Aug.2016, 10-13.
- Yokota S., Seko H., Kunii M., Yamauchi H. and Niino H. (2016) The tornadic supercell on the Kanto Plain on 6 May 2012: Polarimetric radar and surface data assimilation with EnKF and ensemble-based sensitivity analysis. *Monthly Weather Review*, **144**, 3133-3157.
- 小関修治・千葉 元・道田 豊・橋本心太郎 (2016) 船舶搭載型 ADCP で捉えた富山湾から佐渡海峡の流れの特徴. 日本航海学会論文集, **134**, 66-72.
- 乙部直人・筆保弘徳・菅田誠治・伊賀啓太・佐藤正樹・田島俊彦・佐藤 元・酒井 敏・三村和男・山田朋人・北野慈和 (2016) 回転水槽実験のこれまでとこれから. 天気, **63**, 515-535.
- 新野 宏 (2016) 5. 竜巻ーその環境場の理解と予測可能性に向けてー, 2016 年度日本気象学会春季大会シンポジウム報告, 天気, **63**, 973-978.
- 栃本英伍・渡邊俊一・末木健太・吉住蓉子, 下瀬健一・津口裕茂・加藤亮平・鶴沼 昂 (2016) 第3回メソ気象セミナー開催報告, 天気, **63**, 929-935.

Chemical Oceanography (海洋化学)

- Aoyama M., Kajino M., Tanaka T.Y., Sekiyama T.T., Tsumune D., Tsubono T., Hamajima Y., Inomata Y. and Gamo T. (2016) ^{134}Cs and ^{137}Cs in the North Pacific Ocean derived from the March 2011 TEPCO Fukushima Dai-ichi Nuclear Power Plant accident, Japan: Part Two --- Estimation of ^{134}Cs and ^{137}Cs inventories in the North Pacific Ocean. *Journal of Oceanography*, **72**, 67-76.
- Araoka D., Nishio Y., Gamo T., Yamaoka K. and Kawahata H. (2016) Lithium isotopic systematics of submarine vent fluids from arc and back-arc hydrothermal systems in the western Pacific. *Geochemistry, Geophysics, Geosystems*, **17**, 3835-3853.
- Chen C.-H., Liu Y.-H., Lee C.-Y., Sano Y., Zhou H.-W., Xiang H. and Takahata N. (2016) The Triassic reworking of the Yunkai massif (South China): EMP monazite and U-Pb zircon geochronologic evidence. *Tectonophysics*, **694**, 1-22.
- Ehama M., Hashihama F., Kinouchi S., Kanda J. and Saito H. (2016) Sensitive determination of total particulate phosphorus and particulate inorganic phosphorus in seawater using liquid waveguide spectrophotometry. *Talanta*, **153**, 66-70.
- Ferrera C.M., Watanabe A., Miyajima T., San Diego-McGlone M.L., Morimoto N., Umezawa Y., Herrera E., Tsuchiya T., Yoshikai M. and Nadaoka K. (2016) Phosphorus as a driver of nitrogen limitation and sustained eutrophic conditions in Bolinao and Anda, Philippines, a mariculture-impacted tropical coastal area. *Marine Pollution Bulletin*, **105**, 237-248.
- Fichot C.G., Benner R., Kaiser K., Shen Y., Amon R.M.W., Ogawa H. and Lu C.-J. (2016) Predicting dissolved lignin phenol concentrations in the coastal ocean from chromophoric dissolved organic matter (CDOM) absorption coefficients. *Frontiers Marine Science*, **3**, doi: 10.3389/fmars.2016.00007.
- Fukuda H., Katayama R., Yang Y.-Y., Takasu H., Nishibe Y., Tsuda A. and Nagata T. (2016) Nutrient status of Otsuchi Bay (northeastern Japan) following the 2011 off the Pacific coast of Tohoku Earthquake. *Journal of Oceanography*, **72**, 39-52.
- Kagoshima T., Sano Y., Takahata N., Ishida A., Tomonaga Y., Roulleau E., Pinti D.L., Fischer T.P., Lan T., Nishio Y., Tsunogai U. and Guo Z. (2016) Spatial and temporal variations of gas geochemistry at Mt. Ontake, Japan. *Journal of Volcanology and Geothermal Research*, **325**, 179-188.
- Kawagucci S., Miyazaki J., Noguchi T., Okamura K., Shibuya T., Watsuji T., Nishizawa M., Watanabe H., Okino K., Takahata N., Sano Y., Nakamura K., Shuto A., Abe M., Takaki Y., Nunoura T., Koonjul M., Singh M., Beedesse G., Khishma M., Bhooyroo V., Bissessur D., Kumar L.S., Marie D., Tamaki K. and Takai K. (2016) Fluid chemistry in the Solitaire and Dodo hydrothermal fields of the Central Indian Ridge. *Geofluids*, **16**, 988-1005.
- Koike M., Sano Y., Takahata N., Ishida A., Sugiura N. and Anand M. (2016) Combined investigation of H isotopic compositions and U-Pb chronology of young Martain meteorite Larkman Nunatak 06319. *Geochemical Journal*, **50**, 363-377.
- Kondo Y., Obata H., Hioki N., Ooki A., Nishino S., Kikuchi T. and Kuma K. (2016) Transport of trace metals (Mn, Fe, Ni, Zn and Cd) in the western Arctic Ocean (Chukchi Sea and Canada Basin) in late summer 2012. *Deep-Sea Research-I*, **116**, 236-252.
- Lu C.-J., Benner R., Fichot C.G., Fukuda H., Yamashita Y. and Ogawa H. (2016) Sources and transformations of dissolved lignin phenols and chromophoric dissolve organic matter in Otsuchi Bay, Japan. *Frontiers in Marine Science*, **3**, doi: 10.3389/fmars.2016.00085.
- Marty B., Avice G., Sano Y., Altwegg K., Balsiger H., Hässig M., Morbidelli A., Mousis O., and Martin Rubin M. (2016) Origins of volatile elements (H, C, N, noble gases) on Earth and Mars in light of recent results from the ROSETTA cometary mission. *Earth and Planetary Science Letters*, **441**, 91-102.
- Mashio, S. A., Obata H., Tazoe H., Tsutsumi M., Ferrer i Santos A. and Gamo T. (2016) Dissolved platinum in rainwater, river water and seawater around Tokyo Bay and Otsuchi Bay in Japan. *Estuarine, Coastal and Shelf Science*, **180**, 160-167.
- Miyajima T., Morimoto N., Nakamura T., Yamamoto T., Watanabe A. and Nadaoka K. (2016) Atmospheric deposition of reactive nitrogen as a regional-scale eutrophication stress on the coral reef ecosystem. In *Coral Reef Science: Strategy for Ecosystem Symbiosis and Coexistence with Humans under Multiple Stresses*, edited by Kayanne H., Springer, 95-101.
- Nakayama N., Tokieda T., Suzuki A., Kim T.-J., Gamo T. and Obata H. (2016) Size fractionation of nanoparticulate metal sulfides in oxic water of Lake Teganuma, Japan. *Geochemical Journal*, **50**, doi: 10.2343/geochemj.2.0408.
- Nomaki H., Bernhard J.M., Ishida A., Tsuchiya M., Uematsu K., Tame A., Kitahashi T., Takahata N., Sano Y. and Toyofuku T. (2016) Intracellular isotope localization in *Ammonia* sp. (Foraminifera) of oxygen-depleted environments: results of nitrate and sulfate labeling experiments. *Frontiers in Microbiology*, **7**, doi: 10.3389/fmicb.2016.00163.
- Obata H. (2016) Trace Metals. In *Guideline of Ocean Observations*, Vol. 3, edited by The Oceanographic Society of Japan, The Oceanographic Society of Japan, Japan, G303EN:001-005.
- Ohkouchi N., Shibata H., Chikaraishi Y., Nomaki H., Ogawa N., Nagata T., Goto T., Fujikura K. and Kitazato H. (2016) A monitoring result of polychlorinated biphenyls (PCBs) in deep-sea organisms and sediments off Tohoku during 2012-2014: temporal variation and the relationship with the trophic position. *Journal of Oceanography*, **72**, doi: 10.1007/s10872-016-0359-z.

- Ooki M., Kagoshima T., Takahata N., Ishibashi J., Lan T., Guo Z. and Sano Y. (2016) Volatile element isotopes of submarine hydrothermal mineral deposits in the Western Pacific. *Geochemistry, Geophysics, Geosystems*, **17**, doi: 10.1002/2016GC006360.
- Pinti D.L., Gelinas Y., Moritz A.M., Larocque M. and Sano Y. (2016) Anthropogenic and natural methane emissions from a shale gas exploration area of Quebec, Canada. *Science of the Total Environment*, **566-567**, 1329-1338.
- Pinti D.L., Ishida A., Takahata N., Sano Y., Bureau H. and Cartigny P. (2016) Micron-scale $\delta^{13}\text{C}$ determination by NanoSIMS in a Juina diamond with a carbonate inclusion. *Geochemical Journal*, **50**, e7-e12.
- Rouilleau E., Tardani D., Sano Y., Takahata N., Vinet N., Berrios C., Bravo F., Muñoz C., and Sanchez J. (2016) New insight from noble gas and stable isotopes of geothermal/hydrothermal fluids at Cavihue-Copahue Volcanic Complex: Boiling steam separation and water-rock interaction at shallow depth. *Journal of Volcanology and Geothermal Research*, **328**, 70-83.
- Saby M., Pinti D.L., Barbecot F., Sano Y. and Castro M.C. (2016) Linking groundwater quality to residence times and regional geology in southern Quebec, Canada. *Applied Geochemistry*, **65**, 1-13.
- Sano Y., Takahata N., Kagoshima T., Shibata T., Onoue T. and Zhao D. (2016) Groundwater helium anomaly reflects strain change during the 2016 Kumamoto earthquake in Southwest Japan. *Scientific Reports*, **6**, doi: 10.1038/srep37939.
- Tardani D., Reich M., Rouilleau E., Takahata N., Sano Y., Péres P., Sánchez P., Cembrano J., and Arancibia G. (2016) Exploring the structural controls on helium, nitrogen and carbon isotope signatures in hydrothermal fluids along an intra-arc fault system. *Geochimica et Cosmochimica Acta*, **184**, 193-211.
- Tazoe H., Obata H., Yamagata T., Karube Z., Nagai H. and Yamada M. (2016) Determination of strontium-90 from direct separation of yttrium-90 by solid phase extraction using DGA Resin for seawater monitoring. *Talanta*, **152**, 219-227.
- Toki T., Hamamoto A., Tawata M., Miyazaki J., Nakamura K., Abe M., Takai K., Sano Y., Takahata N., Tsunogai U. and Ishibashi J. (2016) Methanogens in H₂-rich hydrothermal fluids resulting from phase separation in a sediment-starved basalt-hosted hydrothermal system. *Chemical Geology*, **447**, 208-218.
- Toki T., Itoh M., Iwata D., Ohshima S., Shinjo R., Ishibashi J., Tsunogai U., Takahata N., Sano Y., Yamanaka T., Ijiri A., Okabe N., Gamo T., Muramatsu Y., Ueno Y., Kawagucci S. and Takai K. (2016) Geochemical characteristics of hydrothermal fluids at Hatoma Knoll in the southern Okinawa Trough. *Geochemical Journal*, **50**, 493-525.
- Uchimiya M., Motegi C., Nishino S., Kawaguchi Y., Inoue J., Ogawa H. and Nagata T. (2016) Coupled response of bacterial production to a wind-induced fall phytoplankton bloom and sediment resuspension in the Chukchi Sea Shelf, Western Arctic Ocean. *Frontiers in Marine Science*, **3**, doi: 10.3389/fmars.2016.00231.
- Wen H.-Y., Sano Y., Takahata N., Tomonaga Y., Ishida A., Tanaka K., Kagoshima T., Shirai K., Ishibashi J., Yokose H., Tsunogai U. and Yang T.F. (2016) Helium and methane sources and fluxes of shallow submarine hydrothermal plumes near the Tokara Islands, Southern Japan. *Scientific Reports*, **6**, doi: 10.1038/srep34126.
- Wen H.-Y., Yang T.F., Lan T.F., Lee H.-F., Lin C.-H., Sano Y. and Chen C.-H. (2016) Soil CO₂ flux in hydrothermal areas of the Tatun Volcano Group, Northern Taiwan. *Journal of Volcanology and Geothermal Research*, **321**, 114-124.
- Yamamoto M., Liu D., Kasai A., Okubo K. and Tanaka M. (2016) Dynamics of iron in the Chikugo River Basin: Comparison of iron with nitrogen and phosphate input to the estuary. *Regional Studies in Marine Science*, **8**, 89-98.
- Yasui S., Kanda J., Usui T. and Ogawa H. (2016) Seasonal variations of dissolved organic matter and nutrients in sediment pore water in the inner part of Tokyo Bay. *Journal of Oceanography*, **72**, 851-866.
- Zhang M., Guo Z., Sano Y., Zhang L., Sun Y., Cheng Z. and Yang T.F. (2016) Magma-derived CO₂ emissions in the Tengchong volcanic field, SE Tibet: Implications for deep carbon cycle at intra-continent subduction zone. *Journal of Asian Earth Sciences*, **127**, 76-90.
- 蒲生俊敬 (2016) 「日本海 その深層で起こっていること」, 講談社, 東京, 204pp.
- 蒲生俊敬 (2016) 水の惑星・地球. *ELCO RADAR*, **66**, 8-10.
- 蒲生俊敬 (2016) 海洋のダイナミクスが生命を育む. *ELCO RADAR*, **67**, 8-10.
- 蒲生俊敬 (2016) 人間活動が海を変えていく. *ELCO RADAR*, **68**, 8-10.
- 蒲生俊敬 (2016) GEOTRACES 計画エンジン全開 一太平洋・インド洋における微量元素・同位体の生物地球化学研究の進展一. 月刊海洋号外, **58**, 5-15.
- デイビッド・L. カーチマン (著) / 永田 俊 (翻訳) (2016) 「微生物生態学 ―ゲノム解析からエコシステムまで―」, 京都大学学術出版会, 日本, 626pp.

Ocean Floor Geoscience (海洋底科学)

- Amekawa S., Kubota K., Miyairi Y., Seki A., Kawakubo Y., Sakai S., Ajithprasad P., Maemoku H., Osada T. and Yokoyama Y. (2016) Fossil otoliths, from the Gulf of Kutch, Western India, as a paleo-archive for the mid- to late-Holocene environment. *Quaternary International*, **397**, 281-288.
- Bouton A., Vennin E., Boule J., Pace A., Bourillot R., Thomazo C., Brayard A., Désaubliaux G., Goslar T., Yokoyama Y., Dupraz C. and Visscher P.T. (2016) Linking the distribution of microbial deposits from the Great Salt Lake (Utah, USA) to tectonic and climatic processes. *Biogeosciences*, **13**, 5511-5526.
- Fujii M., Okino K., Sato H., Nakamura K., Sato T. and Yamazaki T. (2016) Variation in magnetic properties of serpentinized peridotites exposed on the Yokoniwa Rise, Central Indian Ridge: Insights into the role of magnetite in serpentinization. *Geochemistry, Geophysics, Geosystems*, **17**, 5024-5035.

- Fujii M., Okino K., Sato T., Sato H. and Nakamura K. (2016) Origin of magnetic highs at ultramafic hosted hydrothermal systems: Insights from the Yokoniwa site of Central Indian Ridge. *Earth and Planetary Science Letters*, **441**, 26-37.
- Fujinaga K., Yasukawa K., Nakamura K., Machida S., Takaya Y., Ohta J., Araki S., Liu H., Usami R., Maki R., Haraguchi S., Nishio Y., Usui Y., Nozaki T., Yamazaki T., Ichiyama Y., Ijiri A., Inagaki F., Machiyama H., Iijima K., Suzuki K., Kato Y. and KR13-02 MR13-E02 Leg 2 and KR14-02 Cruise members (2016) Geochemistry of REY-rich mud in the Japanese Exclusive Economic Zone around Minamitorishima Island. *Geochemical Journal*, **50**, 575-590.
- Garrett E., Fujiwara O., Garrett P., Hayvaert V.M.A., Shishikura M., Yokoyama Y., Hubert-Ferrari A., Brückner H., Nakamura A., De Batist M. and the QuakeRecNankai team (2016) A systematic review of geological evidence for Holocene earthquakes and tsunamis along the Nankai-Suruga Trough, Japan. *Earth Science Reviews*, **159**, 337-357.
- Honsho C., Yamazaki T., Ura T., Okino K., Morozumi H. and Ueda S. (2016) Magnetic anomalies associated with abundant production of pyrrhotite in a sulfide deposit in the Okinawa Trough, Japan. *Geochemistry, Geophysics, Geosystems*, **17**, 4413-4424.
- Horiuchi K., Kamata K., Maejima S., Sasaki S., Sasaki N., Yamazaki T., Fujita S., Motoyama H. and Matsuzaki H. (2016) Multiple ¹⁰Be records revealing the history of cosmic-ray variations across the Iceland Basin excursion. *Earth and Planetary Science Letters*, **440**, 105-114.
- Hyeong K., Kuroda J., Seo I. and Wilson P.A. (2016) Response of the Pacific intertropical convergence zone to global cooling and initiation of Antarctic glaciation across the Eocene Oligocene Transition. *Scientific Reports*, **6**, doi: 10.1038/srep30647.
- Iijima K., Yasukawa K., Fujinaga K., Nakamura K., Machida S., Takaya Y., Ohta J., Haraguchi S., Nishio Y., Usui Y., Nozaki T., Yamazaki T., Ichiyama Y., Ijiri A., Inagaki F., Machiyama H., Suzuki S., Kato Y. and KR13-02 Cruise members (2016) Discovery of extremely REY-rich mud in the western North Pacific Ocean. *Geochemical Journal*, **50**, 557-573.
- Ishiwa T., Yokoyama Y., Miyairi Y., Ikehara M. and Obrochta S. (2016) Sedimentary environmental change induced from late Quaternary sea-level change in the Bonaparte Gulf, northwestern Australia. *Geoscience Letters*, **3**, doi: 10.1186/s40562-016-0065-0.
- Ishiwa T., Yokoyama Y., Miyairi Y., Obrochta S., Sasaki T., Kitamura A., Suzuki A., Ikehara M., Ikehara K., Kimoto K., Bourget J. and Matsuzaki H. (2016) Reappraisal of sea-level lowstand during the Last Glacial Maximum observed in the Bonaparte Gulf sediments, northwestern Australia. *Quaternary International*, **397**, 373-379.
- Iwasaki S., Inoue M., Suzuki A., Sasaki O., Kano H., Iguchi A., Sakai K. and Kawahata H. (2016) The role of symbiotic algae in the formation of the coral polyp skeleton: 3-D morphological study based on X-ray microcomputed tomography. *Geochemistry, Geophysics, Geosystems*, **17**, 3629-3637.
- Kimura G., Hashimoto Y., Yamaguchi A., Kitamura Y. and Ujiie K. (2016) Cretaceous - Neogene accretionary units: Shimanto Belt. In *The Geology of Japan*, edited by Moreno T. et al., The Geological Society, London, 125-137.
- Kitamura A., Ohashi Y., Ishibashi H., Miyairi Y., Yokoyama Y., Ikuta R., Ito Y., Ikeda M. and Shimano T. (2016) Holocene geohazard events on the southern Izu Peninsula, central Japan. *Quaternary International*, **397**, 541-554.
- Kuroda J., Jiménez-Espejo F.J., Nozaki T., Gennari R., Lugli S., Manzi V., Roveri M., Flecker R., Sierro F.J., Yoshimura T., Suzuki K. and Ohkouchi N. (2016) Miocene to Pleistocene osmium isotopic records of the Mediterranean sediments. *Paleoceanography*, **31**, 148-166.
- Lee C.-T.A., Yeung L.Y., McKenzie N.R., Yokoyama Y., Ozaki K. and Lenardic A. (2016) Two-step rise of atmospheric oxygen linked to the growth of continents. *Nature Geoscience*, **9**, 417-424.
- Maeda A., Fujita K., Horikawa K., Suzuki A., Yoshimura T., Tamenori Y. and Kawahata H. (2016) Oxygen isotope and Mg/Ca geochemical tracers in laboratory cultured reef-dwelling benthic foraminifera. *Journal of Geophysical Research: Biogeosciences*, **122**, 185-199.
- Nakada M., Okuno J. and Yokoyama Y. (2016) Total meltwater volume since the Last Glacial Maximum and viscosity structure of Earth's mantle inferred from relative sea level changes at Barbados and Bonaparte Gulf and GIA induced J2. *Geophysical Journal International*, **204**, 1237-1253.
- Nakamura A., Yokoyama Y., Maemoku H., Yagi H., Okamura M., Matsuoka H., Miyake N., Osada T., Adhikari D.P., Dangol V., Ikehara M., Miyairi Y. and Matsuzaki H. (2016) Weak monsoon event at 4.2 ka recorded in sediment from Lake Rara, the Himalayas. *Quaternary International*, **397**, 349-359.
- Nakamura K., Machida S., Okino K., Masaki Y., Iijima K., Suzuki K. and Kato Y. (2016) Acoustic characterization of pelagic sediments using sub-bottom profiler data: Implications for the distribution of REY-rich mud in the Minamitorishima EEZ, western Pacific. *Geochemical Journal*, **50**, 605-619.
- Otsubo M., Miyakawa A., Kawasaki R., Sato K., Yamaguchi A. and Kimura G. (2016) Variations in stress and driving pore fluid pressure ratio using vein orientations along megasplay faults - example from the Nobeoka Thrust, southwest Japan. *Island Arc*, **25**, 421-432.
- Palazzin G., Raimbourg H., Famin V., Jolivet L., Kusaba Y. and Yamaguchi A. (2016) Deformation processes at the down-dip limit of the seismogenic zone: the example of Shimanto accretionary complex. *Tectonophysics*, **687**, 28-43.
- Rudd R.C., Tyler J.J., Tibby J., Yokoyama Y., Tavernier I., Verleyen E., Fukui M. and Takano Y. (2016) A diatom-inferred record of lake variability during the last 900 years in Lützw-Holm Bay, East Antarctica. *Journal of Quaternary Research*, **31**, 114-125.

- Sakashita W., Yokoyama Y., Miyahara H., Yamaguchi Y.T., Aze T., Obrochta S.P. and Nakatsuka T. (2016) Relationship between early summer precipitation in Japan and the El Niño-Southern and Pacific Decadal Oscillations over the past 400 years. *Quaternary International*, **397**, 300-306.
- Shimano T. and Yamazaki T. (2016) Environmental rock magnetism of Cenozoic red clay in the South Pacific. *Geochemistry, Geophysics, Geosystems*, **17**, 1296-1311.
- Yamaguchi A., Fukuchi R., Hamahashi M. and Shimizu M. (2016) UAV-based mesoscale lithologic distribution map of a large shear zone in Jurassic accretionary complex (Ohwaki outcrop in the Mino Belt, central Japan). *Island Arc*, **25**, 436-438.
- Yamaguchi A., Hina S., Hamada Y., Kameda J., Hamahashi M., Kuwatani T., Shimizu M. and Kimura G. (2016) Source and sink of fluid in pelagic siliceous sediments along a cold subduction plate boundary. *Tectonophysics*, **686**, 146-157.
- Yamazaki T. and Horiuchi K. (2016) Precessional control on ocean productivity in the Western Pacific Warm Pool for the last 400 kyr: Insight from biogenic magnetite. *Geochemistry, Geophysics, Geosystems*, **17**, 4399-4412.
- Yamazaki T., Shimono T. and Inoue S. (2016) Paleomagnetic inclination variations during the last 200 kyr in the Okhotsk Sea and their relation to persistent non-axial-dipole field. *Earth Planets Space*, **68**, doi: 10.1186/s40623-016-0561-7.
- Yokoyama Y. and Esat T.M. (2016) Deep-sea corals feel the flow. *Science*, **354**, 550-551.
- Yokoyama Y., Anderson J.B., Yamane M., Simkins L.M., Miyairi Y., Yamazaki T., Koizumi M., Suga H., Kusahara K., Prothro L., Hasumi H., Southon J.R. and Ohkouchi N. (2016) Widespread collapse of the Ross Ice Shelf during the late Holocene. *Proceedings of the National Academy of Science*, **113**, 2354-2359.
- Yokoyama Y., Maeda Y., Okuno J., Miyairi Y. and Kosuge T. (2016) Holocene Antarctic melting and lithospheric uplift history of the southern Okinawa trough inferred from mid- to late-Holocene sea level in Iriomote Island, Ryukyu, Japan. *Quaternary International*, **397**, 342-348.
- Yoshimura T., Kuroda J., Lugli S., Tamenori Y., Ogawa N.O., Jiménez-Espejo F.J., Isaji Y., Roveri M., Manzi V., Kawahata H. and Ohkouchi N. (2016) An X-ray spectroscopic perspective on Messinian evaporite from Sicily: Sedimentary fabrics, element distributions, and chemical environments of S and Mg. *Geochemistry, Geophysics, Geosystems*, **17**, 1383-1400.
- 中西正男・沖野郷子 (2016) 「海洋底地球科学」, 東京大学出版会, 東京, 318pp.
- 吉村寿紘・井上麻夕里 (2016) 海洋におけるカルシウムの地球科学と安定同位体指標. 海の研究, **25**, 81-99.

Marine Ecosystem Dynamics (海洋生態系動態)

- Abe, H., Kobayashi G. and Sato-Okoshi W. (2016) Ecological impacts of earthquake and tsunami and the following succession on the subtidal macrobenthic community in Onagawa Bay, northeastern Japan, with special reference to the dominant taxon, polychaetes. In J. Urabe and T. Nakashizuka (eds), Ecological impacts of tsunamis on coastal ecosystems. *Lessons from the Great East Japan Earthquake*, 59-84.
- Azimuddin K.M., Hirai J., Suzuki S., Haider M.N., Tachibana A., Watanabe K., Kitamura M., Hashihama F., Takahashi K. and Hamasaki K. (2016) Possible association of diazotrophs with marine zooplankton in the Pacific Ocean. *Microbiology Open*, **5**, 1016-1026.
- Fukumori H., Itoh H. and Kano Y. (2016) The complete mitochondrial genome of the stream snail *Clithon retropictus* (Neritimorpha: Neritidae). *Mitochondrial DNA Part B: Resources*, **1**, 820-821.
- Goto R., Sakamoto S., Hayakawa J. and Seike K. (2016) Underwater observation of the giant spoon worm Ikeda taenioides (Annelida: Echiura: Ikedidae) in a subtidal soft-bottom environment in northern Japan, which survived tsunamis of the 2011 off the Pacific Coast of Tohoku Earthquake. *Journal of Oceanography*, doi: 10.1007/s10872-016-0380-2.
- Haider M.N., Nishimura M. and Kogure K. (2016) Bacterial community structure and diversity of closely located coastal areas. *Open Journal of Marine Science*, **6**, 423-439.
- Hamasaki K., Taniguchi A., Tada Y., Kaneko R. and Miki T. (2016) Active populations of rare microbes in oceanic environments as revealed by bromodeoxyuridine incorporation and 454 tag sequencing. *Gene*, **576**, 650-656.
- Hidaka K., Itoh H., Hirai J. and Tsuda A. (2016) Occurrence of the *Paracalanus parvus* species complex in offshore waters south of Japan and their genetic and morphological identification to species. *Plankton and Benthos Research*, **11**, 131-143.
- Hiraoka S., Machiyama A., Ijichi M., Inoue K., Oshima K., Hattori M., Yoshizawa S., Kogure K. and Iwasaki W. (2016) Genomic and metagenomic analysis of microbes in a soil environment affected by the 2011 Great East Japan Earthquake Tsunami. *BMC Genomics*, **17**, doi: 10.1186/s12864-016-2380-4.
- Hiraoka S., Yang C.C., and Iwasaki W. (2016) Metagenomics and bioinformatics in microbial ecology: Current status and beyond. *Microbes and Environments*, **31**, 204-212.
- Hirase S., Takeshima H., Nishida M., and Iwasaki W. (2016) Parallel mitogenome sequencing alleviates random rooting effect in phylogeography. *Genome Biology and Evolution*, **8**, 1267-1278.
- Hirase S., Ikeda M., Hayasaka S., Iwasaki W. and Kijima A. (2016) Stability of genetic diversity in an intertidal goby population after exposure to tsunami disturbance. *Marine Ecology*, **37**, 1161-1167.
- Hirase S., Yokoyama Y., Leed C.T., and Iwasaki W. (2016) The Pliocene-Pleistocene transition had dual effects on north American migratory bird speciation. *Palaeogeography, Palaeoclimatology, Palaeoecology*, **462**, 85-91.

- Hosaka T., Yoshizawa S., Nakajima Y., Ohsawa N., Hato M., DeLong E.F., Kogure K., Yokoyama S., Kimura-Someya T., Iwasaki W. and Shirouzu M. (2016) Structural mechanism for light-driven transport by a new type of chloride ion pump, *Nonlabens marinus* rhodopsin-3. *Journal of Biological Chemistry*, **291**, 17488-17495.
- Kaneko R., Nagata T., Suzuki S. and Hamasaki H. (2016) Depth dependent and seasonal variability in archaeal community structure in the subarctic and subtropical western North Pacific. *Journal of Oceanography*, **72**, 427-438.
- Kaneko R., Wong S.-K., Ogura Y., Hayashi T., Yoshizawa S. and Hamasaki K. (2016) Draft genome sequences of two *Fabibacter* sp. strains isolated from coastal surface water of Aburatsubo Inlet, Japan. *Genome announcements*, **4**, e01360-16.
- Kano Y., Brenzinger B., Nützel A., Wilson N.G., and Schrödl M. (2016) Ringiculid bubble snails recovered as the sister group to sea slugs (Nudipleura). *Scientific Reports*, **6**, doi: 10.1038/srep30908.
- Kano Y., Takano T., Schwabe E., and Warén A. (2016) Phylogenetic position and systematics of the wood-associate limpet genus *Caymanabyssia* and implications for ecological radiation into deep-sea organic substrates by lepetelloid gastropods. *Marine Ecology*, **37**, 1116-1130.
- Kitahashi T., Watanabe H., Ikehara K., Jenkins R.G., Kojima S. and Shimanaga M. (2016) Deep-sea meiofauna off the Pacific coast of Tohoku and other trench slopes around Japan: A comparative study before and after the 2011 off the Pacific coast of Tohoku Earthquake. *Journal of Oceanography*, **72**, 129-139.
- Nishibe Y., Isami H., Fukuda H., Nishida S., Nagata T., Tachibana A. and Tsuda A. (2016) Impact of the 2011 Tohoku earthquake tsunami on zooplankton community in Otsuchi Bay. *Journal of Oceanography*, **72**, 77-90.
- Noguchi T., Kitahashi T., Shinohara G., Hashimoto J. and Kojima S. (2016) Morphological differences among snipefishes (Macroramphosidae: *Macroramphosus*) from the Pacific and Atlantic oceans. *Plankton and Benthos Research*, **11**, 147-150.
- Ozaki H. and Iwasaki W. (2016) MOCCS: clarifying DNA-binding motif ambiguity using ChIP-Seq data. *Computational Biology and Chemistry*, **63**, 62-72.
- Poulsen J.Y., Sado T., Hahn C., Byrkjedal I., Moku M. and Miya M. (2016) Preservation Obscures Pelagic Deep-Sea Fish Diversity: Doubling the Number of Sole-Bearing Opisthoproctids and Resurrection of the Genus *Monacoa* (Opisthoproctidae, Argentiniformes). *PLOS ONE*, **11**, doi: 10.1371/journal.pone.0159762.
- Romero P.E., Pfenninger M., Kano Y. and Klussmann-Kolb A. (2016) Molecular phylogeny of the Ellobiidae (Gastropoda: Panpulmonata) supports independent terrestrial invasions. *Molecular Phylogenetics and Evolution*, **97**, 43-54.
- Saito H. (2016) Plankton and Benthos. In *Guideline of Ocean Observations*, Vol. 6, edited by The Oceanographic Society of Japan, The Oceanographic Society of Japan, Tokyo. G601EN:001-009.
- Sato-Takabe Y., Nakao H., Kataoka T., Yokokawa T., Hamasaki K., Ohta K. and Suzuki S. (2016) Abundance of common aerobic anoxygenic phototrophic bacteria in a coastal aquaculture area. *Frontiers in Microbiology*, **7**, doi: 10.3389/fmicb.2016.01996.
- Seike K., Kitahashi T. and Noguchi T. (2016) Sedimentary features of Onagawa Bay, northeastern Japan after the 2011 off the Pacific coast of Tohoku Earthquake: sediment mixing by recolonized benthic animals decreases the preservation potential of tsunami deposits. *Journal of Oceanography*, **72**, 141-149.
- Seo E., Sazi T., Togawa M., Nagata O., Murakami M., Kojima S. and Seo Y. (2016) A portable infrared photoplethysmograph: Heartbeat of *Mytilus galloprovincialis* analyzed by MRI and application to *Bathymodiolus septemdiemum*. *Biology Open*, **5**, 1752-1757.
- Shiozaki T., Ijichi M., Isobe K., Hashihama F., Nakamura K., Ehama M., Hayashizaki K., Takahashi K., Hamasaki K. and Furuya K. (2016) Nitrification and its influence on biogeochemical cycles from the equatorial Pacific to the Arctic Ocean. *ISME Journal*, **10**, 2184-2197.
- Sogawa S., Sugisaki H., Saito H., Okazaki Y., Ono T., Shimode S. and Kikuchi T. (2016) Seasonal and regional change in vertical distribution and diel vertical migration of four euphausiid species (*Euphausia pacifica*, *Thysanoessa inspinata*, *T. longipes*, and *Tessarabrachion oculatum*) in the northwestern Pacific. *Deep Sea Research Part I*, **109**, 1-9.
- Song J., Joung Y., Park S., Cho J.C. and Kogure K. (2016) *Rubrivirga profundus* sp. nov., isolated from deep-sea water. and emended description of the genus *Rubrivirga*. *International Journal of Systematic and Evolutionary Microbiology*, **66**, 3253-3257.
- Sriswasdi S., Takashima M., Manabe R., Ohkuma M., Sugita T. and Iwasaki W. (2016) Global deceleration of gene evolution following recent genome hybridizations in fungi. *Genome Research*, **26**, 1081-1090.
- Sudo Y. and Yoshizawa S. (2016) Functional and photochemical characterization of a light-driven proton pump from the gammaproteobacterium *Pantoea vagans*. *Photochemistry and Photobiology*, **92**, doi: 10.1111/php.12585.
- Tada Y., Shiozaki T., Ogawa H. and Suzuki K. (2016) Basin-scale distribution of prokaryotic phylotypes in the epipelagic layer of the Central South Pacific Ocean during austral summer. *Journal of Oceanography*, doi: 10.1007/s10872-016-0391-z.
- Uribe J.E., Colgan D., Castro L.R., Kano Y. and Zardoya R. (2016) Phylogenetic relationships among superfamilies of Neritimorpha (Mollusca: Gastropoda). *Molecular Phylogenetics and Evolution*, **104**, 21-31.
- Uribe J.E., Kano Y., Templado J. and Zardoya R. (2016) Mitogenomics of Vetigastropoda: insights into the evolution of pallial symmetry. *Zoologica Scripta*, **45**, 145-159.
- Watanabe H., Yahagi T., Nagai Y., Seo M., Kojima S., Ishibashi J., Yamamoto H., Fujikura K., Mitarai S. and Toyofuku T. (2016) Different thermal effect for brooding and larval dispersal of two neighboring distributed shrimps in deep-sea hydrothermal vent field. *Marine Ecology*, **37**, 1282-1289.

- Wong S.-K., Yoshizawa S., Nakajima Y., Ogura Y., Hayashi T. and Hamasaki K. (2016) Draft genome sequence of *Lewinella* sp. strain 4G2 isolated from the coastal sea surface microlayer. *Genome announcements*, **4**, doi: 10.1128/genomeA.00754-16.
- Yamashita Y., Lu C.J., Ogawa H., Nishioka J., Obata H. and Saito H. (2016) Application of an in situ fluorometer to determine the distribution of fluorescent organic matter in the open ocean. *Marine Chemistry*, **177**, 295-305.
- Yorissue T., Chan B.K.K., Kado R., Watanabe H., Inoue K., Kojima S. and Høeg J.T. (2016) On the morphology of antennular sensory and attachment organs in cypris larvae of the deep-sea vent/seep barnacles, *Ashinkailepas* and *Neoverruca*. *Journal of Morphology*, **227**, 594-602.
- 岩崎 渉 (2016) 遺伝子発現ネットワークとバイオインフォマティクス. 医学のあゆみ, **259**, 865-869.
- 岩崎 渉 (2016) 環境DNA解析[NGSアプリケーション 今すぐ始める! メタゲノム解析 実験プロトコール](服部正平編), 羊土社, 東京, 170-174.
- 岩崎 渉・佐藤行人・源 利文・山中裕樹・荒木仁志・宮 正樹 (2016) 環境DNA解析のインパクト. 実験医学, **34**, 103-107.
- 小林元樹・三浦知之・小島茂明 (2016) 環形動物の奇妙な仲間ハオリムシ類 ー概説と新種の紹介ー. 月刊海洋号外, **57**, 46-51.
- 齊藤宏明 (2016) 海洋生物の行動 (回遊・鉛直移動). [海洋生態学] (日本生態学会 編), 共立出版, 東京, 209-230.
- 齊藤宏明・山村織生 (2016) 海洋生態系と人間活動. [海洋生態学] (日本生態学会 編), 共立出版, 東京, 244-275.
- 齊藤宏明・津田 敦 (2016) 海中生態系. [海洋生態学] (日本生態学会 編), 共立出版, 東京, 21-67.
- 佐藤正典・加藤哲哉・清家弘治・伊谷 行 (2016) アナジャコウロコムシ (環形動物門ウロコムシ科) の東日本からの記録. タクサ: 日本動物分類学会誌, **41**, 30-39.
- 佐藤正典・狩野泰則 (2016) 環形動物の分類学研究. 月刊海洋号外, **57**, 5-11.
- 濱崎恒二 (2016) 細菌プランクトンの動態と光栄養. 月刊海洋, **48**, 6-14.
- 吉澤 晋 (2016) 微生物型ロドプシンの多様な機能. 光合成研究, **26**, 149-154.

Marine Bioscience (海洋生命科学)

- Aoyama J., Yoshinaga T., Tanaka C. and Ishii K. (2016) Geographic distribution and environmental control of vertebral count in *Ammodytes* spp. along the northern Pacific coast of Japan. *Journal of Fish Biology*, **90**, doi: 10.1111/jfb.13193.
- Endo H., Yoshida M., Uji T., Saga N., Inoue K. and Nagasawa H. (2016) Stable nuclear transformation system for the coccolithophorid alga *Pleurochrysis carterae*. *Scientific Reports*, **6**, doi: 10.1038/srep22252.
- Enstipp M., Ballorain K., Ciccione S., Nagasaki T., Sato K. and Georges J.-Y. (2016) Energy expenditure of adult green turtles (*Chelonia mydas*) at their foraging grounds and during simulated oceanic migration. *Functional Ecology*, **30**, 1810-1825.
- Fukuda N., Aoyama J., Yokouchi K. and Tsukamoto K. (2016) Periodicities of inshore migration and selective tidal stream transport of glass eels, *Anguilla japonica*, in Hamana Lake, Japan. *Environmental Biology of Fishes*, **99**, 309-323.
- Fukuoka T., Yamane M., Kinoshita C., Narazaki T., Marshall G.J., Abernathy K.J., Miyazaki N. and Sato K. (2016) The feeding habit of sea turtles influences their reaction to artificial marine debris. *Scientific Reports*, **6**, doi: 10.1038/srep28015.
- Gonzalvo S., Otaki T., Tanoue H. and Komatsu T. (2016) Acoustic tracking of aquarium reared Akame (*Lates japonicus*) released in Shimanto Estuary. *International Journal of Advances in Science Engineering and Technology*, **4**(1), Spl. 3, 3-8.
- Hasegawa K., Kato A., Watanabe T., Takagi W., Romero M., Bell J.D., Toop T., Donald J.A. and Hyodo S. (2016) Sulfate transporters involved in sulfate secretion in the kidney are localized in the renal proximal tubule II of the elephant fish (*Callorhynchus milii*). *American Journal of Physiology*, **311**, R66-R78.
- Hays G.C., Ferreira L.C., Sequeira A.M.M., Meekan M.G., Duarte C.M., Bailey H., Bailleul F., Bowen W.D., Caley M.J., Costa D.P., Eguiluz V.M., Fossette S., Friedlaender A.S., Gales N., Gleiss A.C., Gunn J., Harcourt R., Hazen E.L., Heithaus M.R., Heupel M., Holland K., Horning M., Jonsen I., Kooyman G.L., Lowe C.G., Madsen P.T., Marsh H., Phillips R.A., Righton D., Ropert-Coudert Y., Sato K., Shaffer S.A., Simpfendorfer C.A., Sims D.W., Skomal G., Takahashi A., Trathan P.N., Wikelski M., Womble J.N., and Thums M. (2016) Key questions in marine megafauna movement ecology. *TREE*, **31**, 463-475.
- Higashiyama H., Hirasawa T., Oisi Y., Sugahara F., Hyodo S., Kanai Y. and Kuratani S. (2016) On the vagal cardiac nerves, with special reference to the early evolution of the head-trunk interface. *Journal of Morphology*, **277**, 1146-1158.
- Hyodo S. (2016) Neurohypophysial hormone family. In *Handbook of Hormones: Comparative Endocrinology for Basic and Clinical Research*, edited by Takei Y. et al., Academic Press, San Diego, 39-52.
- Ikuta T., Takaki Y., Nagai Y., Shimamura S., Tsuda M., Kawagucci S., Aoki Y., Inoue K., Teruya M., Satou K., Teruya K., Shimoji M., Tamotsu H., Hirano T., Maruyama T. and Yoshida T. (2016) Heterogeneous composition of key metabolic gene clusters in a vent mussel symbiont population. *ISME Journal*, **10**, 990-1001.
- Katsu Y., Cziko P.A., Chandsawangbhuwana C., Thornton J.W., Sato R., Oka K., Takei Y., Baker M.E. and Iguchi T. (2016) A second estrogen receptor from Japanese lamprey (*Lethenteron japonicum*) does not have activities for estrogen binding and transcription. *General and Comparative Endocrinology*, **236**, 105-114.
- Kogure Y., Sato K., Watanuki Y., Wanless S. and Daunt F. (2016) European shags optimize their flight behavior according to wind conditions. *Journal of Experimental Biology*, **219**, 311-318.
- Koito T., Liu W., Morimoto S., Inoue K. and Toyohara H. (2016) Comparison of taurine related compounds in deep- and shallow-water mussel species. *Plankton and Benthos Research*, **11**, 81-86.

- Liénart C., Feunteun E., Miller M.J., Aoyama J., Mortillaro J.-M., Hubas C., Kuroki M., Watanabe S., Dupuy C., Carpentier A., Otake T., Tsukamoto K. and Meziane T. (2016) Geographic analyses of stable isotopic and fatty acid composition of three families of anguilliform leptocephali in the western South Pacific. *Marine Ecology Progress Series*, **544**, 225-241.
- Mabuchi, K. (2016) Complete mitochondrial genome of the parrotfish *Calotomus japonicus* (Osteichthyes: Scaridae) with implications based on the phylogenetic position. *Mitochondrial DNA Part B: Resources*, doi: 10.1080/23802359.2016.1214553.
- Mabuchi, K. (2016) A method for PCR-based identification of fish eggs attached to vegetation in Lake Biwa, Japan. *Conservation Genetics Resources*, **8**, 215-217.
- Mabuchi, K. (2016) Complete mitochondrial genomes of five introduced strains of common carp *Cyprinus carpio* in Japan with 29 diagnostic SNPs distinguishable by restriction enzyme analysis. *Mitochondrial DNA Part B: Resources*, doi: 10.1080/23802359.2016.1159931.
- Miller M.J., Wouthuyzen S., Sugeha H.Y., Kuroki M., Tawa A., Watanabe S., Syahailatua A., Suharti S., Tantu F.Y., Otake T., Tsukamoto K. and Aoyama J. (2016) High biodiversity of leptocephali in Tomini Bay Indonesia in the center of the Coral Triangle. *Regional Studies in Marine Science*, **8**, 99-113.
- Miller P.J.O., Narazaki T., Isojunno S., Aoki K., Smout S. and Sato K. (2016) Body density and diving gas volume of the northern bottlenose whale (*Hyperoodon ampullatus*). *Journal of Experimental Biology*, **219**, 2458-2468.
- Miyata N., Mori T., Kagehira M., Miyazaki N., Suzuki M. and Sato K. (2016) In situ CTD measurement using fish-borne recorders reveal short-term excursions of Japanese sea bass from sea water to freshwater. *Aquatic Biology*, **25**, 97-106.
- Nakamura-Kusakabe I., Nagasaki T., Kinjo A., Sassa M., Koito T., Okamura K., Yamagami S., Yamanaka T., Tsuchida S. and Inoue K. (2016) Effect of sulfide, osmotic, and thermal stresses on taurine transporter mRNA levels in the gills of the hydrothermal vent-specific mussel *Bathymodiolus septemdiemum*. *Comparative Biochemistry and Physiology, Part A*, **191**, 74-79.
- Nakazato S., Minagawa T., Shirotori F., Shinoda A., Aoyama J. and Yoshinaga T. (2016) Ages of the giant mottled eel *Anguilla marmorata* recruited at the northern Luzon Island, the Philippines between 2009 and 2011. *Coastal Marine Science*, **39**, 1-4.
- Nurdin N., Komatsu T., Rani C., Supriadi, Fakhriyah S. and Agus (2016) Coral reef destruction of Small island in 44 years and destructive fishing in Spermonde Archipelago, Indonesia. *IOP Conference Series: Earth and Environmental Science*, **47**, doi: 10.1088/1755-1315/47/1/012011.
- Nurdin N., Komatsu T., Barille L., AS M.A., Sawayama S., Fitrah M.N. and Prasyad H. (2016) Spectral classifying base on color of live corals and dead corals covered with algae. *Proceeding of SPIE*, **9878**, doi: 10.1117/12.2227297.
- Ochi D., Matsumoto K., Oka N., Deguchi T., Sato K., Satoh T.P., Muto F. and Watanuki Y. (2016) Dual foraging strategy and chick growth of streaked shearwater *Calonectris leucomelas* at the two colonies of different oceanographic environment. *Ornithological Science*, **15**, 213-225.
- Ohishi K., Yamamoto M., Tame A., Kusaka C., Nagai Y., Sugimura M., Inoue K., Uematsu K., Yoshida T., Ikuta T., Toyofuku T. and Maruyama T. (2016) Long-term cultivation of the deep-sea clam *Calyptogena okutanii*: changes in the abundance of chemoautotrophic symbiont, elemental sulfur, and mucus. *Biological Bulletin*, **230**, 257-267.
- Ruhr I., Takei Y. and Grosell M. (2016) The role of the rectum in osmoregulation and the potential effect of renouanylin on SLC26a6 transport activity in the Gulf toadfish (*Opsanus beta*). *American Journal of Physiology*, **311**, R179-R191.
- Sato, T. P., Miya M., Mabuchi K. and Nishida M. (2016) Structure and variation of the mitochondrial genome of fishes. *BMC Genomics*, **17**, 719.
- Satoh S., Tanoue H., Ruitton S., Mohri M. and Komatsu T. (2016) Morphological and behavioral ontogeny in larval and early juvenile discus fish *Symphysodon aequifasciatus*. *Ichthyological Research*, doi: 10.1007/s10228-016-0530-y.
- Sekine D., Ohishi K., Nakamura Y., Kusaka C., Tame A., Inoue K., Nakazawa M., Miyake H., Yoshida T. and Maruyama T. (2016) Monoclonal antibodies to hemocytes of the deep-sea symbiotic mussel, *Bathymodiolus japonicus*. *Jamstec Report of Research and Development*, **23**, 27-33.
- Shiomi K., Sato K., Handrich Y. and Bost C.A. (2016) Diel shift of swim speeds in king penguins in relation to changes of light intensity. *Marine Ecology Progress Series*, **561**, 233-243.
- Shirotori F., Ishikawa T., Tanaka C., Aoyama J., Shinoda A. and Yoshinaga T. (2016) Species composition of the anguillid glass eels recruited at the southern Mindanao Island, the Philippines. *Fisheries Science*, **82**, 915-922.
- Takabe S., Inokuchi M., Yamaguchi Y. and Hyodo S. (2016) Distribution and dynamics of branchial ionocytes in houndshark reared in full-strength and diluted seawater environments. *Comparative Biochemistry and Physiology, Part A*, **198**, 22-32.
- Takei Y. (2016) Neuropeptide Y Family. In *Handbook of Hormones: Comparative Endocrinology for Basic and Clinical Research*, edited by Takei Y. et al., Academic Press, San Diego, 211-212.
- Takei Y. (2016) Natriuretic peptide Family. In *Handbook of Hormones: Comparative Endocrinology for Basic and Clinical Research*, edited by Takei Y. et al., Academic Press, San Diego, 279-283.
- Takei Y. (2016) Secretin (Pituitary Adenylate Cyclase-Activating Polypeptide) Family. In *Handbook of Hormones: Comparative Endocrinology for Basic and Clinical Research*, edited by Takei Y. et al., Academic Press, San Diego, 140-141.

- Takei Y. and Hwang P.P. (2016) Homeostatic responses to osmotic stress in fishes. In *Fish Physiology Vol. 35: Biology of Stress in Fish*, edited by Schreck C.B., Tort L. Farrell A.P. and Brauner C.J., Academic Press, San Diego, 207-249.
- Takei Y., Takahashi A. (2016) Appetite-regulating peptides. In *Handbook of Hormones: Comparative Endocrinology for Basic and Clinical Research*, edited by Takei Y. et al., Academic Press, San Diego, 78-79.
- Takei Y., Ando H., Tsutsui K. (2016) *Handbook of Hormones: Comparative Endocrinology for Basic and Clinical Research*. Academic Press, San Diego, 1-646.
- Takei Y., Suzuki I., Wong M.K.S., Milne R., Moss S., Sato K. and Hall A. (2016) Development of an animal-borne blood collection device and its deployment for the detection of cardiovascular and stress hormones in submerged phocid seals. *American Journal of Physiology Regulatory, Integrative and Comparative Physiology*, **311**, R788-R796.
- Tanaka C., Aoki R., Ida H., Aoyama J., Misaka T., Takeya Y., Inada S., Uzaki N. and Yoshinaga T. (2016) Molecular genetic identification of Japanese sand lances using mitochondrial DNA cytochrome c oxidase subunit 1 restriction fragment length polymorphisms. *Fisheries Science*, **82**, 887-895.
- Tsujimoto R., Terauchi G., Sasaki H., Sakamoto S.X., Sawayama S., Sasa S., Yagi H. and Komatsu T. (2016) Damage to seagrass and seaweed beds in Matsushima Bay, Japan, caused by the huge tsunami of the Great East Japan Earthquake on 11 March 2011. *International Journal of Remote Sensing*, **37**, 5843-5863.
- Uto K., Seki H., Saito G., Kosugi Y. and Komatsu T. (2016) Development of a low-cost, lightweight hyperspectral imaging system based on a polygon mirror and compact spectrometers. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **9**, 861-875.
- Wong M.K.S., Pipil S., Kato A. and Takei Y. (2016) Duplicated CFTR isoforms in eels diverged in regulatory structures and osmoregulatory functions. *Comparative Biochemistry and Physiology, Part A*, **199**, 130-141.
- Wong M.K.S., Pipil S., Ozaki H., Suzuki Y., Iwasaki W. and Takei Y. (2016) Flexible selection of diversified Na⁺/K⁺-ATPase α -subunit isoforms for osmoregulation in teleosts. *Zoological Letters*, **2**, doi: 10.1186/s40851-016-0050-7.
- Xu M., Sakamoto S. and Komatsu T. (2016) Attachment strength of the subtidal seaweed *Sargassum horneri*. *Journal of Applied Phycology*, **28**, 3679-3687.
- Yamamoto T., Kohno H., Mizutani A., Yoda K., Matsumoto S., Kawabe R., Watanabe S., Oka N., Sato K., Yamamoto M., Sugawa H., Karino K., Skiommi K., Yonehara Y. and Takahashi A. (2016) Geographical variation in body size of a pelagic seabird, the streaked shearwater *Calonectris leucomelas*. *Journal of Biogeography*, **43**, 801-808.
- Yonehara Y., Goto Y., Yoda K., Watanuki Y., Young L.C., Weimerskirch H., Bost C.-A. and Sato K. (2016) Flight paths of seabirds soaring over the ocean surface enable measurement of fine-scale wind speed and direction. *PNAS*, **113**, 9039-9044.
- Yuyama I., Higuchi T. and Takei Y. (2016) Sulfur utilization in corals is enhanced by endosymbiotic algae. *Biology Open*, **5**, 1299-1304.
- 竹井祥郎 (2016) 血圧調節とホルモン. 「ホルモンから見た生命現象の進化 第5巻 ホメオスタシスと適応—恒—」(海谷啓之・内山実・坂本竜哉 編), 裳華房, 東京, 158-174.
- 竹井祥郎・渡邊太朗 (2016) 魚類を用いて近位尿管における硫酸イオン輸送機構を探る. 腎と透析, **81**, 444-450.
- 兵藤 晋 (2016) 体液調節機構の進化: 魚類. 「ホルモンから見た生命現象の進化 第5巻 ホメオスタシスと適応—恒—」(海谷啓之・内山実 編), 裳華房, 東京, 16-31.
- 山口陽子・兵藤 晋 (2016) プロラクチンの分子進化に関する新事実 - サメでの発見と2種類の遺伝子 -. 比較内分泌学, **42**, 12-14.

Living Marine Resources (海洋生物資源)

- Aoki Y., Kitagawa T., Kiyofuji H., Okamoto S. and Kawamura T. (2016) Changes in energy intake and cost of transport by skipjack tuna (*Katsuwonus pelamis*) during northward migration in the northwestern Pacific Ocean. *Deep Sea Research Part II: Topical Studies in Oceanography*, doi: 10.1016/j.dsr2.2016.05.012.
- Hayashi A., Zhang K., Saruwatari T., Kawamura T. and Watanabe Y. (2016) Distribution of eggs and larvae of Japanese anchovy (*Engraulis japonicus*) in the Pacific waters off northern Japan. *Fisheries Science*, **82**, 311-319.
- Hirohashi H., Iida T., Sato N., Sauer H.H.W. and Iwata Y. (2016) Complex adaptive traits between mating behaviour and post-copulatory sperm behaviour in squids. *Reviews in fish biology and fisheries*, **23**, 601-607.
- Hirohashi N., Tamura-Nakano M., Nakaya F., Iida T. and Iwata Y. (2016) Sneaker male squid produce long-lived spermatozoa by modulating their energy metabolism. *The Journal of Biological Chemistry*, **291**, 19324-19334.
- Hirose M. (2016) Diversity and distribution of adeonid bryozoans (Cheilostomata: Adeonidae) in Japanese waters. *European Journal of Taxonomy*, **203**, 1-41.
- Irie T. and Morimoto N. (2016) Intraspecific variations in shell calcification across thermal window and within constant temperatures: Experimental study on an intertidal gastropod *Monetaria annulus*. *Journal of Experimental Marine Biology and Ecology*, **483**, 130-138.
- Iwata E., Tanno K., Fujii C., Yamauchi S., Yanagimoto T. and Saruwatari T. (2016) The use of RNA transcription rates to assess the onset of sexual maturation in the hermaphroditic greeneye *Chlorophthalmus albatrossis*. *DNA Polymorphism*, **24**, 30-37.
- Takei S., Kaeriyama H., Ambe D., Ono T., Ito S., Shimizu Y. and Watanabe T. (2016) Radioactive cesium dynamics derived from hydrographic observations in the Abukuma River Estuary, Japan. *Journal of Environmental Radioactivity*, **153**, 1-9.

- Kitagawa T., Hyodo S. and Sato K. (2016) Atmospheric depression-mediated water temperature changes affect the vertical movement of chum salmon *Oncorhynchus keta*. *Marine Environmental Research*, **119**, 72-78.
- Kuroda H., Setou T., Kakehi S., Ito S., Taneda T., Azumaya T., Inagake D., Hiroe Y., Morinaga K., Okazaki M., Yokota T., Okunishi T., Aoki K., Shimizu Y., Hasegawa D. and Watanabe T. (2016) Recent advances in Japanese fisheries science in the Kuroshio-Oyashio region through development of the FRA-ROMS ocean forecast system: Overview of the reproducibility of reanalysis products. *Open Journal of Marine Science*, **7**, 62-90.
- Madigan D.J., Chiang W., Wallsgrove N.J., Popp B.N., Kitagawa T., Choy C.A., Tallmon J., Ahmed N., Fisher N.S. and Sun C. (2016) Intrinsic tracers reveal recent foraging ecology of giant Pacific bluefin tuna at their primary spawning grounds. *Marine Ecology Progress Series*, **553**, 253-266.
- Makiguchi Y., Ichimura M., Kitayama T., Kawabata Y., Kitagawa T., Kojima T. and Pitcher T.E. (2016) Sperm allocation in relation to female size in a semelparous salmonid. *Royal Society Open Science*, doi: 10.1098/rsos.160497.
- Muraoka D., Tamaki H., Takami H., Kurita Y. and Kawamura T. (2016) Effects of the 2011 Great East Japan Earthquake and tsunami on two kelp bed communities on the Sanriku coast. *Fisheries Oceanography*, Tsunami Special Issue, doi: 10.1111/fog.12198.
- Ohtsuchi N. and Kawamura T. (2016) Redescription of *Alox chaunos* Galil & Ng, 2007 (Crustacea: Decapoda: Brachyura: Leucosiidae) new to Japan; with notes on the male characters of *A. latusoides* (Sakai, 1937). *Zootaxa*, **4111**, 41-52.
- Ohtsuchi N., Kawamura T., Hayakawa J., Kurogi H. and Watanabe Y. (2016) Growth patterns and population dynamics of the kelp crab *Pugettia vulgaris* (Decapoda: Brachyura: Epialtidae) on the coast of Sagami Bay, Japan. *Crustaceana*, **89**, 645-667.
- Pangsuk B., Sonkam W., Hirose M. and Putchakarn S. (2016) Marine Bryozoans from Saket Island, Suchada Beach and Samet Islands, Rayong, Thailand. *Proceedings of 54th Kasetsart University Annual Conference: Plants, Animals, Veterinary Medicine, Fisheries, Agricultural Extension and Home Economics*, Kasetsart University, Bangkok, 947-957.
- Sakamoto A. and Shirakihara K. (2016) Ecosystem dynamics in Tokyo Bay with a focus on high trophic levels using Ecopath with Ecosim. *Journal of Marine Science and Technology*, doi: 10.1007/s00773-016-0388-8.
- Schwaha T., Hirose M. and Wanninger A. (2016) The life of the freshwater bryozoan *Stephanella hina* (Bryozoa, Phylactolaemata) - a crucial key to elucidating bryozoan evolution. *Zoological Letters*, **2**, doi: 10.1186/s40851-016-0060-5.
- Takami H., Kawamura T., Won N.-I., Muraoka D., Hayakawa J. and Onitsuka T. (2016) Effects of macro algal expansion triggered by the 2011 earthquake and tsunami on recruitment density of juvenile abalone *Haliotis discus hannai* at Oshika Peninsula, northeastern Japan. *Fisheries Oceanography*, Tsunami Special Issue, doi: 10.1111/fog.12191.
- Takasuka A., Nishikawa K., Kuroda H., Okunishi T., Shimizu Y., Sakaji H., Ito S., Tokai T. and Oozeki Y. (2016) Growth variability of Pacific saury *Cololabis saira* larvae under contrasting environments across the Kuroshio axis: survival potential of minority versus majority. *Fisheries Oceanography*, **25**, 390-406.
- Wagawa T., Tamate T., Kuroda H., Ito S., Kakehi S., Yamanome T. and Kodama T. (2016) Relationship between coastal water properties and adult return of chum salmon (*Oncorhynchus keta*) along the Sanriku coast, Japan. *Fisheries Oceanography*, **25**, 598-509.
- Watanabe S., Hagihara S., Miller M.J., Machida M., Komatsu K., Nishida S. and Tsukamoto K. (2016) Collection of spawning-condition eels of *Ariosoma meeki* in the Kuroshio Current in the East China Sea. *Journal of the Marine Biological Association of the UK*, **96**, 1701-1707.
- 伊藤進一 (2016) 海洋低次栄養段階生態系モデルの歴史とNEMURO. 月刊海洋, **48**, 291-301.
- 伊藤進一・有馬正和・市川雅明・青木 茂・奥西 武・寛 茂穂・長谷川大介・和川 拓・安田一郎・田中雄大・黒田 寛・清水勇吾 (2016) 水中グライダーによる沿岸海洋観測の可能性. 沿岸海洋研究, **53**, 125-133.
- 入江貴博 (2016) 中立遺伝マーカーを用いた近親判別に基づく個体数推定の可能性. 月刊海洋, **48**, 340-348.
- 河村知彦 (2016) 大槌湾のアワビやウニは大津波でどうなったのか? *BIOSTORY*, **25**, 86-91.
- 河村知彦 (2016) 大槌湾の環境と海洋生物. 「大槌発 未来へのランドデザイン 震災復興と地域の自然・文化」(谷口真人 編), 昭和堂, 京都, 96-121.
- 河村知彦・仲間雅裕 (2016) 海底生態系. 「海洋生態学」(津田敦・森田健太郎 編), 共立出版, 東京, 68-121.
- 小松幸生・松村俊吾・田中 潔 (2016) 大槌湾の表層・底層水質リアルタイムモニタリングの現状と課題. 月刊海洋, **48**, 242-248.
- 猿渡敏郎 (2016) 魚の一生を俯瞰する - 生活史という見方と意義. 「生きざまの魚類学 魚の一生を科学する」(猿渡敏郎 編), 東海大学出版会, 平塚, 1-16.
- 白木原国雄 (2016) 個体数推定のための目視理論と沿岸性鯨類スナメリへの適用. 月刊海洋, **48**, 349-356.
- 平松一彦 (2016) 我が国周辺水域の水産資源の評価手法について. 月刊海洋, **48**, 361-365.
- 山田秀秋・早川 淳・中本健太・河村知彦・今 孝悦 (2016) 小型巻貝 2 種におけるソデカラッパからの被食回避に及ぼす人工海藻の影響. 日本水産学会誌, **82**, 33-35.
- 山田秀秋・島袋寛盛・早川 淳・中本健太・河村知彦・今 孝悦 (2016) 亜熱帯藻場構成植物に対するアイゴ幼魚の摂食選択制評価 (短報). 日本水産学会誌, **82**, 631-633.

Multiple Field Marine Science (複合領域)

- Aoyama M., Hamajima Y., Hult M., Uematsu M., Oka E., Tsumune D. and Kumamoto Y. (2016) ^{134}Cs and ^{137}Cs in the North Pacific Ocean derived from the TEPCO Fukushima Dai-ichi Nuclear Power Plant accident, Japan in March 2011: Part One - Surface pathway and vertical distributions. *Journal of Oceanography*, **72**, 53-65.
- Blasiak R., Pacheco E., Furuya K., Golden C.D., Jauharee A.R., Natori Y., Saito H., Sinan H., Tanaka T., Yagi N. and Yiu E. (2016) Local and regional experiences with assessing and fostering ocean health. *Marine Policy*, **71**, 54-59.
- Itabashi, S., Hayami, H., Uno, I., Pan, X., Uematsu, M. (2016) Importance of coarse-mode nitrate produced via sea salt as atmospheric input to East Asian Oceans. *Geophysical Research Letter*, **43**, 5483-5491.
- Kuwaie T., Kanda J., Kubo A., Nakajima A., Ogawa H., Sohma A. and Suzumura M. (2016) Blue carbon in human-dominated estuarine and shallow coastal systems. *Ambio*, **45**, 290-301.
- Liu D. and Yamamoto M. (2016) Influence of seawater temperature and organic matter on iron elution from a mixture of steelmaking slag and composts. *ISIJ International*, **56**, 899-903.
- Maruo M., Ishimaru M., Azumi Y., Fukuizumi A., Kawasumi Y., Nagafuchi O. and Obata H. (2016) Comparison of soluble reactive phosphorous and orthophosphate concentrations in river waters. *Limnology*, **17**, 7-12.
- Nishikawa M., Fukuda M., Nakabayashi Y, Saito N, Ogawa N., Nakajima T., Shinoda K., Tsuchiya T. and Nosaka Y. (2016) A method to give chemically stabilities of photoelectrodes for water splitting: Compositing of a highly crystalized TiO_2 layer on a chemically unstable Cu_2O photocathode using laser-induced crystallization process. *Applied Surface Science*, **363**, 173-180.
- Riethdorf J.-R., Thibodeau B., Ikehara M., Nurnberg D., Max L., Tiedemann R. and Yokoyama Y. (2016) Surface nitrate utilization in the Bering Sea since 180 ka BP: Insight from sedimentary nitrogen isotopes. *Deep Sea Research part II*, **125-126**, 163-176.
- Shiba K., Motozuka S., Yamaguchi T., Ogawa N., Otsuka Y., Ohnuma K., Kataoka T. and Tagaya M. (2016) Effect of cationic surfactant micelles on hydroxyapatite nanocrystal formation: An investigation into the inorganic-organic interfacial interactions. *Crystal Growth & Design*, **16**, 1467-1471.
- Shigemitsu M., Gruber N., Oka A. and Yamanaka Y. (2016) Potential use of the N_2/Ar ratio as a constraint on the oceanic fixed nitrogen loss. *Global Biogeochemical Cycles*, **30**, 576-594.
- Suzuki T. and Michida Y. (2016) Data publication and international exchange. In *Guideline of Ocean Observations*, Vol. 1, edited by The Oceanographic Society of Japan, The Oceanographic Society of Japan, Tokyo, G105EN.001-008.
- Tajiri R., Ogawa N., Fujiwara H. and Kojima T. (2017) Mechanical control of whole body shape by a single cuticular protein Obstructor-E in *Drosophila melanogaster*. *PLOS Genet* **13**(1), doi: 10.1371/journal.pgen.1006548.
- Ueda S., Miura K., Kawata R., Furutani H., Uematsu M., Omori Y. and Tanimoto H. (2016) Number-size distribution of aerosol particles and new particle formation events in tropical and subtropical Pacific Oceans. *Atmospheric Environment*, **142**, 324-339.
- Yamada Y., Fukuda H., Tada Y., Kogure K. and Nagata T. (2016) Bacterial enhancement of gel particle coagulation in seawater. *Aquatic Microbial Ecology*, **77**, 11-22.
- Yamamoto M. and Liu D. (2016) Effects of organic matter on acceleration of the iron elution rate from steelmaking slag. *ISIJ International*, **56**, 1884-1888.
- 駒越太郎・渡邊 剛・白井厚太郎・山崎敦子・植松光夫 (2016) シャコガイ殻を用いた高時間解像度の環境解析 - 沖ノ鳥島シラナミガイ殻に刻まれた台風の痕跡 -. 月刊海洋号外, **56**, 80-93.
- 白井厚太郎 (2016) サンゴ礁科学への炭酸塩分析による学際的アプローチ. 月刊海洋号外, **56**, 116-127.
- 杉野弘明・道田 豊・城山英明・八木信行・久保麻紀子・徳永佳奈恵 (2016) 大森ふるさとの浜辺整備事業に見る海洋環境修復事業に伴う持続的合意形成の形. 土木学会海洋開発論文集 B3, **72**, 838-843.
- 徳永佳奈恵・久保麻紀子・杉野弘明・道田 豊 (2016) 米国における海洋再生可能エネルギー開発と海洋空間計画の役割: ロードアイランド州海洋特別エリア管理計画を例として. 日本海洋政策学会誌, **6**, 101-116.
- 成田祥・森本大介・植松光夫 (2016) インド洋における海洋エアロゾル中の化学成分の特徴と分布. 月刊海洋号外, **58**, 111-116.
- 山本光夫・木村伸吾 (2016) 海洋分野におけるキャリアパス形成に向けたインターンシッププログラムの教育効果. 日本海洋政策学会誌, **6**, 117-129.