

CURRICULUM VITAE

Name: Hiroaki Saito

Occupation: Professor

Center for International and Local Research Collaboration,
Atmosphere and Ocean Research Institute (AORI),
The University of Tokyo

Advisor to the Director, AORI, the University of Tokyo

Professor, Department of Aquatic Bioscience, Graduate School of
Agricultural and Life Sciences, The University of Tokyo

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Education:

1986 B. Agr., Tohoku University

1996 Ph.D. (Agriculture), Tohoku University

Research and professional experience:

2019- Advisor to the Director, AORI, the University of Tokyo

2016- Professor, AORI, the University of Tokyo

2014-2016 Associate Professor, Section of Marine Planktology, AORI, the
University of Tokyo

2011- Head, Ecosystem Dynamics Group, Tohoku National Fisheries
Research Institute, Fisheries Research Agency

2001-2011 Chief, Biological Oceanography Section, Tohoku National Fisheries
Research Institute, Fisheries Research Agency

1997 - 2001 Senior Scientist of Biological Oceanography Section, Hokkaido
National Fisheries Research Institute

1998 - 1999 Guest Scientist, Danish Institute for Fisheries Research

1990 - 1997 Researcher, Biological Oceanography Section, Hokkaido National
Fisheries Research Institute

1987 - 1990 Researcher, Fisheries Resources Division, Hokkaido National Fisheries Research Institute, Fisheries Agency

Other appointments

2010-2011 Lecturer, Nagasaki University

2007-2008 Guest associate Professor, The University of Tokyo

2004 Lecturer, Shizuoka University

1994 - 2000 Cooperated Scientist of Sea Ice Research Laboratory, The Institute of Low Temperature Science, Hokkaido University

1992 - 2001 Cooperated Scientist of National Institute of Polar Research

Awards:

2020 Wooster Award, North Pacific Marine Science Organization

2007, 2009 The Hidaka Prize of the Oceanographic Society of Japan (co-author)

2003 The Best Paper Award from the Plankton Society of Japan (co-author)

1999 The Uda Prize of the Japanese Society of Fisheries Oceanography (co-author)

1998 The Okada Prize of the Oceanographic Society of Japan

Research Interest:

My scientific interest is the role of organisms in marine ecosystem dynamics and biogeochemical cycles. I have been studied biology and ecology of copepod, beautiful creature in marine ecosystem, and also various marine organisms from virus to whales. The essential aim of my studies is to understand the processes and mechanisms of marine ecosystem response to natural and anthropogenic perturbations. Recent research topics are:

- Ecosystem structure and dynamics in oligotrophic subtropical regions
- The role of zooplankton on biological pump
- Solving “*Kuroshio Paradox*” (high fisheries production from oligotrophic Kuroshio region) by studying nutrient supply mechanisms and ecosystem structure/dynamics
- Developing new ocean provinces respect to the distribution of biogenic elements and biogeography
- The role of iron on marine food-web dynamics and biogeochemical cycles
- Sustainable use of marine ecosystem services

I also keen to contribute to solve ocean-related social issues by preparing scientific knowledge. I am contributing some national/international projects related to UN Decade of Ocean Science for Sustainable Development (2021-2030) and UN SDGs, especially SDG14 “Life under water”.

Committees:**Chair:**

- 2018-2023 Chair, IMBeR-Japan National Committee, Science Council of Japan
2016-2019 Chair, PICES Science Board
2015-2016 Cochairman, PICES FUTURE SSC
2009-2016 Chair of FUTURE Advisory Panel on Climate, Oceanographic Variability and Ecosystems, PICES
2004 - 2008 Chair, IMBER-Japan National Committee, Science Council of Japan

Member:

- 2023- Advisory Board, UN Ocean Decade
2023- Associate Member, Science Council of Japan
2023-2024 International Steering Committee (ISC) of the 2nd UN Ocean Decade Regional Conference & 11th WESTPAC International Marine Science Conference, UNESCO/IOC.
2022- Member, Advisory Panel on United Nations Decade of Ocean Science, PICES-ICES2022- Member, Study Group for External Review of PICES
2021- Member, International Steering Group on the Second Cooperative Study of Kuroshio and its Adjacent Regions (CSK-2), WESTPAC, IOC/UNESCO
2020- Member, Study Group of ICES-PICES Ocean Decade
2018-, 2007-2008 Associate member, Science Council of Japan
2017- Member, NPOCE SSC, CLIVAR Pacific Panel
2016- Japanese delegation at the IOC Assembly/IOC Executive Council
2015- Japanese delegation at the IOC/WESTPAC Intergovernmental Session
2013-2016 Vice Chairman, PICES Science Board
2013- Fellow of the board of Oceanographic Society of Japan
2011-2013, 2014-2017, 2019-2021 Member of the Paper Awards Selection Committee of the Oceanographic Society of Japan
2010-2012 Member, ICES/PICES Joint Study Group on "Developing a Framework for Scientific Cooperation in Northern Hemisphere Marine Science"
2009-2019 Member, PICES Science Board
2008 - 2010 Co-chair, Future Implementation Plan Writing Team, PICES
2007 - 2008 Member, FISP Writing Team, PICES
2007 - 2011 Member, WG22 (Iron supply and its impact on biogeochemistry and ecosystems in the North Pacific Ocean), PICES
2007 - 2013 Member, International Journal Committee, The Japanese Society of Fisheries Oceanography
2005 - 2009 Member, Study Group on Future Integrative Scientific Programs,

- PICES
- 2004 - 2007 Member, IFEP Advisory Panel, PICES
- 2004 - 2005 Member, Japan-GLOBEC National Committee, The Science Council of Japan
- 2004 - 2008 Science Steering Committee, IGBP/SCOR IMBER
- 2003 - 2005 Member, Committee of Global Environmental Research, The Science Council of Japan
- 2002 - 2004 Member, IGBP/SCOR Ocean Biogeochemistry and Ecosystems Transition Team
- 2001 - 2004 Member of MODEL Task Team, PICES

Editorial boards of academic journals:

- 2023- Editor-in-chief, Journal of Oceanography (Springer-Nature)
- 2022-2023 Guest Editor, Deep-Sea Research Part II: Topical Studies in Oceanography, Special Issue: IMBeR West Pacific Symposium: Changing West Pacific Ocean: Science and Sustainability.
- 2021- Associate Editor for Marine Biogeochemistry (Frontiers in Marine Science, Frontiers in Earth Science and Frontiers in Chemistry)
- 2020-2023 Topic Editor in Coastal Ocean Processes, Frontier in Marine Science (Topic Section: Oceanographic Processes Linking Nearshore, Continental Shelf, and Shelf Break)
- 2019 Editor, Kuroshio Current: Physical, Biogeochemical, and Ecosystem Dynamics (Geophysical Monograph Series, AGU-Wiley)
- 2019 Guest Editor, Philippine Journal of Natural Sciences
- 2016 Guest editor of the Special Issue “Study of change in ecosystem and material cycle caused by climate change and its feedback in the western North Pacific”, Journal of Oceanography
- 2011 -2019 Editorial board, Journal of Oceanography
- 2007- 2013 Editorial board, Fisheries Oceanography
- 2005- 2011 Editor, Plankton and Benthos Research (Plankton Biology and Ecology until 2005)
- 2003- 2010 Associate editor, Progress in Oceanography

Membership of academic societies:

- The Oceanographic Society of Japan
- Plankton Society of Japan
- Japanese Society of Fisheries Oceanography
- Japan Geoscience Union
- The Association for the Sciences of Limnology and Oceanography
- The American Geophysical Union

Projects

- 2020-2024 CREPSUM (Collaborative Research and Education Project in Southeast Asia for Sustainable Use of Marine Ecosystems): Project Coordinator (PI), funded by JSPS Core-to-core program.
<https://jspscrops.sum.wixsite.com/mysite>
- 2017-2019 RENSEA (Research and education network on coastal ecosystems in Southeast Asia. Project Coordinator (PI), funded by JSPS Core-to-core program.
- 2011-2016 New Ocean Paradigm on its Biogeochemistry, Ecosystem and Sustainable Use (funded by MEXT). <http://ocean.fs.a.u-tokyo.ac.jp/>
- 2011-2021 SKED: Project leader (2011-2014), member (2014-2021). The Study of Kuroshio Ecosystem Dynamics for Sustainable Fisheries (funded by MEXT) <http://tnfri.fra.affrc.go.jp/kaiyo/sked/english/index.html>
- 2007-2012 POMAL: Project leader, Population outbreak of Marine Life (funded by the Ministry of Agriculture, Forestry and Fisheries)
<http://tnfri.fra.affrc.go.jp/kaiyo/POMALweb/e-pomal.html>
- 2007 BLOSSOM: Project leader, Blooming Plankton Succession Study in the Oyashio Marine Ecosystem
- 2005-2008 PI. The role of heterotrophic dinoflagellates on the vertical transport of biogenic elements, funded by JSPS.
- 2003 SPINUP: Project leader, Study for Plankton and Iron Dynamics in the western Subarctic Pacific.
- 2002-2006 DEEP: Project leader, Deep-Sea Ecosystem and Exploitation Project, funded from Ministry of Agriculture, Forests and Fisheries of Japan.
- 2001-2004 SEEDS: Member. Japan-SOLAS project Subarctic ocean iron Enrichment and Ecosystem Dynamics Study, funded from Ministry of Environments of Japan.
- 1998-2000 PROVES: Member, MUST III programme, Processes of Vertical Exchange in Shelf Sea, funded by EU.
- 1998-2002 VENFISH: Member, Japan-GLOBEC project, Comprehensive study of the Variation of the oceanic ENvironment and FISH populations in the North-western Pacific
- 1997-2002 SAGE: Member. Japan-JGOFS project. Subarctic Gyre Experiment, funded from Science and Technology Agency of Japan
- 1990-2010 *A-line* Monitoring: Japan-JGOFS related project. Monitoring program of biological processes in the Oyashio region
- 1992-1993 SARES: Member. A joint Canada-Japan project conducted on the first-year ice of Saroma-ko Lagoon and Resolute Passage, Ministry of Education, Culture and Sports of Japan
- 1990-1998 Global Environmental Research Fund project, Effects of Enhanced

UV-B radiation on terrestrial and marine ecosystem, funded from Ministry of Environment.

1990-1998 BIOCOSMOS: Member, Comprehensive Program of Research for Agro-Ecological System and Optimum Control. Ministry of Agriculture, Forests and Fisheries of Japan.

PUBLICATIONS

Refereed Publications:

1. Jiang, S., Hashihama, F., Liu, H., Yoshitake, K., Takami, H., Hamasaki, K., Ikhsani, I. Y., Obata, H., Saito, H. (2023) Variations in physiology and genomic function of *Prochlorococcus* across the eastern Indian Ocean. *J. Geophys. Res. Oceans*, 128: e2023JC019898. <https://doi.org/10.1029/2023JC019898>
2. Dai, M., Ya-Wei Luo, Eric P. Achterberg, Thomas J. Browning, Yihua Cai, Zhimian Cao, Fei Chai, Bingzhang Chen, Matthew J. Church, Dongjian Ci, Chuanjun Du, Kunshan Gao, Xianghui Guo, Zhendong Hu, Shuh-Ji Kao, Edward A. Laws, Zhongping Lee, Hongyang Lin, Qian Liu, Xin Liu, Weicheng Luo, Feifei Meng, Shaoling Shang, Dalin Shi, Hiroaki Saito, Luping Song, Xianhui Sean Wan, Yuntao Wang, Wei-Lei Wang, Zuozhu Wen, Peng Xiu, Jing Zhang, Ruifeng Zhang, Kuanbo ZhouLuo, Y.-W., Achterberg, E. P., Browning, T. J., Cai, Y., Cao, Z. (2023) Upper ocean biogeochemistry of the oligotrophic North Pacific subtropical gyre: From nutrient sources to carbon export. *Rev. Geophys.*, 61: e2022RG000800. <https://doi.org/10.1029/2022RG000800>
3. Zainal, A., Falahudin, D., Saito, H., Mintarsih, T. H., Hafitz, M., Suteja, Y. (2023) Indonesian policy and researches toward 70% reduction of marine plastic pollution by 2025. *Mar. Policy*, 155: 105692. <https://doi.org/10.1016/j.marpol.2023.105692>
4. Yu, Z., Wong, MK-S., Inoue, J., Ahmed Sl., Higuchi, T., Hyodo, S., Itoh, S., Komatsu, K., Saito, H. and Ito, S. (2023) Environmental DNA in the Kuroshio reveals environment-dependent distribution of economically important small pelagic fish. *Front. Mar. Sci.*, 10: 1121088. <https://doi.org/10.3389/fmars.2023.1121088>
5. Sato, M., Shiozaki, T., Hashihama, F., Kodama, T., Ogawa, H., Saito, H., Tsuda, A., Takeda, S. and Furuya, K. (2022) Relative depths of the subsurface peaks of phytoplankton abundance conserved over ocean provinces. *Limnol. Oceanogr.*, 67: 2557-2571. <https://doi.org/10.1002/lno.12222>

6. Fukuda H, Hidaka K, Setou T, Kusaka A, Ambe D and Saito H (2022) Temporal and regional variabilities in the attenuation of sinking particulate organic carbon in the Kuroshio region. *Front. Mar. Sci.*, 9: 875362. <https://doi.org/10.3389/fmars.2022.875362>
7. Jiang, S., Hashihama, F., Masumoto, Y., Liu, H., Ogawa, H., Saito, H. (2022) Phytoplankton dynamics as a response to physical events in the oligotrophic Eastern Indian Ocean. *Prog. Oceanogr.*, 203: 102784 <https://doi.org/10.1016/j.pocean.2022.102784>
8. Liu, A. C. H., Chang, F. H., Yang, J. W. Saito, H., Umezawa, Y., Chen, C. C., Jan, S., Hsieh, C. H. (2022) Free-living marine bacterioplankton composition and diversity along the Kuroshio region. *Deep-Sea Res. Part I*, 183: 103741 <https://doi.org/10.1016/j.dsr.2022.103741>
9. Isaji, Y., Yoshikawa, C., Ogawa, N., O., Matsumoto, K., Makabe, A., Toyoda, S., Ishikawa, N. F., Ogawa, H., Saito, H., Honda, M. C., Ohkouchi, N. (2022) Nitrogen sources for phytoplankton in the eastern Indian Ocean determined from $\delta^{15}\text{N}$ of chlorophyll a and divinylchlorophyll a. *Geochem. Geophys. Geosystems*, 23: e2021GC010057 <https://doi.org/10.1029/2021GC010057>
10. Hashihama, F., Yasuda, I., Kumabe, A. Sato, M., Sasaoka, H., Iida, Y., Shiozaki, T., Saito, H., Kanda, J., Furuya, K., Boyd, P., Ishii, M. (2021) Nanomolar phosphate supply and its recycling drive net community production in the subtropical North Pacific. *Nature Comm.*, 12: 3462. <https://doi.org/10.1038/s41467-021-23837-y>
11. Hashihama, F., Saito, H., Kodama, T., Yasui-Tamura, S., Kanda, J., Tanita, I., Ogawa, H., Woodward, E. M. S., Boyd, P. W., and Furuya, K. (2021) Cross-basin differences in the nutrient assimilation characteristics of induced phytoplankton blooms in the subtropical Pacific waters, *Biogeosci.*, 18: 897–915. <https://doi.org/10.5194/bg-18-897-2021>
12. Jiang, S., Hashihama, F., Saito, H. (2021) Phytoplankton growth and grazing mortality through the oligotrophic subtropical North Pacific. *J. Oceanogr.*, 77: 505-521 <https://doi.org/10.1007/s10872-020-00580-4>
13. Hashihama, F., Saito, H., Shiozaki, T., Ehama, M., Suwa, S., Sugiyama, T., et al. (2020) Biogeochemical controls of particulate phosphorus distribution across the oligotrophic subtropical Pacific Ocean. *Global Biogeochem. Cycles*, 34: e2020GB006669. <https://doi.org/10.1029/2020GB006669>

14. Arifin, Z., and Saito, H. (2019) Bridging coastal research program between Indonesia and Japan. *Mar. Res. Indonesia*, 44: 34-41. <https://doi.org/10.14203/mri.v44i1.551>
15. Hashihama, F., Suwa, S., Kanda, J., Ehama, M., Sakuraba, R., Kinouchi, S., Sato, M., Yamaguchi, T., Saito, H., Ogura, Y., Hayashi, T., Mori, H., Kurokawa, K., Suzuki, S., Hamasaki, K. (2019) Arsenate and microbial dynamics in different phosphorus regimes of the subtropical Pacific Ocean. *Prog. Oceanogr.*, 176: 102-115. <https://doi.org/10.1016/j.pocean.2019.05.007>
16. Takagi, H., Kimoto, K., Fujiki, T., Saito, H., Schmidt, C., Kucera, M., Moriya, M. (2019) Characterizing photosymbiosis in modern planktonic foraminifera. *Biogeosci.*, 16: 3377-3396. <https://doi.org/10.5194/bg-16-3377-2019>
17. Michida, Y., et al. (2019) Guidelines for harmonizing ocean surface microplastic monitoring methods. Ministry of the Environment Japan, 71 pp. https://www.env.go.jp/en/water/marine_litter/guidelines/guidelines.pdf
18. Bograd, S. J., Kang, S., Di Lorenzo, E., Horii, T., Katugin, O. N., King, J. R., Lobanov, V. B., Makino, M., Na, G., Perry, R. I., Qiao, F., Rykaczewski, R. R., Saito, H., Therriault, T. W., Yoo, S., Batchelder, H. (2019) Developing a social–ecological–environmental system framework to address climate change impacts in the North Pacific. *Front. Mar. Sci.*, 6: 333. <https://doi.org/10.3389/fmars.2019.00333>
19. Sogawa, S., Hidaka, K., Kamimura, Y., Takahashi, M., Saito, H., Okazaki, Y., Shimizu, Y., Setou, T. (2019) Environmental characteristics of spawning and nursery grounds of Japanese sardine and mackerels in the Kuroshio and Kuroshio Extension area. *Fish. Oceanogr.*, 28: 454– 467. <https://doi.org/10.1111/fog.12423>
20. Saito, H. (2019) The Kuroshio: its recognition, scientific activities and emerging issues. In *Kuroshio Current* (eds T. Nagai, H. Saito, K. Suzuki and M. Takahashi) AGU-Wiley Geophysical Monograph 243, pp3-11, AGU and John Wiley and Sons, Hoboken, USA. <https://doi.org/10.1002/9781119428428.ch1>
21. Okazaki, Y., Miyaoto, H., Suzuki, K., Saito, H., Hidaka, K., and Ichikawa, T. (2019) Diverse trophic pathways from zooplankton to larval and juvenile fishes in the Kuroshio ecosystem. In *Kuroshio Current* (eds T. Nagai, H. Saito, K. Suzuki and M. Takahashi) AGU-Wiley Geophysical Monograph 243, pp257-272, AGU and John Wiley and Sons, Hoboken, USA.

<https://doi.org/10.1002/9781119428428.ch15>

22. Miyamoto, H., Vijai, D., Okazaki, Y., Saito, H. (2019) Feeding ecology of chaetognath *Flaccisagitta enflata* in Kuroshio region, western North Pacific. In *Kuroshio Current* (eds T. Nagai, H. Saito, K. Suzuki and M. Takahashi) AGU-Wiley Geophysical Monograph 243, pp245-256, AGU and John Wiley and Sons, Hoboken, USA. <https://doi.org/10.1002/9781119428428.ch16>
23. Isada, T, Hattori-Saito, A., Saito, H., Kondo, Y., Nishioka, J., Kuma, K., Hattori, H., McKay, R.M.L., Suzuki, K. (2019) Responses of phytoplankton assemblages to iron availability and mixing water masses during the spring bloom in the Oyashio region, NW Pacific. *Limnol. Oceanogr.*, 64: 194-216. <https://doi.org/10.1002/lno.11031>
24. Shiozaki, T., Bombar, D., Riemann, L., Sato, M., Hashihama, F., Kodama, T., Tanita, I., Takeda, S., Saito, H., Hamasaki, K., Furuya, K. (2018) Linkage between dinitrogen fixation and primary production in the oligotrophic South Pacific Ocean, *Global Biogeochem. Cycles*, 32: 1028-1044. <https://doi.org/10.1029/2017GB005869>
25. Yamashita, Y., Hashihama, F., Saito, H., Fukuda, H., Ogawa, H. (2017) Factors controlling the geographical distribution of fluorescent dissolved organic matter in the surface waters of the Pacific Ocean. *Limnol. Oceanogr.*, 62: 2360-2374. <https://doi.org/10.1002/lno.10570>
26. Cheung, S., K. Suzuki, H. Saito, Y. Umezawa, X. Xia, and H. Liu (2017) Highly heterogeneous diazotroph communities in the Kuroshio Current and the Tokara Strait, Japan. *PLOS ONE*, 12: e0186875, <https://doi.org/10.1371/journal.pone.0186875>
27. Nishibe, Y., Takahashi, K., Sato, M., Kodama, T., Kakehi, S., Saito, H., Furuya, K. (2017) Phytoplankton community structure, as derived from pigment signatures, in the Kuroshio Extension and adjacent regions in winter and spring. *J. Oceanogr.*, 73: 463-478. <https://doi.org/10.1007/s10872-017-0415-3>
28. Saito, H. (2016) Plankton Net. In: *Guideline of Ocean Observations Volume 6, Plankton and Benthos*, The Oceanographic Society of Japan, ISBN 978-4-908553-27-1, G601EN:001-009. <https://kaiyogakkai.jp/jos/en/guide/download>
29. Ehama, M., Hashihama, F., Kinouchi, S., Kanda, J., Saito, H. (2016) Sensitive

determination of total particulate phosphorus and particulate inorganic phosphorus in seawater using liquid waveguide spectrophotometry. *Talanta*, 153: 66-70. <https://doi.org/10.1016/j.talanta.2016.02.058>

30. Sogawa, S., Sugisaki, H., Saito, H., Okazaki, Y., Ono, T., Shimode, S., 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 Res. Part I*, 109: 1-9. <https://doi.org/10.1016/j.dsr.2015.12.010>
31. Blasiak, R., Pacheco, E., Furuya, K., Golden, C. D., Jauharee, A. R., Natori, Y., Saito, H., Sinan, H., Tanaka, T., Yagi, N., Yiu, E. (2016) Local and regional experiences with assessing and fostering ocean health. *Mar. Policy*, 71: 54-59. <https://doi.org/10.1016/j.marpol.2016.05.011>
32. Nishibe, Y., Takahashi, K., Shiozaki, T., Kakehi, S., Saito, H., Furuya, K. (2015) Size-fractionated primary production in the Kuroshio Extension and adjacent regions in spring. *J. Oceanogr.*, 71: 27-40. <https://doi.org/10.1007/s10872-014-0258-0>
33. Yamashita, Y., Lu, C.-J., Ogawa, H., Nishioka, J., Obata, H., Saito, H. (2015) Application of in situ fluorometer for determining distribution of fluorescent organic matter in the open ocean. *Mar. Chem.*, 177: 295-305. <https://doi.org/10.1016/j.marchem.2015.06.025>
34. Itoh, S., Yasuda, I., Saito, H., Tsuda, A., Komatsu, K. (2015) Mixed layer depth and chlorophyll a: profiling float observations in the Kuroshio-Oyashio Extension region. *J. Mar. Systems*, 151: 1-14. <https://doi.org/10.1016/j.jmarsys.2015.06.004>
35. Tsuda, A., Saito, H., Kasai, H., Nishioka, J., Nakatsuka, T. (2015) Vertical segregation and population structure of ontogenetically migrating copepods *Neocalanus cristatus*, *N. flemingeri*, *N. plumchrus* and *Eucalanus bungii* during ice-free season in the Sea of Okhotsk. *J. Oceanogr.*, 71: 271-285. <https://doi.org/10.1007/s10872-015-0287-3>
36. Hashihama, F., Kanda, J., Tauchi, A., Kodama, T., Saito, H., Furuya, K. (2015) Liquid waveguide spectrophotometric measurement of nanomolar ammonium in seawater based on the indorphenol reaction with *o*-phenylphenol (OPP). *Talanta*, 143: 374-380. <https://doi.org/10.1016/j.talanta.2015.05.007>

37. Kakehi, S., Ito, S., Kuwata, A., Saito, H., Tadokoro, K. (2015) Phytoplankton distribution during the winter convective season in Sendai Bay, Japan. *Cont. Shelf Res.*, 97: 43-53. <http://dx.doi.org/10.1016/j.csr.2015.02.005>
38. Nishibe, Y., Takahashi, K., Ichikawa, T., Hidaka, K., Kurogi, H., Segawa, K., Saito, H. (2015) Degradation of discarded appendicularian houses by oncaeid copepods. *Limnol. Oceanogr.*, 60: 967-976. <https://doi.org/10.1002/lno.10061>
39. Yoshimura, T., Nishioka, J., Ogawa, H., Kuma, K., Saito, H., Tsuda, A. (2014) Dissolved organic phosphorus production and decomposition during open ocean diatom blooms in the subarctic Pacific. *Mar. Chem.*, 165: 46-54. <https://doi.org/10.1016/j.marchem.2014.08.003>
40. Tsuda, A., Saito, H., Kasai, H. (2014) Vertical distributions of large ontogenetically migrating copepods in the Oyashio region during their growing season. *J. Oceanogr.*, 70: 123-132. <https://doi.org/10.1007/s10872-013-0214-4>
41. Nosaka, Y., Isada, T., Kudo, I., Saito, H., Hattori, H., Tsuda, A., Suzuki, K. (2014) Light utilization efficiency of phytoplankton in the Western Subarctic Gyre of the North Pacific during summer. *J. Oceanogr.*, 70: 91-103. <https://doi.org/10.1007/s10872-013-0217-1>
42. Shiozaki, T., Ito, S., Takahashi, K., Saito, H., Nagata, T., Furuya, K. (2014) Regional variability of factors controlling the onset timing and magnitude of spring algal blooms in the northwestern North Pacific. *J. Geophys. Res. Oceans*, 119: 1-13. <https://doi.org/10.1002/2013JC009187>
43. Yamashita, Y., Nosaka, Y., Suzuki, K., Ogawa, H., Takahashi, K., Saito, H. (2013) Photobleaching as a factor controlling spectral characteristics of chromophoric dissolved organic matter in open ocean. *Biogeosci.*, 10: 7207-7217 <https://doi.org/10.5194/bg-10-7207-2013>
44. Takahashi, K., Ichikawa, T., Saito, H., Kakehi, S., Sugimoto, Y., Hidaka, K., Hamasaki, K. (2013) Sapphirinid copepods as predators of doliolids: Their role in doliolid mortality and sinking flux. *Limnol. Oceanogr.*, 58: 1972-1984. <https://doi.org/10.4319/lo.2013.58.6.1972>
45. Sogawa, S., Sugisaki, H., Saito, H., Okazaki, Y., Shimode, S., Kikuchi, T. (2013) Congruence between euphausiid community and water region in the northwestern Pacific. Particularly in the Oyashio-Kuroshio Mixed Water Region. *J. Oceanogr.*, 69: 71-85. <https://doi.org/10.1007/s10872-012-0158-0>
46. Kondo, Y., Takeda, S., Nishioka, J., Sato, M., Saito, H., Suzuki, K., Furuya, K.

- (2013) Growth stimulation and inhibition of natural phytoplankton communities by model organic ligands in the western subarctic Pacific. *J. Oceanogr.*, 69: 97-115. <https://doi.org/10.1007/s10872-012-0160-6>
47. Yamada, N., Fukuda, H., Ogawa, H., Saito, H., Suzumura, M. (2012) Heterotrophic bacterial production and extracellular enzymatic activity in sinking particulate matter in the western North Pacific Ocean. *Front. Microbiol.*, 3: 379. <https://doi.org/10.3389/fmicb.2012.00379>
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