Appendix 6 Cited references

Note that the Japanese literature marked with * at the end of the reference represents it was translated to English by the JWRC (Japan Wildlife Research Center)

Preface

- Hanzawa S (1941) Micropaleontological studies of drill cores from deep well in Kita-Daito-Zima (North Borodino Island). In the Commemoration of Professor H. Yabe, M. I. A. Sixtieth Birthday, Jubilee Publ, 2: 756-802
- Hirata K (1976) Distribution of raised reef limestone and present reef-building activity in Takara-jima and Kodakara-jima, Nansei Islands, Japan. Science Rep Kagoshima Univ, 16: 75-89 (in Japanese with English abstract)
- Kan H, Takahashi T, Koba M (1991) Morphodynamics on Holocene reef accretion: Drilling results from Nishimezaki reef, Kume Island, the Central Ryukyu. Geographical Review of Japan, 64 (2): 114-131
- Konishi K (1980) Coral reefs uplifted to a terrestrial island (2). Shizen (Nature), Chuh-oh Koh-ron Co., Tokyo, 412 (June, 1980): 62-73 (in Japanese*)
- Nakamori T (1986) Community structures of recent and Pleistocene hermatypic corals in the Ryukyu Islands, Japan. Sci Rep Tohoku Univ (2nd Ser, geol), 56: 71-133
- Research Institute for Subtropics (1999) Survey of possibilities in subtropics research in the areas of organisms and environment.

 --A case study on coral bleaching event--, Okinawa Development Agency, Okinawa, 103 pp (in Japanese)
- Veron JEN (1992) Conservation of biodiversity: a critical time for the hermatypic corals of Japan. Coral Reefs, 11: 13-21

- Adjeroud M, Tsuchiya M (1999) Genetic variation and clonal structure in the scleractinian coral *Pocillopora damicornis* in the Ryukyu Archipelago, southern Japan. Mar Biol, 134 (4): 753-760
- Arakaki Y, Uehara T (1991) Physiological adaptations and reproduction of the four types of *Echinometra mathaei* (Blainville). In: Yanagisawa T, Yasumasu I, Oguro C, Suzuki N, Motokawa T (eds) Biology of Echinodermata: Proc 7th Int Echinoderm Conference, Japan (Atami) 9th 14th September 1990. A.A. Balkema Rotterdam, pp 105-112
- Cadoret L, Adjeroud M, Tsuchiya M (1999) Spatial distribution of chaetodontid fish in coral reefs of the Ryukyu Islands, southern Japan. J Mar Biol Ass UK, 79: 725-735
- Chappell J, Polach H (1991) Post-glacial sea-level rise from a coral record at Huon Peninsula, Papua New Guinea. Nature, 349: 147-149
- Fairbanks RG (1989) A 17,000-year glacio-eustatic sea level record: influence of glacial melting rates on the Younger Dryas event and deep-ocean circulation. Nature, 342: 637-642
- Hori K, Kayanne H (2000) Submarine morphology of the island shelf off the middle to south Ryukyu Islands, southwest Japan. Geographical Review, 73A (3): 161-181 (in Japanese with English abstract)
- Iryu Y, Nakamori T, Yamada T (1998) Pleistocene reef complex deposits in the Central Ryukyus, south-western Japan. Spec Publs Int Assoc Sediment, 25: 197-213
- Japan Coral Reef Society (2002) In: Nakamori T (ed) Coral reef research in Japan I, Japan Coral Reef Society, 108 pp (in Japanese)
- Kan H, Hori N (1993) Formation of topographic zonation on the well-developed fringing reef-flat, Minna Island, the Central Ryukyus. Transactions Japanese Geomorphological Union, 14: 1-16
- Kan H, Hori N, Nakashima Y, Ichikawa K (1995) The evolution of narrow reef flats at high-latitude in the Ryukyu Islands. Coral Reefs, 14 (3) 123-130
- Kan H, Hori N, Kawana T, Kaigara T, Ichikawa K (1997) The evolution of a Holocene fringing reef and island: Reefal environmental sequence and sea level change in Tonaki Island, the Central Ryukyus. Atoll Res Bull, 443: 1-20
- Kimura M (1985) Back-arc rifting in the Okinawa Trough. Mar Pet Geol, 2: 222-240
- Koba M, Nakata T, Takahashi T (1982) Late Holocene eustatic

- sea-level changes deduced from geomorphological features and their 14C dates in the Ryukyu Islands, Japan. Paleogeogr Paleoclimatol Paleoecol, 39: 231-260
- Kohn AJ (1959) The ecology of Conus in Hawaii. Ecol Monogr, 29: 47-90
- Konishi K, Tsuji Y, Goto T, Tanaka T, Futakuchi K (1983) Multi-hole shallow drilling of coral reefs- A case history of the holocene in Kikai Island, central Ryukyus- Monthly Marine Sciences, 15: 154-164 (in Japanese with English abstract)
- Lewis JR (1964) The Ecology of Rocky Shores. The English Universities Press, London, pp 323
- Licuanan WY, Capili EB (2003) Range extensions of Japanese Scleractia to the Philippines. Galaxea, 5: 63-67
- Matsuda S (2002) A review of the studies on nonarticulate coralline algae in the coral reef environments of Japan. Coral reef studies in Japan I, The Japan Coral Reef Society, pp 29-42 (in Japanese)
- Mezaki S (1985) Searching for Ryukyu Islands Arc Okinawa-Aki-shobou, Ginowan, 253 pp (in Japanese)
- Nakamori T, Iryu Y, Yamada T (1995) Development of coral reefs of the Ryukyu Islands (southwest Japan, East China Sea) during Pleistocene sea-level change. Sediment Geol, 99: 215-231
- Nishihira M (1974) Intertidal zone of Okinawa, Okinawa Prefecture, 262 pp (in Japanese*)
- Nishihira M, Sato Y, Arakaki Y, Tsuchiya M (1991) Ecological distribution and habitat preference of four types of the sea urchin *Echinometra mathaei* on the Okinawan coral reefs. In: Yanagisawa T, Yasumasu I, Oguro C, Suzuki N, Motokawa T (eds) Biology of Echinodermata: Proc 7th Int Echinoderm Conference, Japan (Atami) 9th 14th September 1990. A.A. Balkema, Rotterdam, pp 91-104
- Nishihira M, Veron JEN (1995) Hermatypic corals of Japan. Kaiyusha, Tokyo, 439 pp (in Japanese)
- Nishikawa A, Katoh M, Sakai K (2003) Larval settlement rates and gene flow of broadcast-spawning (*Acropora tenuis*) and planula-brooding (*Stylophora pistillata*) corals. Mar Ecol Prog Ser, 256: 87-97
- Ota Y, Omura A (1992) Contrasting styles and rates of tectonic uplift of coral reef terraces in the Ryukyu and Daito Islands, southwestern Japan. Quaternary Int, 15/16: 17-29
- Sano M, Shimizu M, Nose Y (1984) Changes in structure of coral reef fish communities by destruction of hermatypic corals: observational and experimental views. Pacific Sci, 38 (1):

51-79

- Sano M, Shimizu M, Nose Y (1987) Long-term effects of destruction of hermatypic corals by *Acanthaster planci* infestation on reef fish communities at Iriomote Island, Japan. Mar Ecol Prog Ser, 37: 191-199
- Sheue C-R, Liu H-Y, Yong JWH (2003) *Kandelia obovata* (Rhizophoraceae), a new mangrove species from Eastern Asia. Taxon, 52: 287-294
- Shibuno T, Hashimoto K, Abe O, Takada Y (1999) Short-term changes in structure of a fish community following coral bleaching at Ishigaki Island, Japan. Galaxea, JCRS, 1: 51-58
- Takahashi T, Koba M, Kan H (1988) Relationship between reef growth and sea level on the Northwest coast of Kume Island, the Ryukyus: data from drill holes on the Holocene coral reef. Proc 6th Int Coral Reef Symp, 3: 491-196
- Tsuchiya M, Nishihira M, Sato Y (1991) Behavioral characteristics of the sea urchin *Echinometra mathaei* (Blainville): agonistic behavior and recolonization process on the depopulated reef flat. In: Yanagisawa T, Yasumasu I, Oguro C, Suzuki N, Motokawa T (eds) Biology of Echinodermata: Proc 7th Int Echinoderm Conference, Japan. A.A. Balkema, Rotterdam, pp 113-118
- Tsuchiya M, Yonaha C (1992) Community organization of associates of the scleractinian coral *Pocillopora damicornis*: Effects of colony size and interactions among the obligate symbionts. Galaxea, 11 (1) 29-56
- Tsuchiya M, Nojima S (2002) Occurrence of *Traperzia* associated with *Acropora*: on the "wrong" host coral? Coral Reefs, 21 (2): 160
- Tsuchiya M, Fai HC (in press) Role of the crown-of-thorns starfish *Acanthaster planci* in mechanisms promoting the coexistence of several species of the obligate symbiontic xanthid crab *Trapezia* on pocilloporid corals. Kreiner J (ed) The 4th Committee for the International Symposium on Okinawa Studies (Japanologisches Seminar, Bonn, March, 26 and 27, 2002), Conference Volume.
- Tsuda RT (1991) Catalog of the marine benthic algae from the Ryukyu Islands, Japan. Galaxea, 10 (1): 35-64
- Uehara T, Shingaki M, Taira K, Arakaki Y, Nakatomi H (1991)

- Chromosome studies in eleven Okinawan species of sea urchins, with special reference to four species of the Indo-Pacific *Echinometra*. In: Yanagisawa T, Yasumasu I, Oguro C, Suzuki N, Motokawa T (eds) Biology of Echinodermata: Proc 7th Int Echinoderm Conference, Japan (Atami) 9th 14th September 1990. A.A. Balkema, Rotterdam, pp 119-129
- Vannini M (1985) A shrimp that speak crab-ese. J Crust Biol, 5 (1): 160-167
- Veron JEN (1992) Hermatypic corals of Japan. Aust Inst Mar Sci Monogr Series 9, pp 234
- Veron JEN (2000a) Corals of the world, Vol 1. Aust Inst Mar Sci, Townsville, 463 pp
- Veron JEN (2000b) Corals of the world, Vol 2. Aust Inst Mar Sci, Townsville, 429 pp
- Veron JEN (2000c) Corals of the world, Vol 3. Aust Inst Mar Sci, Townsville, 490 pp
- Yamano H, Kayanne H, Yonekura N (2001a) Anatomy of a modern coral reef flat: A recorder of storms and uplift in the late Holocene, J Sediment Res, 71: 295-304
- Yamano H, Abe O, Kitagawa H, Niu E, Nakamura T (2001b) Coral reef evolution at the leeward side of Ishigaki Island, southwest Japan. Radiocarbon, 43: 899-908
- Yamano H, Hori K, Yamauchi M, Yamagawa O, Ohmura A (2001c) Highest-latitude coral reef at Iki Island, Japan. Coral Reefs, 20 (1): 9-12
- Yamano H, Kayanne H, Yonekura N, Kudo K (2000) 21-year changes of backreef coral distribution: Causes and significance, J Coastal Res, 16: 99-110
- Yasugi R, Koseki S, Furutani M, Hidaka T (1996) Iwanami Biological Distinary, 4th edition. Iwanami Shoten, Tokyo, p 536 (in Japanese*)
- Yokochi H (2002) Seagrass beds in Ryukyu Archipelago. In: Nakamori T (ed) Coral reef studies in Japan Part 1, The Japan Coral Reef Society, Tokyo, pp 21-27 (in Japanese)
- Yonekura N, Kayanne H, Matsumoto E, Ishii T, Matsushima Y, Hori N, Nakai T (1994) Geomorphic development of modern fringing reefs of Yoron Island, Ryukyu Arc, Japan. The Quatetnary Res, 33 (2): 67-79

- Aeby GS (1992) The potential effect the ability of a coral intermediate host to regenerate has had on the evolution of its association with a marine parasite. Proc 7th Int Coral Reef Symp, 2: 809-815
- Aeby GS (2003) Corals in the genus *Porites* are susceptible to infection by a larval trematode. Coral Reefs, 22: 216
- Akamine J (1999) Notes on the blast fishing for livelihood in the Spratly Islands. Journal of Regional Fisheries, 40 (2): 81-100 (in Japanese with English abstract)
- Akimichi T (1984) Territorial regulation in the small-scale fisheries of Itoman, Okinawa. In: Ruddle K, Akimichi T (eds) Maritime institutions in the Western Pacific. Senri Ethnol Studies 17, National Museum of Ethnology, Osaka, pp 89-120
- Akimichi T (1985) Bonito and live-bait fishery: Coastal resources and space use in Yaeyama, Okinawa. In: H.J. Cecardi et G. Champalbere (eds) Oceanographie les Ameragements Cotiers et la Gestion du Littoral. 7 Exploitation des Ressources, Actes du Colloque Pluridiscplinaire.
- Akimichi T (1995) Indigenous resource-management and sustainable development-case-studies from Papua-New-Guinea and Indonesia. Anthropol Sci, 103 (4): 321-327
- Akimichi T (2001) Species-oriented community-based resource management: A Case study from small-scale fisheries in the Yaeyama islands, southwestern Japan. In: McGoodwin JR (ed) Understanding the Cultures of Fishing Communities: A Key to Fisheries Management and Food Security. FAO Fisheries Technical Paper, 401: 109-131

- Akimichi T (2002) Introduction to the troubled seas. In: Akimichi T, Kishigami N (eds) The Troubled Seas: The Anthropological Study of Marine Resource Management. Jinbun-Shoin, Kyoto, pp 9-36 (in Japanese)
- APEC-MRCWG (1998) In: Asia-Pacific Economic Cooperation Marine Resources Conservation Working Group (ed) Proceedings of the APEC Workshop on the Impacts of Destructive Fishing Practices on the Marine Environment, 16-18 December 1997. Agriculture and Fisheries Department, Hong Kong, pp 315
- Arakaki Y, Yamazato K (1998) Crown-of-thorns starfish outbreak in the coast along Onna Village, Okinawa Island. RIS Newsletter, 2: 6-8 (in Japanese)
- Bailey C, Zerner C (1992) Community-based fisheries management institutions in Indonesia. Maritime Anthropological Studies, 5 (1): 1-17.
- Bak RPM (1983) Neoplasia, regeneration and growth in the reef-building coral Acropora palmata. Mar Biol, 77 (3): 221-228
- Barnett TP, Pierce DW, Schnur R (2001) Detection of anthropogenic climate change in the world's oceans. Science, 292: 270-274
- Birkeland CE, Lucas JS (1990) *Acanthaster planci*: major management problem of coral reefs. CRC Press, Boca Raton, pp 257
- Black NA, Voellmy R, Szmant AM (1995) Heat Shock Protein Induction in *Montastraea faveolata* and *Aiptasia pallida* Exposed to Elevated Temperatures. Biol Bull, 188 (3) 234-240

- Bryan PG (1973) Growth rate, toxicity, and distribution of the encrusting sponge *Terpios* sp. (Hadromerida: Suberitidae) in Guam, Mariana Islands. Micronesica, 9 (2): 237-242
- Cesar H, Lundin CG, Bettencourt S, Dixon J (1997) Indonesian coral reefs-An economic analysis of a precious but threatened resource. Ambio, 26 (6): 345-350
- Chen CA, Lam KK, Nakano Y, Tsai WS (2003) A stable association of the stress-tolerant zooxanthellae, Symbiodinium clade D, with the low-temperature-tolerant coral, *Oulastrea crispate* (Scleractinia: Faviidae) in subtropical non-reefal coral communities. Zoological Stud, 42: 540-550
- Cheney DP (1975) Hard tissue tumors of Scleractinian corals. In: Hildemann WH, Benedict AA (eds) Immunologic Phylogeny. Plenum, NY, pp 77-87
- Coles SL, Seapy DG (1998) Ultra-violet absorbing compounds and tumorous growths on acroporid corals from Bandar Khayran, Gulf of Oman, Indian Ocean. Coral Reefs, 17 (2) 195-198
- Department of Cultural and Environment, Okinawa Prefecture (2003)

 Result of measurement of water quality (public water and groundwater), pp 32-33 (in Japanese*)
- Department of Health and Environment, Okinawa Prefecture (1989) Report on state of hermatypic corals in Kin Bay. Monitoring survey report of red soil pollution. (in Japanese*)
- Department of Planning and Development, Okinawa Prefecture (1993) Investigation on actual condition of near shore waters: Okinawa Island and surrounding neighboring islands. (in Japanese)
- Department of Planning and Development, Okinawa Prefecture (1994) Investigation on actual condition of near shore waters: Miyako Island, Ishigaki Island, Iriomote Island, and surrounding neighboring islands. (in Japanese)
- Edmunds PJ (1994) Evidence that reef-wide patterns of coral bleaching may be the result of the distribution of bleaching-susceptible clones. Mar Biol. 121 (1) 137-142
- Fang LS, Huang SP, Lin KL (1997) High temperature induces the synthesis of heat-shock proteins and the elevation of intracellular calcium in the coral *Acropora grandis*. Coral Reefs, 16 (2) 127-131
- Feeny D, Berkes F, McCay BJ, Acheson J M (1992) The tragedy of the commons: twenty-two years later. Human Ecology, 18 (1): 1-19
- Fujioka Y (1984) Oceanographic condition and muricid gastropods, Miyake Island. Chiribotan, 14 (4): 81-86 (in Japanese)
- Fujioka Y (1994) Study on Preservation of Coral Ecosystem. Global Environment Research of Japan in 1993, Research Information Office, Global Environment Department, Environment Agency, 2: 407-415 (in Japanese)
- Fujioka Y (1997) Influence of sedimentation and water temperature on coral communities. In: Global Environment Research of Japan, Final Reports for Projects Completed in 1996, Research Information Office, Global Environment Department, Environment Agency, 2: 142-159 (in Japanese)
- Fujioka Y, Yamazato K (1983) Host selection of some Okinawan coral associated gastropods belonging to the genera *Drupella*, *Coralliophila* and *Quoyula*. Galaxea, 2: 59-73
- Fujiwara S (1994) Analysis of survey results in coral reef sea area.

 The report of the marine biotic environment survey in the 4th national survey on the natural environment, Vol. 3, Coral reefs, Nature Conservation Bureau, Ministry of the Environment, pp 31-48 (in Japanese*)
- Fukuda T, Miyawaki I (1982) *Acanthaster planci* outbreak in Sekisei Lagoon, Yaeyama Archipelago. Marine Parks Journal, 56: 10-13 (in Japanese*)
- Garrett P, Ducklow H (1975) Coral diseases in Bermuda. Nature, 253: 349-350
- Gateno D, Leon A, Barki Y, Cortes J, Rinkevich B (2003) Skeletal tumor formations in the massive coral *Pavona clavus*. Mar Ecol Prog Ser, 258: 97-108
- Geiser DM, Taylor JW, Ritchie KB, Smith GW (1998) Cause of sea fan death in the West Indies. Nature, 394: 137-138
- Glynn PW (1990) Coral mortality and disturbances to coral reefs in

- the tropical eastern Pacific. In: Glynn PW (ed) Global ecological consequences of the 1982-1983 El Nino-Southern Oscillation. Elsevier Oceanogr Ser 52, Amsterdam, pp 55-126
- Glynn PW (1991) Elimination of two reef-building hydrocorals following the 1982-83 El Nino Warming event. Science, 253: 69-71
- Glynn PW (1993) Coral reef bleaching: ecological perspectives. Coral Reefs, 12: 1-17
- Glynn PW, D'Croz L (1990) Experimental evidence for high temperature stress as the cause of El Nino-coincident coral mortality. Coral Reefs, 8 (4): 181-192
- Glynn PW, de Weerdt WH (1991) Elimination of two reef-building hydrocorals following the 1982-83 El Nino warming event. Science, 253: 69-71
- Glynn PW, Imai R, Sakai K, Nakano Y, Yamazato K (1992) Experimental responses of Okinawan (Ryukyu Islands, Japan) reef corals to high sea temperatures and UV Radiation. Proc 7th Int Coral Reef Symp, 1: 27-37
- Grant AJ, Remond M, People J, Hinde R (1999) Effects of host-tissue homogenate of the scleractinian coral *Plesiastrea versipora* on glycerol metabolism in isolated symbiotic Dinoflagellates. Marine Biology, 128: 665-670
- Habe T (1989) Study on coral reef conservation and extermination of juvenile Acanthaster planci. Report on the study results of grant-in-aid for scientific study (General research A), in fiscal 1988, 266 pp (in Japanese*)
- Hidaka M (2002) Zooxanthellae and skeletal formation of hermatypic corals. In: Nakamori T (ed) Coral reef research in Japan I, Japan Coral Reef Society, pp 59-65 (in Japanese*)
- Hirose M, Hidaka M (2000) Reduced reproductive success in scleractinian corals the survived the 1998 bleaching in Okinawa. Galaxea, JCRS, 2: 17-21
- Hough-Guldberg O, Smith GJ (1989) The effects of sudden changes in temperature, light and salinity on the population density and export of zooxanthellae from the reef corals *Sylophora* pistillata Esper and Seriatpora hystrix Dana. J Exp Mar Biol Ecol, 129 (3): 279-304
- Hughes TP, Baird AH, Bellwood DR, Card M, Connolly SR, Folke C,
 Grosberg R, Hoegh-Guldberg O, Jackson JBC, Kleypas J,
 Lough JM, Marshall P, Nystrom M, Palumbi SR, Pandolfi JM,
 Rosen B, and Roughgarden J (2003) Climate change, human
 impacts, and the resilience of coral reefs. Science, 301:
 929-933
- Imai R (1992) The effects of high temperature and high UV irradiance on hermatypic corals; *Acropora valida, Pocillopora damicornis, Millepora exaesa, Millepora intricate.* A thesis submitted to the graduate school of the University of the Ryukyus in partial fulfiliment.
- Imamura K (1990) Social role of fishermen's wives in Ishigaki. Kikan-Zinruigaku, 20 (3): 129-178 (in Japanese)
- Inaba M, Suzuki H (2000) Seafloor environment monitors of hermatypic corals in Ogasawara Islands vegetation recovery business. --The current state of the seafloor environment immediately after exterminating of the *Capra aegagrus hircus*--, 3rd JCRS summary, 16 p (in Japanese)
- Jokiel PL, Coles SL (1990) Response of Hawaiian and other Indo-Pacific reef corals to elevated temperature. Coral reefs, 8: 155-162
- Jones RJ (1997) Changes in zooxanthellar densities and chlorophyll concentrations in corals during and after a bleaching event. Mar Ecol Prog Ser, 158: 51-59
- Kakuma S (2002) Development and history of conflicts in payao (FAD) fisheries in Okinawa. In: Akimichi T and Kishigami N (eds) The Troubled Seas: The Anthropological Study of Marine Resource Management. Jinbunshoin, Kyoto, pp 39-59 (in Japanese)
- Kamezaki N, Nomura K, Ui S (1987) Population dynamics of stony corals and *Acanthaster planci* in Sekisei lagoon, Okinawa (1983-1986). Marine Parks Journal, 74: 12-17 (in Japanese)
- Kamezaki N, Ui S (1984) Bleaching of hermatypic corals in Yaeyama Islands. Marine Parks Journal, 61: 10-13 (in Japanese)
- Kato M (1999) Beaches of Japan -- The vanishing coastal nature--.

- Iwanami Shoten, Tokyo, 220 pp (in Japanese*)
- Kawaguti S (1944) On the physiology of reef corals VI. Zooxanthella of the reef corals is *Gymnodinium* sp., Dinoflagellata; its culture in vitro. Palao Trop Biol Stn Stud, 2: 675-679
- Kawakubo N (1988) Thinking about the nature of Ogasawara Islands.

 --Starting with the airport construction plan--. The
 Conservation of Nature, 318: 16-19 (in Japanese)
- Kayanne H (2002) Part 1 Coral. In: Kananne H, Miyagi T (eds) "Coral and mangrove", Iwatani Shoten, Tokyo, pp 1-78 (in Japanese)
- Kokita T, Nakazono A (2001) Rapid response of an obligately corallivorous filefish *Oxymonacanthus longirostris* (Monacanthidae) to a mass coral bleaching event. Coral Reefs, 20 (2): 155-158
- Kuchikura Y (1977) An ecological approach to the fishing activity system of a coral island community in Okinawa. In Watanabe H (ed) Human activity system -Its spatiotemporal structure, University of Tokyo Press, Tokyo, pp 117-147 (in Japanese)
- Kuroki T, van Woesik R (1999) Changes in zooxanthellae characteristics in the coral *Stylophora pistillata* during the 1998 bleaching event. Galaxea, JCRS, 1: 97-101
- Kushmaro A, Loya Y, Fine M, Rosenberg E (1996) Bacterial infection and coral bleaching. Nature, 380: 396
- Lesser MP (1997) Oxidative stress causes coral bleaching during exposure to elevated temperatures. Coral reefs, 16 (3): 187-192
- Lesser MP, Stochaj WR, Tapley DW, Shick JM (1990) Bleaching in coral reef anthozoans: effects of irradiance, ultraviolet radiation, and temperature on the activities of protective enzymes against active oxygen. Coral reefs, 8 (4): 225-232
- Loya Y, Bull G, Pichon M (1984) Tumor formations in scleractinian corals. Helgol. Meeresunters, 37: 113-117
- Loya Y, Sakai K, Yamazato K, Nakano Y, Sambali H, van Woesik R (2001) Coral Breaching: the Winners and the Losers. Ecological Letters, 4 (2): 122-131
- Lucas JS (1973) Reproductive and larval biology of Acanthaster planci (L.) in Great Barrier Reef waters. Micronesica, 9: 197-203
- Lucas JS (1984) Growth, maturation and effects of diet in *Acanthaster planci* (L.)(Asteroidea) and hybrids reared in the laboratory. J Exp Mar Biol Ecol, 79 (2): 129-148
- Moran P (1997) Crown-of-thorns starfish: questions and answers.
 On-line reference series, Australian Institute of Marine Science,
 Townsville
 - (http://www.aims.gov.au/pages/reflib/cot-starfish/pages/cot-00 0.html)
- Mori M (1995) Movement of stony corals and crown-of-thorns starfish in Sekisei Lagoon. Marine Parks Journal, 107: 10-15 (in Japanese)
- Moyer JT, Emerson WK, Ross M (1982) Massive destruction of scleractinian corals by the muricid gastropod, *Drupella*, in Japan and the Philippines. The Nautilus, 96: 69-82
- Muscatine L (1980) Productivity of zooxanthellae. Brookhaven Symp Biol, 31: 381-402
- Muscatine L, Gates R, Baghdasarian G (1992) Temperature Shock Causes Host Cell Detachment in Symbiotic Cnidarians: Implications for Coral Bleaching. Proc 7th Inter Coral Reef Symp, 1: 72-73
- Nadaoka K, Nihei Y, Wakaki K, Kumano R, Kakuma S, Moromizato S, Omija T, Iwao K, Shimoike K, Taniguchi H, Nakano Y, Ikema T (2001) Regional variation of water temperature around Okinawa coasts and its relationship to offshore thermal environments and coral bleaching. Coral Reefs, 20 (4): 373-384
- Nakano Y (1984) Analysis of the mechanism of expansion and contraction of polyps by diurnal cycle on five species of Faviidae. Undergraduate thesis in Biology course, University of the Ryukyus. (in Japanese)
- Nakano Y (2002a) A review on physiological and ecological researches on responses of hermatypic corals by environment impacts. In: Nakamori T (ed) Coral reef research in Japan I, Japanese Coral Reef Society, pp 43-49 (in Japanese)
- Nakano Y (2002b) Comparison of extent of the damage with 1998

- bleaching event 1. Bleaching on hermatypic corals around Okinawa Island. Report on coral mortality and its cause in Ishigaki Island, Nature Conservation Bureau, Ministry of the Environment, pp156-162 (in Japanese*)
- Nakano Y, Yamashiro H (2002) Disease on *Porites* on Okinawa Island. 5th JCRS summary, p 11 (in Japanese*)
- Nature Conservation Bureau, Environment Agency (1984) Urgent survey on conservation of Sakiyama Bay Nature Conservational Area. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1986) Urgent survey on abnormal phenomenon of marine ecosystem in Amami Archipelago. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1989) Report on clarification of contributing factors that influences on population fluctuation of organisms in marine ecosystem, and its management methods, fiscal 1988 (in Japanese)
- Nature Conservation Bureau, Environment Agency (1991) Report of survey on actual condition of coral communities' damage by *Drupella cornus* predation in marine park zones. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1994a) Report on study of damage of coral communities by *Morula spinosa* in Amakusa district, Unzen-Amakusa National Park, fiscal 1993. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1994b) The report of the marine biotic environment survey in the 4th national survey on the natural environment. Coral reefs, Vol. 3 (in Japanese)
- Nature Conservation Bureau Environment Agency (1998) The 5th national survey on the natural environment (coastal areas). A comprehensive report. (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2002) Report on coral mortality and its cause in Ishigaki Island. (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2003) Report on conservational activities in marine park zones, in fiscal 2002. (in Japanese)
- Nishihira M, Veron JEN (1995) Hermatypic corals of Japan. Kaiyusha, Tokyo, 439pp (in Japanese)
- Nishihira M, Yamazato K (1974) Human interference with the coral reef community and *Acanthaster* infestation of Okinawa. Proc 2nd Int Coral Reef Symp, 1: 577-590
- Nojima S (2001) North migration of hermatypic corals in west coast of Amakusa. 4th JCRS summary, p 64 (in Japanese)
- Nomura K, Kamezaki N (1987) The present condition of crown-of-thorns starfish and corals in Hateruma Island, Yaeyama Group. Marine Parks Journal, 73: 16-19 (in Japanese)
- Nomura K, Tominaga M (2001) The coral conservation against population explosions of *Drupella fragum* at Shirigai, Otsuki, Pacific coast of central Japan, and its removing guide. Marine Parks Journal, 130: 11-16 (in Japanese)
- Okinawa Prefectural Fisheries Experiment Sttion (1978) Survey report on state of pollution by red soil run-offs. (in Japanese)
- Okinawa Prefectural Tourism Development Bureau (1976) Influence of *Acanthaster planci* on coral reef ecosystem, concerning heavy infestations of *Acanthaster planci*. (in Japanese)
- Okinawa Prefecture (2003) Maintenance plan of coastal areas of the Ryukyu Islands. (in Japanese*)
- Omija T (1987) Survey on Pollution by Reddish Soil in Okinawa --A
 Convenient Measuring Method for Reddish Soil in Sediment
 and Reddish Soil Levels in Okinawa--. Annual Report of
 Okinawa Prefectural Institute of Public Health, 20: 100-110 (in
 Japanese)
- Omija T (1992) Current Status of red soil pollution in Okinawa Prefecture. Newsletter of Okinawa Prefectural Institute of Pollution and Health, 26: 87-96 (in Japanese)
- Omija T (in press) SPSS Convenient Measuring Method and its explanation. Newsletter of Okinawa Prefectural institute of Health and Environment, 37: (in Japanese)
- Omija T, Oyama M, Ikema N, Yaeyama Regional Public Health and Welfare Division, Okinawa Prefectural Fisheries Improvement and Diffusion Center, Fisheries Division of Ishigaki City, Fisheries Cooperative of Iheya Village, Fisheries Cooperative

- of Izena, F (1993) Current status of red soil pollution in various sea areas in Okinawa Prefecture (2nd Report). Abstract from 23rd Conference of Health Observer, pp 50-60 (in Japanese)
- Omija T, Nakasone K, Mitsumoto H, Kobayashi T (1999) Impacts of red soil sedimentation on corals (2nd Report): About coral resistance to red soil sedimentation. Newsletter of Okinawa Prefectural institute of Health and Environment, 33: 111-120 (in Japanese)
- Omija T, Nakasone K, Mitsumoto H, Uehara M, Oshiro T (2000a) Impacts of red soil pollution on corals. Newsletter of National Pollution Research Association, 25 (2): 23-28 (in Japanese)
- Omija T, Nakasone K, Mitsumoto H, Uehara M, Oshiro T (2000b) Comparison of coral resistance to red soil pollution and to bleaching. Newsletter of Okinawa Prefectural institute of Health and Environment, 34: 69-76 (in Japanese)
- Omija T, Higa E, Nakasone K, Mitsumoto H (2002) Comparison of the Accumulated Soil in Okinawa Coastal Sea before and after the Enforcement of Red Soil Erosion Prevention Ordinance. Annual Report of Okinawa Prefectural Institute of Health and Environment, 36: 77-84 (in Japanese with English abstract)
- Omija T, Nakasone K, Mitsumoto H, Higa E (2003) Monitoring of terrestrial pollutants into coral reef. Investigation research report of coral reefs, the Cabinet Office consignment in 2002, pp 86-102 (in Japanese with English abstract)
- Patterson KL, Porter JW, Ritchie KE, Polson SW, Mueller E, Peters EC, Santavy DL, Smith GW (2002) The etiology of white pox, a lethal disease of the Caribbean elkhorn coral, *Acropora palmata*. Proc Natl Acad Sci USA, 99: 8725-8730
- Pecheux M (1998) Link between CO2 rise and bleaching probed by fast fluorescence kinetics. Int Soc for Reef Studies (ISRS) European Meeting, 1988
- Peters EC (1997) Diseases of coral-reef organisms. In: Birkeland C (ed) Life and death of coral reefs. Chapman & Hall, New York, pp 114-139
- Peters EC, Halas JC, McCarty HB (1986) Calicoblastic neoplasms in Acropora palmata, with a review of reports on anomalies of growth and form in corals. J Natl Cancer Inst, 76: 895-912
- Plucer-Rosario G (1987) The effect of substratum on the growth of Terpios, an encrusting sponge which kills corals. Coral Reefs, 5 (4): 197-200
- Raymundo LJH, Harvell CD, Reynolds TL (2003) Porites ulcerative white spot disease: description, prevalence, and host range of a new coral disease affecting Indo-Pacific reefs, Dis Aquat Organ, 56: 95-104
- Research Institute for Subtropics (1999) Survey of possibilities in subtropics research in the areas of organisms and environment.

 --A case study on coral bleaching event--, Okinawa Development Agency, Okinawa, 103 pp (in Japanese*)
- Richardson LL (1998) Coral diseases: what is really known? Trends Ecol Evo, 1 13: 438-443
- Richardson LL, Goldberg WM, Kuta KG, Aronson RB, Smith GW, Ritchie KB, Halas JC, Feingold JS, Miller SL (1998) Florida's mystery coral-killer identified. Nature, 392: 557-558
- Richardson LL, Kuta KG, Schnell S, Carlton RG (1997) Ecology of the black band disease microbial consortium. In: Proc 8th Int Coral Reef Symp, 1: 597-600
- Rowan R, Knowlton N (1995) Intraspecific diversity and ecological zonation in coral-algal symbiosis. Proc Natl Acad Sci USA, 92: 2850-2853
- Ruddle K (1993) External forces and change in traditional community-based fishery management systems in the Asia-Pacific region. Maritime Anthropological Studies, 6: 1-37
- Ruddle K, Akimichi T (1984) Maritime institutions in the Western Pacific. Senri Ethnol Studies 17, National Museum of Ethnology, Osaka.
- Ruddle K, Akimichi T (1989) Sea tenure in Japan and the southwestern Ryukyus. In Cordell J (ed) A Sea of Small Boats. Cambridge, Mass, Cultural Survival Inc., pp 337-370
- Ruddle K, Johannes RE (1985) The Traditional Knowledge and Management of Coastal Systems in Asia and the Pacific, UNESCO Regional office for science and technology for

- Southeast Asia, Jakarta.
- Rützler K, Muzik K (1993) Terpios hoshinota, a new cyanobacteriosponge threatening Pacific reefs. In: Uriz MJ, Rützler K (eds) Recent Advances in Ecology and Systematics of Sponges. Scientia Marina, 2157: 395-403
- Sakai K, Nishihira M (1986) Ecology of hermatypic corals. In: Nishihira M (ed) Coral reefs of Okinawa. Okinawa Environmental Analysis Center Co. Ltd., Urasoe City, pp 83-97 (in Japanese*)
- Sakai K, Muzik K, Nakamura S, Nishihira M (1988) A note on resurvey of coral communities and *Acanthaster* populations around Okinawa Island, Japan in 1984. Galaxea, 7 (1): 41-52
- Sano M (1985) Crown-of thorns starfish: a species disturbing coral reef ecosystems. In: Okiyama M, Suzuki K (eds) Marine organisms of Japan: Ecology of invasion and disturbance, Tokai University Press, Tokyo, pp 16-26 (in Japanese)
- Sharp VA, Miller D, Bythell JC, Brown BE (1994) Expression and bacterial colonization of mucus from soft coral Briareum abestinum. Bull Mar Sci, 30: 888-893
- Shibuno T, Hashimoto K, Abe O, Takada Y (1999) Short-term changes in structure of a fish community following coral bleaching at Ishigaki Island, Japan. Galaxea, JCRS, 1: 51-58
- Shimoda T, Ichikawa T, Matukawa Y (1998) Nutrient conditions and their effects on coral growth in reefs around Ryukyu Islands. Bulletin of the National Research Institute of Fisheries Science, 12: 71-80 (in Japanese with English Abstract)
- Shimoike K (1995) Gametogenesis of the corallivorous gastropod (*Drupella cornus* and *D. fragum*) and their habitat in Akajima Island. Report of Akajima Marine Science Laboratory, 6: 12-16 (in Japanese)
- Shimojyo T, Kakuma S, Moromizato S, Nadaoka K, Morinaga K (2001) High water temperature trend around Okinawa in the summer of 2001. The 4th JCRS summary, p 8 (in Japanese*)
- Shirai S (1956) Ecological notes on the Amami-Oshima (II), Okinawa. Collecting and Breeding, 18(10): 301-307 (in Japanese)
- Shokita S (1988) Aquaculture in coral reefs. Midorishobou, Tokyo. (in Japanese*)
- Smith GJ, Muscatine L (1999) Cell cycle of symbiotic dinoflagellates: Variation in G1 phase-duration with anemone nutritional status and macronutrient supply in the Aiptasia pulchella-Symbiodinium pulchrorum symbiosis. Marine Biology, 134 (3): 405-418
- Spergel B, Moye M (2004) Financing marine conservation. -- A menu of options--, WWF, 68 pp
- Suefuji M, van Woesik R (2001) Coral recovery from the 1998 bleaching event is facilitated in Stegastes (Pisces: Pomacentridae) territories, Okinawa, Japan.Coral Reefs, 20 (4): 385-386
- Takahashi S, Nakamura T, Sakamizu M, van Woesik R, Yamasaki H (2001) Repair machinery of symbiotic photosynthesis as the primary target of heat. 4th JCRS summary, p 41 (in Japanese*)
- Takayama S, Shirasaki S (1990) Stress for Reef-Building Corals. (in Japanese)
- Takekawa D (1998) Progressiveness and environmental adaptation of Itoman fishermen, Okinawa: A case study of *agiyaa* fish drive. Rettoh-no-Bunkashi, 10: 75-120 (in Japanese)
- Takekawa D (2001) Technology complex in fish drive in Okinawa.
 In: Shinohara T (ed) Folk-Technology, Asakura Shoten, Tokyo, pp 94-117 (in Japanese)
- Takekawa D (2003) Rights to the environment based on practical knowledge: Conflict and nature view among diver fishermen and tourist divers in Miyako Islands. Bulletin of the National Museum of History and Folklore, 105: 89-112 (in Japanese)
- Toguchi K, Yoshikawa H (1990) Development and conservation of coral reef area, a public point of view on regional development. Coral Reef Area Research Group (ed) Hot Nature --Environmental Geography of Coral Reefs in Japan---. Kokonshoin, Tokyo, pp 300-316 (in Japanese*)
- Tominaga M (1998) Removing of coral-eating gastropods by volunteers at the Tsutomezaki Marine Park, Ashizuri-Uwakai National Park. Marine Parks Journal, 121: 8-12 (in Japanese)

- Tsuchiya M (1999) Effect of mass coral bleaching on the community structure of small animals associated with the hermatypic coral *Pocillopora damicornis*. Galaxea, JCRS, 1: 65-72
- Tsuchiya M, Yanagiya K, Nishihira M (1987) Mass mortality of the sea urchin *Echinometra mathaei* (Blainville) caused by high water temterature on the reef flats in Okinawa, Japan. Galaxea, 6 (2): 375-386
- Turner SJ (1994) The biology and population outbreaks of the corallivorous gastropod *Drupella* on Indo-Pacific reefs. Oceanogr Mar Biol Ann Rev, 32: 461–530
- Ueda F (1992) Migrating fishermen in Okinawa. --History and life of Itoman fishermen--. Tanigawa K (ed) The world of Ryukyu Arc, Shougakukan, Tokyo, 6: 479-502 (in Japanese)
- Ueno S, Yokochi H (1990) Story of crown-of-thorns starfish Part 2.
 Umino-hakubutsukan, Marine Science Museum, Tokai
 University, Shimizu, 20 (3): 4-6 (in Japanese)
- Ujiie H (1986) Seafloor of the Ryukyu Arc. --Bottom material and geological features--, Shinsei Books Publication, Okinawa, pp14-25 (in Japanese)
- Umezawa Y, Miyajima T, Yamamuro M, Kayane H, Koike I (2001) Analysis of the influential area of land-derived nitrogen in tropical and subtropical coastal areas. --Usefulness of $\delta 15N$ values in macroalgae--. Monthly Kaiyo, 33 (7): 472-476 (in Japanese)
- Veron JEN (1995) Corals in Space and Time, The Biogeography and Evolution of the Scleractinia. Comstock/Cornell, Ithaca and London, pp 34-60
- Wilkinson C (1998) The 1997-1998 Mass Bleaching Event Around The World. In: Wilkinson C (ed) Status of Coral Reefs of The World: 1998, Australian Institute of Marine Science, Queensland, pp 15-38
- Wilkinson C (2002) In: Wilkinson C (ed) Status of Coral Reefs of The World: 2002, Australian Institute of Marine Science, Townsville, 378 pp
- Wilkinson C, Rahman RA (1994) Causes of coral reef degradation within Southeast Asia. In: Wilkinson CR (ed) Living Coastal Resources of Southeast Asia: Status and Management, Australian Institute of Marine Science, Townsville, pp 18-24
- Williams EH, Bunkley-Williams L (1990) The world-wide coral bleaching cycle and related sources of coral mortality. Atoll Res Bull. 335: 1-71
- Yamaguchi M (1973) Early life histories of coral reef asteroids, with special reference to *Acanthaster planci* (L.). In: Jones OA, Endean R (eds) Biology and geology of coral reefs, 2: Biology 1. Academic Press, New York, pp 369-387
- Yamaguchi M (1974) Growth of juvenile *Acanthaster planci* (L.) in the laboratory. Pacific Science, 28 (2): 123-138
- Yamaguchi M (1986a) Introduction to the study of coral reefs 8 -The crown-of-thorns starfish problem (1). Aquabiology, 47:

- 408-412 (in Japanese with English abstract)
- Yamaguchi M (1986b) Introduction to the study of coral reefs 4
 -Coral reef sponges (1) Sponges as destroyers of reef-building corals. Aquabiology, 43: 88-92 (in Japanese with English abstract)
- Yamaguchi M (1986c) *Acanthaster planci* infestations of reefs and coral assemblages in Japan: a retrospective analysis of control efforts. Coral Reefs, 5: 23-30
- Yamaguchi M (1987) Occurrences and persistency of *Acnathster* planci pseudo-population in relation to oceanographic conditions along the Pacific coast of Japan. Galaxcea, 6: 277-288
- Yamashiro H (2003) Coral diseases with special reference to tumors. Journal of Fossil Research, 36 (1): 1-5 (in Japanese)
- Yamashiro H, Oku H, Higa H, Chinen I, Sakai K (1999) Composition of lipids, fatty acids and sterols in Okinawan corals. Comp Biochem Phys B, 122: 397-407
- Yamashiro H, Yamamoto M, Van Woesik R (2000) Tumor formation on the coral *Montipora informis*. Dis Aquat Org, 41: 211-217
- Yamashiro H, Oku H, Onaga K, Iwasaki H, Takara K (2001) Coral tumors store reduced level of lipids. J Exp Mar Biol Ecol, 265 (2): 171-179
- Yamasu T (1988) Organisms of coral reefs 3. Symbiosis in coral reefs. Nishihira M (ed) Coral reefs of Okinawa. Okinawa Environmental Research & Technology Center, pp 123-145 (in Japanese)
- Yamazato K (1981) A Note on the expulsion of zooxanthellae during summer, 1980 by the Okinawan reef building corals. Sesoko Mar Lab Tech Rep, 8: 9-18
- Yamazato K (1999) Coral bleaching in Okinawa, 1980 vs 1998. Galaxea JCRS, 1: 83-87
- Yamazato K, Kiyan T (1973) Reproduction of *Acanthaster planci* in Okinawa. Micronesica, 9: 185-195
- Yokochi H (1998) The early detection of *Acanthaster* outbreaks by monitoring the algae-eating juvenile starfish. Midoriishi, 9: 12-14 (in Japanese)
- Yokochi H, Ogura M (1987) Spawning period and discovery of juvenile *Acanthaster planci* (L.)(*Echinodermata: Asteroidea*) at northwestern Iriomote-jima, Ryukyu Islands. Bull Mar Sci, 41 (2): 611-616
- Yokochi H, Ueno S (1990) Story of crown-of-thorns starfish Part 1. Umino-hakubutsukan, Marine Science Museum, Tokai University, Shimizu, 20 (2): 4-6 (in Japanese)
- Yokochi H, Ueno S, Ogura M, Nagai A, Habe T (1991) Spatial-temporal changes of the distribution and abundance of *Acnathaster planci* (L.) and corals at northwestern Iriomote-jima, Ryukyu Islands: 1983-1988. Journal of the School of Marine Science and Technology, Tokai University, 32: 231-242 (in Japanese with English abstract)

- AIMS (1997) Survey manual for tropical marine resources, 2nd edition. In: English S, Wilkinson C, Baker V (eds) Australian Institute of Marine Science, Townsville, 390 pp
- AIMS (1998) In: Clive WilkinsonC (ed) Status of the Coral Reefs of the World, Australian Institute of Marine Science.
- Andréfouët S, Berkelmans R, Odriozola L, Done T, Oliver J, Müller-Karger F (2002) Choosing the appropriate spatial resolution for monitoring coral bleaching events using remote sensing, 21(2):147 154
- Andréfouët S, Kramer P, Torres-Pulliza D, Joyce KE, Hochberg EJ, Garza-Perez R, Mumby PJ, Riegl B, Yamano H, White WH, Zubia M, Brock JC, Phinn SR, Naseer A, Hatcher BG, Muller-Karger F (2003) Multi-sites evaluation of IKONOS data for classification of tropical coral reef environments. Remote Sensing of Environment, 88: 128-143
- Arai K, Yokoyama S, Nakahara N (1999) Bleaching event of hermatypic corals in Urasoko Bay, Ishigaki Island. Urgent

- survey on the influence of hermatypic coral communities' bleaching on marine ecosystems and its conservational approaches. Seikai National Fisheries Research Institute, Fisheries Agency, pp 105-233 (in Japanese*)
- Benny AH, Dawson G (1983) Satellite imagery as aid to bathymetric charting in the Red Sea. The Cartographic Journal, 20 (1): 5-16.
- Cabinet Office, Government of Japan (2001) Report on the survey of coral reefs. (in Japanese*)
- Cabinet Office, Government of Japan (2002) Report on the survey of coral reefs. (in Japanese*)
- Cabinet Office, Government of Japan (2003) Report on the survey of coral reefs. (in Japanese*)
- Department of Health and Environment, Okinawa Prefecture (1994) Report on conservation of coral reef ecosystem, in fiscal 1993. (in Japanese*)
- Department of Health and Environment, Okinawa Prefecture (1995)

- Report on conservation of coral reef ecosystem, in fiscal 1994. (in Japanese*)
- Department of Health and Environment, Okinawa Prefecture (1996)
 Report on conservation of coral reef ecosystem, in fiscal 1995.
 (in Japanese*)
- Department of Health and Environment, Okinawa Prefecture (1997) Report on conservation of coral reef ecosystem, in fiscal 1996. (in Japanese*)
- Department of Planning and Development, Okinawa Prefecture (1993) Survey on the state of coastal areas on Okinawa Island and neighboring islands. (in Japanese*)
- Department of Planning and Development, Okinawa Prefecture (1994) Survey on the state of coastal areas on Miyako, Ishigaki, Iriomote and neighboring islands. (in Japanese*)
- Elvidge CD, Dietz JB, Berkelmans R, Andréfouët S, Skirving W, Strong AE, Tuttle BT (2004) Satellite observation of Keppel Islands (Great Barrier Reef) 2002 coral bleaching using IKONOS data. Coral Reefs, 23: 123-132
- Fu L-L, Christensen EJ, Yamarone Jr. CA, Lefebvre M, Menard Y, Dorrer M, Escudier P (1994) TOPEX/POSEIDON mission overview. J Geophys Res, 99: 24369-24381
- Fujioka Y (1997) Influence of sedimentation and water temperature on coral communities. In: Global Environment Research of Japan, Final Reports for Projects Completed in 1996, Research Information Office Global Environment Department Environment Agency, 2: 142-159 (in Japanese)
- Fujioka Y, Ohba H (2003) Development of management method based on health of hermatypic corals. In: Global Environment Research Fund, Final report of research results, Research and Information Office, Global Environment Bureau, Ministry of the Environment, pp 9-31 (in Japanese*)
- Fujioka y, Shibuno T (1999) Effects of bleaching event on community construction of hermatypic corals. Urgent survey on the influence of hermatypic coral communities' bleaching on marine ecosystems and its conservational approaches. Seikai National Fisheries Research Institute, Fisheries Agency, pp 3-13 (in Japanese*)
- Fujiwara S, Shimizu K, Sugai K, Osima M, Uno T, Tsuchiya T, Lyzenger S (1997) Coral coverage analysis using color aerial photograph images. Report of the global environment research fund, Environment Agency of Japan, entitled "Studies on preservation of coral reef ecosystem", pp 131-149 (in Japanese*)
- Funakoshi Y, Ueno S (2002) Graziing effect of *Diadema setosum* on *Acropora tumida* community in Suruga Bay. 5th JCRS summary. (in Japanese)
- GBRMPA (1998) State of the Great Barrier Reef World Heritage Area, Great Barrier Reef Marine Park Authority.
- Harashima A (1997) Study on development of monitoring method for variable coral reefs. In: Global Environment Research of Japan, Final Reports for Projects, Research Information Office, Global Environment Department, Environment Agency, pp 111-121 (in Japanese*)
- Harashima A, Kunugi M (2003) Study on the evaluation of environment changes and management method for growth and degradation of individual colonies. In: Global Environment Research Fund, Final report of research results, Research and Information Office, Global Environment Bureau, Ministry of the Environment, pp 45-58 (in Japanese*)
- Hardy JT, Hoge FE, Yungel JK, Dodge RE (1992) Remote detection of temperature-induced coral "bleaching" using pulsed-laser fluorescence spectroscopy. Mar Ecol Prog Ser, 88: 247-255
- Hasegawa H (2001) Environmental degradation processes due to the land improvement practices on Ishigaki Island. In: Umitsu M (ed) A study of the Late Holocene Geo-environment and Evolution of Coastal Lowlands, pp 100-114 (in Japanese)
- Hasegawa H, Ichikawa K, Kobayashi M, Kobayashi T, Hoshino M, Mezaki S (1999) The mass-bleaching of coral reefs in the Ishigaki Lagoon, 1998. Galaxea, JCRS, 1: 31-39 (in Japanese with English abstract)
- Hashimoto K, Shibuno T, Abe O, Takada Y (1999) Bleaching event of hermatypic corals in Urasoko Bay. Urgent survey on the

- influence of hermatypic coral communities' bleaching on marine ecosystems and its conservational approaches. Seikai National Fisheries Research Institute, Fisheries Agency, pp 15-18 (in Japanese*)
- Hayashibara T, Tamashiro S, Sano M, Fukuoka K, Minakawa M (1999) Changes of metabolic state of hermatypic corals accompanied by bleaching event. Urgent survey on the influence of hermatypic coral communities' bleaching on marine ecosystems and its conservational approaches. Seikai National Fisheries Research Institute, Fisheries Agency, pp 235-252 (in Japanese*)
- Hochberg EJ, Atkinson MJ, Andréfouët S (2003) Spectral reflectance of coral reef bottom-types worldwide and implications for coral reef remote sensing. Remote Sensing of Environment, 85: 159-173
- Holden H, LeDrew E (1999) Hyperspectral identification of coral reef features. Int. J. Remote Sens, 20: 2545-2563
- ICRI (1995) Call for Action . ICRI policy paper.
- Joyce KE, Phinn SR (2002) Bidirectional reflectance of corals, International Journal of Remote Sensing 23(2): 389-394
- Jupp DLB (1988) Background and extensions to depth of penetration (DOP) mapping in shallow coastal waters. Proc Symposium on Remote Sensing of Coastal Zone, Gold Coast, Queensland, IV 2 (1)- IV 2 (19)
- Kayanne H, Harii S, Yamano M, Ide Y, Akimoto F (1999) Changes in living coral coverage before and after the 1998 bleaching event on coral reef flats of Ishigaki Island, Ryukyu Islands. Galaxea, JCRS, 1: 73-82 (in Japanese with English abstract)
- Kayanne H, Harii S, Ide Y, Akimoto F (2002) Recovery of coral populations after the 1998 bleaching on Shiraho Reef, in the southern Ryukus, NW Pacific. Marine Ecology Progress Series, 239: 93-103
- Kuroshio Biological Research Foundation (2003) Annual business report of fiscal 2002. (in Japanese*)
- Lyzenga DR (1978) Passive remote sensing techniques for mapping water depth and bottom features. Applied Optics, 17: 379-383
- Matsunaga T, Kayanne H (1997) Observation of coral reefs on Ishigaki Island, Japan, using LANDSAT TM images and aerial photographs. Proc 4th Int Conf on Remote Sensing for Marine and Coastal Environments, Orlando, Florida, 1: 657-666
- Matsunaga T, Hoyano A, Mizukami Y (2000) Monitoring of coral reefs on Ishigaki Island in Japan using multi-temporal remote sensing data, Proc SPIE, 4154: 212-222
- Matsunaga T, Tsuchida S, Iwasaki A (2001a) Satellite hyperspectral observation of north Ishigaki Island using Earth Observation-1 Hyperion, Proc 31st Japanese Remote Sensing Symposium, pp 47-48 (in Japanese with English abstract)
- Matsunaga T, Hoyano A, Ishii Y (2001b) A study of classification of sea floo cover in coral reef areas by simulation with hyperspectral sensor Hyperion, Proc 31st Japanese Remote Sensing Symposium, pp 47-48 (in Japanese with English abstract)
- Matsunaga T, Hoyano A, Izawa K, Mizukami Y (2001c) Preliminary study on environmental monitoring of subtropical shallow water areas using ASTER image, Proc 30th Japanese Remote Sensing Symposium, pp 241-242 (in Japanese with English abstract)
- Matsunaga T, Hoyano A, Izawa K (2001d) Subtropical shallow water seafloor distribution map using ASTER VNIR/Landsat TM image, Proc 30th Japanese Remote Sensing Symposium, pp 183-184 (in Japanese with English abstract)
- Mezaki S (1991) Environment of coral reefs in Ishigaki Island, WWF Japan, Tokyo, 214 pp (in Japanese)
- Miller RL, Cruise JF (1995) Effects of suspended sediments on coral growth: Evidence from remote sensing and hydrologic modeling, Remote Sensing of Environment, 53: 177-187
- Mito K, Kato M, Kobayashi M, Kurihara T, Shibuno T, Shimizu H (1999) Survey of the influence on fish community in Ishigaki Island. Urgent survey on the influence of hermatypic coral communities' bleaching on marine ecosystems and its conservational approaches. Seikai National Fisheries Research Institute, Fisheries Agency, pp 43-104 (in Japanese)

- Miyazaki T, Nakatani Y, Harashima A (1995) Measuring the coral reef distribution of Kuroshima Island by satellite remote sensing. Proc SPIE, 2586: 65-72
- Miyazaki T, Tokumura K, Sugita M (1997) Coral reef monitoring by the compact airborne spectrographic imager (casi). Proc SPIE, 3222: 419-425
- Miyazaki T, Tokumura K, Sugita M (1998) Coral reef monitoring by the compact airborne spectrographic II. Proc SPIE, 3496: 130-136
- Mumby CD, Green AJ, Clark PJ (1997) Coral reef habitat mapping: how much detail can remote sensing provide? Marine Biology, 30 (2): 193-202
- Mumby PJ, Clark CD, Green EP, Edwards AJ (1998) Benefits of water column correction and contextual editing for mapping coral reefs. International Journal of Remote Sensing, 19: 203–210
- Mumby PJ, Chisholm JRM, Clark CD, Hedley JD, Jaubert J (2001) Spectrographic imaging –a bird's eye view of the health of coral reefs. Nature, 413: 36
- Nadaoka K, Nihei Y, Yokoyama T, Ohmija T, Shimoike K (1998) Satellite-image analysis of coral reef area based on the spectral reflectance characteristics of the sea bottom, Proc 2nd Regional Symp on Infrastructure Planning in Civil Eng, 2: 467-478
- Nadaoka K, Nihei Y, Kumano R, Yokobori T, Omija T, Wakaki K (2001a) A field observation on hydrodynamic and thermal environments of a fringing reef at Ishigaki Island under typhoon and normal atmospheric conditions. Coral Reefs, 20 (4): 387-398
- Nadaoka K, Nihei Y, Wakaki K, Kumano R, Kakuma S, Moromizato S, Omija T, Iwao K, Shimoike K, Taniguchi H, Nakano Y, Ikema T (2001b) Regional variation of water temperature around Okinawa coasts and its relationship to offshore thermal environments and coral bleaching. Coral Reefs, 20 (4): 373,384
- Nakasone K, Omija T, Mitsumoto H, Uehara M, Oshiro T (2000) Monitoring water pollution caused by reddish soil run-off. Report of Okinawa Prefectural Institute of health and Environment, 34: 85-95 (in Japanese with English abstract)
- Nakaya S (2001) Consideration of monitoring methods. Report on coral reef survey. Contract research of the cabinet office in fiscal 2000, Research Institute for Subtropics, pp 8-28 (in Japanese*)
- Nature Conservation Bureau, Environment Agency (1973) Research on shallow water ecology. Mechanism of crown-of-thorns starfish outbreak and its countermeasures. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1979) The 2nd national survey on the natural environment (nationwide edition). (in Japanese*)
- Nature Conservation Bureau, Environment Agency (1983) Biota around Sakiyama Bay, Iriomote Island. (in Japanese*)
- Nature Conservation Bureau, Environment Agency (1984) Urgent survey on conservation of Sakiyama Bay Nature Conservational Area. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1990) Survey report on Sakiyama Bay nature conservation area. (in Japanese*)
- Nature Conservation Bureau, Environment Agency (1994a) The report of the marine biotic environment survey in the 4th national survey on the natural environment, Vol. 3, Coral reefs. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1994b) Coral reef distribution map. (in Japanese*)
- Nature Conservation Bureau, Environment Agency (1998a) Annual report of coral reef monitoring around Ishigaki Island, 1998. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1998b) Annual report of coral reef monitoring in Sekisei Lagoon and neighboring areas, Iriomote National Park, 1997. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1998c) The 5th national survey on the natural environment (coastal areas). A comprehensive report. (in Japanese)

- Nature Conservation Bureau, Environment Agency (1999a) Report of ecosystem diversity survey on Iriomote National Park marine protected area, 1998. (in Japanese*)
- Nature Conservation Bureau, Environment Agency (1999b) Annual report of coral reef monitoring in Sekisei Lagoon and neighboring areas, Iriomote National Park, 1998. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1999c) Annual report of coral reef monitoring around Ishigaki Island, 1999. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1999d) Report of ecosystem diversity survey on Sakiyama Bay nature conservation area, 1998. (in Japanese*)
- Nature Conservation Bureau, Environment Agency (2000a) Urgent survey on the influence of hermatypic coral communities' bleaching on marine ecosystems and its conservational approaches. (in Japanese*)
- Nature Conservation Bureau, Environment Agency (2000b) Annual report of coral reef monitoring around Ishigaki Island, 2000. (in Japanese)
- Nature Conservation Bureau, Environment Agency (2000c) Annual report of coral reef monitoring in Sekisei Lagoon and neighboring areas, Iriomote National Park, 1999. (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2001a) Annual report of coral reef monitoring in Sekisei Lagoon and neighboring areas, Iriomote National Park, 2000. (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2001b)

 Annual report of coral reef monitoring around Ishigaki Island,
 2001 (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2001c) Report on implementation of coral reef research and monitoring, in fiscal 2000. (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2002a) Annual report of coral reef monitoring around Ishigaki Island, 2002. (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2002b) Report on promotion project of research and monitoring on coral reefs, in fiscal 2001. (in Japanese*)
- Nature Conservation Bureau, Ministry of the Environment (2003a) Report on promotion project of research and monitoring on coral reefs, in fiscal 2002. (in Japanese*)
- Nature Conservation Bureau, Ministry of the Environment (2003b) Report on conservational activities in marine park zones, in fiscal 2002. (in Japanese)
- Nature Conservation Division, Okinawa Prefecture (2001) Report on coral reef monitoring in Okinawa Kaigan Quasi-National Park (in Okinawa Island and Kerama Islands), in fiscal 2000. (in Japanese*)
- Nature Conservation Division, Okinawa Prefecture (2003) Report on implementation of Reef Check, fiscal 2003 (in Japanese*)
- Nishihira M (2001) Keynote lecture --About coral reef monitoring---Report on implementation of coral reef research and monitoring, in fiscal 2000, Nature Conservation Bureau, Ministry of the Environment, pp 162-167 (in Japanese*)
- Nishihira M, Yamazato K (1974) Human interference with the coral reef community and *Acanthaster* infestation of Okinawa. Proc 2nd Int Coral Reef Symp, 1: 577-590
- Nomura K, Kuroyanagi K, Kondo T (2000) Bleaching event in Yaeyama Archipelago. Urgent survey on the influence of hermatypic coral communities' bleaching on marine ecosystems and its conservational approaches, Nature Conservation Bureau, Ministry of the Environment, pp 98-148 (in Japanese)
- Oki K (2002) Around Amami Oshima. Report on coral mortality and its cause in Ishigaki Island, Nature Conservation Bureau, Ministry of the Environment, pp 113-117 (in Japanese*)
- Okinawa Convention and Visitors Bureau (2000) Report on survey result of *Acanthaster planci* outbreak and its predation damage. (in Japanese*)
- Okinawa Environment Technology Association (2003) Annual report in fiscal 2002. (in Japanese*)
- Okinawa Prefectural Tourism Development Bureau (1976) Influence of *Acanthaster planci* on coral reef ecosystem, concerning

- heavy infestations of *Acanthaster planci*. (in Japanese)
- Paringit EC (2003) Integrated monitoring and modeling of a coastal-land coupled environmental ecosystem based on remote sensing. Doctoral Thesis, Tokyo Institute of Technology, 172 pp
- Paringit EC, Nadaoka K (2002a) Reflectance sensitivity of coral reef areas to optically-active constituents, Proc IEEE Int Geoscience and Remote Sensing Symposium (IGARSS).
- Paringit EC, Nadaoka K (2002b) Two approaches in reflectance modeling of coral reef areas, Proc Int Symp on Marine and Coastal Environments-ERIM, pp 20-22
- Paringit EC, Nadaoka K (2002d) Morphological inferences from canopy reflectance model for coral reef areas. Proc Pan-Ocean Remote Sensing Conference (PORSEC), pp 379-384
- Paringit EC, Nadaoka K (2003a) Sediment yield modeling for small agricultural catchments: Land cover parameterization based on remote sensing data analysis. Hydrological Processes, Vol. 17, 9: 1845-1866
- Paringit EC, Nadaoka K (2003b) Multiangular and Hyperspectral Reflectance Modeling of Seagrass Beds for Remote Sensing Studies, Proc IEEE Geoscience and Remote Sensing Symposium, pp 21-25
- Paringit EC, Nadaoka K (2003c) A multitemporal and multispectral approach to remote sensing for long-term sediment distribution monitoring over a coral reef area. Proc 4th Regional Symposium in Infrastructure Development in Civil Engineering (RSID4), April 2003, Bangkok, Thailand
- Paringit EC, Nadaoka K (2004) Deriving relationships between reef sedimentation and inland erosion characteristics based on field observation data, hydrologic modeling and remote sensing analysis, Proc 2nd Int Conf on Asian and Pacific Coasts (APAC), Tokyo, Japan.
- Sakai K, Muzik K, Nakamura S, Nishihira M (1988) A note on resurvey of coral communities and *Acanthaster* populations around Okinawa Island, Japan in 1984. Galaxea, 7 (1): 41-52
- Seikai National Fisheries Research Institute, Fisheries Agency (1999)

 Urgent survey on the influence of hermatypic coral communities' bleaching on marine ecosystems and its conservational approaches. (in Japanese*)
- Shibuno T, Abe O, Takada Y, Hashimoto K (1999) Bleaching event of hermatypic corals in Urasoko Bay. Urgent survey on the influence of hermatypic coral communities' bleaching on marine ecosystems and its conservational approaches. Seikai National Fisheries Research Institute, Fisheries Agency, pp 19-35 (in Japanese*)
- Strong AE, Barrientos CS, Duda C, Sapper J (1997) Improved satellite techniques for monitoring coral reef bleaching. Proc 8th Int Coral Reef Symp, 2: 1495-1498
- Strong AE, Liu G, Kimura T, Yamano H, Tsuchiya M, Kakuma S, van Woesik R (2002) Detecting and monitoring 2001 coral reef bleaching events in Ryukyu Islands, Japan using satellite bleaching Hot Spot remote sensing technique. Proc Int Geosci Remote Sensing Symp, 2002 V: 2199-2201
- Suzuki Y, Nadaoka K, Miyazawa Y, Harii S, Yasuda N (2004) Analysis of long-distance larval dispersal of corals and crown-of-thorns starfish using JCOPE and a coastal current model, Proc Coastal Eng, JSCE, Vol. 51 (in Japanese)
- Takada Y, Abe O, Shibuno T, Hashimoto K (1999) Bleaching event of hermatypic corals in Urasoko Bay. Urgent survey on the influence of hermatypic coral communities' bleaching on marine ecosystems and its conservational approaches. Seikai National Fisheries Research Institute, Fisheries Agency, pp 37-42 (in Japanese*)
- Taketomi Town (1983) Report on distribution of stony corals and Acanthaster planci in Sekisei Lagoon. (in Japanese*)
- Taketomi Town (1984) Report on distribution of stony corals and Acanthaster planci in Sekisei Lagoon. (in Japanese*)
- Taketomi Town (1985) Report on distribution of stony corals and Acanthaster planci in Sekisei Lagoon. (in Japanese*)
- Taketomi Town (1986) Report on distribution of stony corals and Acanthaster planci in Sekisei Lagoon. (in Japanese*)
- Taketomi Town (1987) Survey on distribution of stony corals and

- Acanthaster planci in Sekisei Lagoon and adjacent areas. (in Japanese*)
- Taketomi Town (1988) Survey on distribution of stony corals and Acanthaster planci in Sekisei Lagoon and adjacent areas. (in Japanese*)
- Taketomi Town (1989) Survey on distribution of stony corals and *Acanthaster planci* in Sekisei Lagoon and adjacent areas. (in Japanese*)
- Taketomi Town (1990) Survey on distribution of stony corals and *Acanthaster planci* in Sekisei Lagoon and adjacent areas.(in Japanese*)
- Taketomi Town (1991) Survey on distribution of stony corals and *Acanthaster planci* in Sekisei Lagoon and adjacent areas. (in Japanese*)
- Taketomi Town (1992) Survey on distribution of stony corals and Acanthaster planci in Sekisei Lagoon and adjacent areas.(in Japanese*)
- Taketomi Town (1993) Survey on distribution of stony corals and Acanthaster planci in Sekisei Lagoon and adjacent areas. (in Japanese*)
- Taketomi Town (1994) Survey on distribution of stony corals and Acanthaster planci in Sekisei Lagoon and adjacent areas. (in Japanese*)
- Taketomi Town (1995) Survey on distribution of stony corals and Acanthaster planci in Sekisei Lagoon and adjacent areas.(in Japanese*)
- Taketomi Town (1996) Survey on distribution of stony corals and Acanthaster planci in Sekisei Lagoon and adjacent areas. (in Japanese*)
- Taketomi Town (1997) Survey on distribution of stony corals and Acanthaster planci in Sekisei Lagoon and adjacent areas. (in Japanese*)
- Taniguchi H, Iwao K, Omori M (1999) Coral bleaching around Akajima, Okinawa I. A report of the September 1998 survey. Galaxea, JCRS, 1: 59-64 (in Japanese with English Abstract)
- Tokyo Metropolitan Government (2000) State of hermatypic corals. Report on assessment survey of Ogasawara Airport construction, in fiscal 1999 (in Japanese*)
- Tokyo Metropolitan Government (2001) State of hermatypic corals. Report on assessment survey of Ogasawara Airport construction, in fiscal 2000. (in Japanese*)
- WWFJ, Ishigaki City (1998) The 2nd coral reef monitoring survey report of Shiraho, Activity report of WWF Japan, 1997. WWF Japan, Ishigaki City, p 19 (in Japanese*)
- Yamano H and Tamura M (2004) Detection limits of coral reef bleaching by satellite remote sensing: Simulation and data analysis, Remote Sensing of Environment, 90: 86-103
- Yamano H, Kayanne H, Yonekura N, Kudo K (2000) 21-year changes of backreef coral distribution: Causes and significance, J Coastal Res, 16: 99-110
- Yamano H, Tamura M, Kunii Y, Hidaka M (2002) Hyperspectral remote sensing and radiative transfer simulation as a tool for monitoring coral reef health. Marine Technology Society Journal. 36: 4-13
- Yamano H, Matsunaga T, Ikema T (2003a) Airborne hyperspectral measurement of coral reefs around Akajima, Okinawa, Japan -Autumn 2002-. Proc. 34th Conference of the Remote Sensing Society of Japan, pp 35-38 (in Japanese with English abstract)
- Yamano H, Tamura M, Kunii Y, Hidaka M (2003b) Spectral reflectance as a potential tool for detecting stressed corals. Galaxea, JCRS, 5: 1-10
- Yamano H, Abe O, Matsumoto E, Kayanne H, Yonekura N (2003c)
 "Influence of wave energy on Holocene coral reef development: an example from Ishigaki Island, Ryukyu Islands, Japan, Sedimentary Geology, 159: 27-41
- Yoshida M, Miyamoto N (2000) Report on the coral bleaching event and its recovery state in Sekisei Lagoon. Urgent survey on the influence of hermatypic coral communities' bleaching on marine ecosystems and its conservational approaches, in fiscal 1998. Marine Parks Center of Japan, pp 149-186 (in Japanese*)
- Yoshida M, Hanaizumi, H, Yamano H (2004) A method for extracting

flow lines in coral reef area using aerial photographs. Abstracts, 10th Int Coral Reef Symp.

Yui M, Sakai K (1997) Influence of land development on coral reefs.

In: Global Environment Research of Japan, Final Reports for Projects, Research Information Office Global Environment Department Environment Agency, pp 94-109 (in Japanese*)

- Adams TJH (1996) Modern institutional framework for reef fisheries management. In: Polunin NVC, Roberts CM (eds) Reef Fisheries. Chapman & Hall, London, pp 337-360
- Akimichi T (2002) Conservation of coral reef ecosystems and socio-economic dilemma. 5th JCRS summary, pp 38-40 (in Japanese)
- Crosby MP, Geenen KS, Bohne R (2000) Alternative Access Management Strategies for Marine and Coastal Protected Areas: A Reference Manual for their Development and Assessment, U.S. Man and the Biosphere Program, Washington DC, 168 pp
- Dalzell P, Adams TJH, Polunin NVC (1996) Coastal Fisheries in the Pacific Islands. Oceanogr Mar Biol, 34: 395-531
- DENR and MPCJ (1996) The report of the project for resources survey and conservation of Tubataha Reefs National Marine Park. Department of Environment and Natural Resources, and Marine Parks Center of Japan, 200 pp
- Doumenge F, Edwards SR, Planck RJ (1990) Evaluation of the impact of the proposed airport at Shiraho reef. IUCN, 73 pp
- Ebisawa A (1998) State of resource and management of *Lethrinus atkinsoni* in Yaeyama sea area. Outline of techniques for dissemination in fiscal 1997, Implementation Conference of Researches on Agriculture, Forestry and Fisheries, Okinawa Prefecture, pp 111-112 (in Japanese)
- Fisheries Division of the Department of Agriculture, Forestry and Fisheries, Okinawa Prefecture (2002) Fishery Adjustment Regulation in Okinawa Prefecture. (in Japanese)
- GBRMAP , World Bank, IUCN (1995) A global representative system of marine protected areas. Great Barrier Reef Marine Park Authority/World Bank/International Union for Conservation of Nature and Natural Resources, vol. I-IV
- GCRMN (1997) GCRMN (Global Coral Reef Monitoring Network) strategic plan. IOC/UNEP/IUCN/GCRMN
- Gulland JA (1983) Fish stock assessment: A manual of basic methods. John Wiley & Sons, New York, pp 1-20
- Hamamoto K, Kumamoto K, Short K, Mizuguchi K, Ueda F, Tanaka T, Nakajima M (1996) In: Hamamoto K (ed) Marine protector theory, Mana Publication, Tokyo, 462 pp (in Japanese)
- Horrill JC, Kamukuru AT, Mgaya YD, Risk M (2000) Captor 6. Northern Tanzania and Zanzibar. In. McClanahan TR, Sheppard CRC, Obura DO (eds) Coral Reefs of the Indian Ocean: their Ecology and Conservation, Oxford, pp 167-198
- Hughes TP, Baird AH, Bellwood DR, Card M, Connolly SR, Folke C,
 Grosberg R, Hoegh-Guldberg O, Jackson JBC, Kleypas J,
 Lough JM, Marshall P, Nystrom M, Palumbi SR, Pandolfi JM,
 Rosen B, and Roughgarden J (2003) Climate change, human
 impacts, and the resilience of coral reefs. Science, 301:
 929-933
- Ikehara S (1984) Local nature. Okinawa Prefectural Museum Tomonokai, 80 pp (in Japanese*)
- International Coral Reef Research and Monitoring Center, Ministry of the Environment (2002a) The teacher's guide for experience and education on coral reef. 113 pp + 12 pls (in Japanese)
- International Coral Reef Research and Monitoring Center, Ministry of the Environment (2002b) The coral book for kids. 42pp (in Japanese)
- JICA (2002) The Study on the Integrated Coral Reef Management Plan in North Sulawesi in the Republic of Indonesia. Final Report Volume I. Summary, Japan International Cooperation Agency
- Kakuma S (2000a) Co-management of Coastal Fisheries Resources in Tropic and Sub-tropic Regions. In: Proceedings of an International Workshop: Asia-Pacific Cooperation on Research

- for Conservation of Mangroves, 26-30 March 2000, Okinawa, The United Nations University, pp 1
- Kakuma S (2000b) Synthesis on Moored FADs in the North West Pacific Region. In: Proceedings: Tuna Fishing and Fish Aggregating Devices, Oct. 1999, Martinique, pp 63-77
- Kakuma S, Higa Y (1995) Sedentary resource management in Onna village, Okinawa, Japan. In: South Pacific Commission and Forum Fisheries Agency Workshop on the Management of South Pacific Inshore Fisheries, Manuscript Collection of Country Statement and Background Papers, 1: 427-438
- Marine Parks Center of Japan (1997) The report of the project for resources survey and conservation of Tongan marine reserves.
- Marine Parks Center of Japan (1999) Report on the training workshop in global coral reef monitoring techniques. (in Japanese and English)
- McClanahan TRY, Kaunda-Arara B (1996) Fishery recovery in a coral-reef marine park and its effect on the adjacent fishery. Conservation Biology, 10: 1187-1199
- Ministry of the Environment, Government of Japan (2002) Report of the Global Coral Reef Monitoring Network (GCRMN) Regional Workshop for the East Asian Seas. – Effective Data Assembling in the East Asian Seas. –, 140 pp
- Nago Elementary School, Nago Kindergarten (2001) Nature work-study program. Survey report in 2001, pp 99-109 (in Japanese*)
- Nakai T (2002) Direction and roles of NGO/NPO in nature conservation activity. 5th JCRS summary, pp 38-40 (in Japanese)
- Nature Conservation Bureau, Environment Agency (1998) The 5th national survey on the natural environment (coastal areas). A comprehensive report. (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2002a) 500 Important Wetlands in Japan. (in Japanese and English)
- Nature Conservation Bureau, Ministry of the Environment (2002b) Coral reefs in Yaeyama. (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2002e)

 The New National Strategy on Biological Diversity. (in Japanese)
- Nature Conservation Society of Japan (1991) Influence of New Ishigaki Airport construction on coral reef ecology. NACSJ Report, 75: 119 (in Japanese)
- Nishihira M (1991) Field watching on coral reef --Ohdo coast in Itoman City--. Nature Conservation Division, Department of Culture and Environment Affairs, Okinawa Prefectural Government, 72 pp (in Japanese)
- Nishihira M (1992) Story of corals --Corals in Okinawa coral reefs--. Nature Conservation Division, Department of Culture and Environment Affairs, Okinawa Prefectural Government, 72 pp (in Japanese)
- Okinawa Prefecture Tourism Division (2000) The status and issues of tourism in Okinawa. (in Japanese*)
- Omine S (2003) Implementation of 'Exploration of Sakieda region'. Report on Environment education forum in Ishigaki Island in 2003, pp 12-15 (in Japanese*)
- Onna Village Fisheries Cooperative (2000) Resource management. Churaumi part II, Okinawa, pp 25-29 (in Japanese*)
- Owan H (2003) Environment Education in Prefectural Comprehensive Education Center. Biol Mag Okinawa, 41: 70-71 (in Japanese*)
- Planck RJ, McAllister DE, McAllister AT (1988) Shiraho Coral Reef and the proposed new Ishigaki island airport, Japan. IUCN, 231 pp
- Pomeroy RS, Williams MJ (1994) Fisheries co-management and

- small-scale fisheries: A Policy Brief, ICLARM, Manila.
- Russ GR (1991) Coral reef fisheries: effects and yields. In: Sale PF (ed) The Ecology of Fishes on Coral Reefs, Academic Press, pp 601-635
- Simard F (1995) Marine region 16: Northwest Pacific. Great Barrier Reef Marine Park Authority/World Bank/IUCN, A global representative system of marine protected areas. : 107-130
- Tani K, Murakawa T, Kojima A (2003) Integrated study adopting water wise activity. Report on environment education forum of coastal areas in Ishigaki, 2003, pp 51-53 (in Japanese*)
- Taniguchi H (2003) Effect of closing resort diving stations at Zamami-son and unexpected negative effect of closing.

 -Result of the Reef Check Zamami-. Midoriishi 14: 16-19 (in Japanese)
- The Environment Agency, the Government of Japan (1997) Report of the International Coral Reef Initiative (ICRI) Second Regional workshop for the East Asian Seas, Okinawa, Japan 16-20 February, 1997 (in Japanese)
- The Environment Agency, Government of Japan (1998) Report of international workshop for social, economic and cultural assessment methods for coral reef areas.
- The Ministry of Foreign Affairs of Japan (1997) Report on the basic

- survey of constructing global monitoring network, in fiscal 1996. (in Japanese*)
- Transport Department, Okinawa General Bureau, Okinawa Development Agency (2000) The report on the investigation for promoting measures to regional vitalization by tourism utilizing historical, cultural and natural resources in distant islands. (in Japanese*)
- Tsuchiya M (1999) Coral reefs are in danger. --The keyword for conservational approach is its balance--, Okinawa Marine Shuppan Ltd., pp 125 (in Japanese)
- Vernberg FJ, Vernberg WB (2001) The Coastal Zone: Past, Present, and Future. Univ of South Carolina Press, 207 pp
- Wells S, White AT (1995) Involving the community. In: Gubbay S (ed) Marine protected areas: Principles and techniques for management. Chapman & Hall, London, pp 61-63
- Yamashiro S (2003) Contents and problems on education program in 'environment course'. Biol Mag Okinawa, 41: 69-70 (in Japanese*)
- Yasuda K (in press) Implementation of environment education in elementary school. Biol Mag Okinawa. (in Japanese*)

- Aota T, Watanuki H, Omori M, Taniguchi H (2003) Coral restoration technique by transporting massive amount of planula. Proceedings of Civil Engineering in the Ocean. 19: (in Japanese*)
- Auberson B (1982) Coral transplantation: an approach to the reestablishment of damaged reefs. Kalikasan, Philipp J Biol, 11: 158-172
- Becker LC, Mueller E (1999) The culture, transplantation, and storage of *Montastraea faveolata*, *Acropora cervicornis*, and *A. palmata*: what we learned so far. Natl Coral Reef Inst Abstract, p 53
- Bowden-Kerby A (1997) Coral transplantation in sheltered habitats using unattached fragments and cultured colonies. Proc 8th Int Coral Reef Symp, 2: 2063-2068.
- Dodge RE, Anderegg D, Fergen R and Cooke P (1999) Sewer outfall coral transplantation project. Nat'al Coral Reef Inst Abstract, p
- Fujiwara S (2003) Study of the disturbance and restoration of coral reefs. In: Global Environment Research Fund, Final report of research results in FY2002, Research and Information Office, Global Environment Bureau, Ministry of the Environment, pp 75-92 (in Japanese)
- Fukuda T, Miyawaki I (1982) Acanthaster planci outbreak in Sekisei Lagoon, Yaeyama Archipelago. Marine Parks Journal, 56: 10-13 (in Japanese*)
- Fukunishi K, Yonaha K, Morita H, Yamamoto H, Takahashi Y (1998) Coral reef considered method for port development. Techno-ocean '98 Intl Symp Proc, pp 181-184 (in Japanese*)
- Furushima Y, Okamoto M, Oguro I, Kaya T, Matsuda T, Komatsu T (2001) Measurement of small scale water motion in the neighborhood of coral reef. JAMSTECR, 43: 125-132 (in Japanese with English abstract)
- Hatta M, Iwao K(2003) Metamorphosis induction and its possible application to coral seedlings production. Recent Advances in Marine Science and Technology, 2002: 465-470
- Hatta M, Fukami H, Wang W, Omori M, Shimoike K, Hayashibara T, Ina Y, Sugiyama T (1999) Reproductive and genetic evidence for a reticulate evolutionary history of mass-spawning corals. Mol Biol Evol, 16 (11): 1607-1613
- Hatta M, Iwao K, Taniguchi H, Omori M (2003) Seed production. In:
 Omori M (ed) Manual for restoration and remediation of coral
 reefs, Nature Conservation Bureau, Ministry of the
 Environment, pp 13-25 (in Japanese)

- Hayashibara T, Iwao K, Omori M (2003) Induction and control of spawning in Okinawan staghorn corals. Coral Reefs.
- Heyward AJ, Smith LD, Rees M, Field SN (2002) Enhancement of coral recruitment by in situ mass culture of coral larvae. Mar Ecol Prog Ser, 230: 113-118
- Hirara Port Construction Office, Okinawa General Bureau (2002)

 Toward realization of environmentally friendly breakwater. (in Japanese)
- Hosoya S (2003) Experiment 3. Transplantation of whole coral colony: *Porites lutea*. In: Omori M (ed) Manual for restoration and remediation of coral reefs, Nature Conservation Bureau Ministry of the Environment, pp 63-68 (in Japanese)
- Hunter CL (1993) Genotype variation and colonal structure in coral populations with different disturbance histories. Evolutions, 47:1213-1228
- ICRI (2003) ITMEMS 2 Action Statement, International Coral Reef Initiative, 16 pp
- Ikeda Y, Iwao K (2001) Transplantation of coral colonies to coal ash contained cement. 4th JCRS summary, p 38 (in Japanese*)
- Ishii M, Maekochi N, Omura M, Yamamoto H, Takahashi Y, Tamura K (2000) Experiment on relocation of coral community applying environment considered technique. 3rd JCRS summary, p 19 (in Japanese*)
- Ishii M, Maekochi N, Omura M, Yamamoto H, Takahashi Y, Tamura K (2001) Techniques to restore the environment considering the coral communities in Hirara Bay. Coastal Engineering in Japan, 48: 1301-1305 (in Japanese*)
- Iwao K, Fujisawa T, Hatta M (2002) A cnidarian neuropeptide of the GLWamide family induces metamorphosis of reef-building corals in the genus Acropora. Coral Reefs, 21 (2): 127-129
- Kaly UL (1995) Experimental test of the effect of methods of attachment and handling on the rapid transplantation of corals. CRC Reef Research Center Tech Rep, 1: 28
- Kitada H (2002) Fecundity of Acropora tenuis in Akajima Island. Midoriishi, 13: 26-29 (in Japanese)
- Komatsu T, Kawai H (1992) Measurements of time-averaged intensity of water motion with plaster balls. J Oceanogr, 48 (4) 353-365
- Kudo K and Yabiku T (1988) Aquamarine project in Okinawa. Techno-Ocean 1988 Int Symp Proc, 2: 338-347
- Misaki H (1998a) Survivorship of transplanted corals in Sekisei Lagoon, Okinawa. Marine Parks Journal, 118: 7-12 (in Japanese)
- Misaki H (1998b) Growth of juvenile corals (4). Marine Pavilion,

- 27: 65(in Japanese)
- Misaki H (2002) Growth of juvenile corals (6). Marine Pavilion, 31: 42-43 (in Japanese)
- Morse ANC, Iwao K, Baba M, Shimoike K, Hayashibara T and Omori M (1996) An ancient chemosensory mechanism brings new life to coral reefs. Biol Bull, 191 (2) 149-154
- Munoz Chagin RF (1997) Coral transplantation program in the Paraiso coral reef, Cozumel Island, Mexico. Proc 8th Int Coral Reef Symp, 2: 2075-2078
- Nature Conservation Bureau, Environment Agency (1981) Report on conservation and utilization of underwater scenery in shallow water area, in Sekisei Lagoon, Iriomote National Park. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1993) Report on restoration techniques of coral reefs' ecological system, fiscal 1992. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1994b) The report of the marine biotic environment survey in the 4th national survey on the natural environment, Vol. 3, Coral reefs. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1994a) Report on restoration techniques of coral reefs' ecological system, fiscal 1993. (in Japanese)
- Nature Conservation Bureau Environment Agency (1995) Report on restoration techniques of coral reefs' ecological system, fiscal 1994. (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2001) Report on implementation of coral reef research and monitoring, in fiscal 2000. (in Japanese)
- Negri AP, Webster NS, Hill RT, Heyward AJ (2001) Metamorphosis of broadcast spawning corals in response to bacteria isolated from crustose algae. Mar Ecol Prog Ser, 223: 121-131
- Nishihira M, Veron JEN (1995) Hermatypic corals of Japan. Kaiyusha, Tokyo, 439 pp (in Japanese)
- Okamoto M, Nojima A (2003a) Transplantation of juvenile corals. In:
 Omori M (ed) Manual for restoration and remediation of coral reefs, Nature Conservation Bureau, Ministry of the Environment, pp 37-39 (in Japanese)
- Okamoto M, Nojima A (2003b) Development of underwater engineering for coral reef restoration. In: Omori M (ed) Manual for restoration and remediation of coral reefs, Nature Conservation Bureau, Ministry of the Environment, pp 46-56 (in Japanese)
- Okubo N (2003) Transplantation of coral fragments. In: Omori M (ed) Manual for restoration and remediation of coral reefs,

- Nature Conservation Bureau, Ministry of the Environment, pp 31-36 (in Japanese)
- Okubo N, Omori M (2001) The review of coral transplantation around the world. Galaxea, 3: 31-40 (in Japanese with English abstract)
- Okubo N, Taniguchi H, Omori M, Motokawa T (2002) Appropriate method for the transplantation of three species of *Acropora* with different demographic characteristics. 5th JCRS summary, p 20 (in Japanese)
- Omija T, Mitsumoto H (2001) The relation of turbidity, transparency, and SPSS data in coral reefs. Newsletter of Okinawa Prefectural Institute of Pollution and Health, 35: 103-110(in Japanese)
- Pandolfi JM, Bradbury RH, Sala E, Hughes TP, Bjorndal KA, Cooke RG, McArdle D, McClenachan L, Newman MJH, Paredes G, Warner RR, Jackson JBC (2003) Global trajectories of the long-term decline of coral reef ecosystems. Science, 301: 955-958
- Petersen D, Tollrian R (2001) Methods to enhance sexual recruitment for restoration of damaged reefs. Bull Mar Sci, 69 (2): 989-1000
- Port and Marine Environment Research Institute, Waterfront Vitalization and Environment Research Center (1999) Scheme of the manual for harmonious harbor development on coral reefs. 99 + 27 pp (in Japanese*)
- Shimomura Y, Hatta M, Watanuki A, Aota T, Iwao K (2002) Large-scale culture of acroporids larvae: for coral seedlings production. 5th Annual Meeting of JCRS, Abstract, p 36 (in Japanese)
- Tatsuki T (1977) Restoration of underwater scenery. Marine Parks Journal, 41: 10-12 (in Japanese*)
- Willis BL, Babcock RC, Harrison PL, Wallace CC (1997) Experimental hybridization and breeding incompatibilities within the mating systems of mass spawning reef corals. Coral Reefs, 16 (Suppl): S53-S65
- Yap HT and Gomez ED (1984) Growth of Acropora pulchra . Responses of natural and transplanted colonies to temperature and day length. Mar Biol, 81 (2): 209-215
- Yap HT, Alino PM and Gomez ED (1992) Trends in growth and mortality of three coral species (Anthozoa: Scleractinia), including effects of transplantation. Mar Ecol Prog Ser, 83 (1): 91-101

- Akagi M (2003) Minabe and Tanabe in Kii Peninsula. Diver, 24 (10): 119 p (in Japanese*)
- Benayahu Y (1995) Species composition of soft corals (Octocorallia, Alcyonacea) on the coral reefs of Sesoko Island, Ryukyu Archipelago, Japan. Galaxea, 12 (1) 103-124
- Department of Environment and Culture, Okinawa Prefecture (2003)

 Report on extermination project of *Acanthaster planci* in Yaeyama area. (in Japanese*)
- Department of Health and Environment, Okinawa Prefecture (1994)
 Actual state survey of red soil run-offs in Todoroki River, in fiscal 1993. (in Japanese*)
- Department of National Park, Ministry of Health and Welfare (1970) Outline of the primary designated national parks. Marine Parks Journal, 13: 8-13 (in Japanese*)
- Department of Planning and Development, Okinawa Prefecture (1994) Investigation on actual condition of near shore waters:

 Miyako Island, Ishigaki Island, Iriomote Island, and surrounding neighboring islands. (in Japanese)
- Done TJ (1982) Patterns in the distribution of coral communities across the central Great Barrier Reef. Coral Reefs, 1: 95-107

- Editorial Board of Zamami Village History (1989) History of Zamami Village (Vol. 1), Zamami Village Office, 710 pp (in Japanese)
- Eguchi M (1971a) Scleractinian corals from sites proposed for the Marine Park of Nagasaki Prefecture. Rep Mar Park Cent, Nagasaki Prefect, pp 19-31 (in Japanese)
- Eguchi M (1971b) Scleractinia of candidate sites for marine parks in Nagasaki Prefecture. Rep Mar Park Cent, Nagasaki Prefect, pp 19-31 (in Japanese)
- Eguchi M (1973) Coral fauna and coral reefs of the Tsushima Island, Nagasaki Prefecture. Rep Mar Park Cent, Nagasaki Prefect, pp 45-56 (in Japanese)
- Eguchi M (1975) Coral fauna of Nagasaki Prefecture (Kami-Goto, Hirado, and Tsukumo). Rep Mar Park Cent, Nagasaki Prefect, pp 39-46 (in Japanese)
- Eguchi M, Fukuda T (1972) Invertebrates (chiefly coral fauna) of Marine Park of Iki Island, Nagasaki Prefecture. Rep Mar Park Cent, Nagasaki Prefect, pp 45-58 (in Japanese)
- Environment Conservation Division, Kumamoto Prefecture (1998) Important wild animals and plants for protection in Kumamoto Prefecture. Red data book of Kumamoto, 381 pp (in Japanese)

- Fujioka Y (1994) Community structure of hermatypic corals in Tosa Bay. Nanseigaikai no Shigen-Kenkyuu (Resources and Oceanography of south-western Japanese waters) Nansei Fisheries Research Institute, Fisheries Agency of Japan, 10: 37-45 (in Japanese)
- Fujioka Y (1999) Mass destruction of the hermatypic corals during a bleaching event in Ishigaki Island, southwestern Japan. Galaxea, JCRS, 1: 41-50
- Fujioka Y (2002) Destruction and recovery of hermatypic coral communities after the mass bleaching event at Ishigaki Island. Galaxea, JCRS, 4: 53-61
- Fujiwara S, Kondo T (2000) Current state of coral reefs in Miyako Islands. Marine Parks Journal, 127: 3-8 (in Japanese)
- Fukuda H (1995) Marine gastropoda (Mollusca) of the Ogasawara Island, Part 3: Additional records. Ogasawara Research, 21: 1-142.
- Fukuda T, Nomura K, Matsumoto K (1991) Knowledges on distribution of hermatypic corals and fishes in the Kuroshio waters. Marine Parks Journal, 93: 3-14 (in Japanese)
- Funakoshi Y, Ueno S (2004) Effects of protection cage from the grazing of *Diadema setosum* on reef building coral. Bulletin of Institute of Oceanic Research and Development, Tokai University, 25: 41-46 (in Japanese with English abstract)
- Hagiwara R (2003) Distribution, environment conditions and sexual reproduction of the zoozanthellae corals at the Banda area in Tateyama Bay, Chiba, Japan. Midoriishi, 14: 24-30 (in Japanese)
- Harii S, Kayanne H (2002) Larval settlement of corals in flowing water using a racetrack flume. Mar Technol Soc J, 36: 76-79
- Harii S, Kayanne H (2003) Larval dispersal, recruitment, and adult distribution of the brooding stony Octocoral *Heliopora* coerulea on Ishigaki Island, southwest Japan. Coral Reefs, 22 (2): 188-196
- Harii S, Omori M, Yamakawa H, Koike Y (2001) Sexual reproduction and larval settlement of the zooxanthellate coral *Alveopora japonica* Eguchi at high latitudes. Coral Reefs, 20 (1): 19-23
- Harii S, Kayanne H, Takigawa H, Hayashibara T, Yamamoto M (2002) Larval survivorship, competency periods and settlement of two brooding corals, *Heliopora coerulea* and *Pocillopora damicornis*. Mar Biol, 141 (1): 39-46
- Hasegawa H (2001) Environmental degradation processes due to the land improvement practices on Ishigaki Island. In: Umitsu M (ed) A study of the late Holocene geo-environment and evolution of coastal lowlands, pp 100-114 (in Japanese)
- Hasegawa H, Ichikawa K, Kobayashi M, Kobayashi T, Hoshino M, Mezaki S (1999) The mass-bleaching of coral reefs in the Ishigaki Lagoon, 1998. Galaxea, JCRS, 1: 31-39 (in Japanese with English abstract)
- Hatushima S (1975) Flora of Ryukyus. Okinawa Biological Education Society, Okinawa, 1002 pp (in Japanese)
- Hayashi K, Ino T, Takamatsu H (1974) Investigation report on the candidate sites of marine park zones in Miyakejima, including other one site. Metropolis of Tokyo, pp 40-133 (in Japanese*)
- Hayashi T (2002) Elimination attempts on accumulated soil in Koshirigai. CURRENT, 3(1): 2-4 (in Japanese*)
- Hayashibara T (1995) Ecological studies on reef-building corals and their sexual reproduction around Akajima Island, Kerama Islands Group. Ph. D. thesis, Tokyo University of Fisheries, Tokyo, 123 pp (in Japanese)
- Hiraga T (1994) Coral data in Mie Prefecture. The report of the marine biotic environment survey in the 4th national survey on the natural environment, Vol.3 Coral reefs. Nature Conservation Bureau, Environment Agency, pp 99-104 (in Japanese)
- Hirara City (2003) Report on Environmental Conservation and Sustainable Use of Yabiji Reef. (in Japanese)
- Hirata K (1967) Distribution of raised reef limestone and present reef-building activity in Takara-jima and Kodakara-jima, Nansei Islands, Japan. Science Rep Kagoshima Univ, 16: 75-89 (in Japanese with English abstract)
- Hirata T, Yamakawa T, Iwata A, Manabe S, Hiramatsu W, Ohnishi N (1996) Fish fauna of Kashiwa-jima Island, Kochi Prefecture,

- Japan. --Centering on their behavior and ecology--. Bull Mar Sci Fish, Kochi Univ, 15: 1-177 (in Japanese with English abstract)
- Hori K, Kayanne H (2000) Submarine morphology of the island shelf off the middle to south Ryukyu Islands, southwest Japan. Geographical Review, 73A (3): 161-181 (in Japanese with English abstract)
- Hosaka S, Taniguchi H (2003) The year of 2002 at AMSL, with list of research activities by visitors and the staff members. Midoriishi, 14: 42-44 (in Japanese)
- ICUN (1988) Coral Reefs of the World. Vols.1~3. UNEP and ICUN, Cambridge, 373 + 389 + 329 p
- Igarashi T (2002) State of hermatypic corals after volcanic eruption in Miyakojima. Situation report on fauna and flora of Miyakejima in fiscal 2001, Zoological Society of Japan, pp 116-128 (in Japanese*)
- Inaba M (2003) Ecological feature and status of reef-building corals in the Bonin Islands, Japan. Midoriishi, 14: 20-23 (in Japanese)
- Inaba M, Horikoshi K (2002) Report on Monitoring of Sea Bottom Environment in Fukuro Bay. In: Ogasawara Islands Branch Office of the Tokyo Metropolitan government (eds) Vegetation Recovery Project Report of the Ogasawara National Park in 2001, pp 81-92 (in Japanese)
- Investigation Group on Marine Organisms in the Cast of Yaku Island (1992) Reports on the investigation on marine organisms in the coast of Yaku Island. 98 pp (in Japanese)
- Irikawa A (2002) Current status of hermatypic coral communities on Okinawa Island. Newsletter of Okinawa Environmental Technology Association, 4: 42-61 (in Japanese)
- Iryu Y, Nakamori T, Matsuda S, Abe O (1995) Distribution of marine organisms and its geological significance in the modern reef complex of the Ryukyu Islands. Sediment Geol, 99: 243-258
- Ishigaki City (2001) Result of questionnaire survey on prevention measures of red soil run-offs. (in Japanese)
- Ishigaki City (2003) Statistical data of Ishigaki, 26: (in Japanese)
- Iwao K (2001) Observation of oceanographic data at Akajima Island from 1995 to 2000. Midoriishi, 12: 21-25 (in Japanese)
- Iwao K (2003) Surveys of marine fauna around Kerama Islands by visiting scientists and the staff of AMSL. Midoriishi, 14: 38-41 (in Japanese)
- Iwase F (2002) Record on flood disaster measures on Minokoshi Bay. CURRENT 3 (1): 5 (in Japanese)
- Johannes RE, Wiebe WJ, Crossland CJ, Rimmer DW, Smith SV (1983) Latitudinal limits of coral reef growth. Mar Ecol Prog Ser. 11: 105-111
- Kagoshima Prefecture (1969) Survey report of Kinnkou Bay Marine Park, Kirishima-Yakushima National Park. (in Japanese)
- Kagoshima Prefecture Nature Association (1980) Report on the status of damage by *Acanthaster planci* in marine park zones in Amami Gunto Quasi-National Park. (in Japanese*)
- Kaizuka S (1979) Position and Climate of the Ogasawara Islands on the Big-scale Topography. Report of the General Survey on Natural Environment of the Ogasawara (Bonin) Islands, 2: 65-69 (in Japanese)
- Kaizuka S (1989) VI. Islands of Tokyo. Geoscience guide series 13, Guido on geoscience of Tokyo, Corona Publishing Co., Ltd., Tokyo, pp 233-251 (in Japanese*)
- Kaizuka S (1996) Minamitorishima and Okinotorishima --Coral reef island at easternmost and southernmost island in Japanese territory--. In: Nakamura K (ed) Southern islands (Japanese nature, Local version), Iwanami Shoten, Tokyo, 8: 56-57 (in Japanese*)
- Kaizuka S, Nagaoka S, Miyauchi T (1981) Geographical and Geological Features of Iou-jima Island. Report of the General Survey on Natural Environment of the Ogasawara (Bonin) Islands, 3: 113-134 (in Japanese)
- Kaizuka S, Koike K, Endo K, Yamazaki H, Suzuki T (2000) Geography of Japan 4 --Kanto, Izu and Ogasawara---University of Tokyo Press, Tokyo, 349 pp (in Japanese*)
- Kamezaki N, Oki K, Mizuno K, Toji T, Doi O (2003) First record of the leatherback turtle, *Dermochelys coriacea*, nesting in Japan. Bull Herpetol Soc Japan, 2003 (1): 43 (in Japanese)

- Kamijyo T, Higuchi H, Kato T, Shimada K (2002) Influence of volcanic activity on vegetation in Miyake-jima. Situation report on fauna and flora of Miyake-jima in fiscal 2001, Zoological Society of Japan, pp 1-40 (in Japanese*)
- Kan H, Hori N, Nakashima Y, Ichikawa K (1995) The evolution of narrow reef flats at high-latitude in the Ryukyu Islands. Coral Reefs, 14 (3) 123-130
- Kan H, Hori N, Kawana T, Kaigara T, Ichikawa K (1997) The evolution of a Holocene fringing reef and island: Reefal environmental sequence and sea level change in Tonaki Island, the Central Ryukyus. Atoll Res Bull, 443: 1-20
- Kato K, Yamamoto Y, Higuchi H (2002) Bird communities of Miyake-jima after volcanic eruption in 2000, Situation report on fauna and flora of Miyake-jima in fiscal 2001, Zoological Society of Japan, pp 55-73 (in Japanese*)
- Kawana T (1987) Holocene crustal movement in and around the Sekisei Lagoon in Okinawa Prefecture, Japan. Earth Monthly, 9: 129-134 (in Japanese)
- Kawana T (1988) Landform of the Ryukyu Islands. Shinsei Tosho, Naha, 127 pp (in Japanese)
- Kawana T (1989) Quaternary crustal movement in the Ryukyu Islands. Earth Monthly, 11: 618-630 (in Japanese)
- Kawana T (1996) Late Holocene sea-level changes in the nonlimestone areas (Tokashiki, Aka, and Tonaki Islands) in the Central Ryukyus: exemplified from beach conglomerate and coral reefs overlain by the beach conglomerate. Abstracts of the Association of the Japanese Geographers, 50: 116-117 (in Japanese)
- Kawana T, Kan H (2000) Description of the drilling cores through the Holocene barrier reef at the Sekisei Lagoon in the southern Ryukyu Islands, Japan. Bulletin of College of Education, University of the Ryukyus, 57: 343-354 (in Japanese with English abstract)
- Kawana T, Nakata T (1994) Timing of late Holocene tsunamis originated around the Southern Ryukyu Islands, Japan, deduced from coralline tsunami deposits. J Geogr (Chigaku Zasshi), 103: 352-376 (in Japanese with English abstract)
- Kawana T, Nakata T, Omura A (1987) Ages of the fossil coral from the 'Tsunami ufuishi' on Ohama of Ishigaki Island, the Ryukyus, Japan. Quat Res, Tokyo, 26: 155-158 (in Japanese with English abstract)
- Kawana T, Kan H, Sugihara K (1999) Development of the Holocene coral reefs in the Sekisei Lagoon, the Yaeyama Islands. Newsletter of the Okinawa Geographical Society, 32: 7 (in Japanese)
- Kawana T, Ota Y, Omura A (2001) Outer arc of the Ryukyus. In: Machida H, Ota Y, Kawana T, Moriwaki H, Nagaoka S (eds) Geomorphology of Japan 7. Kyushu and Nansei Islands. University of Tokyo Press, Tokyo, pp 232-271 (in Japanese)
- Kayanne H, Suzuki A, Saito H (1995) Diurnal changes in the partial-pressure of carbon-dioxide in coral-reefwater. Science, 269: 214-216
- Kayanne H, Harii S, Yamano H, Tamura M, Ide Y, Akimoto F (1999) Changes in living coral coverage before and after the 1998 bleaching event on coral reef flats of Ishigaki Island, Ryukyu Islands. Galaxea, JCRS, 1: 73-82 (in Japanese with English abstract)
- Kayanne H, Harii S, Ide Y, Akimoto F (2002) Recovery of coral populations after the 1998 bleaching on Shiraho Reef, in the southern Ryukyus, NW Pacific. Mar Ecol Prog Ser, 239: 93-103
- Kikuchi T, Imaizumi T, Wada T (1980) Geographical and Geological Features Kitaiou-jima Island. Report of the General Survey on Natural Environment of the Ogasawara (Bonin) Islands, 3: 95-112 (in Japanese)
- Kimura T (1965) Investigations for marine parks of Iki and Tsushima Islands. Rep Nat Conserv Soc Japan 19, pp 139-144 (in Japanese)
- Kitada H (2002) Fecundity of Acropora tenuis in Akajima Island. Midoriishi, 13: 26-29 (in Japanese)
- Kizaki K (1985) Geological history of the Ryukyu Arc. Okinawa Times, 278 pp (in Japanese*)

- Kizaki K (1992) Geological history of the Kerama Islands. Midoriishi, 3: 1-2 (in Japanese)
- Koba M, Nakata T, Watabe S (1979) Late Quaternary reef caps Takara and Kodakara Islands, Ryukyu Archipelago, and sea-level changes of late Holocene. Earth Science (Chikyu Kagaku), 33 (4): 173-191 (in Japanese with English abstract)
- Kochi Prefecture Nankoku Civil Engineering Office (1992a) Survey report of current state of corals etc. at vicinity area of Tei Port. South port committee, No. 1, 1992 (in Japanese)
- Kochi Prefecture Nankoku Civil Engineering Office (1992b) Detailed investigation report of corals in Tei Port Marina Zone. Port Repair No. 8-50, 1992 (in Japanese)
- Kochi Prefecture Nankoku Civil Engineering Office (1992c) Survey report of current state of corals etc. at vicinity area of Tei Port. South port committee, No. 2, 1992 (in Japanese)
- Kochi Prefecture Nankoku Civil Engineering Office (1993a) Survey report of current state of corals at vicinity area of Tei Port. Port Environment, 1-No. 50, 1993 (in Japanese)
- Kochi Prefecture Nankoku Civil Engineering Office (1993b) Investigation report of water and sea bottom quality at vicinity area of Tei Port, Port Environment, No. 1-51, 1992 (in Japanese)
- Konishi k, Omura A, Nakamichi O (1974) Radiometric coral ages and sea level records from the late Quaternary reef complexes of the Ryukyu Islands. Proc 2nd Int Coral Reef Symp, pp 595-613
- Kosaka T, Komatsu T, Okubo A and Ueno S (2001) Changes of *Acropora tumida* community damaged by low temperature in Suruga Bay, Central Japan (1992-2000). Journal of the School of Marine Science and Technology Tokai University, 52: 57-67 (in Japanese with English abstract)
- Kumamoto Prefecture (1968) Academic investigation report of marine park in Kumamoto Prefecture. (in Japanese)
- Kurata Y (1984) Acanthaster planci in Ogasawara Islands. Marine Parks Journal, 61: 7-9 (in Japanese)
- Kurata Y (1997) Okinotori-shima Island in the tropics. Ogasawara, 42: 15-16 (in Japanese)
- Kurata Y, Mimura T, Takahashi K, Shioya T, Hirose (1969) General view of coral reef in the Ogasawara Islands. Report of the basic research for fishery development in the Ogasawara Islands, Tokyo Fisheries Experiment Station Publications, 208: 130-160 (in Japanese)
- Kuroshio Biological Research Foundation (2002) Report on investigation to recover coral community in Tatsukuchi Marine Park Zone. Kuroshio Biological Research Foundation, Kochi, 13 pp (in Japanese)
- Li BH, Jian ZM., Wang PX (1997) Pulleniatina obliquiloculata as a paleoceanographic indicator in the southern Okinawa Trough during the last 20,000 years. Mar Micropaleontol, 32: 59-69
- Liaison Conference of Marine Parks (1975) Minutes of the Liaison Conference of Marine Parks. Marine Parks Journal, 35/36: 2-22 (in Japanese)
- Loya Y, Sakai K, Yamazato K, Nakano Y, Sambali H, van Woesik R (2001) Coral Breaching: the Winners and the Losers. Ecological Letters, 4 (2): 122-131
- Machida H, Ota Y, Kawana T, Moriwaki H, Nagaoka S (2001) Landforms of Japan, No.7, Kyushu and Nansei Islands. University of Tokyo Press, 355 pp (in Japanese)
- Machida K (2001) Damage record on "the Downpour of Southwestern Kochi" at Shirigai Marine Park Area in Ashizuri-Uwakai National Park. CURRENT, 2(3): 2-6 (in Japanese)
- Marine Park Center of Japan (2001) Conservation of marine nature
 --The role and activities of marine parks--. 79 pp (in Japanese and English)
- Matsuda S (1987) Crustose coralline algae in the Ryukyu Islands. Earth Monthly, 9: 162-168 (in Japanese)
- Matsumoto H (1992) A study on the fauna of reef building coral at Miyako Island. Master Thesis of University of Ryukyus, 80 pp (in Japanese)
- Matsunaga T, Hoyano A, Mizukami Y (2000) Monitoring of coral reefs on Ishigaki Island in Japan using multitemporal remote

- sensing data. Proc SPIE, 4154: 212-222
- Mezaki S (1988) Geography of southern islands. Okinawa Shuppan, Okinawa, 158 pp (in Japanese*)
- Mezaki S (1991) Coral reef environment in Ishigaki Island. WWF Japan Report, 214 pp (in Japanese)
- Minegishi N, Ueno S (1995) Ecological distribution of scleractinian corals and their abiotic environment in the Uchiura Coast of the Suruga Bay. Bull Inst Oceanic Res & Develop, Tokai Univ, 16: 31-40 (in Japanese with English abstract)
- Mitsumoto H, Omija T, Kobayashi T (2000) Water pollution caused by soil run-off and coral reef situation in Shiraho, Ishigaki Island (II). Ann Rep Okinawa Pref Inst Health Environ, 34: 121-124 (in Japanese)
- Miyawaki I (1994) Coral reef data in Wakayama Prefecture. The report of the marine biotic environment survey in the 4th national survey on the natural environment, Vol. 3 Coral reefs, Nature Conservation Bureau, Ministry of the Environment, pp 105-124 (in Japanese*)
- Miyazaki K (2002) Growth of transplanted *Acropora hyacinthus*. CURRENT, 3 (3): 2-3 (in Japanese*)
- Miyazaki Prefecture (2002) Miyazaki's fishing industry. (in Japanese) Moyer JT (1978) Crown-of-thorns starfish invades Miyake-jima. Marine Parks Journal, 44: 17 (in Japanese)
- Moyer JT, Emerson WK, Ross M (1982) Massive destruction of scleractinian corals by the muricid gastropod, *Drupella*, in Japan and the Philippines. The Nautilus, 96: 69-82
- Nadaoka K, Nihei Y, Kumano R, Yokobori T, Omija T, Wakaki K (2001) A field observation on hydrodynamic and thermal environments of a fringing reef at Ishigaki Island under typhoon and normal atmospheric conditions. Coral Reefs, 20 (4): 387-398
- Nagaoka S (1987) Geology and geography of Minamitorishima and Okinotorishima. Annual Report of Ogasawara Research, 11: 88-95 (in Japanese*)
- Nagaoka S (2001a) Iki Island and Goto Islands. In: Machida H, Ota Y, Kawana T, Moriwaki H, Nagaoka S (eds) Geomorphology of Japan 7. Kyushu and Nansei Islands. University of Tokyo Press, Tokyo, pp 101-106 (in Japanese)
- Nagaoka S (2001b) Tsushima and Tsushima Strait. In: Machida Y, Ohta Y, Kawana T, Moriwaki H, Nagaoka S (eds). Geography of Japan 7, Kyushu and Nansei Islands, University of Tokyo Press, Tokyo, pp106-109 (in Japanese)
- Nakabo T (2000) Fishes of Japan --Identification of all species, Second edition. Tokai University Press, 1748 pp (in Japanese*)
- Nakai T (1990) Geomorphological characteristics of northernmost coral reefs in the northwest Pacific. --What it a reef?--. In:
 Coral Reef Area Research Group (ed) Hot Nature,
 Environmental Geograpy of Coral Reefs in Japan. Kokonshoin,
 Tokyo, p57-65 (in Japanese)
- Nakai T, Wada T (1983) Northern-limit coral reefs in Japan. Abstracts of the Study Meeting of the Assoc Japanese Geogr, 24: 78 (in Japanese)
- Nakai T, Toguchi K, Hasegawa H, Wada T (1988) Coral Reef Features in Chichi-jima Island in the Ogasawara Islands -- To Think about the Coral Reef of the north limit --. Proceedings of Japanese Sociaty of Geography, 33: 62-63 (in Japanese)
- Nakajima H, Nakaya Y, Kosaka A, Hanano M (1985) Chapter 4.
 Fishety in Wakayama Prefecture. Nature of Wakayama 1.
 Umi-to-Seibutsu (Marine creature), Wakayama Prefecture
 Museum of Natural History, Wakayama, pp 109-145 (in Japanese)
- Nakamori T (1982) Geology of Miyako Gunto, Ryukyu Islands, Japan. Tohoku Univ, Inst Geol Pal Contr, 84: 23-39 (in Japanese)
- Nakamori T (1986) Community structures of recent and Pleistocene hermatypic corals in the Ryukyu Islands, Japan. Sci Rep Tohoku Univ (2nd Ser, geol), 56: 71-133
- Nakamori T, Suzuki A, Iryu Y (1992) Water circulation and carbon flux on Shiraho coral reef of the Ryukyu Islands, Japan. Continent Shelf Res, 12: 951-970
- Nakanishi Y and Ueno S (1998) The effect of *Colpomenia sinuosa* on the *Acropora tumida* community in Suruga Bay. Bulletin of

- Institute of Oceanic Research and Development, Tokai University 19: 6-69 (in Japanese with English abstract)
- Nakata T, Takahashi T (1978) Holocene emerged coral reefs and sea-level changes in Ryukyu Islands. Geogr Rev Japan, 51 (2): 87-108 (in Japanese with English abstract)
- Natsukari Y, Takita T (1972) Sea state of Iki Island. Rep Mar Park Cent, Nagasaki Prefect, pp 7-23 (in Japanese)
- Natsukari Y, Uchida T, Michitsu K (1973) Sea state of Tsushima Islands. Rep Mar Park Cent, Nagasaki Prefect, pp 1-11 (in Japanese)
- Nature Conservation Bureau, Environment Agency (1973) Research on shallow water ecology. Mechanism of crown-of-thorns starfish outbreak and its countermeasures. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1974) Additional designation of marine park zone Document from Nature Conservation Bureau Environment Agency Marine Parks Journal, 31: 9-12 (in Japanese)
- Nature Conservation Bureau, Environment Agency (1980) The 2nd national survey on the natural environment. Coastal environment survey of tidal flat, seaweed beds and coral reef (nationwide edition). (in Japanese)
- Nature Conservation Bureau, Environment Agency (1984) Urgent survey on conservation of Sakiyama Bay Nature Conservational Area. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1986) Report on clarification of contributing factors that influences on population fluctuation of organisms in marine ecosystems, and its management methods, fiscal 1985. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1988) Report on clarification of contributing factors that influences on population fluctuation of organisms in marine ecosystem, and its management methods, fiscal 1987. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1989) Report on clarification of contributing factors that influences on population fluctuation of organisms in marine ecosystem, and its management methods, fiscal 1988. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1994) The report of the marine biotic environment survey in the 4th national survey on the natural environment, Vol. 3, Coral reefs. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1995a) Report on restoration techniques of coral reefs' ecological system, fiscal 1994. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1995b) Report of ecosystem diversity survey on Ashizuri-Uwakai area, 1995. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1996)
 Distribution map of coral reefs. The 4th national survey on the
 natural environment. Survey of marine organisms and
 environment, 1989-1992. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1999a) Annual report of coral reef monitoring around Ishigaki Island, 1998. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1999b) National survey on the marine natural environment. Report on important coastal organisms. (in Japanese)
- Nature Conservation Bureau, Environment Agency (1999c) Outline of Kinki regional office for nature conservation. (in Japanese)
- Nature Conservation Bureau, Environment Agency (2000a) Annual report of coral reef monitoring around Ishigaki Island, 1999. (in Japanese)
- Nature Conservation Bureau, Environment Agency (2000b) Annual report of coral reef monitoring around Ishigaki Island, 2000. (in Japanese)
- Nature Conservation Bureau, Environment Agency (2000c) Urgent survey on the influence of hermatypic coral communities' bleaching on marine ecosystems and its conservational approaches. (in Japanese)
- Nature Conservation Bureau, Environment Agency (2000d) Annual report of coral reef monitoring in Sekisei Lagoon and neighboring areas, Iriomote National Park, 1999. (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2001)

- Annual report of coral reef monitoring around Ishigaki Island, 2001. (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2002a) 500 Important Wetlands in Japan.
- Nature Conservation Bureau, Ministry of the Environment (2002b)

 Annual report of coral reef monitoring in Sekisei Lagoon and neighboring areas, Iriomote National Park, 2001. (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2002c) Annual report of coral reef monitoring around Ishigaki Island, 2002. (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2003a) Report on nature restoration of Sekisei Lagoon, in fiscal 2002. (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2003b) Report on promotion project of research and monitoring on coral reefs, in fiscal 2002. (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2003c) Annual report of international coral research and monitoring center, vol. 3 (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2003d) Report on conservational activities in marine park zones, in fiscal 2002. (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2003e) Investigation report on management policy of Tatsukushi Facility Complex for conservation and utilization of Tatsukushi Marine Park Zone in Ashizuri-Uwakai National Park, 2003. (in Japanese)
- Nature Conservation Bureau, Ministry of the Environment (2003f) Survey report on extermination project of crown-of-thorns starfish, in 2002-2003. Report on conservational activities of marine park zones, in fiscal 2002. (in Japanese*)
- Nature Conservation Division, Okinawa Prefecture (1999) Guideline for natural environment conservation in Miyako and Kume region. 356 pp (in Japanese*)
- Nature Conservation Division, Okinawa Prefecture (2002) Rapid survey manual for the crown-of-thorns starfish outbreaks and coral communities in Okinawa, Japan. 9 pp (in Japanese*)
- Nature Conservation Division, Okinawa Prefecture (2003) Report on implementation of Reef Check, fiscal 2003. (in Japanese*)
- Nature Conservation Society of Japan (1967) Investigation report on marine park zones in Miyazaki Prefecture. (in Japanese*)
- Nemoto K, Sato T, Miyazaki A and Nakama A (1989) Echo character of the Uchiura Bay, Shizuoka, and its relation to sedimentary. Journal of the Faculty of Marine Science and Technology, Tokai University, 28: 95-118 (in Japanese with English abstract)
- Nishihira M, Veron JEN (1995) Hermatypic corals of Japan. Kaiyusha, Tokyo, 439pp (in Japanese)
- Nishimura K, Miki M, Kimura J (1988) Coastal Fishery Survey in Kitaiou-jima Island in 1986. Report on Coastal Fishery Resouces at Kitaiou-jima Island, Tokyo Fisheries Experiment Station Publications, 351: 1-24 (in Japanese)
- Nojima S (1990) On a small-scale coral reef (?) found in the offshore of marine park. Marine Pavilion, 19 (1): 2-3 (in Japanese)
- Nojima S (1993) Maintenance mechanism of coral communities in fringing area of hermatypic-coral habitats. Report on Grant-in-Aid for Scientific Research, Faculty of Science, Kumamoto Univ, Kumamoto, 11 pp (in Japanese)
- Nojima S, Yeemin T (1999) Community construction and vertical distribution of hermatypic corals in non-reef-building areas. In: Okutani T, Ohta H, Ueshima T (eds) Updated Progress in Aquatic Invertebrate Zoology. Tokai University Press, Tokyo, pp 41-56 (in Japanese with English abstract)
- Nojima S, Ichikawa S, Matsumoto T, Sunagawa S, Obara H (1992) On the hermatypic corals in Yaku Island. Marine Parks Journal, 96: 3-7 (in Japanese)
- Nomura K (1991) Outbreak of *Drupella fragum* in Japanese waters. Diver, 7: 65-67 (in Japanese)
- Nomura K (2001) Coral communities in Kushimoto (5, 6). Marine Pavilion, 30 (9, 11) (in Japanese)
- Nomura K (2002) Coral communities in Kushimoto (7-9). Marine Pavilion, 31 (1, 3, 4) (in Japanese)

- Nomura K (2003) Coral communities in Kushimoto (12). Marine Pavilion, 32 (5) (in Japanese)
- Nomura K (2004) Coral communities in Kushimoto (13). Marine Pavilion, 33 (1) (in Japanese)
- Nomura K, Fukuda T (2000) Coral communities in Kushimoto (1). Marine Pavilion, 29 (11) (in Japanese)
- Nomura K, Fukuda T (2001) Coral communities in Kushimoto (2-4). Marine Pavilion, 32 (1, 5, 8) (in Japanese)
- Nomura K, Fukuda T (2003) Coral communities in Kushimoto (10, 11). Marine Pavilion, 32 (1, 3) (in Japanese)
- Nomura K, Hirotsuji H (2001) Reef building corals in the middle part of Wakayama Prefecture. Nanki-Seibutsu, 43 (2): 89-93 (in Japanese)
- Nomura K, Tominaga M (2001) The coral conservation against population explosions of *Drupella fragum* at Shirigai, Otsuki, Pacific coast of central Japan, and its removing guide. Marine Parks Journal, 130: 11-16 (in Japanese)
- Nomura K, Kajimura M, Uchida H (1994) The reef-building corals in the Oki Islands. Marin Parks Journal, 106: 7-11 (in Japanese)
- Nomura K, Kuroyanagi K, Kondo T (2000) Bleaching event in Yaeyama Archipelago. Urgent survey on the influence of hermatypic coral communities' bleaching on marine ecosystems and its conservational approaches, Nature Conservation Bureau, Ministry of the Environment, 98-148 (in Japanese)
- Nomura K, Kimura T, Kawagoe H (2001) The introduction of the spot check method as a simple monitoring method of large coral reef area, and that practical example in the Sekisei Lagoon, Southern Ryukyus. Marine Parks Journal, (131): 5-12 (in Japanese)
- Nomura K, Kodera A, Ui S, Mori M, Uchida H (2003a) Survey report on state of Kushimoto Marine Park Zone. Report on conservational activities in marine park zones, in fiscal 2002, Nature Conservation Bureau, Ministry of the Environment, pp 25-27, 43-66, 89-96 (in Japanese)
- Nomura K, Fukuda T, Kodera A (2003b) Survey report of crown-of-thorns starfish in Kushimoto sea areas. Report on conservational activities in marine park zones, in fiscal 2002, Nature Conservation Bureau, Ministry of the Environment, pp 4-11 (in Japanese)
- Ogasawara Branch Office, Tokyo Metropolitan Government (2003) Research Report of Vegetation Recovery in Ogasawara National Park in fiscal 2002. 101 pp (in Japanese*)
- Ogasawara Marine Station, Tokyo Metropolitan Government (1995) Survey of natural resources on reefs in Minamitori-shima. Flash report of Tokyo Metropolitan Fisheries Experiment Stationin, 1994. (in Japanese)
- Ogasawara Village of Tokyo (2002) Research report on utilization of marine deep water in the Ogasawara Islands. (in Japanese)
- Ohba H (1995) A list of seaweeds of Akajima Island and its vicinity in Kerama Islands, Okinawa Prefecture, Japan. Midoriishi, 6: 23-28 (in Japanese)
- Ohba H, Ochi H, Fujioka Y (2003) The decline of reef-coral community and the luxuriant growth of benthic marine algae in the moat of Ishigaki-jima Island, Ryukyus (southern Japan). Japan J Phycol 51 (Suppl)
- Ohgaki S, Noike M (1992) Land development activity and the coral reef in Shiraho, Ishigaki Island, Okinawa. Japan J Ecol, 42: 9-20 (in Japanese with English abstract)
- Oita Prefectural Fisheries Experimental Station (1967) Preliminary environmental survey on large scale development in the peal oyster culture ground, Kamae Town, Part 1. (in Japanese)
- Oita Prefecture (1969) Survey report on candidate site of marine park zones in Oita Prefecture. 62 pp (in Japanese*)
- Okubo A, Funakoshi Y, Atobe T and Ueno S (2003) Growth of Acropora tumida population and grazing effects by Diadema setosum in Suruga Bay, central Japan. Bulletin of Institute of Oceanic Research and Development, Tokai University, 24: 51-57 (in Japanese with English abstract)
- Omija T, Oyama M, Ikema N, Yaeyama Regional Public Health and Welfare Division, Okinawa Prefectural Fisheries Improvement and Diffusion Center, Fisheries Division of Ishigaki City,

- Fisheries Cooperative of Iheya Village, Fisheries Cooperative of Izena, F (1993) Current status of red soil pollution in various sea areas in Okinawa Prefecture (2nd Report). Abstract from 23rd Conference of Health Observer, pp 50-60 (in Japanese)
- Omija T, Nakasone K, Kobayashi T (1998) Current state of water pollution caused by red soil run-off and coral reefs in Shiraho, Ishigaki Island. Ann Rep Okinawa Pref Inst Health Environ, 32: 113-117 (in Japanese)
- Omura A, Tsuji Y (1997) Carbonate sediments on the insular shelf off Miyako Islands and their radiometric ages. Earth Monthly, 19: 594-599 (in Japanese)
- Ota Y, Machida H, Hori N, Konishi k, Omura A (1978) Holocene raised coral reefs of Kikai-jims (Ryukyu Islands) --An approach to Holocene sea level study--. George Rev Japan, 51(2): 109-130 (in Japanese with English abstract)
- Paringit EC (2003) Integrated monitoring and modeling of a coastal-land coupled environmental ecosystem based on remote sensing. Doctoral Thesis, Tokyo Institute of Technology, 172 pp
- Port and Harbor Section of Kochi Prefecture (1989a) Survey report of current environmental state around Tei Port, No.6, 1988. (in Japanese)
- Port and Harbor Section of Kochi Prefecture (1989b) Survey report of current environmental state around Tei Port, No.7, 1988. (in Japanese)
- Port and Harbor Section of Kochi Prefecture (1990) General description and evaluation of natural environment on construction site of Tei Marina at Ohte Beach, Yasu Town, Kochi Prefecture. (in Japanese)
- Port and Harbor Section of Kochi Prefecture (1990a) Survey report of current state of corals at vicinity area of Tei Port, No.7, 1989. (in Japanese)
- Port and Harbor Section of Kochi Prefecture (1990b) Report of consignment project of individual current change forecast survey in Tei Port, No.11, 1989. (in Japanese)
- Port and Harbor Section of Kochi Prefecture (1990c) Survey report of current state of corals at vicinity area of Tei Port, No.5, 1989. (in Japanese)
- Port and Harbor Section of Kochi Prefecture (1991) Survey report of current state of corals at vicinity area of Tei Port, No.1, 1991. (in Japanese)
- Port and Harbor Section of Kochi Prefecture (1994) Report of survey on corals in Tei. (in Japanese)
- Port and Harbor Section of Kochi Prefecture (1999) Report of consignment project of investigation and promotion of developing nature experience study park in Tei port. (in Japanese)
- Randall JE, Ida H, Kato K, Pyle RL, Earle JL (1988) Annotated checklist of the inshore fishes of the Ogasawara Islands. Nat Sci Mus Monogr, 1: 1-74 + 19 plates
- Research Institute for Subtropics (1999) Survey of possibilities in subtropics research in the areas of organisms and environment.

 --A case study on coral bleaching event--. (in Japanese)
- Research Institute for Subtropics (2000) Research report on coral bleaching event. (in Japanese)
- Rogers CS (1990) Responses of coral reefs and reef organisms to sedimentation. Mar Ecol Prog Ser, 62: 185-202
- Saito T, Tsukada K, Yamanouchi H (1980) Tokara Ialands -their Nature and Culture. Kokonshoin, Tokyo, 351 pp (in Japanese)
- Sakai K, Nishihira M (1986) Ecology of hermatypic corals. In: Nishihira M (ed) Coral reefs of Okinawa. Okinawa Environmental Analysis Center Co. Ltd., Urasoe City, pp 83-97 (in Japanese*)
- Sakurai M (1985) Kagoshima Bay II physics. In: Coastal research council, the oceanographic society of Japan (ed) Coastal Oceanography of Japanese Islands, Tokai University Press, Tokyo, pp 780-793 (in Japanese*)
- Sanyo-Shikoku RONC (2003) 30th anniversary booklet of Ashizuri-Uwakai National Park. Sanyo-Shikoku Regional Office for Nature Conservation, Nature Conservation Bureau,

- Ministry of the Environment. (in Japanese)
- Sato T, Hori N, Suzuki A (2000) The distribution of massive *Porites* in the moat of fringing reef, Ishigaki Island, Japan. Galaxia, JCRS, 2: 43-50 (in Japanese with English Abstract)
- Sea Turtle Association of Japan (2001) In: Kamezaki N, Tsuuji Y, Matsuzaki Y (eds) Curent status of sea turtle spawning and beach environment, Osaka, 155 pp (in Japanese*)
- Senou H, Morita Y, Morishita O (1997) Newly recorded six fish species from Ogasawara Islands. IOP Div News, 8 (2): 2-7 (in Japanese*)
- Shepard Jw, Moyer JT (1980) Annotated checklist of fishes of Miyake-jima, Japan I. Pomacentridae, Chaetodontidae and Pomcanthidae, Publ Seto Mar Biol Lab, 25: 227-241
- Shimoji K, Nakasone T, Nishihira M, Yokochi H (1990) Quality of water and sediments of Sakiyama Bay Nature Conservation Area, Iriomote Island. Survey report of the Sakiyama Bay Nature Conservation Area, Okinawa, Japan. Nature Conservation Bureau, Environment Agency, pp 27-42 (in Japanese with English Abstract)
- Strong AE, Barrientos CS, Duda C, Sapper J (1997) Improved satellite techniques for monitoring coral reef bleaching. Proc 8th Int Coral Reef Symp, 2: 1495-1498
- Strong AE, Liu G, Kimura T, Yamano H, Tsuchiya M, Kakuma S, van Woesik R (2002) Detecting and monitoring 2001 coral reef bleaching events in Ryukyu Islands, Japan using satellite bleaching Hot Spot remote sensing technique. Proc Int Geosci Remote Sensing Symp, 2002 V: 2199-2201
- Study Group for Undersea Scenery Resources in Amakusa District (1995) Report on a study of undersea scenery resources in Amakusa district, Unzen-Amakusa National Park. (in Japanese)
- Suga H (1994) Coral-eating gastropods in Uwakai, Ehime Pref. Marine Parks Journal, 103: 9-13 (in Japanese)
- Sugihara K, Nakamori T, Iryu Y, Sasaki K, Blanchon P (2003) Late Holocene sea-level changes and tectonic uplift in Kikai-jima, Ryukyu Islands, Japan. Sediment Geol, 159: 5-25
- Sugiyama T (1937) Reef building corals in coastal areas of Japan. Geology and Paleontology Laboratory, Department of Science, Tohoku Univeristy, 26: 5-15 (in Japanese*)
- Suzuki R, Kan H (2004) Zonal trend of reef topography and bioerosion process by sea urchins in a fringing reef, Ishigaki Island, the Ryukyus, Japan. Trans Japan Geomorph Union, 25 (2): 115-137 (in Japanese with English Abstract)
- Tachikawa H, Suganuma H, Sato F (1991) Reef-building corals in the Chichi-jima Islands and the Haha-jima Islands. Report of the second general servey on natural environment of the Ogasawara (Bonin) Islands, Tokyo Metropolitan University, pp 285-296 (in Japanese)
- Takahashi K (1983) Shallow water scleractinian corals around Hachizyo Island. Marine Parks Journal, 60: 7-10 (in Japanese)
- Takahashi K (1990) Coastal area of Izu-Ogasawara Islands VI Stony corals. Coastal Oceanography of Japanese Islands Supplementary volume, Tokai University Press, Tokyo, pp 621-623 (in Japanese*)
- Takahashi T, Koba M, Nakamori T (1985) Coral reefs of the Ryukyu Islands: reef morphology and reef zonation. Proc 5th Int Coral Reef Congr, 3: 211-216
- Takayama S, Shirasaki S (1990) Predation of corals by *Drupela fragum* in Nichinan Coast in Miyazaki Prefecture. Nanki Seibutsu, 32(2): 121-122 (in Japanese*)
- Taniguchi H (2002) Coral bleaching occurred around Akajima Island in 2001. --Comparison with event in 1998--. Midoriishi, 13: 26-29 (in Japanese)
- Taniguchi H (2004) Change of coral coverage around Akajima Island in recent 6 years: observation after and during the coral bleaching events and outbreaks of crown-of-thorns starfish. Midoriishi, 15: 16-19 (in Japanese)
- Taniguchi H, Iwao K (2000) Changes in coral coverage and colony number at Maenohama, Akajima Island, one year after the 1998 bleaching event. Midoriishi, 11: 22-23 (in Japanese)
- Taniguchi H, Iwao K, Omori M (1999) Coral bleaching around Akajima, Okinawa. I. A report of the September 1998 survey.

- Galaxea, JCRS, 1: 59-64 (in Japanese with English Abstract)
- Tokioka T (1953) Invertebrate fauna of the intertidal zone of the Tokara Islands I. Introductory notes, with the outline of the shore and the fauna. Publ Seto Mar Biol Lab, 3 (2): 123-138
- Tokushima Prefecture (1977) Report on environment conservation of marine park zone (Ohshima, Takegashima), in fiscal 1976. (in Japanese)
- Tokushima Prefecture (1978) The 2nd national survey on the natural environment. The distribution of tidal flat, sea grass bed, and coral reef. (in Japanese)
- Tokushima Prefecture (1986) Report on environment conservation in Takegashima Marine Park Zone, Tokushima Prefecture. (in Japanese)
- Tokushima Prefecture (1988) Report of survey on nature conservation in Tokushima Prefecture (marine organisms in Takegashima and Oshima marine park zones in Awa), fiscal 1987. (in Japanese)
- Tokushima Prefecture (1997) Report of baseline survey on marine parks in Tokushima Prefecture, fiscal 1996. (in Japanese)
- Tokushima Prefecture (2002) Report of baseline survey on marine parks in Tokushima Prefecture, fiscal 2001. (in Japanese)
- Tokyo Metropolitan Fisheries Experiment Station (1976) Data of fixed point temperature observation in Izu Islands (1920-1973).Tokyo Metropolitan Fisheries Experiment Station Publication, No. 260: 122 (in Japanese)
- Tokyo Metropolitan Fisheries Experiment Station (1994) Report of the survey on marine habitat in territorial waters of Io-sima and Minamiio-sima. Tokyo Metropolitan Fisheries Experiment Station Publication, No. 373: (in Japanese)
- Tokyo Metropolitan Fisheries Experiment Station (2001) Survey report of stricken coastal fishery ground by volcano eruption in Miyakejima VII. (in Japanese)
- Tominaga M (1998) Removing of coral-eating gastropods by volunteers at the Tsutomezaki Marine Park, Ashizuri-Uwakai National Park, Marine Parks Journal, 121: 8-12 (in Japanese)
- Tourism Promotion and General Affairs Division, Yaeyama Branch Office, Okinawa Prefecture (2003) Symposium report on ripple effects of tourism industry in Yaeyama District. (in Japanese)
- Tribble GW, Bell LJ, Moyer JT (1982) Subtidal effects of a large typhoon on Miyake-jima, Japan. Publ Seto Mar Bio Lab, 27: 1-10
- Tribble GW, Randall RH (1986) A description of the high-latitude shallow water coral communities of Miyake-jima, Japan. Coral Reefs, 4 (3): 151-160
- Tsushima Branch Office, Nagasaki Prefecture (2002) Encyclopedia of Tsushima. Tsushima Tourism and products Society, 385 pp (in Japanese)
- Uchida H (1994) Analysis of survey results in non-coral reef sea area.

 The report of the marine biotic environment survey in the 4th national survey on the natural environment, Vol. 3 Coral reefs, Nature Conservation Bureau, Ministry of the Environment, pp 13-29 (in Japanese*)
- Ueno S (1996) Hermatypic corals of Suruga Bay. In: School of Marine Science and Technology, Tokai University (ed) Nature of Suruga Bay, Shizuoka Shinbun, Shizuoka, pp 149-157 (in Japanese)
- Umezawa Y, Miyajima T, Kayanne H, Koike I (2002a) Significance of groundwater nitrogen discharge into coral reefs at Ishigaki Island, southwest of Japan.Coral Reefs, 21 (4): 346-356
- Umezawa Y, Miyajima T, Yamamuro M, Kayanne H, Koike I (2002b) Fine scale mapping of land-derived nitrogen in coral reefs by d15N in macroalgae. Limnol Oceanogr, 47 (5): 1405-1416
- Veron JEN (1993) A biogeographic database of hermatypic corals. Aust Inst Mar Sci Monogr Series, 10: 433
- Veron JEN (1992a) Conservation of biodiversity: a critical time for the hermatypic corals of Japan. Coral Reefs, 11 (1): 13-21
- Veron JEN (1992b) Environmental control of Holocene changes to the world's most northern hermatypic coral outcrop. Pac Sci, 46: 405-425
- Veron JEN (1992c) Hermatypic corals of Japan. Aust Inst Mar Sci Monogr Series. 9: 234
- Veron JEN (2000a) Corals of the world, Vol 1. Aust Inst Mar Sci,

- Townsville, pp 463
- Veron JEN (2000b) Corals of the world, Vol 2. Aust Inst Mar Sci, Townsville, pp 429
- Veron JEN (2000c) Corals of the world, Vol 3. Aust Inst Mar Sci, Townsville, pp 490
- Veron JEN, Minchin PR (1992) Correlations between sea surface temperatures, circulation patterns and the distribution of hermatypic corals of Japan. Cont Shelf Res, 12: 835-857
- Wada T, Kaizuka S, Tamura T (1979) Geographical features of sea bottom at coast and shallow regions. Report of the general survey on natural environment of the Ogasawara (Bonin) Islands, (2): 85-110 (in Japanese)
- Wallace C (1999) Staghorn corals of the world: A revision of the coral genus Acropora. CSIRO Publishing, Collingwood, pp 421
- WWFJ (1995) WWF Nature series 2. Coral reefs in Shiraho, 48 p (in Japanese)
- Yamaguchi M (1986) *Acanthaster planci* infestations of reefs and coral assemblages in Japan: a retrospective analysis of control efforts. Coral Reefs, 5: 23-30
- Yamano H and Tamura M (2004) Detection limits of coral reef bleaching by satellite remote sensing: Simulation and data analysis, Remote Sensing of Environment, 90: 86-103
- Yamano H, Kayanne H, Yonekura N, Nakamura H, Kudo K (1998) Water circulation in a fringing reef located in a monsoon area: Kabira Reef, Ishigaki Island, Southwest Japan. Coral Reefs, 17 (1) 89-99
- Yamano H, Kayanne H, Yonekura N, Kudo K (2000) 21-year changes of backreef coral distribution: Causes and significance, J Coastal Res, 16: 99-110
- Yamano H, Kayanne H, Yonekura N (2001a) Anatomy of a modern coral reef flat: A recorder of storms and uplift in the late Holocene, J Sediment Res, 71: 295-304
- Yamano H, Abe O, Kitagawa H, Niu E, Nakamura T (2001b) Coral reef evolution at the leeward side of Ishigaki Island, southwest Japan. Radiocarbon, 43: 899-908
- Yamano H, Hori K, Yamauchi M, Yamagawa O, Ohmura A (2001c) Highest-latitude coral reef at Iki Island, Japan. Coral Reefs, 20 (1): 9-12
- Yamano H, Abe O, Matsumoto E, Kayanne H, Yonekura N (2003)
 "Influence of wave energy on Holocene coral reef
 development: an example from Ishigaki Island, Ryukyu Islands,
 Japan, Sedimentary Geology, 159: 27-41
- Yanagi T (1985) Setonaikai III-II physics. In: Coastal research council, the oceanographic society of Japan (ed) Coastal Oceanography of Japanese Islands, Tokai University Press, Tokyo, pp 709-714 (in Japanese*)
- Yokochi H (1999a) Coral comunity of the Sakiyama Bay Natural Conservation Area in Iriomote Island, Okinawa. State of Sakiyama Bay nature conservation area, Okinawa, Japan, March 1999, Nature Conservation Bureau, Environment Agency, pp 13-40 (in Japanese with English abstract)
- Yokochi H (1999b) Seagrass assemblage of the Sakiyama Bay Natural Conservation Area in Iriomote Island, Okinawa. State of Sakiyama Bay nature conservation area, Okinawa, Japan, March 1999, Nature Conservation Bureau, Environment Agency, pp 81-92 (in Japanese with English abstract)
- Yokochi H (2000) Impact of the 1998 bleaching event on coral communities in Amitori Bay, Ishigaki Island. 3rd JCRS summary, p 7 (in Japanese)
- Yokochi H, Ueno S, Ogura M, Nagai A, Habe T (1991)
 Spatial-temporal changes of the distribution and abundance of
 Acnathaster planci (L.) and corals at northwestern
 Iriomote-jima, Ryukyu Islands: 1983-1988. Journal of the
 School of Marine Science and Technology, Tokai University,
 32: 231-242 (in Japanese with English abstract)
- Yonekura N, Kayanne H, Matsumoto E, Ishii T, Matsushima Y, Hori N, Nakai T (1994) Geomorphic development of modern fringing reefs of Yoron Island, Ryukyu Arc, Japan. The Quatetnary Res, 33 (2): 67-79

- Adjeroud M, Tsuchiya M (1999) Genetic variation and clonal structure in the scleractinian coral *Pocillopora damicornis* in the Ryukyu Archipelago, southern Japan. Mar Biol, 134 (4): 753-760
- Atoda K (1947a) The larva and postlarval development of some reef-building corals I, *Pocillopora damicornis* cespitosa (Dana). Sci Rep Tohoku Univ (4th Serl, biol), 18: 24-47
- Atoda K (1947b) The larva and postlarval development of some reef-building coarls II, *Stylophora pistillata* (Esper). Sci Rep Tohoku Univ (4th Ser, biol), 18: 48-64
- Atoda K (1951a) The larva and postlarval development of the reef-building corals , Acropora bruggemanni (Brook). J Morphol, 89: 1-15
- Atoda K (1951b) The larva and postlarval development of some reef-building corals , *Seriatopora hystrix* Dana. Sci Rep Tohoku Univ (4th ser, biol), 19: 33-39
- Beechey FW (1831) Narrative of a voyage to the Pacific and Bering s Strait, London, 2 vols.
- Buddemeier RW, Kleypas JA, Aronson RB (2004) Coral reefs and global climate change: potential contributions of climate change to stresses on coral reef ecosystems. Pew Center on Global Climate Change, 42 pp + v
- Chikamori M (2001) Vegetation changes and human settlements on coral atolls in the Cook Islands. The Mita Historical Society, Faculty of letter, Keio University, Tokyo, 70 (3-4): (in Japanese)
- Culture Division, Okinawa Prefectural Board of Education (1991)
 Historiographical cartographic data. No.1 Seiho-Kuniezu and related materials. Reposited at Historiographical Institute, The University of Tokyo, Yohju-sha, Ginowan, Okinawa, 163 pp + 3 maps (in Japanese)
- Culture Division, Okinawa Prefectural Board of Education (1992) Historiographical Cartographic Data. No.2 Genroku-Kuniezu and related materials. Reposited at Okinawa Prefectural Archive Center, Yohju-sha, Ginowan, Okinawa, 165 pp + 3 maps (in Japanese)
- Dai CF, K Soong, Fan TY (1993) Sexual reproduction of corals in northern and southern Taiwan. Proc 7th Int Coral Reef Symp, 1: 448-455
- Darwin C (1842) The Structure and Distribution of Coral Reefs. Smith, Elder.
- Hall B (1818) Account of a Voyage of Discovery to the West Coast of Corea and the Loo-Choo Island, London, John Murray.
- Harii S, Kayanne H (2003) "Larval dispersal, recruitment, and adult distribution of the brooding stony Octocoral Heliopora coerulea on Ishigaki Island, southwest Japan.
- Coral Reefs, 22 (2): 188-196"
- Harii S, Kayanne H, Takigawa H, Hayashibara T, Yamamoto M (2002) Larval survivorship, competency periods and settlement of two brooding corals, *Heliopora coerulea* and *Pocillopora damicornis*. Mar Biol, 141 (1): 39-46
- Harii S, Omori M, Yamakawa H, Koike Y (2001) Sexual reproduction and larval settlement of the zooxanthellae coral *Alveopora japonica* Eguchi at high latitudes. Coral Reefs, 20 (1): 19-23
- Harrison PL, Babcock RC, Bull GD, Oliver JK, Wallace CC, Willis BL (1984) Mass spawning in tropical reef corals. Science, 223: 1186-1189
- Harrison PL, Wallace CC (1990) Reproduction, dispersal and recruitment of scleractinian corals. In: Dubinsky Z (ed) Coral Reef Ecosystems, Ecosystems of the world 25. Elsevier, Amsterdam, pp 133-207
- Hatta M, Fukami H, Wang W, Omori M, Shimoike K, Hayashibara T, Ina Y, Sugiyama T (1999) Reproductive and genetic evidence for a reticulate evolutionary history of mass-spawning corals. Mol Biol Evol, 16 (11): 1607-1613
- Hughes TP, Baird AH, Bellwood DR, Card M, Connolly SR, Folke C,

- Grosberg R, Hoegh-Guldberg O, Jackson JBC, Kleypas J, Lough JM, Marshall P, Nystrom M, Palumbi SR, Pandolfi JM, Rosen B, Roughgarden J (2003) Climate change, human impacts, and the resilience of coral reefs. Science, 301: 929-933
- Igarashi T, Higashi T, Hamada T (1992) Planulation of a coral *Alveopora japonica* in Izu, central Japan. Abstract, Proc 7th Int Coral Reef Symp: 501
- Japan Academy (1960) History of Biology in Japan, before the Meiji Period. Vol. 1, Japan Society for Promotion of Science, 674 pp + 16 (in Japanese)
- Kajishima T (1997) Documentary History of Zoology in Japan. Yasaka-Shobo, Tokyo, 652 pp + 27 (in Japanese)
- Konishi K (2004) Coralline limestones of the Ryukyus and George Johnes-150 Years ago-. Newsletter of the Japanese Coral Reef Society, 21: 2 (in Japanese)
- Konishi K (2002) Map of coral reefs in the Ryukyus. Newsletter of the Japanese Coral Reef Society, 13: 2 (in Japanese)
- Konishi K, Oshiro I, Tanaka T (1979) Holocene raised coral reef on Senkaku Island. Proc Japan Acad, 55B: 335-340
- Mezaki S, Toguchi K (2002) Place names of Okinawa Prefecture, Heibonsha, Tokyo, 781 pp (in Japanese)
- Nagaoka S (1987) Geology and geography of Minamitorishima and Okinotorishima. Annual Report of Ogasawara Research, 11: 88-95 (in Japanese*)
- Nishihira M (1990) Corals that color Okinawan Sea (1) Deep relations with corals. Green and Life Monthly, Green and Life Co., Naha, pp 58-61 (in Japanese)
- Nishihira M (1988) Play on the Shores of Coral Reef. --Kasbira Cove, Ishigaki Island--. Hirugi-sha, Naha, 201 pp (in Japanese)
- Nishikawa A, Katoh M, Sakai K (2003) Larval settlement rates and gene flow of broadcast-spawning (*Acropora tenuis*) and planula-brooding (*Stylophora pistillata*) corals. Mar Ecol Prog Ser, 256: 87-97
- Permata WD, Kinzie RA, Hidaka M (2000) Histological studies on the origin of planulae of the coral *Pocillopora damicornis*. Mar Ecol Prog Ser, 200: 191-200
- Ports and Harbors Bureau, Ministry of Land, Infrastructure and Transport (2003) Handbook for restoring oceanic nature, its planning, technology and implementation. Vol. 4 Coral reefs, 103 pp (in Japanese*)
- Richmond RH (1987) Energetic, competency, and long-distance dispersal of planula larvae of the coral *Pocillopora damicornis*. Mar Biol, 93: 527-533
- Ricmond RH, Hunter CL (1990) Reproduction and recruitment of corals: comparisons among the Caribbean, the tropical Pacific and the Red Sea. Mar Ecol Prog Ser, 60: 185–203
- Sakai K (1997) Gametogenesis, spawning, and planula brooding by the reef coral *Goniastrea aspera* (Scleractinia) in Okinawa, Japan. Mar Ecol Prog Ser, 151 (1-3) 67-72
- Setoguchi Y (2003) A day at Yaebishi. Coralway, Japan Transocean Air Co. Ltd., 88: 6-9 (in Japanese)
- Suzuki K (1999) Corals. Hosei University Press, Tokyo, 362 pp (in Japanese)
- Tayama T (1952) Coral reefs in southern archipelago. Hydraulic Department Report, 11: 292 pp (in Japanese*)
- Thunberg CP (1779) Resa uti Europa, Africa, Asia, foerraettad aren 1770-1779. (Travels in Europe, Africa and Asia:1794)
- Tokyo National Museum, and Historiographical Institute, The University of Tokyo (2001) Voice from the Past. The University of Tokyo, 254 pp + xvii (in Japanese with English Abstract)
- Tsuchiya M (1999) Ecosystem of coral reefs and tidal flats. In: Ikehara S, Kato Y (eds) Understanding the nature of Okinawa, Tsukijishokan, Tokyo, pp 46-63 (in Japanese*)
- Tsuchiya M (in preparation) Toward integrated coral reef science: A

- new challenge for conservation and restoration of coral reefs. Proc 10th Inter Coral Reef Symp, Keynote lecture.
- Uezu H (1973) Folk crafts and tools of Okinawa. Archeology and folklore series. Yorocotomo Co., Tokyo, 12: 342 pp + 14 (in Japanese)
- Uezu H (1982) Living and folk craft and tools of Okinawa. Archeology and folklore series, Yorocotomo Co., Tokyo, 19: 280 pp + 9 (in Japanese)
- Wilkinson C (2002) In: Wilkinson C (ed) Status of Coral Reefs of The World: 2002, Australian Institute of Marine Science, Townsville, 378 pp
- Yagi K, Makita H, Koba M (1992) The easter-most of Japan. People on Minamitorishima. Chiri (Geography), 37 (7): 28-36 (in Japanese*)
- Yamazato K (1991) Biology of corals. University of Tokyo Press , Tokyo, pp 150 (in Japanese)
- Yamazato K, Sai M, Tioho H, Sultana H (2000b) Planulation period of *Stylophora pistillata* and *Seriatopora hystrix*. Abstract, 9th Inter Coral Reef Symp, p 331
- Yamazato K, T Ushioda, M Sat, E Suwardi (2000a) Planulation of *Pocillopora damicornis* in subtropical water. Abstract, 9th Inter Coral Reef Symp, p 104