Harri Juhani Kuosa

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Dr. Harri Juhani Kuosa
Finnish Environment Institute
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Helsinki, 29 October 2014
General information

Harri Juhani Kuosa

europass Curriculum vitae

PERSONAL INFORMATION

Harri Juhani Kuosa

Ulvilantie 19 C A 1, FI 00350 Helsinki (Finland)

(+358) 40 6737554

harri.kuosa@ymparisto.fi

WORK EXPERIENCE

01/01/2012–Present — **Senior government official**

Finnish Environment Institute, Helsinki (Finland)

Expert in marine ecology

Marine research

01/01/2002–31/12/2011 — **College / university teaching professional**

University of Helsinki, Helsinki (Finland)

Professor in Baltic Sea research

University teaching/supervision

Expert in Baltic Sea ecology

Leadership of research projects

01/01/1991–31/12/2001 — **Senior government official**

Finnish Institute of Marine Research, Helsinki (Finland)

Expert in Baltic Sea ecology

Leadership of research projects

01/09/1987–31/12/1990 — **Biologist**

Walter & Andrée de Nottbeck Foundation, Academy of Finland, Helsinki (Finland)

Baltic Sea research

01/12/1991–Present — **Adjunct professor**

University of Helsinki, Helsinki (Finland)

- University teaching in aquatic sciences
- Supervision of MSc and PhD thesis
- Expert in marine biology

EDUCATION AND TRAINING

01/09/1980–31/08/1986 — **Master of Science, Botany**

University of Helsinki, Helsinki (Finland)

Occupational

Marine biological research

Biological laboratory work

01/09/1986–31/03/1991

PhD in Hydrobiology

University of Helsinki, Helsinki (Finland)

Occupational

- International level marine research
- Scientific writing
- Scientific presentation
- Microscopy techniques
- Isotope techniques

PERSONAL SKILLS

Mother tongue(s): Finnish

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	C1
Swedish	B2	B2	B2	B1	B1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills

Good communication skills from work in research and governmental position.
A number of popular presentations and articles.

Organisational / managerial skills

Leadership of several scientific projects.
Leadership of a research funding agency (annual budget 500 000€) for 10 years.

Job-related skills

Quality assurance work in biological parameters.
Mentoring skills (18 doctoral thesis completed).
Academic CV attached.
Publication list attached.

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Independent user	Independent user	Independent user	Basic user	Basic user

Digital competences - Self-assessment grid

Good command of office suite.

ANNEXES

- CV Harri Kuosa.pdf
- Publication list (2).pdf

CV Harri Kuosa.pdf

CV Harri Kuosa

1. Full name

- Kuosa, Harri Juhani
- Male

2. Date and place of birth, nationality, current residence

- 24.10.1959 Pertteli, Finnish, Helsinki

3. Education and degrees awarded

- PhD, University of Helsinki, Hydrobiology, 1991
- MSc, University of Helsinki, Botany, 1986
- Adjunct professor, Hydrobiology, University of Helsinki, 1991

4. Other training, qualifications and skills

5. Linguistic skills

- Finnish (mother tongue)
- English (good skills), Swedish (adequate skills), Germany (basic skills)

6. Current position

- Leading Researcher, Finnish Environment Institute, Marine Centre 01.01.2009- (on leave 01.01.2009-31.12.2011)

7. Previous professional appointments and career breaks

- Professor in Baltic Sea Research, University of Helsinki, 01.01.2002-31.12.2011
- Special Researcher, Finnish Institute of Marine Research, 01.10.1998-31.12.2008 (on leave 01.01.2002-31.12.2008)
- Researcher, Finnish Institute of Marine Research, 01.01.1991-30.09.1998
- Scientist, Walter and Andrée de Nottbeck Foundation, Tvärminne Zoological Station 1986-1991
- Adjunct Professor, University of Helsinki,
- On personal leave 03.05.1999-01.11.1999

8. Major research funding and academic leadership, student supervision

- Biodiversity changes – causes, consequences and management implications, 2013-2017 (EU BONUS 2012; Viable ecosystems, 200 000€)
- The response of pelagial food web to nutrient encrichment, 2007-2010 (The Academy of Finland #116677 358.010€)
- The role of Baltic Sea ice biota in carbon cycling during winter, 2003-2006 (The Academy of Finland/BIREME #202435 183.550€)
- Carbon sink mechanisms and their climate sensitivity in the Baltic Sea, 2002-2004 (The Academy of Finland SA/50653, 263.500€)
- Supervision of PhD–thesis: Pirjo Kuuppo 1994, Anna Uitto 1997, Johanna Ikävalko 1997, Marja Koski 1999, Anke Kremp 2000, Maiju Viherluoto 2001, Outi Setälä 2004, Hermanni Kaartokallio 2005, Sari Pertola 2006, Emil Vahtera 2007, Katrianna Halinen 2008 (member of supervising group), Janne-Markus Rintala 2009, Sanna Sopanen 2009, Jonna Piiparinen 2011, Laura Hoikkala 2012, Heidi Hällfors 2013, Markus Majaneva 2013, Catherine Henricsson (ongoing), Vivi Fleming-Lehtinen (ongoing)
- Supervision of MSc-thesis: Over 20 finished

9. Major teaching duties and pedagogical competence

- Teacher in over 50 courses and lectures at the University of Helsinki 1982-2015, all academic levels, responsible for courses in phytoplankton identification, sea-ice studies and experimental plankton research, Leader of a Nordic Marine Collegium course and teacher in 4 Nordic courses

10. Scientific awards and honours

11. Other scientific or academic merits and activities

- Pre-examiner of 6 PhD-thesis, opponent of 5 PhD-thesis: Kalle Olli (Tartu, Estonia 1997), Susanna Hajdu (Stockholm, Sverige 2002), Jaana Vaitomaa (Helsinki 2006), Arno Põllumae (Tartu, Estonia 2011), Helene Hodal (Tromsö, Norway 2011), Mustafa Manticki (Århus, Denmark 2015)
- Reviewer for adjunct professorships in Åbo Academy and University of Helsinki
- Reviewer for lectorships in University of Kalmar and University of Stockholm
- Reviewer for professorship in Tallinn University of Technology
- Reviewer for international research institutes: Norwegian Research Academy, Academy of Finland, EU (4th Framework Programme), National Environment Research Council of UK, Australian Antarctic Division, Nordic Research Academy and Netherlands Research Council for Earth and Life Sciences
- Memberships: International Society for Diatom Research, International Society of Protistologists
- Member of editorial board: Boreal Environment Research (1996-2001)
- Referee: Polar Biology, Sarsia, Marine Pollution Bulletin, Hydrobiologia, ICES Journal of Marine Science, Ecography, Journal of Plankton Research, Boreal Environment Research, Annales Botanici Fennici, Annales Zoologici Fennici, Journal of Environmental Monitoring, ISME Journal, Ambio
- Scientific advisor of Onni Talas Foundation, former Member of the council of the Faculty of Biological and Environmental Sciences and Member of the Board of Tvärminne Biological Station (University of Helsinki) and former scirntifc advisor of Walter and Andrée de Nottbeck Foundation
- Participation on 3 Antarctic research cruises
- Cruise leader of several Baltic expeditions onboard R/V Aranda
- Scientific presentations in about 40 international meetings

12. Scientific and societal impact of research

- Over 90 peer-reviewed publications in international journals; about 2350 total citations (without self-citations in Web of Science); H-index 28 (Web of Science), 33 (Google Scholar).

Conley, DJ; Björck, S; Bonsdorff, E; et al. 2009. Hypoxia-Related Processes in the Baltic Sea. ENVIRONMENTAL SCIENCE & TECHNOLOGY 43: 3412-3420, 170 cit.

Vahtera, E; Conley, DJ; Gustafsson, BG; et al. 2007. Internal ecosystem feedbacks enhance nitrogen-fixing cyanobacteria blooms and complicate management in the Baltic Sea. AMBIO 36:186-194, 159 cit.

Kivi, K; Kaitala, S; Kuosa, H; et al. 1993. Nutrient limitation and grazing control of the Baltic plankton community during annual succession. LIMNOLOGY AND OCEANOGRAPHY 38: 893-905, 136 cit.

Lignell, R; Heiskanen, AS; Kuosa, H; et al. 1993. Fate of a phytoplankton spring bloom - sedimentation and carbon flow in the planktonic food web in the northern Baltic. MARINE ECOLOGY-PROGRESS SERIES 94: 239-252, 121 cit.

Kuosa, H 1991. Picoplanktonic algae in the northern Baltic Sea - seasonal dynamics and flagellate grazing. MARINE ECOLOGY-PROGRESS SERIES 73: 269-276, 80 cit.

Stedmon, CA; Thomas, DN.; Granskog, M; et al 2007. Characteristics of dissolved organic matter in Baltic coastal sea ice: Allochthonous or autochthonous origins? ENVIRONMENTAL SCIENCE & TECHNOLOGY 41: 7273-7279, 72 cit.

Kuosa, H; Kivi, K 1989. Bacteria and heterotrophic flagellates in the pelagic carbon-cycle in the northern Baltic Sea. MARINE ECOLOGY-PROGRESS SERIES 53: 93-100, 72 cit.

Vuorinen, I; Hänninen, J; Viitasalo, M; et al. 1997. Proportion of copepod biomass declines with decreasing salinity in the Baltic Sea. ICES JOURNAL OF MARINE SCIENCE 55: 767-774, 66 cit.

Viherluoto, M; Kuosa, H; Flinkman, J; et al. 2000. Food utilisation of pelagic mysids, Mysis mixta and M. relicta, during their growing season in the northern Baltic Sea. MARINE BIOLOGY 136: 553-559, 65 cit.

Bianchi, F; Boldrin, A; Cioce, F; et al. 1991. Phytoplankton distribution in relation to sea ice, hydrography and nutrients in the northwestern Weddell Sea in early spring 1988 during EPOS. POLAR BIOLOGY 12: 225-235, 60 cit.

- Participation on the 3rd and 4th Periodic Assessments of the State of the Baltic

13. Positions of trust, merits and activities in society

- Corporal 1979

Publication list (2).pdf

Publication list

Harri Kuosa

A Peer-reviewed scientific articles

1. Kuosa H 1986. The phytoplankton of a small brackish-water bay, Tvärminne Byviken, southern Finland. Ophelia, Suppl 4:119-127.

2. Kuosa H 1987. Finnish records of the green-algal genus Scenedesmus (Chlorococcales) from coastal waters and rock-pools. Ann Bot Fennici 24:395-402.

3. Kuosa H 1988. Enumeration of autotrophic and heterotrophic flagellates in Baltic Sea sample a comparison of miroscopical methods. Arch Hydrobiol Beih, Ergebn Limnol 31:301-306.

4. Kuosa H, Marcussen B 1988. Grazing of bacteria and phytoplankton by heterotrophic nanoflagellates in a Baltic Sea sample. Hydrobiologia 161:211-216.

5. Kuosa H 1988. Observations on the taxonomy and ecology of Monoraphidium (Chlorophyceae, Chlorococcales) and Koliella (Chlorophyceae, Ulotrichales) species in the Tvärminne sea area, SW coast of Finland. Arch Protistenk 135:45-53.

6. Kuosa H 1988. Horizontal mesoscale distribution of phytoplankton in the Tvärminne sea area, southern Finland. Hydrobiologia 161:69-73.

7. Kuosa H 1988. Some planktonic rock-pool algae from the Tvärminne archipelago, SW coast of Finland. Ann Bot Fennici 25:111-116.

8. Lignell R, Kuosa H 1988. Sources of error in algal exudation measurements. Arch Hydrobiol Beih, Ergebn Limnol 31:97-104.

9. Kuosa H 1988. First record of Paulinella chromatophora (Testacea, Rhizopoda) from the northern Baltic Sea. Memoranda Soc Fauna Flora Fennica 64:77-78.

10. Kuosa H 1988. Some species of the green-algal genus Scenedesmus Meyen (Chlorococcales) in Finnish coastal waters. Algological Studies 49, Arch Hydrobiol Suppl 78:475-481.

11. Kuosa H 1988. Occurrence of autotrophic picoplankton along an open sea - inner archipelago gradient in the Gulf of Finland, Baltic Sea. Ophelia 28:85-93.

12. Kuosa H 1988. Estimating the proportion of active blue-green algal heterocysts in Baltic Sea samples by the TTC method. Ann Bot Fennici 25:233-236.

13. Kuosa H, Gyllenberg G 1989. Effect of lipid reserves on individual carbon content of two planktonic freshwater copepod species. Hydrobiologia 185:245-248.

14. Kuuppo-Leinikki P, Kuosa H 1989. Preservation of picoplanktonic cyanobacteria and heterotrophic nanoflagellates for epifluorescence microscopy. Arch Hydrobiol 114:631-636.

15. Kuosa H, Kivi K 1989. Bacteria and heterotrophic flagellates in the pelagic carbon cycle in the northern Baltic Sea. Mar Ecol Prog Ser 53:93-100.

16. Kuosa H, Gyllenberg G 1989. Lipid content and utilization of lipids in planktonic copepods in Lake Pääjärvi, southern Finland. Hydrobiologia 171:215-222.

17. Kuosa H 1989. Effect of oxygen concentration on the activity and survival of a copepod, Acartia bifilosa (Giesbr.). Aqua Fennica 19:47-50.

18. Kaitala S, Haario H, Kivi K, Kuosa H 1989. Effects of environmental parameters on planktonic communities. Chemometrics and Intelligent Laboratory Systems 7:153-162.

19. Kuuppo-Leinikki P, Kuosa H 1990. Estimation of flagellate grazing on bacteria by size fractionation in the northern Baltic Sea. Arch Hydrobiol Beih, Ergebn Limnol 34:283-290.

20. Kuosa, H 1990. Protozoan grazing on pico- and nanophytoplankton in the northern Baltic Sea:direct evidence from epifluorescence microscopy. Arch Hydrobiol 119:257-265.

21. Kuosa H 1990. Subsurface chlorophyll maximum in the northern Baltic Sea. Arch Hydrobiol 118:437-447.

22. Kuosa H 1990. Picoplanktonic cyanobacteria in the northern Baltic Sea:role in the phytoplankton ommunity. In: Barnes M, Gibson RN (eds). Trophic Relationships in the Marine Environment. Proc 24th Europ Mar Biol Symp, pp. 11-17.

23. Kuosa H 1990. Koliella spiralis Kuosa (Chlorophyceae, Ulotrichales). Baltic Sea phytoplankton identification sheet No. 4. Ann Bot Fennici 27:353-354.

24. Kuosa H 1991. Picoplanktonic algae in the northern Baltic Sea: seasonal dynamics and flagellate grazing. Mar Ecol Prog Ser 73:269-276.

25. Kuosa H 1991. A bloom of the blue-green alga, Anabaena lemmermannii var. minor Nostocophyceae), in the Gennarbyviken fresh-water reservoir, southern Finland. Memoranda Soc Fauna Flora Fennica 67:147-149.

26. Kuosa H 1991. Enumeration of pelagic ciliates with epifluorescence microscopy. Beitr Meereskd 62:119-121.

27. Lignell R, Kaitala S, Kuosa H 1992. Factors controlling phyto- and bacterioplankton in late spring on a salinity gradient in the northern Baltic. Mar Ecol Prog Ser 84:121-131.

28. Bianchi F, Boldrin A, Cioce F, Dieckmann,G, Kuosa H, Larsson A-M, Nöthig E-M, Sehlstedt P-I, Socal G, Syvertsen EE 1992. Phytoplankton distribution in relation to sea ice, hydrography and nutrients in the northwestern Weddell Sea in early spring 1988 during EPOS. Polar Biol 12:225-235.

29. Kuosa H, Norrman B, Kivi K, Brandini F 1992. Effects of Antarctic sea ice biota on seeding as studied in aquarium experiments. Polar Biol 12:333-339.

30. Kuparinen J, Kuosa H 1993. Autotrophic and heterotrophic picoplankton in the Baltic Sea. Adv Mar Biol 29:73-128.

31. Plass-Dülmer C, Khedim A, Koppmann R, Johnen FJ, Rudolph J, Kuosa H 1993. Emissions of light nonmethane hydrocarbons from the Atlantic into the atmosphere. Global Biogeochemical Cycles 7:211-228.

32. Lignell R, Heiskanen A-S, Kuosa H, Gundersen K, Kuuppo-Leinikki P, Pajuniemi R, Uitto A 1993. Fate of phytoplankton spring bloom: sedimentation and carbon flow in the planktonic food web in the northern Baltic. Mar Ecol Prog Ser 94:239-252.

33. Babichenko S, Poryvkina L, Arikese V, Kaitala S, Kuosa H 1993. Remote sensing of phytoplankton using laser-induced fluorescence. Remote Sens Environ 45:43-50.

34. Kivi K, Kaitala S, Kuosa H, Kuparinen J, Leskinen E, Lignell R, Marcussen B, Tamminen T 1993. Nutrient limitation and grazing control of the Baltic plankton community during annual succession. Limnol Oceanogr 38:893-905.

35. Pitkänen H, Tamminen T, Kangas P, Huttula T, Kivi K, Kuosa H, Sarkkula J, Eloheimo K, Kauppila P, Skakalsky B 1993. Late summer trophic conditions in the North-east Gulf of Finland and the river Neva estuary, Baltic Sea. Est Coast Shelf Sci 37:453-474.

36. Kivi K, Kuosa H 1994. Late winter microbial communities in the western Weddell Sea (Antarctica). Polar Biol 14:389-399.

37. Kuuppo-Leinikki P, Autio R, Hällfors S, Kuosa H, Kuparinen J, Pajuniemi R 1994. Trophic

interactions and carbon flow between picoplankton and protozoa in pelagic enclosures manipulated with nutrients and a top predator. Mar Ecol Prog Ser 107:89-102.

38. Poryvkina L, Babichenko S, Kaitala S, Kuosa H, Shalapjonok A 1994. Spectral fluorescence signatures in characterization of phytoplankton community composition. J Plankton Res 16:1315-1327.

39. Heinänen A, Kononen K, Kuosa H, Kuparinen J, Mäkelä K 1995. Bacterioplankton growth associated with physical fronts during a cyanobacterial bloom. Mar Ecol Prog Ser 116:233-245.

40. Larsen J, Kuosa H, Ikävalko J, Kivi K, Hällfors S 1995. A redescription of Scrippsiella hangoei (Schiller) comb. nov. a 'red tide' dinoflagellate from the northern Baltic. Phycologia 34:135-144.

41. Uitto A, Kaitala S, Kuosa H, Pajuniemi R. 1995. Effect of nutrient addition and predation of mysid shrimp (Neomysis Integer) on a plankton community in a short-term enclosure experiment in the northern Baltic. Aqua Fennica 25:23-31.

42. Kivi K, Kuosa H, Tanskanen S 1996. An experimental study on the role of crustacean and microprotozoan grazers in the planktonic food web. Mar Ecol Prog Ser 136:59-68.

43. Kuosa H, Autio R, Kuuppo P, Setälä O, Tanskanen S 1997. Nitrogen, silicon and zooplankton controlling the Baltic spring bloom: an experimental study. Est Coast Shelf Sci 45:813-821.

44. Kristiansen S, Farbrot T, Kuosa H, Myklestad S, Quillfeldt CH 1998. Nitrogen uptake in the infiltration community, an ice algal community in Antarctic pack-ice. Polar Biol 19:307-315.

45. Kononen K, Hällfors S, Kokkonen M, Kuosa H, Laanemets J, Pavelson J, Autio R 1998. Development of a subsurface chlorophyll maximum at the entrance to the Gulf of Finland, Baltic Sea. Limnol Oceanogr. 43:1089-1106.

46. Kuuppo P, Autio R, Kuosa H, Setälä O, Tanskanen S 1998. Nitrogen, silicate and zooplankton control of the planktonic food-web in spring. Est Coast Shelf Sci 46:65-75.

47. Vuorinen I, Hänninen J, Viitasalo M, Helminen U, Kuosa H 1998. Proportion of copepod biomass declines with decreasing salinity in the Baltic Sea. ICES J Mar Sci 55:767-774.

48. Koski M, Kuosa H 1999. The effect of temperature, food concentration and female size on the egg production of the planktonic copepod Acartia bifilosa. J Plankton Res 21:1779-1789.

49. Koski M, Viitasalo M, Kuosa H 1999. Seasonal development of mesozooplankton biomass and production on the SW coast of Finland. Ophelia 50:69-91.

50. Ennet P, Kuosa H, Tamsalu R 2000. The influence of upwelling and entrainment on the algal bloom in the Baltic Sea. J Mar Syst 25:359-367.

51. Viherluoto M, Kuosa H, Flinkman J, Viitasalo M 2000. Food utilisation of pelagic mysids, Mysis mixta and M. relicta, during their growing season in the northern Baltic Sea. Mar Biol 136:553-559.

52. Kiirikki M, Inkala A, Kuosa H, Pitkänen H, Kuusisto M, Sarkkula J 2001. Evaluating the effects of nutrient load reductions on the biomass of toxic nitrogen-fixig cyanobacteria in the Gulf of Finland, Baltic Sea. Boreal Env Res 6:131-146.

53. Dippner J W, Hänninen J, Kuosa H, Vuorinen I 2001. The influence of climate variability on zooplankton abundance in the Northern Baltic Archipelago Sea (SW Finland). ICES J Mar Sci 58:569-578.

54. Lehtiniemi M, Viitasalo M, Kuosa H 2002. Diet composition influences the growth of the pelagic mysid shrimp, Mysis mixta (Mysidacea). Boreal Env Res 7:121-128.

55. Delille D, Fiala M, Kuparinen J, Kuosa H, Plessis C 2002. Seasonal changes in microbial biomass in the first-year ice of the Terre Adélie area (Antarctica). Aquat Microb Ecol 28:257-265.

56. Pertola S, Faust MA, Kuosa H, Hällfors G 2003. Morphology of Prorocentrum minimum (Dinophyceae) in the Baltic Sea and in Chesapeake Bay: Comparison of cell shapes and thecal ornamentation. Bot Mar 46:477-486.

57. Tamsalu R, Zalesny V, Ennet P, Kuosa H 2003. Modelling of ecosystem processes in the Gulf of Finland. Proc Estonian Acad Sci Biol Ecol 52:332-345.

58. Lindén E, Kuosa H 2004. Effects of grazing and excretion of pelagial mysids (Mysis spp.) on size structure and biomass of the phyoplankton community. Hydrobiologia 514:73-78.

59. Raateoja M, Seppälä J, Kuosa H 2004. Bio-optical modeling of primary production in SW Finnish coastal zone, Baltic Sea: Fast repetition rate fluorometry in case 2 waters. Mar Ecol Prog Ser 267:9-26.

60. Ylöstalo P, Seppälä J, Kuosa H 2005. Spectral absorption and fluorescence of phytoplankton in different size fractions across the salinity gradient in the Baltic Sea. Int J Remote Sensing 26:387–414.

61. Setälä O, Autio R, Kuosa H 2005. Predator- prey interactions between a planktonic ciliate Strombidium sp. (Ciliophora, Oligotrichida) and the dinoflagellate Pfiesteria piscicida (Dinamoebiales, Pyrrophyta). Harmful Algae 4:235-247.

62. Setälä O, Autio R, Kuosa H, Rintala J, Ylöstalo P 2005. Survival and photosynthetic activity of different Dinophysis acuminata populations in the northern Baltic Sea. Harmful Algae 4:337-350.

63. Pertola S, Kuosa H, Olsonen R 2005. Is the invasion of Prorocentrum minimum (Dinophyceae) related to the nitrogen enrichment of the Baltic Sea? Harmful Algae 4:481-492.

64. Hajdu S, Pertola S, Kuosa H 2005. Prorocentrum minimum (Dinophyceae) in the Baltic sea:morphology, occurrence—a review. Harmful Algae 4:471-480.

65. Raateoja M, Seppälä J, Kuosa H, Myrberg K 2005. Recent changes in the productive state of the SW Finnish coast in the Baltic Sea. Ambio 34:188-191.

66. Laamanen M, Kuosa H 2005. Annual variability of biomass and heterocysts of the N2-fixing cyanobacterium Aphanizomenon flos-aquae in the Baltic Sea with reference to Anabaena spp. and Nodularia spumigena. Boreal Env Res 10:19-30.

67. Granskog MA, Kaartokallio H, Thomas DN, Kuosa H 2005. Influence of freshwater inflow on the inorganic nutrient and dissolved organic matter within coastal sea ice and underlying waters in the Gulf of Finland (Baltic Sea). Est Coast Shelf Sci 65:109-122.

68. Granskog MA, Kaartokallio H, Kuosa H, Thomas DN, Ehn J, Sonninen E 2005. Scales of horizontal patchiness in chlorophyll a, chemical and physical properties of landfast sea ice in the Gulf of Finland (Baltic Sea). Polar Biol 28:276-283.

69. Stoecker D, Autio R, Rintala J-M, Kuosa H 2005. Ecto-cellular enzyme activity associated with filamentous cyanobacteria. Aquatic Microb Ecol 40:151-161.

70. Bashmachnikov IL, Johannessen OM, Pettersson LH, Evensen G, Neelov IA, Savchuk OP, Leonov AV, Kaitala S, Stipa T, Kuosa H, Filatov NN 2005. Numerical simulations of the White Sea hydrodynamics and marine ecosystem. - In: Filatov NN et al. White Sea: Its marine environment and ecosystem dynamics influenced by global change. Springer, Berlin, pp. 337-442.

71. Kuosa H, Kaartokallio H 2006. Experimental evidence on nutrient and substrate limitation of Baltic sea-ice algae and bacteria. Hydrobiologia 554:1-10.

72. Rintala J-M, Piiparinen J, Autio R, Ehn J, Kuosa H 2006. Changes in phytoplankton biomass and nutrient quantities in the sea ice as responses to light/dark manipulations during different phases of the Baltic winter 2003. Hydrobiologia 554:12-24.

73. Fiala M, Kuosa H, Kopczynska E, Oriol L, Delille D 2006. Spatial and seasonal heterogeneity of sea ice microbial communities in the first-year ice of Terre Adélie area (Antarctica). Aquatic Microb Ecol 43:95-106.

74. Pertola S, Faust MA, Kuosa H 2006 . Survey on the germination and species composition of dinoflagellates from ballast tanks and recent sediments in ports on the South Coast of Finland, North-Eastern Baltic Sea. Mar Poll Bull 52:900-911.

75. Steffens M, Granskog MA, Kaartokallio H, Kuosa H, Luodekari K, Papadimitrou S, Thomas DN 2006. Spatial variation of biogeochemical properties of landfast ice in the Gulf of Bothnia. Ann Glaciol 44:80-87.

76. Brettar I, Labrenz M, Flavier S, Bötel J, Kuosa H, Christen R, Höfle MG 2006. Identification of a Thiomicrospira denitrificans –like epsilonproteobacterium as a catalyst for autotrophic denitrification in the central Baltic Sea. Appl Env Microbiol 72:1364-1372.

77. Granskog M, Kaartokallio H, Kuosa, H, Thomas D, Vainio J 2006. Sea ice in the Baltic Sea: A review. Est Coast Shelf Sci 70:145-160.

78. Kaartokallio H, Kuosa H, Thomas DN, Granskog M, Kivi K 2007. Biomass, composition and activity of organism assemblages along a salinity gradient in sea-ice subjected to river disharge in the Baltic Sea. Polar Biol 30:183-197.

79. Vahtera, E, Conley DJ, Gustafsson BG, Kuosa H, Pitkänen H, Savchuk OP, Tamminen T, Viitasalo M, Voss M, Wasmund N, Wulff F 2007. Internal ecosystem feedbacks enhance nitrogen-fixing cyanobacteria blooms and complicate management in the Baltic Sea. Ambio 36:186-194.

80. Kuparinen J, Kuosa H, Andersson A, Autio R, Granskog MA, Ikävalko J, Kaartokallio H, Karell K, Leskinen E, Piiparinen J, Rintala J-M, Tuomainen J 2007. Role of sea-ice biota in nutrient and organic material cycles in the northern Baltic Sea. Ambio 36:149-154.

81. Papadimitriou S, Thomas DN, Kennedy H, Haas C, Kuosa H, Krell A, Dieckmann GS 2007. Biogeochemical composition of natural sea ice brines from the Weddell Sea during early austral summer. Limnol Oceanogr 52:1809-1823.

82. Stedmon C, Thomas D, Granskog M, Kaartokallio H, Papadimitrou S, Kuosa H 2007. Characteristics of dissolved organic matter in Baltic coastal sea ice: Allochthonous or autochthonous origins? Environ Sci Technol 41:7273-7279.

83. Kaartokallio H, Tuomainen J, Kuosa H, Kuparinen J, Martikainen P, Servomaa K 2008. Succession of natural sea-ice bacterial communities in the Baltic Sea fast ice. Polar Biol 31:783-793.

84. Zemmelink HJ, Dacey JWH, Houghton L, Stefels J, Schröder G, Wisotzki M, Thomas DN, Papadimitriou S, Kuosa H, Koch B, Dittmar T 2008. Biogeochemistry of leads in the Weddell Sea during austral spring. Deep Sea Res; Part II 55:988-999.

85. Fleming-Lehtinen V, Laamanen M,, Kuosa H, Haahti H, Olsonen R 2008. Long-term development of inorganic nutrients and chlorophyll a in the open northern Baltic Sea. Ambio 37:86-92.

86. Conley DJ, Björck S, Bonsdorff E, Carstensen J, Destouni G, Gustafsson BG, Hietanen S, Kortekaas M, Kuosa H, Meier HEM, Müller-Karulis B, Nordberg K, Norkko A, Nürnberg G, Pitkänen H, Rabalais NN, Rosenberg R, Savchuk OP, Slomp CP, Voss M, Wulff F, Lovisa Zillén L 2008. Hypoxia-related rocesses in the Baltic Sea. Environ Sci Technol 43:3412–3420.

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H Patents and invention disclosures

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