

Katrin Iken, peer-Reviewed Publications:

(* denotes student author)

79. Angulo-Preckler C*, Spurkland T, Avila C, Iken K (2015) Antimicrobial activity of selected benthic Arctic invertebrates. *Polar Biol.* Doi 10.1007/s00300-015-1754-4
78. Duffy JE, Reynolds PL, Boström C, Coyer JA, Cusson M, Donadi, S, Douglass GJ, Eklöf JS, Engelen AH, Eriksson BK, Fredriksen S, Gamfeldt L, Gustafsson C, Hoarau G, Hori M, Hovel K, Iken K, Lefcheck JS, Moksnes P-O, Nakaoka M, O'Connor MI, Olsen JL, Richardson JP, Ruesink JL, Sotka EE, Thormar J, Whalen MA, Stachowicz JJ (2015) Biodiversity mediates top-down control in eelgrass ecosystems: a global comparative-experimental approach. *Ecol Lett* 18: 696-705
77. Tu KL, Blanchard AL, Iken K, Horstmann-Dehn L (2015) Small-scale spatial variability in benthic food webs in the northeastern Chukchi Sea. *Mar Ecol Prog Ser* 528: 19-37
76. Roy V*, Iken K, Archambault P (2015) Regional variability of megabenthic community structure across the Canadian Arctic. *Arctic*, 68(2): 180-192
75. Divine LM*, Iken K, Bluhm B (2015) Regional benthic food web structure on the Alaska Beaufort Sea shelf. *Mar Ecol Prog Ser* 531: 15-32, doi: 10.3354/meps11340
74. Roy V*, Iken K, Gosselin M, Tremblay J-E, Belanger S, Archambault P (2015) Benthic faunal assimilation pathways and depth-related changes in food-web structure across the Canadian Arctic. *Deep-Sea Res I* 102: 55-71
73. Wang SW*, Budge SM, Iken K, Gradinger RR, Springer AM, Wooller MJ (2015) Importance of sympagic production to Bering Sea zooplankton as revealed from fatty acid-carbon stable isotope analyses. *Mar Ecol Prog Ser* 518: 31-50. doi: 10.3354/meps11076
72. Roy V*, Iken K, Archambault P (2014) Environmental drivers of the Canadian Arctic megabenthic communities. *PLoS ONE* 9(7): e100900. doi:10.1371/journal.pone.0100900
71. Wang SW*, Budge SM, Gradinger RR, **Iken K**, Wooller MJ (2014) Fatty acid and stable isotope characteristics of sea ice and pelagic particulate organic matter in the Bering Sea: tools for estimating sea ice algal contribution to Arctic food web production. *Oecologia*: 174:699–712; doi: 10.1007/s00442-013-2832-3
70. **Iken K**, Bluhm BA, Søreide JE (2013) Arctic benthic communities. Arctic Report Card Update for 2013. http://www.arctic.noaa.gov/reportcard/benthic_communities.html
69. Miloslavich P, Cruz-Motta JJ, Klein E, **Iken K**, Weinberger V, Konar B, Trott T, Pohle G, Bigatti G, Benedetti-Cecchi L, Shirayama Y, Mead A, Palomo G, Ortiz M, Gobin J, Sardi A, Díaz JM, Knowlton A, Wong M, Peralta AC (2013) Large-scale spatial distribution patterns of gastropod assemblages in rocky shores. *PLoS One* 8(8): e71396. doi:10.1371/journal.pone.0071396
68. Murphy M*, **Iken K** (2013) Larval brachyuran crab timing and distribution in relation to water properties and flow in a high-latitude estuary. *Estuaries and Coasts* 37: 177-190. DOI 10.1007/s12237-013-9668-2

67. Spurkland T*, **Iken K**. (2012) Seasonal growth patterns of *Saccharina latissima* in a glacially-influenced subarctic estuary. *Phycological Research* 60: 261-275. DOI 10.1111/j.1440-1835.2012.00657.x
66. Weems J*, **Iken K**, Gradinger R, Wooller MJ. (2012) Carbon and nitrogen assimilation in the Bering Sea clams *Nuculana radiata* and *Macoma moesta*. *Journal of Experimental Marine Biology and Ecology* 430-431: 32-42
65. Deiman M*, **Iken K**, Konar B (2012) Susceptibility of *Nereocystis luetkeana* (Laminariales, Ochrophyta) and *Eualaria fistulosa* (Laminariales, Ochrophyta) spores to sedimentation. *Algae* 27: 115-123
64. McConnell B*, Gradinger R, **Iken K**, Bluhm BA (2012) Growth rates of juvenile *Scolecopsis squamata* (Polychaeta: Spionidae) from Chukchi Sea fast ice. *Polar Biology* 35: 1487-1494. DOI 10.1007/s00300-012-1187-2
63. Moran SB, Lomas MW, Kelly RP, Gradinger R, **Iken K**, Mathis JT (2012) Seasonal succession of net primary productivity, particulate organic carbon export, and autotrophic community composition in the eastern Bering Sea. *Deep-Sea Research II* 65-70: 84-97 DOI 10.1016/j.dsr2.2012.02.011
62. **Iken K** (2012) Grazers on benthic seaweeds. In: Wiencke C, Bischof K (eds) *Seaweed Biology: Novel Insights into Ecophysiology, Ecology and Utilization*. Ecological Studies, Springer Verlag, Berlin, pp 157-176.
61. Dubois A*, **Iken K** (2012) Seasonal variation in kelp phlorotannins in relation to grazer abundance and environmental variables in the Alaskan sublittoral zone. *Algae* 27: 9-19. DOI 10.4490/algae.2012.27.1.001
60. Hondolero D*, Bluhm B, **Iken K**[#] (2012) Caloric content of dominant benthic species from the Northern Bering and Chukchi Seas: historical comparisons and the effects of preservation. *Polar Biology*: 35:637-644. DOI 10.1007/s00300-011-1107-x (# corresponding author)
59. Bluhm BA, Grebmeier JM, Archambault P, Blicher M, Guðmundsson G, **Iken K**, Lindal Jørgensen L, Mokievsky V (2012) Benthos. In: Arctic Report Card: Update for 2012. <http://www.arctic.noaa.gov/reportcard/index.html>
58. Spurkland T*, **Iken K** (2011) Salinity and irradiance effects on growth and maximum quantum yield of photosynthesis of subarctic *Saccharina latissima* (Laminariales, Laminariaceae). *Botanica Marina* 54: 355-365, doi:10.1515/BOT.2011.042
57. Spurkland T*, **Iken K** (2011) Kelp bed dynamics in estuarine environments in subarctic Alaska. *Journal of Coastal Research* 27: 133-143. doi:10.2112/JCOASTRES-D-10-00194.
56. Pohle G, **Iken K**, Clarke KR, Trott T, Konar B, Cruz-Motta JJ, Wong M, Benedetti-Cecchi L, Mead A, Miloslavich P, Mieszkowska N, Milne R, Tamburello L*, Knowlton A, Kimani E, Shirayama Y (2011) Aspects of benthic decapod diversity and distribution from rocky nearshore habitat at geographically widely dispersed sites. *PLoS One* 6(4): e18606. doi:10.1371/journal.pone.0018606

55. Feder HM, **Iken K**[#], Blanchard AL, Jewett SC, Schonberg S (2011) Benthic food web structure in the southeastern Chukchi Sea: an assessment using $\delta^{13}\text{C}$ and $\delta^{15}\text{N}$ analyses. *Polar Biology* 34: 521-532
(# corresponding author)
54. Bluhm BA, Ambrose Jr WG, Bergmann M, Clough LM, Gebruk AV, Hasemann C, **Iken K**, Klages M, MacDonald IR, Renaud PE, Schewe I, Soltwedel T, Włodarska-Kowalczyk M (2011) Diversity of the arctic deep-sea benthos. *Marine Biodiversity* 41: 87-107. doi:10.1007/s12526-010-0078-4
53. Węśławski JM, Kendall MA, Włodarska-Kowalczyk M, **Iken K**, Kędra M., Legezynska J, Sejr M (2011). Climate change effects on Arctic fjord and coastal macrobenthic diversity – observations and predictions. *Marine Biodiversity* 41: 71-85. DOI 10.1007/s12526-010-0073-9
52. Wei CL, Rowe G, Escobar-Briones E, Boetius A, Soltwedel T, Caley MJ, Soliman Y, Huettmann F, Qu F, Yu Z, Pitcher CR, Haedrich RL, Wicksten MK, Rex MA, Baguley JG, Sharma J, Danovaro R, MacDonald IR, Nunnally CC, Deming JW, Montagna P, Lévesque M, Weslawski JM, Włodarska-Kowalczyk M, Ingole B, Bett BJ, Yool A, Bluhm BA, **Iken K**, Narayanaswamy BE (2010) Global Patterns and Predictions of Seafloor Biomass Using Random Forests. *PLoS One* 5(12): e15323
51. Cruz-Motta JJ, Miloslavich P, Palomo G, **Iken K**, Konar B, Pohle G, Trott T, Benedetti-Cecchi L, Herrera C, Hernández A, Sardi A, Bueno A, Castillo J, Klein E, Guerra-Castro E, Gobin J, Gómez DI, Riosmena-Rodríguez R, Mead A, Knowlton A, Shirayama Y (2010) Patterns of spatial variation of assemblages associated with intertidal rocky shores: a global perspective. *PLoS One* 5(12): e14354
50. **Iken K**, Konar B, Benedetti-Cecchi L, Cruz-Motta JJ, Knowlton A, Pohle G, Mead A, Miloslavich P, Wong M, Trott T, Mieszkowska N, Riosmena-Rodríguez R, Airoidi L, Kimani E, Shirayama Y, Frascetti S, Ortiz Touzet M, Silva A (2010) Large-scale spatial distribution patterns of echinoderms in nearshore rocky habitats. *PLoS One* 5(11): e13845
49. Konar B, **Iken K**, Cruz-Motta JJ, Benedetti-Cecchi L, Knowlton A, Pohle G, Miloslavich P, Edwards M, Trott T, Kimani E, Riosmena-Rodríguez R, Wong M, Jenkins S, Mead A, Silva A, Sousa Pinto I, Shirayama Y (2010) Global patterns of macroalgal diversity and biomass in rocky nearshore environments. *PLoS One* 5(10): e13195
48. Benedetti-Cecchi L, **Iken K**, Konar B, Cruz Motta JJ, Knowlton A, Pohle G, Castelli A, Tamburello L*, Mead A, Trott T, Miloslavich P, Wong M, Shirayama Y, Lardicci C, Palomo G, Maggi E (2010) Spatial relationships between polychaete assemblages and environmental variables over broad geographical scales. *PLoS One* 5(9): e12946
47. Diyabalanage T*, **Iken KB**, McClintock JB, Amsler CD, Baker BJ (2010) Palmadorins A–C, diterpene glycerides from the Antarctic nudibranch *Austrodoris kerguelensis*. *Journal of Natural Products* 73: 416-421
46. O’Dor R, Acosta J, Aksel Bergstad O, Brainard R, Bratney J, Canals M, Costa D, Gunn J, Horne JK, **Iken K**, Kocik J, Konar B, Payne J, Reid C, Robison B, Steinke D, Vanden Berghe E (2010) Bringing new life to ocean observation. In: Hall J, DE Harrison and D Stammer (eds) Proceedings of OceanObs’09: Sustained Ocean Observations and Information for Society, ESA Publication WPP-306

45. Bluhm BA, **Iken K**, Hopcroft RR (2010) Observations and exploration of the Arctic's Canada Basin and the Chukchi Sea: The Hidden Ocean and RUSALCA expeditions. *Deep-Sea Research II* 57: 1-4 (editorial)
44. MacDonald IR, Bluhm BA, **Iken K**, Gagaev S, Strong S* (2010) Benthic macrofaunal and megafaunal assemblages in the Arctic deep-sea Canada Basin. *Deep-Sea Research II* 57: 136-152
43. **Iken K**, Bluhm BA, Dunton KH (2010) Benthic food web structure under differing water mass properties in the southern Chukchi Sea. *Deep-Sea Research II* 57: 71-85
42. Gradinger R, Bluhm BA, **Iken K** (2010) Arctic sea ice ridges – safe heavens for sea ice fauna during periods of extreme ice melt? *Deep-Sea Research II* 57: 86-95
- 41[§]. Konar B, **Iken K**, Pohle G, Miloslavich P, Cruz-Motta JJ, Benedetti-Cecchi L, Kimani E, Knowlton A, Trott T, Iseto T, Shirayama Y (2010) Surveying Nearshore Biodiversity. In: AD McIntyre (ed) *Life in the World's Oceans: Diversity, Distribution, and Abundance*. Blackwell Publishing Ltd. (Oxford), pp 27-41
- [§] Book won two PROSE awards (American Publishers Awards for Professional and Scholarly Excellence), one for excellence in physical sciences and mathematics, and one for excellence in earth sciences
40. Sirenko BI, Bluhm BA, **Iken K**, Crane K, Gladish V (2009) Some results of investigation of composition and trophic groups of zoobenthos in the Chukchi Sea. *Explorations of the Fauna of the Seas* 64(72):200-212
39. Bluhm BA, **Iken K**, Mincks Hardy S, Sirenko BI, Holladay BA (2009) Community structure of epibenthic megafauna in the Chukchi Sea. *Aquatic Biology* 7: 269–293
38. Wulff A, **Iken K**, Quartino ML, Al-Handal A, Wiencke C, Clayton MN (2009) Biodiversity, Biogeography and Zonation of benthic micro- and macroalgae in the Arctic and Antarctic. *Botanica Marina* 52: 491-507
- Updated monograph version of above also published in: 2011. *Biology of Polar Benthic Algae*, C. Wiencke (ed.), Walter de Gruyter GmbH & Co. KH, Göttingen. pp. 23-52
37. Amsler CD, **Iken K**, McClintock JB, Baker BJ (2009) Defenses of polar macroalgae against herbivores and biofoulers. *Botanica Marina* 52: 535-545
- Updated monograph version of above also published in: 2011. *Biology of Polar Benthic Algae*, C. Wiencke (ed.), Walter de Gruyter GmbH & Co. KH, Göttingen. pp. 101-119
36. **Iken K**, Amsler CD, Amsler MO, McClintock JB, Baker BJ (2009) Field studies on deterrent roles of phlorotannins in Antarctic brown algae. *Botanica Marina* 52: 547-557
- Updated monograph version of above also published in: 2011. *Biology of Polar Benthic Algae*, C. Wiencke (ed.), Walter de Gruyter GmbH & Co. KH, Göttingen. pp. 121-138
35. Konar B, **Iken K**, Edwards M (2009) Depth-stratified community zonation patterns on Gulf of Alaska rocky shores. *Marine Ecology* 30: 63-73
34. Konar B, **Iken K** (2009) Influence of taxonomic resolution and morphological functional groups in multivariate analyses of macroalgal assemblages. *Phycologia* 48: 24-31
33. Hondolero DE*, Konar B, **Iken K**, Chenelot H (2007) Variation in low Intertidal Communities: Submerged vs. Emerged. In: Rigby P.R. and Shirayama Y. (eds) *Selected*

Papers of the NaGISA World Congress 2006, Publications of the Seto Marine Biological Laboratory, Special Publication Series Vol. VIII. pp 29-36

32. Chenelot HA, **Iken K**, Konar B, Edwards M (2007) Spatial and Temporal Distribution of Echinoderms in Rocky Nearshore Areas of Alaska In Rigby P.R. and Shirayama Y. (eds) Selected Papers of the NaGISA World Congress 2006, Publications of the Seto Marine Biological Laboratory, Special Publication Series Vol. VIII. pp 11-28
31. **Iken K**, Amsler CD, Hubbard JM, McClintock JB, Baker BJ (2007) Allocation patterns of phlorotannins in Antarctic brown algae. *Phycologia* 46: 386-395
30. Rigby R, **Iken K**, Shirayama, Y (2007) *Sampling biodiversity in coastal communities*. Kyoto University Press. pp. 145
29. Wiencke C, Clayton MN, Gómez I, **Iken K**, Lüder UH, Amsler CD, Karsten U, Hanelt D, Bischof K, Dunton K (2006) Life strategy, ecophysiology and ecology of seaweeds in polar waters. *Reviews in Environmental Sciences and Biotechnology* 6: 95-126
28. Konar B, Riosmena-Rodrigues R, **Iken K** (2006) Rhodolith beds: a newly discovered habitat in the North Pacific. *Botanica Marina* 49: 355-359
27. Greer SP, **Iken K**, McClintock JB, Amsler CD (2006) Bioassay-guided fractionation of antifouling compounds using computer-assisted motion analysis of brown algal spore swimming. *Biofouling* 22: 125-132
26. **Iken K**, Bluhm BA, Gradinger R (2005) Food web structure in the high Arctic Canada Basin: evidence from d13C and d15N analysis. *Polar Biology* 28: 238-249
25. Bluhm BA, MacDonald IR, Debenham C*, **Iken K** (2005) Macro- and megabenthic communities in the high Arctic Canada Basin: initial findings. *Polar Biology* 28: 218-231
24. Konar B, **Iken K** (2005) Competitive dominance among sessile marine organisms in a high Arctic boulder community. *Polar Biology* 29: 61-64
23. Amsler CD, **Iken K**, McClintock JB, Amsler MO, Peters KJ*, Hubbard JM, Furrow FB, Baker BJ (2005) Comprehensive evaluation of the palatability and chemical defenses of subtidal macroalgae from the Antarctic Peninsula. *Marine Ecology Progress Series* 294: 141-159
22. Burrows F, Bellmer F, **Iken K** (2005) Restoration monitoring of kelp and other macroalgae In: *Science-based restoration monitoring of coastal habitats*. Thayer GW, McTigue TA, Salz RJ, Merkey DH, Burrows FM, Gayaldo PF (eds) Vol. II, NOAA Coastal Ocean Program Decision Analysis Series No. 23, Chapter 5
21. Lippert H*, **Iken K**, Volk C, Köck M, Rachor E (2004) Chemical defense against predators in a sub-Arctic fjord. *Journal of Experimental Marine Biology and Ecology* 310: 131-146
20. Lippert H*, **Iken K** (2003) Biochemical composition and palatability of invertebrates in a sub-Arctic fjord. *The Marine Biological Association of the United Kingdom* 83: 1215-1219
19. Riemann-Zürneck K, **Iken K** (2003) A deep water corallimorpharian in shallow Antarctic habitats: Bionomics, histology, and systematics of *Corallimorphus profundus* Moseley, 1877 (Cnidaria: Hexacorallia). *Zoologische Verhandelingen Leiden* 345: 367-386

18. **Iken K**, Greer SP, McClintock JB, Amsler CD (2003) A new antifouling bioassay monitoring brown algal spore swimming behavior in the presence of echinoderm extracts. *Biofouling*, 19 (5): 327-334
17. Greer SP, **Iken K**, McClintock JB, Amsler CD (2003) Individual and coupled effects of sea star extracts and surface hydrophobicity on spore settlement and germination in the brown alga *Hinckesia irregularis*. *Biofouling*, 19 (5): 315 - 326
16. Lippert H*, Brinkmeyer R, Mülhaupt T, **Iken K** (2003) Antimicrobial activity in sub-Arctic marine invertebrates. *Polar Biology*, 26: 591-600
15. **Iken K**, Baker B (2003) Ainigmaptilones: New sesquiterpenes from the Antarctic gorgonian coral *Ainigmaptilon antarcticus* (Octocorallia, Gorgonacea). *Journal of Natural Products*, 66 (6): 888-890
14. **Iken K**, Avila C, Fontana A, Gavagnin M (2002) Chemical ecology and origin of chemical defense in the Antarctic nudibranch *Austrodoris kerguelenensis*. *Marine Biology*, 141: 101-109
13. [§] **Iken K**, Amsler CD, Greer SP, McClintock JB (2001) Quantitative and qualitative studies of the swimming behaviour of *Hinckesia irregularis* spores (Phaeophyceae): Ecological implications and parameters for quantitative swimming assays. *Phycologia*, 40: 359-366
[§] awarded the Tyge Christensen Prize, International Phycological Society
[§] received cover page of *Phycologia*, vol. 40
12. Lippert H*, **Iken K**, Rachor E, Wiencke C (2001) Macrofauna associated with macroalgae at Kongsfjord (Spitsbergen) – Species composition and distribution on abundant macroalgal species. *Polar Biology*, 24: 512-522
11. **Iken K**, Brey T, Wand U, Voigt J, Junghans P (2001) Trophic relationships in the benthic community at Porcupine Abyssal Plain (NE Atlantic): a stable isotope analysis. *Progress in Oceanography*, 50: 383-405
10. Amsler CD, **Iken KB**, McClintock JB, Baker BJ (2001) Secondary Metabolites from Antarctic Marine Organisms and their Ecological Implications. In: *Marine Chemical Ecology*, J.B. McClintock and B.J. Baker (eds), CRC Press, Boca Raton, Florida. 267-300
9. Amsler CD, **Iken KB** (2001) Chemokinesis and chemotaxis in marine bacteria and algae. In: *Marine Chemical Ecology*, J.B. McClintock and B.J. Baker (eds), CRC Press, Boca Raton, Florida. 413-430
8. Avila C, **Iken K**, Fontana A, Cimino G (2000) Chemical ecology of the Antarctic nudibranch *Bathydoris hodgsoni* Eliot, 1907: defensive role and origin of its natural products. *Journal of Experimental Marine Biology and Ecology*, 252(1): 27-44
7. Amsler CD, Moeller CB, McClintock JB, **Iken KB**, Baker BJ (2000) Chemical defenses against diatom fouling in antarctic marine sponges. *Biofouling*, 16(1): 29-45.
6. Gavagnin M, De Napoli A, Cimino G, **Iken K**, Avila C, Garcia FJ (1999) Absolute stereochemistry of diterpenoid diacylglycerols from the Antarctic nudibranch *Austrodoris kerguelenensis*. *Tetrahedron Asymmetry*, 10: 2647-2650

5. **Iken K** (1999). Feeding ecology of the Antarctic herbivorous gastropod *Laevilacunaria antarctica* Martens. *Journal of Experimental Marine Biology and Ecology*, 236 (1): 133-148
4. **Iken K**, Quartino ML, Wiencke C (1999) Histological identification of macroalgae from stomach contents of the Antarctic fish *Notothenia coriiceps* gives new insights in its feeding ecology. *Marine Ecology*, 20 (1): 11-18
3. **Iken K**, Avila C, Ciavatta ML, Fontana A, Cimino G (1998) Hodgsonal, a new drimane sesquiterpene from the mantle of the Antarctic nudibranch *Bathydoris hodgsoni*. *Tetrahedron Letters*, 39: 5635-5638
2. **Iken K**, Barrera-Oro ER, Quartino ML, Casaux RJ, Brey T (1997) Grazing in the Antarctic fish *Notothenia coriiceps*: Evidence for selective feeding on macroalgae. *Antarctic Science*, 9 (4): 386-391
1. Weykam G, Gómez I, Wiencke C, **Iken K**, Klöser H (1996) Photosynthetic characteristics and C:N ratios of macroalgae from King George Island (Antarctica). *Journal of Experimental Marine Biology and Ecology*, 204: 1-22