

## PML Publications 2006

1. **Airs, R.L., Llewellyn, C.** (2006). Improved detection and characterisation of fucoxanthin-type carotenoids: novel pigments in *Emiliana huxleyi* (Prymnesiophyceae). *Journal of Phycology*, 42, 391-399
2. **Allen, M.,** Schroeder, D.S., Holden, M.T.G., **Wilson, W.H.** (2006). Evolutionary history of the Coccolithoviridae. *Molecular Biology and Evolution*, 23, 86-92
3. **Allen, M.,** Schroeder, D.S., **Wilson, W.H.** (2006). Preliminary characterisation of repeat families in the genome of EhV-86, a giant algal virus that infects the marine microalga *Emiliana huxleyi*. *Archives of Virology*, 151, 525-535
4. **Allen, M.,** White, G.F., Morby, A.P. (2006). the response of escherichia coli to exposure to the biocide polyhexamethylene biguanide. *Microbiology-SGM*, 4, 152, 989-1000
5. **Allen, J.I., Archer, S., Gilbert, F., Blackford, J., Taylor, A.H.** (2006). Changes in DMS production and flux in relation to decadal shifts in ocean circulation. *Tellus B*, 58B, 242-254
6. **Allen, J.I., Blackford, J.,** Holt, J.T., Holt, M., Siddorn, J.R. (2006). Towards forecast of the NW European Coastal Shelf: benchmarking model performance. *Proceeding of the 4th international EuroGOOS European Operational Oceanography: Present and Future*, 482-487
7. **Allen, M.,** Schroeder, D.S., Donkin, A., **Crawford, K.J., Wilson, W.H.** (2006). Genome comparison of two coccolithoviruses. *Virology Journal*, 3:15, 0-0
8. **Allen, M.,** Forster, T., Schroeder, D.S., Hall, M., Roy, D., Ghazal, P., **Wilson, W.H.** (2006). Locus-specific gene expression pattern suggests a unique propagation strategy for a giant algal virus. *Journal of Virology*, 80, 7699-7705
9. **Allen, M., Wilson, W.H.** (2006). The coccolithovirus microarray: an array of uses briefings in functional genomics and proteomics. *Advance Access published on 11 October 2006. Briefings in Functional Genomics and Proteomics*, 5, 273-279
10. **Allen, M.** (2006). Long live viruses. *New Scientist*, 2572, 192, 73-73
11. **Austen, M.C., Widdicombe, S.** (2006). Comparison of the response of meio- and macrobenthos to disturbance and organic enrichment.. *J. Exptal. Mar. Biol. Ecol.*, 330, 96-104
12. **Austen, M.C.,** Whitlatch, R.B. (2006). Richard Martyn Warwick: A short biography. *Journal of Experimental Marine Biology and Ecology*, 330, 3-11
13. Baker, A.C., Goddard, V.J., Davy, J.E., Schroeder, D.S., Adams, D.A., **Wilson, W.H.** (2006). Identification of a diagnostic marker to detect freshwater cyanophages of filamentous cyanobacteria. *Applied and Environmental Microbiology*, 72, 5713-5719
14. **Bale, A.J., Widdows, J., Harris, C., Stephens, J.A.** (2006). Measurements of the critical erosion threshold of surface sediments along the Tamar estuary using a mini annular flume. *Continental Shelf Research*, 26, 1206-1216
15. **Barange, M.,** Hannesson, R., Herrick, S.F. (2006). Climate Change and the economics of the world's fisheries: an introduction. *Climate Change And The Economics Of The World's Fisheries*, New Horizons in Environmental Economics, Edward Elgar, Mass., 15-17
16. **Bhadury, P.,** Mohammad, B.T., Wright, P.C. (2006). The current status of natural products from marine fungi and their potential as anti-infective agents. *Journal of Industrial Microbiology and Biotechnology*, DOI 10.1007/s10295-005-0070-3, 325-337
17. **Bhadury, P., Austen, M.C.,** Bilton, D., Lamshead, P.J.D., Rogers, A.D., Smerdon, G.R. (2006). Molecular detection of marine nematodes from environmental samples: overcoming eukaryotic interference. *Aquatic Microbial Ecology*, 44, 97-103

18. **Bhadury, P., Austen, M.C.**, Bilton, D., Lamshead, P.J.D., Rogers, A.D., Smerdon, G.R. (2006). Development and evaluation of a DNA-barcoding approach for the rapid identification of marine nematodes. *Marine Ecology Progress Series*, 320, 1-9
19. **Bhadury, P., Austen, M.C.**, Bilton, D., Lamshead, P.J.D., Rogers, A.D., Smerdon, G.R. (2006). Exploitation of archived marine nematodes - a hot lysis DNA extraction protocol for molecular studies. *Zoologica Scripta*, doi:10.1111/j.1463-6409.2006.00250.x
20. Bolam, S.G., Rees, H.L., **Somerfield, P.J.**, Smith, R., **Clarke, K.R.**, **Warwick, R.M.**, **Atkins, M.**, Garnacho, E. (2006). Ecological consequences of dredged material disposal in the marine environment: A holistic assessment of activities around the England and Wales coastline. *Marine Pollution Bulletin*, 52, 415-426
21. Bothwell, J.H.F., Brownlee, C., Hetherington, A.M., Ng, C.K., **Wheeler, G.**, McAinsh, M.R. (2006). Biolistic delivery of Ca<sup>2+</sup> dyes into plant and algal cells. *Plant Journal*, 46(2), 327-335
22. Carberry, K., Owen, R., **Frickers, T.**, Otero, E., **Readman, J.W.** (2006). Contamination of Caribbean Coastal Waters by the Antifouling Herbicide Irgarol 1051. *Marine Pollution Bulletin*, 52, 635-644
23. Carr, M.E., Friedrichs, M.A.M., Schmeltz, M., Aite, M.N., Antoine, D., Arrigo, K., Asanuma, I., Aumont, O., Barber, R., Behrenfeld, M., Bidigare, R., Buitenhuis, E., Campbell, J., Ciotti, A., Dierssen, H., Dowell, M., Dunne, J., Esaias, W., Gentili, B., **Groom, S.B.**, Hoepffner, N., Hishisaka, J., Kameda, T., Le Quere, C., Lohrenz, S., Marra, J., Melin, F., Moore, K., Morel, A., Reddy, T., Ryan, J., Scardi, M., **Smyth, T.J.**, Turpie, K., **Tilstone, G.**, Waters, K., Yamanaka, Y. (2006). A comparison of global estimates of marine primary production from ocean color. *Deep Sea Research II*, 53, 741-770
24. Cermeno, P., Maranon, E., Harbour, D., **Harris, R.** (2006). Invariant scaling of phytoplankton abundance and cell size in contrasting marine environments. *Ecology Letters*, 9, 1210-1215
25. **Ciutat, A., Widdows, J., Readman, J.W.** (2006). Influence of cockle (*Cerastoderma edule*) bioturbation and tidal-current cycles on resuspension of sediment and contaminants (polycyclic aromatic hydrocarbons). *Marine Ecology Progress Series*, 41, 457-464
26. **Clark, D., Fileman, T., Joint, I.** (2006). Determination of ammonium regeneration rates in the oligotrophic ocean by gas chromatography/mass spectrometry. *Marine Chemistry*, 2, 98, 121-130
27. **Clarke, K.R.**, Chapman, M.G., **Somerfield, P.J.**, **Needham, H.R.** (2006). Dispersion-based weighting of species counts in assemblage analyses. *Marine Ecology Progress Series*, 320, 11-27
28. **Clarke, K.R., Somerfield, P.J.**, Chapman, M.G. (2006). On resemblance measures for ecological studies, including taxonomic dissimilarities and a zero-adjusted Bray-Curtis coefficient for denuded assemblages. *J. Exp. Mar. Biol. Ecol.*, 330, 55-80
29. **Clarke, K.R., Somerfield, P.J.**, Airoldi, L., **Warwick, R.M.** (2006). Exploring interactions by second-stage community analyses. *J. Exp. Mar. Biol. Ecol.*, 338, 179-192
30. Conklin, P.L., Gatzek, S., **Wheeler, G.**, Dowdle, J., Raymond, M.J., Rolinski, S., Isupov, M., Littlechild, J.A., Smirnov, N. (2006). Arabidopsis thaliana VTC4 encodes L-galactose 1-P phosphatase, a plant ascorbic acid biosynthetic enzyme. *Journal of Biological Chemistry*, 281, 15662-15670
31. Coombs, S.H., **Smyth, T.J.**, Conway, D., Halliday, N.C., Bernal, M., Stratoudakis, Y., Alvarez, P. (2006). Spawning season and temperature relationships for sardine (*Sardina pichardus*) in the eastern North Atlantic. *Journal of the Marine Biological Association UK*, 86, 1245-1252
32. Cresswell, T., Richards, J.P., Glegg, G.A., **Readman, J.W.** (2006). The impact of legislation on the usage and environmental concentrations of booster biocides. *Marine Pollution Bulletin*, 52, 1169-1175
33. Culverhouse, P.B., Williams, R., Simpson, R., **Gallienne, C.**, Reguera, B., Cabrini, M., Parisini, T., Pazos, Y., Wang, H., Escalera, L., Morono, A., Hensey, M., Silke, J., Pellegrino, A., Thomas, D., James, D., Longa, J., Kennedy, S., del Punta, G. (2006). HAB-BUOY 2006. A new instrument for monitoring HAB species. *African Journal of Marine Science*, 245-250

34. Culverhouse, P.F., **Williams, R.**, Benfield, M., Flood, P.R., Sell, A.F., Mazzocchi, M.G., Buttino, I., Sieracki, M. (2006). Future of automatic image analysis of plankton in marine research. *Marine Ecology Progress Series*, 312, 297-309
35. Davy, S.K., Burchett, S.G., Dale, A.L., Davies, P., Davy, J.E., Muncke, C., Hoegh-Guldberg, O., **Wilson, W.H.** (2006). Viruses: Agents of coral disease? *Diseases of Aquatic Organisms*, 69, 101-110
36. **Dixon, J.**, Statham, P.J., **Widdicombe, C.**, Jones, R., Barquero, S., Dickie, B., Nimmo, M., **Turley, C.M.** (2006). Cadmium uptake by marine micro-organisms in the English Channel and Celtic Sea. *Aquatic Microbial Ecology*, 44, 31-43
37. **Evans, C.**, Malin, G., Mills, G.P., **Wilson, W.H.** (2006). Viral infection of *Emiliana huxleyi* (Prymnesiophyceae) leads to elevated production of reactive oxygen species. *Journal of Phycology*, 42, 1040-1047
38. **Evans, C.**, Malin, G., **Wilson, W.H.**, Liss, P.S. (2006). Infectious titres of *Emiliana huxleyi* virus 86 are reduced by exposure to millimolar dimethyl sulphide and acrylic acid. *Limnology and Oceanography*, 51, 2468-2471
39. Fonsêca-Genevois, V. da, **Somerfield, P.J.**, Baeta Neves, M.H., Coutinho, R., Moens, T. (2006). Colonization and succession on artificial hard substrata by meiofauna. *Marine Biology*, 1039-1050
40. Fuller, N.J., **Tarran, G.A.**, **Cummings, D.**, **Woodward, E.M.S.**, Orcutt, K.M., Yallop, M., Le Gall, F., Scanlan, D.J. (2006). Molecular analysis of photosynthetic picoeukaryote community structure along an Arabian Sea transect. *Limnology and Oceanography*, 51(6), 2502-2514
41. Fuller, N.J., **Tarran, G.A.**, Yallop, M., Orcutt, K.M., Scanlan, D.J. (2006). Molecular analysis of picocyanobacterial community structure along an Arabian Sea transect reveals distinct spatial separation of lineages. *Limnology and Oceanography*, 51(6), 2515-2526
42. **Groom, S.B.**, Galvin, J. (2006). Optical phenomena over Plymouth. *Weather*, 61, 323-324
43. Han, G., Gable, K., Yan, L., **Allen, M.**, **Wilson, W.H.**, Moitra, M., Harmon, J.M., Dunn, T.M. (2006). Expression of a novel marine viral single-chain serine palmitoyltransferase. *Journal of Biological Chemistry*, 281, 39935-39942
44. Hannesson, R., Herrick, S.F., **Barange, M.** (2006). On the consequences of climate change in pelagic fish populations: a conclusion. *Climate Change and The Economics Of The World's Fisheries*, 296-304
45. Hannesson, R., **Barange, M.**, Herrick, S.F. (2006). Climate Change and The Economics Of The World's Fisheries. *Climate Change And The Economics Of The World's Fisheries*, 2006, 1-304
46. **Hardman-Mountford, N.**, Huthnance, J. (2006). The development of useful indicators for Marine Processes & Climate (MPC) and Underwater Sound. Report to the Inter-Agency Committee for Marine Science and Technology (IACMST). Mar 2006. 98pp
47. **Hardman-Mountford, N.** (2006). Product O.4 Global gridded time series of oceanic chlorophyll-a concentration from ocean colour. n/a, GCOS. Systematic Observation Requirements for Satellite-based Products for Climate. Supplemental details to the satellite-based component of the "Implementation Plan for the Global Observing System for Climate in Support of the UNFCCC", 35-35
48. Haugan, P.M., **Turley, C.**, Poertner, H.O. **2006**. Effects on the marine environment of ocean acidification resulting from elevated levels of CO<sub>2</sub> in the atmosphere, DN-utredning 2006-1, 1-36
49. Heywood, J.L., Zubkov, M.V., **Tarran, G.A.**, Fuchs, B.M., Holligan, P.M. (2006). Prokaryoplankton standing stocks in oligotrophic gyre and equatorial provinces of the Atlantic Ocean: Evaluation of inter-annual variability. *Deep Sea Research II Special Edition, Deep-Sea Research II: Topical Studies in Oceanography*, 53, 1530-1547
50. Hughes, C., Malin, G., **Nightingale, P.D.**, Liss, P.S. (2006). The effect of light stress on the release of volatile iodocarbons by 3 species of marine microalgae. *Limnology and Oceanography*, 51, 2849-2854

51. Irigoien, X., **Harris, R.** (2006). Comparative population structure, abundance and vertical distribution of six copepod species in the North Atlantic: evidence for intraguild predation? *Marine Biology Research*, 2, 276-290
52. Johnson, Z.I., Zinser, E.R., Coe, A., McNulty, N.P., **Woodward, E.M.S.**, Chisholm, S.W. (2006). Niche partitioning among *Prochlorococcus* ecotypes along ocean-scale environmental gradients. *Science*, 24 March 2006, 311, 1669-1669
53. **Joint, I.** (2006). Bacteria conversations: talking, listening and eavesdropping. *Journal of the Royal Society Interface*, 3, 459-463
54. Jonsson, P.R., van Duren, L.A., Amielh, M., Asmus, R., Aspden, R.J., Daunys, D., Friedrichs, M., Friend, P.L., Olivier, F., **Pope, N.**, Precht, E., Sauriau, P.G. (2006). Making water flow: a comparison of the hydrodynamic characteristics of 12 different benthic biological flumes. *Aquatic Ecology*, 40, 409-438
55. Kaiser, M.J., **Clarke, K.R.**, Hinz, H., **Austen, M.C.**, **Somerfield, P.J.**, Karakassis, I. (2006). Global analysis of the response and recovery of benthic biota to fishing. *Marine Ecology Progress Series*, 311, 1-14
56. **Kimmance, S.**, Atkinson, D., Montagnes, D.J. (2006). Do temperature-food interactions matter? Responses of production and its components in the model heterotrophic flagellate *Oxyrrhis marina*. *Aquat. Microb. Ecol.*, 42, 63-73
57. **Kitidis, V.**, Stubbins, A.P., Uher, G., Upstill Goddard, R.C., **Law, C.S.**, **Woodward, E.M.S.** (2006). Variability of chromophoric organic matter in surface waters of the Atlantic Ocean. *Deep Sea Research II*, 53, 1666-1684
58. **Kitidis, V.**, Tizzard, L., Uher, G., Judd, A., Upstill Goddard, R.C., Head, I.M., Gray, N.D., Taylor, G., Durán, R., Diez, R., Iglesias, J., García-Gil, S. (2006). The biogeochemical cycling of methane in Ria de Vigo, NW Spain: Sediment Processing and Sea-Air exchange. *Journal of Marine Systems*, 1-1
59. **Kitidis, V.**, Uher, G., Upstill Goddard, R.C., Mantoura, R.F.C., Spyres, G., **Woodward, E.M.S.** (2006). Photochemical production of ammonium in the oligotrophic Cyprus Gyre (Eastern Mediterranean). *Biogeosciences*, 3, 439-449
60. Lehodey, P., Alheit, J., **Barange, M.**, Baumgartner, T., Beaugrand, G., Drinkwater, K., Fromentin, J-M., Hare, S., Ottersen, G., Perry, I., Roy, C., Van der Lingen, C., Werner, F. (2006). Climate variability, fish and fisheries. *Journal of Climate*, 19, 5009-5030
61. Leonard, D.R.P., **Clarke, K.R.**, **Somerfield, P.J.**, **Warwick, R.M.** (2006). The application of an indicator based on taxonomic distinctness for UK marine biodiversity assessments. *Journal of Environmental Management*, 78, 52-62
62. **Lewis, K.**, **Allen, J.I.**, Richardson, A.J., Holt, J.T. (2006). Error quantification of a high resolution coupled hydrodynamic-ecosystem coastal-ocean model: Part3, validation with Continuous Plankton Recorder data. *Journal of Marine Systems*, 63, 209-224
63. **Lindeque, P.**, Hay, S.J., Heath, M.R., Ingvarsdottir, A., Rasmussen, J., Smerdon, G.R., Waniek, J. (2006). Integrating conventional microscopy and molecular analysis to analyse the abundance and distribution of four *Calanus* congeners in the North Atlantic. *Journal of Plankton Research*, 28, 2, 221-238
64. Lopez, E., Anadon, R., **Harris, R.** (2006). Functional responses of copepod nauplii using a high efficiency gut fluorescence technique. *Marine Biology*, 150, 893-903
65. Lopez-Urrutia, A., **San Martin, E.**, **Harris, R.**, Irigoien, X. (2006). Scaling the metabolic balance of the oceans. *Proceeding of the National Academy Of Sciences*, 103, 8739-8744
66. **Lowe, D.M.**, **Moore, M.N.**, **Readman, J.W.** (2006). Pathological reactions and recovery of hepatopancreatic digestive cells from the marine snail *Littorina littorea* following exposure to a polycyclic aromatic hydrocarbon. *Marine Environmental Research*, 61, 457-470

67. Lyons, B.P., Stentiford, G.D., Bignell, J., Goodsir, F., Sivyer, D.B., Devlin, M.J., **Lowe, D.M., Beesley, A., Pascoe, C.K., Moore, M.N.**, Gamacho, E. (2006). A biological effects monitoring survey of Cardigan Bay using flatfish histopathology, cellular biomarkers and sediment bioassays: findings of the Prince Madog Prize 2003. *Marine Environmental Research*, 62 Suppl. 1, S342-S346
68. **Mangi, S.C.**, Roberts, C.M. (2006). Quantifying the environmental impacts of artisanal fishing gear on Kenya's coral reef ecosystems. *Marine Pollution Bulletin*, 52, 1646-1660
69. Marshall, K., **Joint, I.**, Callow, M.E., Callow, J.A. (2006). Effect of Marine Bacterial Isolates on the Growth and Morphology of Axenic Plantlets of the Green Alga *Ulva linza*. *Microbial Ecology*, 52, 302-310
70. **Martinez Martinez, J.**, Norland, S., Thingstad, T.F., Schroeder, D.S., Bratbak, G., **Wilson, W.H.** (2006). Variability in microbial population dynamics between similarly perturbed mesocosms. *Journal of Plankton Research*, 28, 783-791
71. Mary, I., Cummings, D., Biegala, I.C., Burkill, P.H., Archer, S., Zubkov, M.V. (2006). Seasonal dynamics of bacterioplankton community structure at a coastal station in the western English Channel. *Aquat. Microb. Ecol.*, 42, 119-126
72. Mayor, D., Anderson, T.R., Irigoien, X., **Harris, R.** (2006). Feeding and reproduction of *Calanus finmarchicus* during non-bloom conditions in the Irminger Sea. *Journal of Plankton Research*, doi:10.1093/plankt/fbl047, 1-19
73. **McVeigh, A., Moore, M.N., Allen, J.I.**, Dyke, P. (2006). Lysosomal responses to nutritional and contaminant stress in mussel hepatopancreatic digestive cells: a modelling study. *Marine Environmental Research*, 62 Suppl., S433-S438
74. Mieszkowska, N., **Kendall, M.A.**, Hawkins, S.J., Leaper, R., Williamson, P., **Hardman-Mountford, N.**, Southward, A.J. (2006). Changes in the range of some common rocky shore species as a response to climate change. *Hydrobiologia*, 555, 241-251
75. **Miller, P., Shutler, J., Moore, G., Groom, S.B.** (2006). SeaWiFS discrimination of harmful algal bloom evolution. *International Journal of Remote Sensing*, 27, 2287-2301
76. Minier, C., **Moore, M.N.**, Galgani, F., Claisse, D. (2006). Multixenobiotic resistance protein expression in *Mytilus edulis*, *Mytilus galloprovincialis* and *Crassostrea gigas* from the French coasts. *Marine Ecology Progress Series*, 322, 143-154
77. **Moore, M.N., Allen, J.I., McVeigh, A.** (2006). Environmental prognostics: an integrated model supporting lysosomal stress responses as predictive biomarkers of animal health status. *Marine Environmental Research*, 61, 278-304
78. **Moore, M.N., Allen, J.I., McVeigh, A., Shaw, J.P.** (2006). Lysosomal and autophagic reactions as predictive indicators of environmental impact in aquatic animals. *Autophagy*, 2, 217-220
79. **Moore, M.N., Allen, J.I., Somerfield, P.J.** (2006). Autophagy: role in surviving environmental stress. *Marine Environmental Research*, 62 Suppl., S420-S425
80. **Moore, M.N.** (2006). Do nanoparticles present ecotoxicological risks for the health of the aquatic environment? *Environment International*, 32, 967-976
81. Morrison, N., Wood, A.J., Hancock, D., Shah, S., Hakes, L., Gray, T., Tiwari, B., Kille, P., Cossins, A., Hegarty, M., **Allen, M., Wilson, W.H.**, Olive, P., Last, K., Kramer, C., Bailhache, T., Reeves, J., Pallet, D., Warne, J., Nashar, K., Parkinson, H., Sansone, S., Rocca-Serra, P., Stevens, R., Snape, J., Field, D., Brass, A. (2006). Standard annotation of environmental OMICS data - Application to the transcriptomics domain. *OMICS: A Journal of Integrative Biology*, 10, 172-178
82. **Mühling, M., Somerfield, P.J.**, Harris, N., Belay, A., Whitton, B.A. (2006). Phenotypic analysis of *Arthrospira* (Spirulina) strains (cyanobacteria). *Phycologia*, 45, 148-157
83. **Mühling, M.**, Fuller, N.J., **Somerfield, P.J.**, Post, A.F., **Wilson, W.H.**, Scanlan, D.J., **Joint, I.**, Mann, N.H. (2006). High resolution genetic diversity studies of marine *Synechococcus* using rpoC1-based RFLP. *Aquat. Microb. Ecol.*, 263-275

84. Ostroumov, A., **Widdows, J.** (2006). Inhibition of mussel suspension feeding by surfactants of three classes. *Hydrobiologia*, 556, 381-386
85. **Pascoe, P.L.** (2006). Chromosomal polymorphism in the Atlantic dog-whelk, *Nucella lapillus* (Gastropoda: Muricidae): nomenclature, variation and biogeography. *Biological Journal of the Linnean Society*, 87, 195-210
86. Pemberton, K.L., **Clarke, K.R., Joint, I.** (2006). Quantifying uncertainties associated with the measurement of primary production. *Marine Ecology Progress Series*, 322, 51-59
87. Pinto, T.K., **Austen, M.C.,** Bemvenuti, C.E. (2006). Effects of macroinfauna sediment disturbance on nematode vertical distribution. *Journal Marine Biological Association*, 86, 227-233
88. Polimeme, L., **Allen, J.I.,** Zavatarelli, M. (2006). Model of interactions between dissolved organic carbon and bacteria in marine systems. *Aquatic Microbial Ecology*, 43, 127-138
89. **Pope, N., Widdows, J., Brinsley, M.** (2006). Estimation of bed shear stress using the turbulent kinetic energy (TKE) approach - a comparison of annular flume and field data. *Continental Shelf Research*, 26, 959-970
90. Poulton, A.J., Holligan, P.M., Hickman, A., Kim, Y-N., Adey, T.R., Stinchcombe, M.C., Holten, C., **Woodward, E.M.S.** (2006). Size-fractionated carbon fixation, chlorophyll-biomass and diagnostic pigments in the Atlantic Ocean. *Deep Sea Research II*, 53, 1593-1610
91. Poulton, A.J., Sanders, R., Holligan, P.M., Stinchcombe, M.C., Addey, J., Brown, L., **Chamberlain, K.** (2006). Phytoplankton mineralization in the Atlantic Ocean. *Glob. Biogeochem. Cyc.*, 20, 1-10
92. Pradhan, Y., Lavender, S.J., **Hardman-Mountford, N., Aiken, J.** (2006). Seasonal and inter-annual variability of chlorophyll-a concentration in the Mauritanian upwelling; observation of an anomalous event during 1998-99. *Deep Sea Research II Special Edition*, 53, 1548-1559
93. Puillat, I., Lazure, P., Jegou, A.M., Lampert, L., **Miller, P.I.** (2006). Mesoscale hydrological variability induced by northwesterly wind on the French continental shelf of the Bay of Biscay. *Scientia Marina*, 70, 15-26
94. **Readman, J.W.** (2006). Development, occurrence and regulation of antifouling paint biocides: historical review and future trends. *Review Series in Chemistry*, 5, 1-15
95. **Readman, J.W.** (2006). The world's waters: a chemical contaminant perspective. Royal Society of Chemistry publications, *An Introduction to Pollution Science*. Ed.: R.M. Harrison., 77-121
96. **Rees, A.P., Law, C.S., Woodward, E.M.S.** (2006). High rates of nitrogen fixation during an in-situ phosphate release experiment in the Eastern Mediterranean Sea. *Geophysical Research Letters*, 33, 0-0
97. **Rees, A.P., Woodward, E.M.S., Joint, I.** (2006). Concentrations and uptake of nitrate and ammonium in the Atlantic Ocean between 60 N and 50 S. *Deep Sea Research II*, 53, 1649-1665
98. Reinthaler, T., van Aken, H., Veth, C., Arístegui, J., **Robinson, C.,** Williams, P.JleB., Lebaron, P., Herndl, G. (2006). Prokaryotic respiration and production in the meso- and bathypelagic realm of the eastern and western North Atlantic basin. *Limnology and Oceanography*, 51, 3, 1262-1273
99. Reul, A.R., Rodriguez, J.R., Blanco, J.M.B., **Rees, A.,** Burkill, P.H. (2006). Control of microplankton size structure in contrasting water columns of the Celtic Sea. *Journal of Plankton Research*, 28, 449-457
100. **Robinson, C.,** Poulton, A.J., Holligan, P.M., Baker, A.R., Forster, G., **Gist, N.,** Jickells, T., Malin, G., Upstill Goddard, R.C., Williams, R.G., **Woodward, E.M.S.,** Zubkov, M.V. (2006). The Atlantic Meridional Transect (AMT) Programme: a contextual view 1995 - 2005. *Deep Sea Research II*, 1485-1515
101. **Robinson, C.,** Holligan, P.M., Jickells, T. (2006). The Atlantic Transect Programme - Preface. *Deep Sea Research II*, 53, 14 - 16, 1483-1484
102. Salas, N., Ortiz, L., Gilcoto, M., Varela, M., Bayona, J.M., **Groom, S.B.,** Alvarez-Salgado, X.A., Albaiges, J. (2006). Fingerprinting petroleum hydrocarbons in plankton and surface sediments during the spring and early summer blooms in the Galician coast (NW Spain) after the Prestige oil spill. *Marine Environmental Research*, 62, 388-413

103. **San Martin, E.**, Irigoien, X., **Harris, R.**, Lopez-Urrutia, A., Zubkov, M.V., Heywood, J.L. (2006). Variation in the transfer of energy in marine plankton along a productivity gradient in the Atlantic Ocean. *Limnology and Oceanography*, 51, 2084-2091
104. **San Martin, E., Harris, R.**, Irigoien, X. (2006). Latitudinal variation in plankton size spectra in the Atlantic Ocean. *Deep Sea Research II*, 53, 1560-1572
105. Scotter, A.J., Marshall, C.B., Graham, L.A., **Gilbert, J.A.**, Garnham, C.P., Davies, P.L. (2006). The basis for hyperactivity of antifreeze proteins. *Cryobiology*, 53, 229-239
106. Serret, P., Fernandez, E., **Robinson, C., Woodward, E.M.S.**, Perez, V. (2006). Local productivity does not control the balance between plankton photosynthesis and respiration in the open Atlantic Ocean. *Deep Sea Research II*, 53, 1611-1628
107. Sherrard, N.J., Nimmo, M., **Llewellyn, C.** (2006). Combining HPLC pigment markers and ecological similarity indices to assess phytoplankton community structure; An environmental tool for eutrophication. *The Science of the Total Environment*, 361, 97-110
108. Sherwin, T.J., Williams, M.O., Turrell, W.R., Hughes, S.L., **Miller, P.I.** (2006). A description and analysis of mesoscale variability in the Faroe-Shetland Channel. *Journal of Geophysical Research-Oceans*, 111, 0-0
109. **Shutler, J.**, Nixon, M.S. (2006). Zernike velocity moments for sequence-based description of moving features. *Image and Vision Computing*, 24, 343-356
110. **Smyth, T.J., Moore, G., Hirata, T., Aiken, J.** (2006). A semi-analytical model for the derivation of ocean color inherent optical properties: description, implementation and performance assessment. *Applied Optics*, 45, 8116-8131
111. **Somerfield, P.J.**, Cochran, S.J., Dahle, S., Pearson, T.H. (2006). Free-living nematodes and macrobenthos in a high-latitude glacial fjord. *Journal of Experimental Marine Biology and Ecology*, 330, 284-296
112. **Somerfield, P.J.**, Atkins, M., Bolam, S.G., **Clarke, K.R.**, Garnacho, E., Rees, H.L., Smith, R., **Warwick, R.M.** (2006). Relative impacts at sites of dredged-material relocation in the coastal environment: a phylum-level meta-analysis approach. *Marine Biology*, 148, 1231-1240
113. **Stebbing, A.R.D.** (2006). Genetic parsimony: a factor in the evolution of complexity, order and emergence. *Biological Journal of the Linnean Society*, 88, 295-308
114. Stubbins, A.P., Uher, G., **Kitidis, V., Law, C.S.**, Upstill Goddard, R.C., **Woodward, E.M.S.** (2006). The Open Ocean Source of Atmospheric Carbon Monoxide. *Deep Sea Research II*, 53, 1685-1694
115. Stubbins, A.P., Uher, G., **Law, C.S.**, Mopper, K., **Robinson, C.**, Upstill Goddard, R.C. (2006). Open Ocean Carbon Monoxide Photoproduction. *Deep Sea Research II*, 1695-1705
116. Suggest, D., Moore, C.M., Maranon, E., **Omachi, C.Y.**, Varela, M., **Aiken, J.**, Holligan, P.M. (2006). Photosynthetic electron turnover in the tropical and subtropical Atlantic Ocean. *Deep Sea Research II*, 53, 1573-1592
117. **Tarran, G.A.**, Heywood, J.L., Zubkov, M.V. (2006). Latitudinal changes in the standing stocks of nano- and picoeukaryotic phytoplankton in the Atlantic Ocean. *Deep Sea Research II Special Edition, Deep-Sea Research II: Topical Studies in Oceanography*, 53, 1516-1529
118. **Torres, R., Allen, J.I.**, Figueiras, F.G. (2006). Sequential data assimilation in an upwelling influenced estuary. *Journal of Marine Systems*, doi:10.1016/j.jmarsys.2006.02.01, 0-0
119. **Torres, R.**, Barton, E.D. (2006). Onset and development of the Iberian poleward flow along the Galician coast. *Continental Shelf Research*, 26, 1134-1153
120. **Townsend, M.**, Worsfold, T.M., Smith, P.R.J., Martina, L.J., **McNeill, C.L., Kendall, M.A.** (2006). Occurrence of *Sternaspis scutata* (Polychaeta: Sternaspidae) in the English Channel. *Cahiers de Biologie Marine*, 47, 281-285

121. **Turley, C.M., Blackford, J., Widdicombe, S., Lowe, D.M., Nightingale, P.D., Rees, A.P.** (2006). Reviewing the Impact of Increased Atmospheric CO<sub>2</sub> on Oceanic pH and the Marine Ecosystem. Proceedings of the Avoiding Dangerous Climate Change Symposium, 8, 65-70
122. **Turley, C.** (2006). Impacts of Climate Change on Ocean Acidification in Marine Climate Change Impacts Annual Report Card 2006 (Eds. Buckley, P.J, Dye, S.R. and Baxter, J.M), Online Summary Reports, MCCIP, Lowestoft, [www.mccip.org.uk](http://www.mccip.org.uk)
123. **Turley, C.M.** (2006) Ocean acidification and its impacts. In: Confronting Climate Change: Critical Issues For New Zealand Edited by Ralph Chapman, Jonathan Boston and Margot Schwass, Published by Victoria University Press, 125-133.
124. **Uncles, R.J., Stephens, J.A., Law, D.J.** (2006). Turbidity maximum in the macrotidal, highly turbid Humber Estuary, UK: Floccs, Fluid Mud, Stationary Suspensions and Tidal Bores. Estuarine, Coastal and Shelf Science, 67, 30-52
125. **Uncles, R.J., Stephens, J.A., Harris, C.** (2006). Properties of suspended sediments in the estuarine turbidity maximum of the highly turbid Humber Estuary system, UK. Ocean Dynamics, 56, 235-247
126. **Uncles, R.J., Stephens, J.A., Harris, C.** (2006). Runoff and tidal influences on the estuarine turbidity maximum region of a highly turbid system: the upper Humber and Ouse Estuary, UK. Marine Geology, 235, 213-228
127. Underwood, A.J., **Clarke, K.R.** (2006). Response on a proposed method for analysing experiments on food choice. Journal of Experimental Marine Biology and Ecology, 335, 151-153
128. Varela, M., Bode, A., Lorenzo, J., Alvarez-Ossorio, M.T., Miranda, A., Patrocinio, T., Anadon, R., Viesca, L., Rodriguez, N., Valdes, L., Urrutia, A., Rodriguez, J.M., Alvarez-Salgado, X.A., **Groom, S.B.** (2006). The effect of the "Prestige" oil spill on the plankton in the N-NW Spanish coast. Marine Pollution Bulletin, 272-286
129. **Warwick, R.M., Dashfield, S., Somerfield, P.J.** (2006). The integral structure of a benthic infaunal assemblage. Journal of Experimental Marine Biology and Ecology, 330, 12-18
130. **Wheeler, G., Tait, K., Taylor, A.R., Brownlee, C., Joint, I.** (2006). Acyl-homoserine lactones modulate the settlement rate of the marine alga, *Ulva intestinalis*, via a novel chemokinetic mechanism. Plant, Cell and Environment, 29(4), 608-618
131. **Widdows, J., Brinsley, M., Pope, N., Staff, F., Bolam, S.G., Somerfield, P.J.** (2006). Temporal changes in biota and sediment erodability following the placement of fine dredge material on the upper intertidal shores of estuaries in Essex. Marine Ecology Progress Series, 319, 27-41
132. **Widdows, J., Staff, F.** (2006). Biological effects of contaminants: measurement of scope for growth in mussels. ICES Techniques in Marine Environmental Sciences, 1-28
133. **Wilson, W.H., Schroeder, D.S., Ho, J., Canty, M.** (2006). Phylogenetic analysis of PgV-102P, a new virus from the English Channel that infects *Phaeocystis globosa*. Journal of the Marine Biological Association UK, 86, 485-490
134. Worm, B., Barbier, E.B., Duffy, J.E., Folke, C., Halpern, B.S., Jackson, J.B.C., Lotze, H.K., Micheli, F., Palumbi, S.R., Sala, E., Selkoe, K.A., Stachowicz, J.J., Watson, R., **Beaumont, N.J.** (2006). Impact of biodiversity loss on ocean ecosystem services. Science, 314, 787-790
135. **Yebra, L., Harris, R., Wilson, R., Davidson, R., Montagnes, D.J.** (2006). Epizooplankton summer production in the Irminger Sea. Journal of Marine Systems, 62, 1-8
136. Zubkov, M.V., **Tarran, G.A., Burkill, P.H.** (2006). Bacterioplankton of low and high DNA content in the suboxic waters of the Arabian Sea and the Gulf of Oman: abundance and amino acid uptake. Aquat. Microb. Ecol., 43, 23-32