

## PML Publications: 2012

1. **Allen, M.J., Tait, K.,** Muehling, M., Weynberg, K., **Bradley, C.,** Trivedi, U., Gharbi, K., **Nissimov, J.,** Mavromatis, K., Jensen, C.N., Grogan, G., **Ali, S.T.** Genome Sequence of *Stenotrophomonas maltophilia* PML168, Which Displays Baeyer-Villiger Monooxygenase Activity. *Journal of Bacteriology* 194, 4753-4754.
2. Al-Subiai, S.N., Arlt, V.M., **Frickers, P.E., Readman, J.W.,** Stolpe, B., Lead, J.R., Moody, A.J., Jha, A.N. Merging nano-genotoxicology with eco-genotoxicology: An integrated approach to determine interactive genotoxic and sub-lethal toxic effects of C-60 fullerenes and fluoranthene in marine mussels, *Mytilus* sp. *Mutation Research-Genetic Toxicology and Environmental Mutagenesis* 745, 92-103.
3. **Archer, S.D., Kimmance, S.A., Stephens, J.A., Hopkins, F.E.,** Bellerby, R.G.J., Shulz, K.G., Piontek, J., Engel, A. Contrasting responses of DMS and DMSP to ocean acidification in Arctic waters. *Biogeosciences Discussions*, 9, 12803-12843
4. **Artoli, Y., Blackford, J.C., Butenschoen, M.,** Holt, J.T., Wakelin, S.L., Thomas, H., Borges, A.V., **Allen, J.I.** The carbonate system in the North Sea: Sensitivity and model validation. *Journal of Marine Systems* 102, 1-13.
5. Avgoustidi, V., **Nightingale, P.D.,** Joint, I., Steinke, M., Turner, S.M., **Hopkins, F.E.,** Liss, P.S. Decreased marine dimethyl sulfide production under elevated CO<sub>2</sub> levels in mesocosm and in vitro studies. *Environmental Chemistry* 9, 399-404.
6. **Balasundaram, B., Skill, S.C., Llewellyn, C.A.** A low energy process for the recovery of bioproducts from cyanobacteria using a ball mill. *Biochemical Engineering Journal* 69, 48-56.
7. Barnes, R.S.K., **Barnes, M.K.S.** Shore height and differentials between macrobenthic assemblages in vegetated and unvegetated areas of an intertidal sandflat. *Estuarine Coastal and Shelf Science* 106, 112-120.
8. **Beale, R.,** Liss, P.S., **Dixon, J.L., Nightingale, P.D.** Quantification of oxygenated volatile organic compounds in seawater by membrane inlet-proton transfer reaction/mass spectrometry. *Analytica Chimica Acta* 706, 128-134.
9. Bell, T.G., Malin, G., Lee, G.A., Stefels, J., **Archer, S.,** Steinke, M., Matrai, P. Global oceanic DMS data inter-comparability. *Biogeochemistry* 110, 147-161.
10. Biller, P., Ross, A.B., **Skill, S.C.,** Lea-Langton, A., **Balasundaram, B.,** Hall, C., Riley, R., **Llewellyn, C.A.** Nutrient recycling of aqueous phase for microalgae cultivation from the hydrothermal liquefaction process. *Algal Research*, 1, 70-76
11. Birchenough, S.N.R., Buhl-Mortensen, L., Craeymeersch, J.A., Dannheim, J., Degraer, S., Godbold, J., Foveau, A., **Queiros, A.M.,** Reiss, H. Report of the Study Group on Climate related Benthic processes in the North Sea (SGCBNS). *ICES Cooperative Research Reports, ICES CM* 2011/SSGEF, 12, 1-24
12. Blanchard, J.L., Jennings, S., Holmes, R., Harle, J., **Merino, G., Allen, J.I.,** Holt, J., Dulvy, N.K., **Barange, M.** Potential consequences of climate change for primary production and fish production in large marine ecosystems. *Philosophical Transactions of the Royal Society B-Biological Sciences* 367, 2979-2989.
13. Borges Mendes, C.R., de Souza, M.S., Tavano Garcia, V.M., Leal, M.C., **Brotas, V.,** Eiras Garcia, C.A. Dynamics of phytoplankton communities during late summer around the tip of the Antarctic Peninsula. *Deep-Sea Research Part I-Oceanographic Research Papers* 65, 1-14.
14. **Brewin, R.J.W., Dall'Olmo, G., Sathyendranath, S., Hardman-Mountford, N.J.** Particle backscattering as a function of chlorophyll and phytoplankton size structure in the open-ocean. *Optics Express* 20, 17632-17652.

15. **Brewin, R.J.W., Hirata, T., Hardman-Mountford, N.J.,** Lavender, S.J., **Sathyendranath, S.,** Barlow, R. The influence of the Indian Ocean Dipole on interannual variations in phytoplankton size structure as revealed by Earth Observation. *Deep-Sea Research Part II-Topical Studies in Oceanography* 77-80, 117-127.
16. Brito, A.C., **Brotas, V.,** Caetano, M., Coutinho, T.P., Bordalo, A.A., Icely, J., Neto, J.M., Serodio, J., Moita, T. Defining phytoplankton class boundaries in Portuguese transitional waters: An evaluation of the ecological quality status according to the Water Framework Directive. *Ecological Indicators* 19, 5-14.
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20. **Butenschoen, M.,** Zavatarelli, M., Vichi, M. Sensitivity of a marine coupled physical biogeochemical model to time resolution, integration scheme and time splitting method. *Ocean Modelling* 52-53, 36-53.
21. Callaway, R., Shinn, A.P., et al. including **Ellis, R.P.** Review of climate change impacts on marine aquaculture in the UK and Ireland. *Aquatic Conservation-Marine and Freshwater Ecosystems* 22, 389-421.
22. Campanelli, M., Estelles, V., **Smyth, T.,** Tomasi, C., Martinez-Lozano, M.P., Claxton, B., Muller, P., Pappalardo, G., Pietruczuk, A., Shanklin, J., Colwell, S., Wrench, C., Lupi, A., Mazzola, M., Lanconelli, C., Vitale, V., Congeduti, F., Dionisi, D., Cardillo, F., Cacciani, M., Casasanta, G., Nakajima, T. Monitoring of Eyjafjallajökull volcanic aerosol by the new European Skynet Radiometers (ESR) network. *Atmospheric Environment* 48, 33-45.
23. Carpenter, L.J., **Archer, S.D., Beale, R.** Ocean-atmosphere trace gas exchange. *Chemical Society Reviews* 41, 6473-6506.
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25. Cheize, M., Sarthou, G., **Croot, P.L.,** Bucciarelli, E., Baudoux, A-C., Baker, A.R. Iron organic speciation determination in rainwater using cathodic stripping voltammetry. *Analytica Chimica Acta* 736, 45-54.
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27. Christensen, A., **Butenschon, M.,** Gürkan, Z., **Allen, J.I.** (2012). Towards an integrated forecasting system for pelagic fisheries. *Ocean Science Discussions*, 9, 1437-1479
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29. **Dall'Olmo, G.,** Boss, E., Behrenfeld, M.J., Westberry, T.K. Particulate optical scattering coefficients along an Atlantic Meridional Transect. *Optics Express* 20, 21532-21551.
30. Dammschaeuser, A., **Croot, P.L.** Low colloidal associations of aluminium and titanium in surface waters of the tropical Atlantic. *Geochimica et Cosmochimica Acta* 96, 304-318.

31. **de Jesus, J., Walker, P., Grant, M., Groom, S.** WPS orchestration using the Taverna workbench: The eScience approach. *Computers & Geosciences* 47, 75-86.
32. de Jong, J., Schoemann, V., Lannuzel, D., **Croot, P.**, de Baar, H., Tison, J-L. Natural iron fertilization of the Atlantic sector of the Southern Ocean by continental shelf sources of the Antarctic Peninsula. *Journal of Geophysical Research-Biogeosciences* 117.
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34. Di, Y., Schroeder, D., Highfield, A., **Readman, J.**, Jha, A. Integrated biological responses and tissue-specific expression of p53 and ras genes in marine mussels following exposure to C-60 fullerenes and/or benzo(alpha)pyrene. *Mutagenesis* 27, 811-811.
35. **Dixon, J., Nightingale, P.D.** Fine scale variability in methanol uptake and oxidation in the microlayer and near-surface waters of the Atlantic. *Biogeosciences Discussions*, 9, 4513-4542
36. **Dixon, J.L., Nightingale, P.D.** Fine-scale variability in methanol uptake and oxidation: from the microlayer to 1000m. *Biogeosciences* 9, 2961-2972.
37. Donohue, P.J.C., Calosi, P., Bates, A.H., **Laverock, B.**, Rastrick, S., Mark, F.C., Strobel, A., **Widdicombe, S.** Impact of exposure to elevated pCO<sub>2</sub> on the physiology and behaviour of an important ecosystem engineer, the burrowing shrimp *Upogebia deltaura*. *Aquatic Biology* 15, 73-86.
38. Edwards, K.P., Barciela, R., **Butenschoem, M.** Validation of the NEMO-ERSEM operational ecosystem model for the North West European Continental Shelf. *Ocean Science* 8, 983-1000.
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52. **Harris, R.** 2011 David Cushing Prize. *Journal of Plankton Research* 34, 101-101.
53. Hartmann, M., Grob, C., **Tarran, G.A.**, Martin, A.P., Burkill, P.H., Scanlan, D.J., Zubkov, M.V. Mixotrophic basis of Atlantic oligotrophic ecosystems. *Proceedings of the National Academy of Sciences of the United States of America* 109, 5756-5760.
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55. **Hawkins, A.J.S.** Environmental Adaptations in Bivalve Shellfish, Evidenced from Standardised Measures During the Calibration of Shellsim. *Journal of Shellfish Research* 31, 295-295.
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