

## ERI 2011 Peer-reviewed Publications

PUBLICATIONS WITHIN EACH PILLAR ARE LISTED ALPHABETICALLY BY THE FIRST ERI PI NAME TO APPEAR ON THE LIST OF AUTHORS ON EACH PUBLICATION.

### MARINE

- Anderwald P., Daniëlsdóttir A.K., Haug T., Larsen F., Lesage V., Reid R.J., Víkingsson G.A. and Hoelzel A.R. (2011) *Possible cryptic stock structure for minke whales in the North Atlantic: implications for conservation and management*, *Biological Conservation*, **144**, 2479-2489
- Anderwald P., Evans P.G.H., Gyax L. and Hoelzel A.R. (2011) *Role of feeding strategies in seabird - minke whale associations*, *Marine Ecology Progress Series*, **424**, 219-227
- Hellstrom M. And **Benzie J.A.H.** (2011) *Robustness of size measurement in soft corals*, *Coral Reefs*, **30**, 3, 787-790
- Vaziri N., Chern M.-J., and **Borthwick A.G.L.** (2011) *Pseudo spectral  $\sigma$ -transformation model of solitary waves in a tank with uneven bed*, *Computers & Fluids*, **49**, 1, 197-202
- Hunt-Raby A.C., **Borthwick A.G.L.**, Stansby P.K. and Taylor P.H. (2011) *Experimental measurement of focused wave group and solitary wave overtopping*, *Journal of Hydraulic Research*, **49**, 4, 450-464
- Cott, G., Reidy, D., **Chapman D.V.** and **Jansen M.A.K.** (2011) *Salt marshes on peat substrate on the southwest coast of Ireland: edaphic parameters and plant species distribution*, *GeoEcoMarina*, **17**, 41-49
- Cronin M.A.** (2011) *The conservation of seals in Irish waters: how research informs management*, *Marine Policy*, **35**, 748-755
- Cronin M.A.**, Zuur A.F., Ingram S. and **Rogan E.** (2011) *A modelling framework to optimize timing of haul-out counts for estimating harbour seal abundance*, *NAMMCO Sci. Publ.* **8**, 213-226
- Cronin M.A.** (2011) *The status of the harbour seal (*Phoca vitulina vitulina*) in the Republic of Ireland*, *NAMMCO Sci Publ.* **8**, 129-142
- Mirimin L., Miller R., Dillane E., Berrow S.D., Ingram S., **Cross T.F.** and **Rogan E.** (2011) *Finescale population genetic structuring of bottlenose*, *Animal Conservation*, **14**, 4, 342-353.
- Mirimin L., Banguera Hinestroza E., Dillane E., Hoelzel A.R., **Cross T.F.** and **Rogan E.** (2011) *Insights into genetic diversity, parentage, and group composition of Atlantic whitesided dolphins (*Lagenorhynchus acutus*) off the west of Ireland based on nuclear and mitochondrial genetic markers*. *Journal of Heredity*, **102**, 1, 79-87
- Ellis J.S., Gilbey J., Armstrong A., **Cross T.F.**, et al (2011) *Microsatellite standardization and evaluation of genotyping error in a large multi-partner research programme for conservation of Atlantic salmon (*Salmo salar* L.)*. *Genetica*, **139**, 3, 353-367,
- Fermer J., **Culloty S.C.**, **Kelly T.C.** and **O'Riordan R.M.** (2011) *Parasitological survey of the edible cockle *Cerastoderma edule* (*Bivalvia*) on the south coast of Ireland*, *Journal of the Marine Biological Association of the United Kingdom*, **91**, 4, 923-928
- Fermer J., **Culloty S.C.**, **Kelly T.C.** and **O'Riordan R.M.** (2011) *Manipulation of *Cerastoderma edule* burrowing ability by *Meiogymnophallus minutes metacercariae**, *Journal of The Marine Biological Association of The United Kingdom*, **91**, 4, 907-911
- Maloy A.P., **Culloty S.C.**, Bolton-Warberg M., Fitzgerald R. and Slater J.W. (2011) *Molecular identification of laser dissected gut contents from hatchery reared larval cod, *Gadus morhua*: a new approach to diet analysis*. *Aquaculture Nutrition*, **17**, 536-541
- McCarthy M. and **Culloty S.C.** (2011) *Optimisation of two immunofluorescent antibodies for the detection of *Escherichia coli* using immunofluorescent microscopy and flow cytometry*, *Current Microbiology*, **62**, 2, 402-408
- Maloy A.P., **Culloty S.C.**, Slate, J.W. and Harrod C. (2011) *DNA based dietary analysis of adult bivalves and its concurrence with stable isotopes  $^{13}C$  and  $^{15}N$* , *Journal of Shellfish Research*, **30**, 2, 534-534
- Maloy A.P., **Culloty S.C.** and Slater J.W. (2011) *DNA based dietary analysis of wild bivalve larvae*, *Journal of Shellfish Research*, **30**, 2, 530-530
- Culloty S.C.**, Cross M.M., Lunch S., et al (2011) *Susfish: Shellfish productivity in the Irish area - Working towards a sustainable future*, *Journal of Shellfish Research*, **30**, 2, 499-499
- Lynch S.A. and **Culloty S.C.** (2011) *Investigation into the prevalence and distribution of pathogens in cultured and wild populations of the mussel *Mytilus* spp.* *In Ireland*, *Journal of Shellfish Research*, **30**, 2, 528-528
- Lynch S.A., Carlsson J. and **Culloty S.C.** (2011) *Investigation into the involvement of ostreid herpes virus 1 (OSHV -1) in summer mortalities of pacific oyster, *Crassostrea Gigas*, spat and market sized adults in Ireland*, *Journal of Shellfish Research*, **30**, 2, 528-529
- Lynch S.A. and **Culloty S.C.** (2011) *The incidence of Haplosporidians, *Haplosporidium Nelsoni* and *Haplosporidium Americanum*, in the pacific oyster, *Crassostrea Gigas* and the European flat oyster, *Ostrea Edulis*, in Ireland*, *Journal of Shellfish Research*, **30**, 2, 528-528
- Fermer J., **Culloty S.C.**, **Kelly T.C.** and **O'Riordan R.M.** (2011) *Temporal variation of meiogymnophallus minutes infections in the first and second intermediate host*, *Journal of Helminthology*, **84**, 4, 262-368
- Cummins V.** and Kopke K. (2011) *Reflections from Ireland*, *Marine Policy*, **35**, 6, SI, 737-738
- Davenport J.**, Ezgeta-Balic D., Peharda M., Skejic S., Nincevia-Glada, Z. and Matijevic S. (2011) *Size-differential feeding in *Pinna nobilis* L. (*Mollusca: Bivalvia*): Exploitation of detritus, Phytoplankton and zooplankton*, *Estuarine Coastal and Shelf Science*, **92**, 2, 246-254
- Bastian T., Stokes D., Kelleher J.E., Hays G.C., **Davenport J.** and **Doyle T.K.** (2011) *Fisheries bycatch data provide insights into the distribution of the mauve stinger (*Pelagian octiluca*) around Ireland*, *ICES Journal of Marine Science*, **68**, 3, 436-443
- Davenport J.**, Hughes R.N., Shorten M., and Larsen P.S. (2011) *Drag reduction by air release promotes fast ascent in jumping emperor penguins—a novel hypothesis*, *Marine Ecology-Progress Series*, **430**, 171-182
- Bastian T., Haberland D., Purcell J.E., Hays G.C., **Davenport J.**, **McAllen R.** and **Doyle T.K.** (2011) *Large scale sampling reveals the spatiotemporal distributions of the jellyfish *Aurelia aurita* and *Cyanea capillata* in the Irish Sea*, *Marine Biology*, **158**, 12, 2639-2652
- Hawkins A., Knudsen F.R., **Davenport J.**, **McAllen R.**, Bloomfield H.J., Schilt C. and Johnson P. (2011) *Grazing by sprat schools upon zooplankton within an enclosed marine lake*, *Journal of Experimental Marine Biology and Ecology*, **411**, 59-65
- Low J.J., Igoe F., **Davenport J.** and **Harrison S.S.C.** (2011) *Littoral spawning habitats of three southern Arctic charr (*Salvelinus alpinus* L.) population*, *Ecology of Freshwater Fish*, **20**, 4, 537-547
- Davenport J.**, Plot V., Georges J.Y., **Doyle T.K.**, et al (2011) *Pleated turtle escapes the box - shape changes in *Dermodochelys coriacea**, *Journal of Experimental Biology*, **214**, 20, 3474-3479
- Cronin K., **Devoy R.J.D.** and Montserrat F. (2011) *Validation of modelled intertidal flat bed sediment transport using a simple tracer method*, *Journal of Coastal Research*, **64**, 741-745
- Lynam C.P., Lilley M.K.S., Bastian T., **Doyle T.K.**, Beggs S.E. and Hays G.C. (2011) *Have jellyfish in the Irish Sea benefited from climate change and overfishing?*, *Global Change Biology*, **17**, 767-782
- Baxter E.J., Sturt M.M., Ruane N.M., **Doyle T.K.**, **McAllen R.**, et al (2011) *Gill Damage to Atlantic Salmon (*Salmo salar*) Caused by the Common Jellyfish (*Aurelia aurita*) under Experimental Challenge*, *Plos One*, **6**, 4, e18529
- Lilley M. K.S., Beggs S.E., **Doyle T.K.**, et al (2011) *Global patterns of epipelagic gelatinous zooplankton biomass*, *Marine Biology*, **158**, 11, 2429-2436
- Wright D.J., **Dwyer E.** and **Cummins V.** (eds.) (2011) *Coastal Informatics: Web Atlas Design and Implementation*, Hershey, PA: IGI-Global, DOI: 10.4018/978-1-61520-815-9, ISBN13: 9781615208159, 350 pp.

- Hays G.C., Bastian T., **Doyle T.K.**, Fossette S., Gleiss A.C., Gravenor M.B., Hobson V.J., Humphries N.E., Lilley M.K.S., Pade N.G. and Sims D.W. (2011) *High activity and Lévy searches: jellyfish can search the water column like fish*, Proceedings of the Royal Society, B. DOI: 10.1098/rspb.2011.0978
- O'Dea E.K., **Dwyer E.**, **Cummins V.** and Wright D.J. (2011) *Potentials and limitations of Coastal Web Atlases*, Journal of Coastal Conservation, **15**, 4, 607-627
- Falaleeva M.**, **O'Mahony C.**, Gray S., Desmond M., **Gault J.** and **Cummins V.** (2011) *Towards climate adaptation and coastal governance in Ireland: Integrated architecture for effective management?*, Marine Policy, **35**, 6, SI, 784-793
- Fitzpatrick M.**, Graham N., Rihan D.J. and Reid D.G. (2011) *The burden of proof in co-management and results-based management: the elephant on the deck!*, ICES Journal of Marine Science, **68**, 1656–1662
- Gault J.**, O'Hagan A.M., **Cummins V.**, Murphy J. and Vial T. (2011) *Erosion management in Inch Beach, South West Ireland*. Ocean & Coastal Management, **54**, 12, SI, 930-942
- Gault J.**, **Cummins V.**, Gray S., **O'Mahony C.** and **O'Hagan A.M.** (2011) *Developing Local Coastal Adaptation Strategies to Climate Change across North West Europe: How IMCORE is addressing the Challenges*, IMPRINT, No. 2, 37-44
- Marchand M., Sanchez-Arcilla A., Ferreira M., **Gault J.**, et al (2011) *Concepts and science for coastal erosion management – An introduction to the CONSCIENCE framework*, Ocean & Coastal Management, **54**, 12, SI, 859-866
- Lettec S., Jansen M.A.K. and Chapman D.V. (2011) Differential decomposition patterns of marine and terrestrial biomass in a coastal lagoon, GeoEcoMarina, **17**, 51-58
- Cott G.M., **Jansen M.A.K.** and **Chapman D.V.** (2011) *Salt marshes on peat substrate: where blanket bogs encounter the marine environment*, Journal of Coastal Research
- Prinz K., **Kelly T.C.**, **O'Riordan R.M.** and **Culloty, S.C.** (2011) *Factors influencing cercarial emergence and settlement in the digenean trematode Parorchis acanthus (Philophthalmidae)*, Journal of The Marine Biological Association of The United Kingdom, **91**, 8, 1673–1679
- Baxter E.J., Rodger H.D., **McAllen R.** and **Doyle T.K.** (2011) *Gill disorders in marine-farmed salmon: investigating the role of hydrozoan jellyfish*, Aquaculture Environment Interactions, **1**, 3, 245-257
- Kopke K. and **O'Mahony C.** (2011) *Preparedness of key coastal and marine sectors in Ireland to adapt to climate change*, Marine Policy, **35**, 6, 800-809
- Baxter E.J., **McAllen R.**, Allcock A.L. and **Doyle T.K.** (2011) *Abundance, distribution and community composition of gelatinous zooplankton in Irish coastal waters*, Proceedings of the Royal Irish Academy, DOI: 103318/BIOE.2012.01
- Flemer B., Kennedy J., Margassery L.M., **Morrissey J.P.**, **O'Gara F.** and **Dobson A.D.W.** (2011) *Diversity and antimicrobial activities of microbes from two Irish marine sponges, Suberites carnosus and Leucosolenia sp.* Journal of Applied Microbiology, **112**, 2, 289-301
- O'Halloran J.A., Barbosa T.M., **Morrissey J.P.**, Kennedy J., **O'Gara F.** and **Dobson A.D.W.** (2011) *Diversity and antimicrobial activity of Pseudovibrio spp. from Irish marine sponges*, Journal of Applied Microbiology, **110**, 6, 1495–1508
- Phelan R.W., O'Halloran J.A., Kennedy J., **Morrissey J.P.**, **Dobson A.D.W.**, **O'Gara F.** and Barbosa T.M. (2011) *Diversity and bioactive potential of endospore-forming bacteria cultured from the marine sponge Haliclona simulans*, Journal of Applied Microbiology, **112**, 1, 65-78
- Phelan R.W., Clarke C., Barbosa T., **Morrissey J.P.**, **Dobson A.D.W.** and **O'Gara F.** (2011) *A tetracycline resistance encoding plasmid from a Bacillus sp. strain isolated from the marine sponge Haliclona simulans*, Applied and Environmental Microbiology, **77**, 327–329
- O'Donnell V.** and **O'Mahony C.** (2011) *Maintaining a marine leisure industry in a recession*, Journal of Coastal Research, **61**, 133-139
- Margassery L.M., Kennedy J., **O'Gara F.**, **Dobson A.D.W.** and **Morrissey J.P.** (2011) *Diversity and antimicrobial activity of bacteria from the coastal marine sponges Amphilectus fucorum and Eurypyon major*, Letters in Applied Microbiology, **55**, 1, 2-8
- O'Driscoll D., Skrabakova Z., **O'Halloran J.**, van Pelt F.N.A.M. and **James K. J.** (2011) *Mussels increase xenobiotic (Azaspiracid) toxicity using a unique bioconversion mechanism*, Environ Science Technology, **45**, 7, 3102-3108
- O'Mahoney M.**, Mouzakitis G., Doyle J. and **Burnell G.** (2011) *A novel konjac glucomannan xanthan gum binder for aquaculture feeds: the effect of binder configuration on formulated feed stability, feed palatability and growth performance of the Japanese abalone, Haliotis discus hannai*, Aquaculture Nutrition, **17**, 395–407
- Lyons L.J., **O'Riordan R.M.**, **Cross T.F.** and **Culloty S.C.** (2011) *Reproductive biology of the shore crab Carcinus maenas (decapoda: Portunidae): a macroscopic and histological view*, Invertebrate Reproduction and Development, **56**, 2, 144-156.
- Morgan, E., **O'Riordan R.M.** and **Culloty S.C.** (2011) *Aspects of the biology and pathology of the cockle Cerastoderma Edule in the Irish sea*, Journal of Shellfish Research, **30**, 2, 534-534
- Morgan E., **O'Riordan R.M.**, **Kelly T.C.** and **Culloty S.C.** (2011) *The influence of disseminated neoplasia, trematode infections and gametogenesis on surfacing and mortality in the common cockle Cerastoderma edule*, Diseases of Aquatic Organisms, **98**, 1, 73-84
- Power A.M., McCrann K., McGrath D., **O'Riordan R.M.**, Simkanin C. and Myers A.A. (2011) *Physiological tolerance predicts species composition at different scales in a barnacle guild*, Marine Biology, **158**, 10, 2149-2160
- Carlsson J., Shephard S., Coughlan J., Trueman C.N., **Rogan E.** and **Cross T.F.** (2011) *Finescale population structure in a deepsea teleost (orange roughy, Hoplostethus atlanticus)*, Deep Sea Research Part I Oceanographic Research Papers, **58**, 627–636
- Foot A.D., Vilstrup J.T., De Stephanis R., Verborgh P., Abel Nielsen S.C., Deaville R., Kleivane L., Martin V., Miller P.J.O., Oien, N., Pérez Gil M., Rasmussen M., Reid R.J., Robertson K.M., **Rogan E.**, et al. (2011) *Genetic differentiation among North Atlantic killer whale populations*, Molecular Ecology, **20**, 3, 629–641
- Wheeler A.J.** and Stadnitskaya A. (2011) *Benthic deepsea carbonates: reefs and seeps*. In: Heiko Hüneke & Thierry Mulder (Eds.), Deep Sea Sediments (a book of the series Developments in Sedimentology), Amsterdam, Elsevier
- Wheeler A.J.**, **Benzie J.A.H.**, Carlsson J., Collins P., Copley J., Green D., Murton B.J., Dorschel B., Antoniacom, A., Coughlan M., Judge M., Lim A., Morris K., Nye V. (2011) *Moytirra: a newly discovered hydrothermal vent field on the mid-Atlantic Ridge between the Azores and Iceland*, Inter Ridge News, **20**, 37-39
- Foubert A., Huvenne V.A.I., **Wheeler A.J.**, **Kozachenko M.**, Opderbecke J. and Henriot J.P. (2011) *The Moira Mounds, small coldwater coral mounds in the Porcupine Seabight, NE Atlantic: Part B Evaluating the impact of sediment dynamics through high resolution ROV borne bathymetric mapping*, Marine Geology, **282**, 65–78

## ENVIRONMENT

- Accou-Demartin M., Gaborieau V., Song Y.J., Roumagnac P., Marchou B., **Achtman M.** and Weill F.X. (2011) *Salmonella enterica Serotype Typhi with Nonclassical Quinolone Resistance Phenotype*, Emerging Infectious Diseases, **17**, 1091–1094
- Croxall G., Hale J., Weston V., Manning G., Cheetham P., **Achtman M.** and McNally A. (2011) *Molecular epidemiology of extraintestinal pathogenic Escherichia coli isolates from a regional cohort of elderly patients highlights the prevalence of ST131 strains with increased antimicrobial resistance in both community and hospital care settings*, Journal of Antimicrobial Chemotherapy, **66**, 2501–2508
- Didelot X., Bowden R., Street T., Golubchik T., Spencer C., McVean G., Sangal V., Anjum M.F., **Achtman M.**, Falush D. and Donnelly P. (2011) *Recombination and Population Structure in Salmonella enteric*, Plos Genetics, **7**, 7, e1002191

- Vogler A.J., Chan F., Wagner D.M., Roumagnac P., Lee J., Nera R., Eppinger M., Ravel J., Rahalison L., Rasoamanana B.W., Beckstrom-Sternberg S.M., **Achtman M.**, Chanteau S. and Keim P. (2011) *Phylogeography and Molecular Epidemiology of Yersinia pestis in Madagascar*, Plos Genetics, Neglected Tropical Diseases, **5**, 9, e1319
- Achtman M.** (2011) *A Broad Brush, Global Overview of Bacterial Sexuality*, Plos Genetics, **7**, 8, e1002255
- Haase J.K., Murphy R.A., Choudhury Kingshuk R., **Achtman M.**, et al. (2011) *Revival of Seeliger's historical Special Listeria Culture Collection*, Environmental Microbiology, **13**, 12, 3163-3171
- Laukkanen-Ninios R., Didelot X., Jolley K.A., **Achtman M.**, et al. (2011) *Population structure of the Yersinia pseudotuberculosis complex according to multilocus sequence typing*, Environmental Microbiology, **13**, 12, 3114-3127
- Achtman M.** (2011) *Bacterial Population Genetics in Infectious Disease*, Quarterly Review of Biology, **86**, 4, 354-354
- Miao C., Ni J., **Borthwick A.G.L.** and Yang L. (2011) *A preliminary estimate of human and natural contributions to the changes in water discharge and sediment load in the Yellow River*, Global and Planetary Change, **76**, 3-4, 196-205
- Liu R. and **Borthwick A.G.L.** (2011) *Measurement and assessment of carrying capacity of the environment in Ningbo, China*, Journal of Environmental Management, **92**, 8, 2047-2053
- Lee W.-K., **Borthwick A.G.L.** and Taylor P.H. (2011) *A fast adaptive quadtree scheme for a two-layer shallow water model*, Journal of Computational Physics, **230**, 12, 4848-4870
- Jiang L., **Borthwick A.G.L.**, Krámer T. and Józsa J. (2011) *Variable density bore interaction with block obstacles*, International Journal for Computational Fluid Dynamics, **25**, 4, 223-237
- Zhou J.G. and **Borthwick A.G.L.** (2011) *Lattice Boltzmann method for variable density shallow water equations*, Computers & Fluids, **49**, 1, 146-149
- Bacci F. and **Chapman D.V.** (2011) *Microbiological assessment of private drinking water supplies in Co Cork, Ireland*, Journal of Water and Health, **09**, 4, 738-751
- Kabat B. and **Dobson A.D.W.** (2011) *An introduction to the traditional fermented foods and beverages of Turkey*, Critical Reviews in Food Science and Nutrition, **51**, 3, 248-260
- Hladyz S., Abjornsson K., Chauvet E., Dobson M., Elosegí A., Ferreira V., Fleituch T., Gessner M.N., Giller P.S., et al (2011) *Stream Ecosystem Functioning in an Agricultural Landscape: The Importance of Terrestrial-Aquatic Linkages*, Advances in Ecological Research, **44**, 211-267
- Hladyz S., Abjornsson K., **Giller P.S.** and Woodward G. (2011) *Impacts of an aggressive riparian invader on community structure and ecosystem functioning in stream food webs*, Journal of Applied Ecology, **48**, 2, 443-452
- Omamogho J.O., **Hanrahan J.P.**, Tobin J. and Glennon J.D. (2011) *Structural variation of solid core and thickness of porous shell of 1.7 μm core-shell particles on chromatographic performance: Narrow bore columns*, Journal of Chromatography, **12**, 8, 15, 1942-1953
- Delaney P., McManamon C., **Hanrahan J.P.**, Copley M.P., **Holmes J.D.** and **Morris M.A.** (2011) *Development of chemically engineered porous metal oxides for phosphate removal*, Journal of Hazardous Materials, **185**, 1, 382-391
- McCormick D.P. and **Harrison S.S.C.** (2011) *Direct and indirect effects of riparian canopy on juvenile Atlantic salmon, Salmo salar, and brown trout, Salmo trutta, in southwest Ireland*, Fisheries Management and Ecology, **18**, 445-455
- Arnold D.C., Blake A., Iacopino D., Tobin J. M., O'Mahony C., **Holmes J.D.** and **Morris M.A.** (2011) *Planarized and nanopatterned mesoporous silica thin films by chemical mechanical polishing of gap filled topographically patterned substrates*, Transactions on Nanotechnology, **10**, 451-461
- Barth S., Boland J. J. and **Holmes J.D.** (2011) *Defect Transfer from Nanoparticles to Nanowires*, Nano Letters, **11**, 1550-1555
- Barth S., Kolenik M., Donegan K., Krstic V. and **Holmes J.D.** (2011) *Diameter controlled solid phase seeding of germanium nanowires: structural characterization and electrical transport properties*, Chemistry of Materials, **23**, 3335-3340
- Borah D., Shaw M. T., Rasappa S., Farrell R. A., O'Mahony C., Faulkner C. M., Bosea M., Gleeson P., **Holmes J.D.** and **Morris M.A.** (2011) *Plasma etch technologies for the development of ultra small feature size transistor devices*, Journal of Physics D: Applied Physics, **44**, 17, 4012
- Chen L., **Holmes J.D.**, Ramírez García S., and **Morris M.A.** (2011) *Facile synthesis of monodisperse ZnO nanocrystals by direct liquid phase precipitation*, Journal of Nanomaterials, **2011**, ID 853832
- Chen L., Xu J., Zhang W.H., **Holmes J.D.** and **Morris M.A.** (2011) *Syntheses of complex mesoporous silicas using mixtures of nonionic block copolymer surfactants: Understanding formation of different structures using solubility parameters*, Journal of Colloid and Interface Science, **353**, 169-180
- Collins G. and **Holmes J.D.** (2011) *Chemical functionalisation of silicon and germanium nanowires*, Journal of Materials Chemistry, **21**, 11052-11069
- Farrell R. A., Kehagias N., Shaw M. T., Reboud V., Zelsmann M., **Holmes J.D.**, Sotomayor-Torres and **Morris M.A.** (2011) *Surface directed dewetting of a block copolymer for fabricating highly uniform nanostructured microdroplets and concentric nanorings*, Acs Nano, **5**, 1073-1085
- Fleming P. G., **Holmes J.D.**, Otway D. J., and **Morris M.A.** (2011) *The complex synthesis and solid state chemistry of cerialanthana solid solutions prepared via a hexamethylenetetramine precipitation*, Journal of Solid State Chemistry, **184**, 2595-2600
- Fleming P. G., Ramirez S., **Holmes J.D.** and **Morris M.A.** (2011) *An XPS study of the oxidation of reduced cerialanthana nanocrystals*, Chemical Physics Letters, **509**, 51-57
- Fois G., Bolger C. T., **Holmes J.D.** and Cross G. (2011) *Proximal oxidation as a director of self organisation*. Journal of Materials Chemistry, **21**, 8772-8780
- Jung S.J., Lutz T., Boese M., **Holmes J.D.** and Boland J. J. (2011) *Surface energy driven agglomeration and growth of single crystal metal wires*, Nano Letters, **11**, 1294-1299
- Mokarian-Tabari P., Collins T., **Holmes J.D.** and **Morris M. A.** (2011) *Cyclical flipping of morphology in block copolymer films*, Acs Nano, **5**, 4617-4623
- Cahill M.G., Caprioli G., Stack M., Vittori S. and **James K.J.** (2011) *Semi-automated liquid chromatography-mass spectrometry (LC-MS/MS) method for basic pesticides in wastewater effluents*, Analytical and Bioanalytical Chemistry, **400**, 2, 587-594
- Radziejewski A., Vlieghe K., Lammens T., Berckmans B., Maes S., **Jansen M.A.K.**, Knappe C., Albert A., Seidlitz H.K., Bahnweg G., Inzé D. and De Veylder L. (2011) *Atypical E2F activity coordinates PHR1 photolyase gene transcription with endoreduplication onset*, The EMBO journal, **30**, 2, 355-33
- Lahive E., O'Callaghan M.J.A., **Jansen M.A.K.** and **O'Halloran J.** (2011) *Uptake and partitioning of zinc in Lemnaceae*, Ecotoxicology, **20**, 8, 1992-2002
- Sturt M.M., **Jansen M.A.K.** and **Harrison S.S.C.** (2011) *Responses of invertebrate grazers and algal productivity to light and nutrients*, Freshwater Biology, **56**, 1, 1-11
- Sturt M.M., **Jansen M.A.K.** and **Harrison S.S.C.** (2011) *Invertebrate grazing and riparian shade as controllers of nuisance algae in a eutrophic river*, Freshwater Biology, **56**, 12, 2580-2593
- Schreiner M., Mewis I., Huyskens-Keil S., **Jansen M.A.K.**, Zrenner R., Winkler J.B., **O'Brien N.** and Krumbein A. (2011) *UVB induced secondary plant metabolites—potential benefits for plant and human health*, Critical Reviews in Plant Sciences, **31**, 3, 229-240
- Poage M., Le Martret B., **Jansen M.A.K.**, Nugent G.D. and Dix P.J. (2011) *Modification of reactive oxygen species (ROS) scavenging capacity of chloroplasts through plastid transformation*, Plant Molecular Biology, **76**, 3-5, SI, 371-384

- Delopoulos T., **Jones P.W.** and Haydock P.P.J. (2011) *Variation in in-vitro hatch of potato cyst nematodes in response to different potato cultivars inoculated with isolates of arbuscular mycorrhizal fungi*, *Nematology*, **13**, 661–672
- Milner S.E., Brunton N.P., **Jones P.W.**, **O'Brien N.M.**, Collins S.G. and Maguire A.R. (2011) *Bioactivities of Glycoalkaloids and their aglycones from Solanum species*, *Journal of Agricultural and Food Chemistry*, **59**, 8, 3454–3484
- Kalachev L.V., **Kelly T.C.**, O'Callaghan M.J. and Pokrovski, A.V. (2011) *Analysis of threshold-type behaviour in mathematical models of the intrusion of a novel macroparasite in a host colony*, *Mathematical Medicine and Biology-A Journal of the IMA*, **28**, 4, 287–333
- Irwin S., Wilson M.W., **Kelly T.C.**, O'Mahony B. Oliver G., Troake P., Ryan B., Cullen C., O'Donoghue B. and **O'Halloran J.** (2011) *The breeding biology of Hen Harriers Circus cyaneus in Ireland over a five year period*, *Irish Birds*, **9**, 165–172
- Sweeney O.F., Wilson M.W., Irwin S., **Kelly T.C.**, Gittings T. and **O'Halloran J.** (2011) *Breeding birds of native woodlands and plantations forests in Ireland*, *Irish Birds*, **9**, 181–196
- Rafique R., Peichl M., Hennessy D. and **Kiely G.** (2011) *Evaluating management effects on nitrous oxide emissions from grasslands using the process-based DeNitrification-DeComposition (DNDC) model*, *Atmospheric Environment*, **45**, 33, 6029–6039
- Wellock M.K., LaPerle C.M. and **Kiely G.** (2011) *What is the impact of afforestation on the carbon stocks of Irish mineral soil?*, *Forest Ecology and Management*, **262**, 8, 1589–1596
- Jung M., Reichstein M., Margolis H.A., Cescatti A., Richardson A.D., Arain M.A., Arneth A., Bernhofer C., Bonal, D., Chen J.Q., Gianelle D., **Kiely G.** et al (2011) *Global patterns of land-atmosphere fluxes of carbon dioxide, latent heat, and sensible heat derived from eddy covariance, satellite, and meteorological observations*, *Journal of Geophysical Research-Biosciences*, **116**, September
- Groenendijk M., Dolman A.J., Ammann C., Arneth A., Cescatti A., Dragoni D., Gash J.H.C., Gianelle D., Gioli B., **Kiely G.**, et al (2011) *Seasonal variation of photosynthetic model parameters and leaf area index from global Fluxnet eddy covariance data*, *Journal of Geophysical Research-Biogeosciences*, **116**, G04027
- Mishurov M. and **Kiely G.** (2011) *Gap-filling techniques for the annual sums of nitrous oxide fluxes*, *Agricultural and Forest Meteorology*, **151**, 12, 1763–1767
- Xu X., Liu W. and **Kiely G.** (2011) *Modeling the change in soil organic carbon of grassland in response to climate change: Effects of measured versus modelled carbon pools for initializing the Rothamsted Carbon Model*, *Agriculture Ecosystems & Environment*, **140**, 3–4, 372–381
- Rafique R., Hennessy D. and **Kiely G.** (2011) *Nitrous oxide emission from grazed grassland under different management systems*, *Ecosystems*, **14**, 4, 563–582
- Xu X., Liu W., Zhang C. and **Kiely G.** (2011) *Estimation of soil organic carbon stock and its spatial distribution in the Republic of Ireland*, *Soil Use and Management*, **27**, 2, 156–162
- Zhang C., Tang Y., Xu X. and **Kiely G.** (2011) *Towards spatial geochemical modelling: Use of geographically weighted regression for mapping soil organic carbon contents in Ireland*, *Applied Geochemistry*, **26**, 7, 1239–1248
- Nizami A.S., Molander S., Sama Z., Rafique R., Korres N.E., **Kiely G.** and **Murphy J.D.** (2011) *Comparative analysis using EIA for developed and developing countries: case studies of hydroelectric power plants in Pakistan, Norway and Sweden*, *International Journal of Sustainable Development and World Ecology*, **18**, 2, 134–142
- Koehler A.K., Sottocornola M. and **Kiely G.** (2011) *How strong is the current carbon sequestration of an Atlantic blanket bog?*, *Global Change Biology*, **17**, 1, 309–319
- Peichl M., **Leahy P.** and **Kiely G.** (2011) *Six-year stable annual uptake of carbon dioxide in intensively managed humid temperate grassland*, *Ecosystems*, **14**, 1, 112–126
- Leahy P.G.** and **Kiely G.** (2011) *Short duration rainfall extremes in Ireland: Influence of climatic variability*, *Water Resources Management*, **25**, 3, 987–1003
- McIntyre O.** (2011) *The World Court's Emphasis on Procedural Rules in the Recent Pulp Mills Case: Contributing to the Progressive and Coherent Development of International Water Law*, *Water Alternatives*
- McIntyre O.** (2011) *International Water Resources Law and the International Law Commission Draft Articles on Transboundary Aquifers: A Missed Opportunity for Cross-Fertilisation?* *International Community Law Review*, **13**, 1–18
- McIntyre O.** (2011) *The Human Right to Water and Global Administrative Law: Mutually Supporting Concepts* in L. Westra, K. Bosselmann and C. Soskolne (eds.), *Globalisation and Ecological Integrity in Science and International Law* (Cambridge Scholars Press, 2011) 208–231
- McIntyre O.** (2011) *The Emergence of the Human Right to Water in an Era of Globalization and its Implications for International Investment Law* in J. F. Addicott, M. J. H. Bhuiyan and T. Chowdhury (ed.), *Globalization, International Law and Human Rights*, (Oxford University Press, New Delhi, 2011) 147–176
- McIntyre O.** and Lankford B. (2011) *Water Allocation Methodologies for the Limpopo Watercourse Commission* report prepared for LIMCOM on behalf of GIZ, October
- McIntyre O.** (2011) *Assessment of Implications for Management of Cross-Border Waters of United Kingdom Accession to the U.N. Watercourses Convention*, report prepared for the Northern Ireland Department of Environment on behalf of WWF (UK), 2011
- Donegan K. P., Godsell J. F., Tobin J. M., O'Byrne J. P., Otway D. J., **Morris M.A.**, Roy S. and **Holmes J.D.** (2011) *Microwave assisted synthesis of icosahedral nickel nanocrystals*, *Cryst Eng Comm*, **3**, 2023–2028
- Collins G., Fleming P., O'Dwyer C., **Morris M.A.** and **Holmes, J.D.** (2011) *Organic functionalization of germanium nanowires using arenediazonium salts*, *Chemistry of Materials*, **23**, 1883–1891
- O'Byrne J. P., Li Z., Jones S. L.T., Fleming P. G., Larsson J. A., **Morris M.A.** and **Holmes J.D.** (2011) *Nitrogen doped carbon nanotubes: growth, mechanism and structure*, *Chem Phys Chem*, **12**, 2995–3001
- Burke D. M., O'Byrne J., Fleming P. G., Borah D., **Morris M.A.** and **Holmes J.D.** (2011) *Carbon nanocages as heavy metal ion adsorbents*, *Desalination*, **280**, 87–94
- Barth S., Kazakova O., Estrade S., Hobbs R. G., Peiro F., **Morris M.A.** and **Holmes J.D.** (2011) *Synthesis and magnetic characterization of coaxial Ge<sub>1</sub>xMnx/aSi heterostructures*, *Crystal Growth and Design*, **11**, 5253–5259
- Barret M., Egan F., Fargier E., **Morrissey J.P.** and **O'Gara F.** (2011) *Genomic analysis of the type VI secretion systems in Pseudomonas spp.: novel clusters and putative effectors uncovered*, *Microbiology*, **157**, 6, 1726–1739
- Barret M., **Morrissey J.P.** and **O'Gara F.** (2011) *Functional genomics analysis of plant growth-promoting rhizobacterial traits involved in rhizosphere competence*, *Biology and Fertility of Soils*, **47**, 7, 729–743
- Lane M. M., Burke N., Karreman R., Wolfe K. H., O'Byrne C. P. and **Morrissey J.P.** (2011) *Physiological and metabolic diversity in the yeast Kluyveromyces marxianus*, *Antonie Van Leeuwenhoek International Journal of General and Molecular Microbiology*, **100**, 4, 507–519
- Reen F.J., Mooij M.J., Holcombe L.J., McSweeney C.M., McGlacken, G.P., **Morrissey J.P.** and **O'Gara F.** (2011) *The Pseudomonas quinolone signal (PQS), and its precursor HHQ, modulate interspecies and interkingdom behaviour*, *FEMS Microbiol Ecol*, **77**, 2, 413–428
- Rice O., Miller S.H., **Morrissey J.P.** and **O'Gara F.** (2011) *Exploitation of glucose catabolic gene fusions to investigate in situ expression during Pseudomonas plant interactions*, *Biology and Fertility of Soils*, **48**, 2, 235–238
- Lahart N., O'Callaghan Y., Aherne S.A., O'Sullivan D., FitzGerald R.J. and **O'Brien N.M.** (2011) *Extent of hydrolysis effects on casein hydrolysate bioactivity: Evaluation using the human Jurkat T cell line*, *RnaA Publication of The Rna Society*, **21**, 777–782

- O'Sullivan A. M., O'Callaghan Y. C., O'Grady M. N., Queguineur B., Hanniffy D., Troy D. J., Kerry J. P. and O'Brien N.M. (2011) *In vitro* and cellular antioxidant activities of seaweed extracts prepared from five brown seaweeds harvested in spring from the west coast of Ireland, *Food Chemistry*, **126**, 3, 1064–1070
- Legendre C., Mooij M.J., Adams C. and O'Gara F. (2011) *Impaired expression of hypoxia-inducible factor1 a in cystic fibrosis airway epithelial cells - a role for HIF1 in the pathophysiology of CF?*, *Journal of Cystic Fibrosis*, **10**, 4, 286–290
- O'Callaghan J., Reen F.J., Adams C. and O'Gara F. (2011) *Low oxygen induces the T3SS in Pseudomonas aeruginosa via modulation of the small RNAs, rsmZ and rsmY*, *Microbiology-SGM*, **157**, 3417–3428
- Holcombe L.J., O'Gara F. and Morrissey J.P. (2011) *Implications of interspecies signalling for virulence of bacteria and fungal pathogens*, *Future Microbiology*, **6**, 7, 799–817
- Smith E.M., McCarthy J., Nevin R., Khan M.R., Dow J.M., O'Gara F. and Doohan F.M. (2011) *In-vitro analyses are not reliable predictors of the plant growth promotion capability of bacteria; a Pseudomonas fluorescens strain that promotes the growth and yield of wheat*, *Journal of Applied Microbiology*, **111**, 3, 683–692
- Zhou L., Glennon J.D., Luong J.H.T., Reen F.J., O'Gara F., McSweeney C. and McGlacken G.P. (2011) *Detection of the Pseudomonas Quinolone Signal (PQS) by cyclic voltammetry and amperometry using a boron doped diamond electrode*, *Chemical Communications*, **47**, 37, 10347–10349
- Margassery L.M., Kennedy J., O'Gara F., Dobson A.D.W. and Morrissey J.P. (2011) *A high throughput screen to identify novel calcineurin inhibitors*, *Journal of Microbiological Methods*, **88**, 1, 63–66
- Donnelly A., Caffarra A., Diskin E., Kelleher C.T., Plesters A., Proctor H., Stirnemann R., Jones M.B., O'Halloran J., et al (2011) *Climate warming results in phenotypic evolutionary changes in spring events mini review. In press*, In: *Climate Change, Ecology and Systematics*. London: Cambridge University Press
- Bougaham A.F., Moulai R. and O'Halloran J. (2011) *Breeding biology of Grey Wagtails Motacilla cinerea at the southern edge of their breeding range (region of Bejaia, Algeria)*, *Bird Study*, **58**, 357–360
- Lahive E., O'Halloran J. and Jansen M.A.K. (2011) *Differential sensitivity of four Lemnaceae species to zinc sulphate*, *Environmental Experimental Botany*, **71**, 1, 25–33
- Donaghy A.M., Green R.E. and O'Halloran J. (2011) *Timing of autumn migration of young Corncrakes Crex crex*. *IBIS*, **153**, 425–428
- O'Connell M.M., Keating U., McElligott D., O'Reill P., O'Callaghan J. and O'Halloran J. (2011) *An investigation of a novel anomalous pink feather colouration in the Mute Swan Cygnus olor in Britain and Ireland*, *Wildfowl*, 152–165
- Kennedy J., O'Leary N., Kiran S., Morrissey J., O'Gara F., Selvin J. and Dobson A.D.W. (2011) *Functional metagenomic strategies for the discovery of novel enzymes and biosurfactants with biotechnological applications*, *Journal of Applied Microbiology*, **111**, 787–799
- O'Leary N., O'Mahony M.M. and Dobson A.D.W. (2011) *Regulation of phenylacetic acid assimilation is sigma 54 dependent in Pseudomonas putida CA3*, *BMC Microbiology*, **11**, 229
- Quirke T. and O'Riordan R.M. (2011) *The effect of different types of enrichment on the behaviour of cheetahs in captivity*, *Applied Animal Behaviour Science*, **133**, 1–2, 87–94
- Quirke T. and O'Riordan R.M. (2011) *The effect of a randomised enrichment treatment schedule on the behaviour of cheetahs (Acinonyx jubatus)*, *Applied Animal Behaviour Science*, **135**, 103–109
- Haigh A., Butler F. and O'Riordan R. (2011) *Habitat use by the European hedgehog (Erinaceus europaeus, Linnaeus, 1758) in an Irish rural landscape*, *The Irish Naturalists' Journal*
- McCarthy A. and Ruth A.A. (2011) *Fluorescence excitation and excited state intra-molecular proton transfer of jet cooled naphthol derivatives: Part 1. 1hydroxy-2naphthaldehyde*, *Physical Chemistry Chemical Physics*, **13**, 16, 7485–7499
- Nitschke U., Ruth A.A., Dixneuf S. and Stengel D.B. (2011) *Molecular iodine emission rates and photosynthetic performance of different thallus parts of Laminaria digitata (Phaeophyceae) during emersion*, *Planta*, **233**, 737–748
- Ryall A. (2011) *Access to Environmental Justice: Pulling the Threads Together*, *Irish Planning and Environmental Law Journal*, **18**, 152–160
- Ryall A. (2011) *Access to Environmental Information in Ireland: Implementation Challenges*, *Journal of Environmental Law*, **23**, 1, 45–71
- Ryall A. (2011) *Environmental Protection Agency Review Group, A Review of the Environmental Protection Agency (Dublin: Department of Environment, Community and Local Government, May 2011)*.
- Sage C. (2011) *Environment and Food*. Abingdon, Oxon, UK: Routledge.
- Sage C. (2011) *Conventions of Quality and Governance of Artisan Food: Revealing the tyranny of 'sound science' in the regulation of Irish raw milk cheese*, In: Keohane, K. and O'Mahony, P (Eds.). *Irish Environmental Politics: The communicative turn*. Manchester: Manchester University Press
- Sage C. (2011) *Combustibili fossili e acqua dolce: Sfide per il sistema globale dell'alimentazione*. *Ambiente Società Territorio*, **56**, 5, 8–12
- Madadlou A., Iacopino D., Sheehan D., Emamdjomeh Z. and Mousavi M.E. (2011) *Ultrasound assisted generation of ACE-inhibitory peptides from casein hydrolyzed with nanoencapsulated protease*, *Journal of Science of Food and Agriculture*, **91**, 2112–2116
- Tyther R., McDonagh B. and Sheehan D. (2011) *Proteomics in investigation of protein nitration in kidney disease: Technical challenges and perspectives from the spontaneously hypertensive rat*, *Mass Spectrometry Reviews*, **30**, 121–141
- O'Connor D.J., Iacopino D., Healy D., O'Sullivan D. and Sodeau J.R. (2011) *The intrinsic fluorescence spectra pollen and fungal spores*, *Atmospheric Environment*, **45**, 35, 6451–6458
- Juhel G., Batisse E., Hugues Q., Daly D., van Pelt E.N.A.M., O'Halloran J. and Jansen M.A.K. (2011) *Alumina nanoparticles enhance growth of Lemna minor*, *Aquatic Toxicology*, **105**, 3–4, 328–336
- Chen J. and Venables D.S. (2011) *A broadband optical cavity spectrometer for measuring weak near ultraviolet absorption spectra of gases*, *Atmospheric Measurement Techniques*, **4**, 425–436
- Chen J., Wenger J.C. and Venables D.S. (2011) *Near ultraviolet absorption cross sections of nitrophenols and their potential influence on tropospheric oxidation capacity*, *Journal of Physical Chemistry A*, **115**, 12235–12242
- Kourtchev I., Hellebust S., Bell J.M., O'Connor I.P., Healy R.M., Allanic A., Healy D., Wenger J.C. and Sodeau, J.R. (2011) *The use of polar organic compounds to estimate the contribution of domestic solid fuel combustion and biogenic sources to ambient levels of organic carbon and PM2.5 in Cork Harbour, Ireland*, *Science of the Total Environment*, **409**, 11, 2143–2155
- McGillen M.R., Archibald A.T., Carey T., Leather K.E., Shallcross D.E., Wenger J.C. and Percival C.J. (2011) *Structure-activity relationship (SAR) for the prediction of gas phase ozonolysis rate coefficients: an extension towards heteroatomic unsaturated species*, *Physical Chemistry Chemical Physics*, **13**, 7, 2842–2849
- Chuang H.C., Jones T., Chen Y., Bell J., Wenger J. and Berusse, K. (2011) *Characterisation of airborne particles and associated organic components produced from incense burning*, *Analytical and Bioanalytical Chemistry*, **401**, 10, 3095–3102
- Clifford G., Healy R., Wenger J., et al (2011) *The Atmospheric Photolysis of o-Tolualdehyde*, *Environmental Science & Technology*, **45**, 22, 9649–9657
- Kirrane M.J., De Guzman L.I., Rinderer T.E., Frake A.M., Wagnitz J. and Whelan P.M. (2011) *Asynchronous Development of Honey Bee Host and Varroa destructor (Mesostigmata: Varroidae) Influences Reproductive Potential of Mites*, *Journal of Economic Entomology*, **104**, 1146–1152
- Higgs K.T. and Williams B.P.J. (2011) *Palynology and palaeoenvironments of the Silurian Coosglass Slate and Ferriter's Cove formations in the Dunquin Inlier (Dingle Peninsula, Ireland)*, *Geological Quarterly*, **55**, 2, 95–107

## ENERGY

- Rafferty P., **Keane M.** and Costa A. (2011) *Calibrating whole building energy models: Detailed case study using hourly measured data*, Energy and Buildings, **43**, 12, 3666-3679
- Rafferty P., **Keane M.** and O'Donnell J. (2011) *Calibrating whole building energy models: An evidence-based methodology*, Energy and Buildings, **43**, 9, 2356-2364
- Torrens J.I., **Keane M.**, Costa A. and O'Donnell J. (2011) *Multi-criteria optimisation using past, real time and predictive performance benchmarks*, Simulation Modelling Practice and Theory, **19**, 4, 1258-1265
- Ahmed A., Korres N.E., Ploennigs J., Elhadi H. and **Menzel K.** (2011) *Mining building performance data for energy-efficient operation*, Advanced Engineering Informatics, **25**, 2, 341-354
- Ahmed A., Otreba M., Korres N.E., Elhadi H. and **Menzel K.** (2011) *Assessing the performance of naturally day-lit buildings using data mining*, Advanced Engineering Informatics, **25**, 2, 364-379
- Ploennigs J., Ahmed A., Hensel B., Stack P. and **Menzel K.** (2011) *Virtual sensors for estimation of energy consumption and thermal comfort in buildings with underfloor heating*, Advanced Engineering Informatics, **25**, 4, 688-698
- Leahy P.** and Foley, A.M. (2011) *Wind generation output during cold weather-driven electricity demand peaks in Ireland*, Energy, **39**, 1, 48-53
- Singh A., Nizami A.S., Korres N.E. and **Murphy J.D.** (2011) *The effect of reactor design on the sustainability of grass biomethane*, Renewable and Sustainable Energy Reviews, **15**, 1567-1574
- Nizami A.S., Singh A. and **Murphy J.D.** (2011) *Design, commissioning and start-up of a sequentially fed leach bed reactor complete with up-flow anaerobic sludge blanket digesting grass silage*, Energy & Fuels, **25**, 823-834
- Nizami A.S., Orozco A., Groom E., Diertrich B. and **Murphy J.D.** (2011) *How much gas can we get from grass*, Applied Energy, **92**, 783-790
- Asam Z., Poulsen T.G., Nizami A.S., Rafique R., Kiely G. and **Murphy J.D.** (2011) *How can we improve biomethane production per unit of feedstock in biogas plants?* Applied Energy, **88**, 213-2018
- Browne J.D., Nizami A.S. and **Murphy J.D.** (2011) *Assessing the cost of biofuel production with increasing penetration of the transport fuel market: a case study of gaseous biomethane in Ireland*, Renewable and Sustainable Energy Reviews, **15**, 9, 4537-4547
- McEniry J., O'Kiely P., Crossan P., Groom E. and **Murphy J.D.** (2011) *The effect of feedstock cost on biofuel cost as exemplified by biomethane production from grass silage*, Biofuels, Bioproducts, Biorefinery, **5**, 6, 670-682
- Nizami A.S., Molander S., Asam Z., Rafique R., Korres N.E., Kiely G. and **Murphy J.D.** (2011) *Comparative analysis using EIA for developed and developing countries: case studies of hydroelectric power plants in Pakistan, Norway and Sweden*, International Journal of Sustainable Development and World Ecology, **18**, 2, 134-142
- Nizami A.S. and **Murphy J.D.** (2011) *Optimizing the Operation of a Two Phase Anaerobic Digestion System Digesting Grass Silage*, Environmental Science and Technology, **45**, 7561-7569
- Singh A., Nigam P.S. and **Murphy J.D.** (2011) *Mechanism and challenges in commercialisation of algal biofuels*, Bioresource Technology, **102**, 26-34
- Singh A., Nigam P.S. and **Murphy J.D.** (2011) *Renewable fuels from algae: An answer to debatable land based fuels*, Bioresource Technology, **102**, 10-16
- Smyth B.M. and **Murphy J.D.** (2011) *The indirect effects of biofuels and what to do about them: the case of grass biomethane and its impact on livestock*, Biofuels, Bioproducts, Biorefinery, **5**, 165-184
- Smyth B.M., Smyth H. and **Murphy J.D.** (2011) *Determining the regional potential for a grass biomethane industry*, Applied Energy, **88**, 2037-2049
- Thamsiriroj T. and **Murphy J.D.** (2011) *A critical review of the applicability of biodiesel and grass biomethane as biofuels to satisfy both biofuel targets and sustainability criteria*, Applied Energy, **88**, 1008-1019
- Thamsiriroj T. and **Murphy J.D.** (2011) *Modelling monodigestion of grass silage in a 2 stage CSTR anaerobic digester using ADM1*, Bioresource Technology, **102**, 948-959
- Thamsiriroj T. and **Murphy J.D.** (2011) *The impact of the life cycle analysis methodology on whether biodiesel produced from residues can meet the EU sustainability criteria for biofuel facilities constructed after 2017*, Renewable Energy, **36**, 50-63
- Thamsiriroj T., Smyth H. and **Murphy J.D.** (2011) *A roadmap for the introduction of gaseous transport fuel: A case study for renewable natural gas in Ireland*, Renewable and Sustainable Energy Reviews, **15**, 9, 4642-4651
- Murphy J.D.** and Thamsiriroj T. (2011) *What will fuel transport systems of the future?*, Material Today, **14**, 11, 518-524
- Dennehy E., Howley M. and **Ó Gallachóir B.P.** (2011) *Energy in Ireland*. In: Energy Ireland Yearbook 2011, Dublin: bmf Business Services.
- Bazilian B., Nussbaumer P., Rogner H.H., Brew Hammond A., Foster V., Pachauri S., Williams E., Howells M., Niyongabo P., Musaba L., **Ó Gallachóir B.P.**, et al (2011) *Energy access scenarios to 2030 for the power sector in sub Saharan Africa*, Utilities Policy, **20**, 1, 1-16
- Conroy N., Deane J.P. and **Ó Gallachóir B.P.** (2011) *Wind turbine availability - should it be time or energy based? A case study in Ireland*, Renewable Energy, **36**, 11, 2967-2971
- Daly H. and **Ó Gallachóir B.P.** (2011) *Modelling future private car energy demand in Ireland*, Energy Policy, **39**, 12, 7815-7824
- Daly H. and **Ó Gallachóir B.P.** (2011) *Modelling private car energy demand using a technological car stock model*, Transportation Research Part D Transport and Environment, **16**, 2, 93-101
- Dineen D. and **Ó Gallachóir B.P.** (2011) *Modelling the impacts of building regulations and a property bubble on residential space and water heating*, Energy and Buildings, **43**, 1, 166-178
- Rogan F., Dennehy E., Daly H., Howley M. and **Ó Gallachóir B.P.** (2011) *Impacts of an emission based private car taxation policy—one year ex-post Analysis*, Transportation Research Part A Policy and Practice, **45**, 7, 583-597
- Rout U.K., Voss A., Singh A., Blesl M., Fahl U. and **Ó Gallachóir B.P.** (2011) *Energy and emissions forecast for China over a long time horizon*, Energy, **36**, 1, 1-11.
- Deane J.P., Walsh D., FitzGerald J. and **Ó Gallachóir B.P.** (2011) *Comparing Electricity Modelling for Energy Forecasts: PLEXOS and IDEM*, Section 6 of Clancy M. and Scheer J. 2011 Energy Forecasts in Ireland to 2020 - 2011 Report. Report Published by Sustainable Energy Authority of Ireland
- Dennehy E., Howley M. and **Ó Gallachóir B.P.** (2011) Sustainable Energy Authority of Ireland, September
- Howley M., Dennehy E., Holland M. and **Ó Gallachóir B.P.** (2011) *Energy in Ireland 1990-2010*, Sustainable Energy Authority of Ireland.