

## REF 2014: Research outputs (REF2) (sorted by title)

### 7 – Earth Systems and Environmental Sciences

[3D reconstruction of a shallow archaeological site from high-resolution acoustic imagery: The Grace Dieu.](#) APPLIED ACOUSTICS, 69 (5). pp. 399-411. [Journal article]

[A major trough-mouth fan on the continental margin of the Bellingshausen Sea, West Antarctica: The Belgica Fan.](#) MARINE GEOLOGY, 252 (3-4). pp. 129-140. [Journal article]

[A model for the concentration of lead and polychlorinated biphenyls in lake sediment.](#) Journal of Paleolimnology, 43 . pp. 565-576. [Journal article]

[A new hybrid Coulomb/statistical model for forecasting aftershock rates.](#) Geophysical Journal International . pp. 1-6. [Journal article]

[A Reconstruction of Regional and Global Temperature for the Past 11,300 Years.](#) SCIENCE, 339 (6124). pp. 1198-1201. [Journal article]

[Airflow reversal and alternating corkscrew vortices in foredune wake zones during perpendicular and oblique offshore winds.](#) Geomorphology, 187 . pp. 86-93. [Journal article]

[An evaluation of acoustic seabed classification techniques for marine biotope monitoring over broad-scales \(>1 km<sup>2</sup>\) and meso-scales \(10 m<sup>2</sup>–1 km<sup>2</sup>\).](#) Estuarine, Coastal and Shelf Science, 93 . pp. 336-349. [Journal article]

[Archaeology and International Development in Africa.](#) Duckworth Academic Press. 159 pp ISBN 978-0-7156-3905-4 [Book (authored)]

[Area-based targeting of fuel poverty in Northern Ireland: An evidenced-based approach.](#) Applied Geography, 34 . pp. 639-649. [Journal article]

[Assessment of ecological status in UK rivers using diatoms.](#) Freshwater Biology , 53 . pp. 403-422. [Journal article]

[Barrier islands on bedrock: a new landform type demonstrating the role of antecedent topography on coastal evolution.](#) Geology, 40 . pp. 823-826. [Journal article]

[Bed Ribbing Instability Explanation: Testing a numerical model of ribbed moraine formation arising from coupled flow of ice and subglacial sediment.](#) Journal of Geophysical Research - Earth Surface, 113 (F03005). pp. 1-15. [Journal article]

[Climate Sensitivity Estimated from Temperature Reconstructions of the Last Glacial Maximum.](#) SCIENCE, 334 (6061). pp. 1385-1388. [Journal article]

[Coastal foredune topography as a control on secondary airflow regimes under offshore winds.](#) Earth Surface processes and Landform, 35 (3). pp. 344-353. [Journal article]

[Constraints on the origin and evolution of Iani Chaos, Mars.](#) Journal of Geophysical Research, 116 (E6). [Journal article]

[Cosmogenic Be-10 chronology of the last deglaciation of western Ireland, and implications for sensitivity of the Irish Ice Sheet to climate change.](#) GEOLOGICAL SOCIETY OF AMERICA BULLETIN, 121 (1-2). pp. 3-16. [Journal article]

[Decadal behavior of tidal inlet-associated beach systems, Northwest Ireland, in relation to climate forcing.](#) Journal of Sedimentary Research, 81 . pp. 38-51. [Journal article]

[Deep-water geomorphology of the glaciated Irish margin from high-resolution marine geophysical data.](#) Marine Geology, 291-294 . pp. 113-131. [Journal article]

[Dunluce Castle; archaeology and history.](#) Four Courts Press. Dublin . 230 pp ISBN 978-1-84682-373-2 [Book (authored)]

[Effect of the Sumatran mega-earthquake on the global magnitude cut-off and event rate.](#) NATURE GEOSCIENCE, 1 (3). p. 142. [Journal article]

[Evaluating fuel poverty policy in Northern Ireland using a geographic approach.](#) Energy Policy . [Journal article]

[Famine and Displacement in Plantation-period Munster.](#) In: Plantation Ireland: Settlement and Material Culture. Four Courts Press, Dublin , pp. 132-139. ISBN 978-1-84682-186-8 [Book section]

[Field characterization of three-dimensional lee-side airflow patterns under offshore winds at a beach-dune system.](#) Journal of Geophysical Research - Earth Surface, 118 . pp. 706-721. [Journal article]

[Foredune accretion under offshore winds.](#) GEOMORPHOLOGY, 105 (1-2, Sp. Iss. SI). pp. 139-146. [Journal article]

[Global warming preceded by increasing carbon dioxide concentrations during the last deglaciation.](#) NATURE, 484 (7392). 49+. [Journal article]

[High resolution measured and modelled three-dimensional airflow over a coastal bowl blowout.](#) Geomorphology, 177-178 . pp. 62-73. [Journal article]

[Increases in soil organic carbon sequestration can reduce the global warming potential of long-term liming to permanent grassland.](#) Global Change Biology, doi: 10.1111/j.1365-2486.2010.02328.x . pp. 1925-1934. [Journal article]

[Interseismic coupling, stress evolution, and earthquake slip on the Sunda Megathrust.](#) Geophysical Research Letters, 40 (16). pp. 4204-4208. [Journal article]

[Investigation of three-dimensional wind flow behaviour over coastal dune morphology under offshore winds using Computational Fluid Dynamics \(CFD\) and ultrasonic anemometry.](#) Earth Surface Processes and Landforms, 36 . pp. 1113-1134. [Journal article]

[Limitations of instantaneous water quality sampling in surface-water catchments: Comparison with near-continuous phosphorus time-series data.](#) JOURNAL OF HYDROLOGY, 405 (1-2). pp. 182-193. [Journal article]

[Limited overlap between the seismic gap and coseismic slip of the great 2010 Chile earthquake.](#) NATURE GEOSCIENCE, 4 (3). pp. 173-177. [Journal article]

[Long-term changes in oxygen depletion in a small temperate lake: effects of climate change and eutrophication.](#) Freshwater Biology, 57 (2). pp. 278-289. [Journal article]

[Mapping Submerged Landscapes Using Multibeam Bathymetric Data: a case study from the north coast of Ireland.](#) International Journal of Nautical Archaeology, 40 (1). pp. 99-112. [Journal article]

[Marine geophysical evidence for ice sheet extension and recession on the Malin Shelf: New evidence for the western limits of the British Irish Ice Sheet.](#) Marine Geology, 276 (1-4). pp. 86-99. [Journal article]

[Marine geophysical evidence for Late Pleistocene ice sheet extent and recession off northwest Ireland.](#) Quaternary Science Reviews, 44 . pp. 147-159. [Journal article]

[Measuring and monitoring fuel poverty in the UK: National and regional perspectives.](#) Energy Policy, 49 . pp. 27-32. [Journal article]

[Modelling fluid induced seismicity on a nearby active fault.](#) Geophysical Journal International, 194 (3). pp. 1613-1624. [Journal article]

[Modelling soil phosphorus decline: Expectations of Water Framework Directive policies.](#) ENVIRONMENTAL SCIENCE & POLICY, 13 (6). pp. 472-484. [Journal article]

[Multi-nutrient vs. nitrogen-only effects on carbon sequestration in grassland soils.](#) Global Change Biology, N/A . [Journal article]

[Near-real-time aftershock hazard maps.](#) Nature Geoscience, 2 (3). pp. 154-155. [Journal article]

[Observations of wind-blown sand under various meteorological conditions at a beach.](#) JOURNAL OF GEOPHYSICAL RESEARCH-EARTH SURFACE, 113 (F4). F04008. [Journal article]

[On the size and shape of drumlins.](#) GEM-International Journal of Geomathematics, 4 (2). pp. 155-165. [Journal article]

[Ottoman Suakin 1541 – 1865 AD – Lost & Found.](#) In: Frontiers of the Ottoman World. (Eds: Peacock, A), Proceedings of the British Academy. Oxford University Press, pp. 469-492. ISBN 13: 9780197264423 [Book section]

[Oxygen depletion in lake hypolimnia.](#) Limnology and Oceanography, 54 . pp. 905-916. [Journal article]

[Plant functional composition influences rates of soil carbon and nitrogen accumulation.](#) JOURNAL OF ECOLOGY, 96 (2). pp. 314-322. [Journal article]

[Practice versus policy-led coastal defence management.](#) MARINE POLICY, 33 (6). pp. 923-929. [Journal article]

[Quantification of Phosphorus Transport from a Karstic Agricultural Watershed to Emerging Spring Water.](#) Environmental Science & Technology, 47 . pp. 6111-6119. [Journal article]

[Quantifying nutrient transfer pathways in agricultural catchments using high temporal resolution data.](#) Environmental Science and Policy, 24 . pp. 44-57. [Journal article]

[Rathlin Island: an archaeological survey of a maritime landscape.](#) Belfast. 482 pp. TSO. ISBN 9780337097041 [Book (edited)]

[Response of the Irish Ice Sheet to abrupt climate change during the last deglaciation.](#) Quaternary Science Reviews, 35 . pp. 100-115. [Journal article]

[Sedimentology and depositional history of Holocene sandy contourites on the lower slope of the Faroe-Shetland Channel, northwest of the UK.](#) Marine Geology, 268 . pp. 85-96. [Journal article]

[Soil carbon sequestration in prairie grasslands increased by chronic nitrogen addition.](#) Ecology, Preprint . [Journal article]

[Statistical evaluation of characteristic earthquakes in the frequency-magnitude distributions of Sumatra and other subduction zone regions.](#) GEOPHYSICAL RESEARCH LETTERS, 36 (L20303). [Journal article]

[Stress evolution before and after the 2008 Wenchuan, China earthquake.](#) Earth and Planetary Science Letters, 307 . pp. 222-232. [Journal article]

[Stress triggering and the Canterbury earthquake sequence.](#) Geophysical Journal International . pp. 1-8. [Journal article]

[The Bengkulu premonition: cultural pluralism and hybridity in disaster risk reduction.](#) AREA, **43 (4)**. pp. 449-455. [Journal article]

[The ecological impact of rural building on habitats in an agricultural landscape.](#) Landscape and Urban Planning, 101 (3). 262 - 268. [Journal article]

[The impact of scour processes on a smothered reef system in the Irish Sea.](#) Estuarine, Coastal and Shelf Science, 84 (3). pp. 409-418. [Journal article]

[The Last Glacial Maximum.](#) Science, 325 (5941). pp. 710-714. [Journal article]

[The measures and materiality of Improvement in Ireland.](#) International Journal of Historical Archaeology, 17 (1). pp. 72-93. [Journal article]

[The role of time-lapse bathymetric surveys in assessing morphological change at shipwreck sites.](#) Journal of Archaeological Science, 37 (11). pp. 2938-2946. [Journal article]

[The sedimentary legacy of a palaeo-ice stream on the shelf of the southern Bellingshausen Sea: Clues to West Antarctic glacial history during the Late Quaternary.](#) Quaternary Science Reviews, 29 (19-20). pp. 2741-2763. [Journal article]

[The September 2009 Padang earthquake.](#) Nature Geoscience, 3 . pp. 70-71. [Journal article]

[The Solutrean Atlantic Hypothesis: A view from the ocean.](#) Journal of the North Atlantic, 1 (1). pp. 85-98. [Journal article]

[The use of a high-resolution 3D Chirp sub-bottom profiler for the reconstruction of the shallow water archaeological site of the Grace Dieu \(1439\), River Hamble, UK.](#) JOURNAL OF ARCHAEOLOGICAL SCIENCE, 36 (2). pp. 408-418. [Journal article]

[Timing of the East Antrim Coastal Readvance: phase relationships between lowland Irish and upland Scottish ice sheets during the Last Glacial Termination.](#) Quaternary Science Reviews, 58 . pp. 18-29. [Journal article]

[Towards an archaeology of Early Islamic Ports on the Western Red Sea Coast.](#) Journal of Maritime Archaeology, 8:2 . pp. 311-323. [Journal article]

[Trace metal contamination of Beaufort's Dyke, North Channel, Irish Sea: A legacy of ordnance disposal.](#) Marine Pollution Bulletin, 62 . pp. 2345-2355. [Journal article]

[Transient Simulation of Last Deglaciation with a New Mechanism for Bolling-Allerod Warming.](#) SCIENCE, 325 (5938). pp. 310-314. [Journal article]

[Tsunami threat in the Indian Ocean from a future megathrust earthquake west of Sumatra.](#) EARTH AND PLANETARY SCIENCE LETTERS, 265 (1-2). pp. 61-81. [Journal article]

[Using Multibeam Echo-Sounder Data to Identify Shipwreck Sites: archaeological assessment of the Joint Irish Bathymetric Survey data.](#) International Journal of Nautical Archaeology, 40 (1). pp. 87-98. [Journal article]

[Volcanic time-markers for Marine Isotopic Stages 6 and 5 in Southern Ocean sediments and Antarctic ice cores: implications for tephra correlations between palaeoclimatic records.](#) QUATERNARY SCIENCE REVIEWS, 27 (5-6). pp. 518-540. [Journal article]