



Australian Government

ansto

Nuclear-based science benefiting all Australians

Journal Publication

2006

1. Chen, Patrick P.-T.; Butcher, K. Scott A.; Wintrebert-Fouquet, Marie; Wuhrer, Richard; Phillips, Matthew R. Kathryn. E. Prince, Heiko Timmers, Santosh K. Shrestha, and Brian F. Usher. 2006. Apparent band-gap shift in InN films grown by remote-plasma-enhanced CVD. *Journal of Crystal Growth*, 288 (2006) 241-246.
2. Y. Zhao, M. Ionescu, P. Munroe and S. X. Dou, Significant improvement of activation energy in MgB₂/Mg₂Si multilayer films, *Appl. Phys. Lett.* 88, 012502-1, (2006)
3. G.R. MacFarlane, S.J. Markich, K. Linz, S. Gifford, R.H. Dunstan, W. O'Connor, R.A. Russell. The Akoya pearl oyster shell as an archival monitor of lead exposure. *Environmental Pollution*, 143 (2006) 166-173.
4. Murugaraj, Pandiyan; Mainwaring, David Edward; Jakubov, Timur; Mora-Huertas, Nelson Eduardo, Nurra Ali Khelil and Rainer Siegele, Electron transport in semiconducting nanoparticle and nanocluster carbon-polymer composites *Solid State Communications* 137 (2006) 422-426
5. C.G. Skilbeck and D. Fink, (2006) Radiocarbon dating and sedimentation rates for Holocene-upper Pleistocene sediments, eastern equatorial Pacific and Peru continental margin, Data report ODP Leg-181. In Jørgensen, B.B., D'Hondt, S.L., Miller, D.J. (Eds.), *Proc. ODP, Sci. Results*, 201, (http://www-dp.tamu.edu/publications/201_SR/108/108.htm.)
6. D. Fabel, **D. Fink**, O. Fredin, J. Harbor, M. Land, (2006) A. Stroeven Cosmogenic exposure ages from relict lateral moraines overridden by the Fennoscandian ice-sheet in northern Sweden, *Quaternary Research*, 65, 136-146.
7. J. Harbor, A. Steroven, D. Fabel, A. Clarhall, J. Kleman, Y.Li, D. Elmore and **D Fink**, Cosmogenic nuclide evidence for minimal erosion across two subglacial sliding boundaries of the late glacial Fennoscandian ice sheet, *Geomorphology*, 75, (2006) 90-99.
8. **D. Fink**, B. McKelvey, M. Hambrey, D. Fabel, R. Brown, Pleistocene deglaciation chronology of the Radok Lake basin, Amery Oasis, northern Prince Charles Mountains, Antarctica. *Earth Planet Sci Letters* 243 (2006) 229-243.
9. Penny D, Pottier C, Fletcher RJ, Barbetti M, **Fink D**, Hua Q. A palynological record of vegetation and land-use change from Angkor – Hariharalaya, *Antiquity*, v80 (2006) 599-614.
10. Turney CSM, Haberle S, **Fink D**, Kershaw AP, Barbetti M, Barrows T, Black M, Corregge T, Hua Q, Hesse P, Johnston R, Moss P, Morgan V, Nanson G, van Ommen T, Rule S, Williams NJ, Zhao J-X, Cohen TJ, D'Costa D, Feng Y-X, Gagan M, Mooney S, Xia Q. Integration of Ice core, Marine and Terrestrial Records for the Australian Last Glacial Maximum and Termination: A contribution from the OZ INTIMATE Group. *Journal of Quaternary Science*, (2006) v21, 751-761.

11. R. D. Bhardwaj, M. A. Curtis, K. L. Spalding, B. A. Buchholz, **D. Fink**, T. Björk-Eriksson, C. Nordborg, H. Druid, P. S. Eriksson and J. Frisé. Neocortical neurogenesis in humans is restricted to development, , *Proc Nat. Acad. Sci., (USA)*, v103(13) (2006) 12564-12568
12. Henderson-Sellers, A., M. Fischer, I. Aleinov, K. McGuffie, W.J. Riley, G.A. Schmidt, K. Sturm, K. Yoshimura and P. Irannejad, 2006: 'Stable Water Isotope Simulation by Current Landsurface Schemes: Results of iPILPS Phase 1', *Global and Planetary Change* **51**, 34-58. Procite #2006-96.
13. Fischer, M.J., 2006: 'iCHASM, a flexible land-surface model that incorporates stable water isotopes', *Global and Planetary Change* **51**, 121-130. Procite #2005-176.
14. Fischer, M.J. and K. Sturm, 2006: 'REMOiso forcing for the iPILPS Phase 1 experiments and the performance of REMOiso in three domains', *Global and Planetary Change* **51**, 73-89. Procite #2005-131.
15. Twining, J., Stone, D., Tadros, C., Henderson-Sellers, A., and Williams, A.G., 2006: moisture Isotopes in the Biosphere and Atmosphere (MIBA) in Australia: a priori estimates and preliminary observations of stable water isotopes in soil, plant and vapour for the Tumberumba Field Campaign', *Global and Planetary Change* **51**, 59-72.
16. Henderson-Sellers, A., 2006: 'Improving land-surface parameterization schemes using stable water isotopes: introducing the 'iPILPS' initiative', *Global and Planetary Change* **51**, 3-24. Procite #2006-95.
17. Gat, J., and Airey, P., 2006: 'Stable water isotopes in the atmosphere/biosphere/lithosphere interface: scaling—up from the local to continental scale, under humid and dry conditions', *Global and Planetary Change* **51**, 25-33. Procite #2005-106.
18. McGuffie, K., and Henderson-Sellers, A., 2006: Editors' foreword, *Global and Planetary Change* **51**, 1-2. Procite #2006-97.
19. Fischer, M.J., 2006: '[Review of] *Geostatistics for Environmental Applications*', *Geographical Research* **44** (4), 1745-5863. Procite #2006-103.
20. Garvey, C.J. and J. Ferris. Small angle neutron scattering studies on an absolute intensity scale structure of three cultured diatom frustules. *European Biophysics Journal (submitted)*.
21. D.P.Child, M.A.C. Hotchkis, M.L. Williams. High Sensitivity Plutonium Isotopic Analysis in Environmental and Monitoring Samples, in *Recent Advances in Actinide Science*, ed. R. Alvares and N D Bryan, Royal Society of Chemistry Publishing, Cambridge, UK, June 2006.
22. Jordan, T. B., A. J. Seen, G. E. Jacobsen, and J. L. Gras. 2006. Radiocarbon determination of woodsmoke contribution to air particulate matter in Launceston, Tasmania. *Atmospheric Environment*, 40:2575-2582
23. Turney, C. S. M., A. P. Kershaw, S. James, N. Branch, J. Cowley, L. K. Fifield, G. Jacobsen, and P. Moss. 2006. Geochemical changes recorded in Lynch's Crater, Northeastern Australia, over the past 50 ka. *Palaeogeography Palaeoclimatology Palaeoecology*, 233:187-203.
24. Turney, C. S. M., A. P. Kershaw, J. J. Lowe, S. van der Kaars, R. Johnston, S. Rule, P. Moss, L. Radke, J. Tibby, M. S. McGlone, J. M. Wilmshurst, M. J. Vandergoes, S. J. Fitzsimons, C. Bryant, S. James, N. P. Branch, J. Cowley, R. M. Kalin, N. Ogle, G. Jacobsen, and L. K. Fifield. 2006. Climatic variability in the southwest Pacific during the Last Termination (20-10 kyr BP). *Quaternary Science Reviews*, 25:886-903.

25. Alves, P. Reichart, R. Siegele, P.N. Johnston, D.N. Jamieson, Ion beam lithography using single ions. *Nucl. Instr. and Meth. B249* (2006) 730-733.
26. A. Begum, S.K. Biswas, P. K. Hopke, D.D. Cohen, Multi-elemental analysis and characterisation of atmospheric particulate pollution in Dhaka. *Aerosol and Air Quality Research*, 6 (2006) 334-359.
27. Y. Zhao, M. Ionescu, P. Munroe and S. X. Dou, Significant improvement of activation energy in MgB₂/Mg₂Si multilayer films, *Appl. Phys. Lett.* 88, 012502-1, (2006)
28. Y. Zhao, M. Ionescu, M. J. Qin, P. Munroe, S. X. Dou, Transport properties of multilayered MgB₂/Mg₂Si thin films, *J. Appl. Phys.* 99, 08M503, (2006)
29. K.E.Prince, P.J.Evans, G.Triani, Z.Zhang and J.Bartlett, Characterisation of alumina-silica films deposited by ALD. *Surface and Interface Analysis*, 38. (2006) 1692-1695. DOI:10.1002/sia.2422
30. Manickam Minakshi, Pritam Singh, Touma B. Issa, Stephen Thurgate, Kathryn Prince and David Mitchell, "Electrochemical lithium insertion into a manganese dioxide electrode in aqueous solutions" *Proceedings of the Tenth Asian Conference on Solid State Ionics*, World Scientific Publishing Co. Pte. Ltd. Singapore, pp. 392-399 (2006).
31. Manickam Minakshi, Pritam Singh, Stephen Thurgate and Kathryn Prince. Electrochemical Behaviour of Olivine-Type LiMnPO₄ in Aqueous Solutions. *Electrochemical and Solid-State Letters*, 9 (10), (2006) A471-A474
32. Hao Zhou , Tuquabo Tesfamichael, John Bell, Kathryn Prince, Characterization of Nitrogen-Implanted TiO₂ Nanostructured Films, *Materials Science & Engineering B-Solid State materials for Advanced Technology*, 126 (1), (2006) 44-48.
33. NELLY BLAIR, K. E. PRINCE, R. D. FAULKNER, A. R. TILL, Using the Scanning Electron Microprobe and Secondary Ion Mass Spectrometry to Locate ¹⁴C- and ¹³C-Labelled Plant Residues within Soil Aggregates. *SCANNING VOL. 28*, (2006) 259–266
34. S. Granville, F. Budde, B. J. Ruck, H. J. Trodahl, G. V. M. Williams, A. Bittar, M. Ryan J. Kennedy, A. Markwitz, J. B. Metson, K. E. Prince, J. M. Cairney, M. C. Ridgway. Single phase nanocrystalline GaMnN thin films with high Mn content. *J. of Applied Physics* 100, (2006) 084310-1.
35. Dodson, J. R., Hickson, S., Khoo, R., Li, X.Q., Toia, J., and Zhou, W.J. (2006). A vegetation and environment history for the last 14,000 years from Dingnan, Jiangxi Province, south China. *Journal of Integrative Plant Biology* 48:1018-1027.
36. Li, Xiaoqiang, Zhou, Xinying, Shang, Xue and Dodson, John (2006). Different size methods of charcoal analysis in loess and its significance in the study of fire variation. *Journal of Lake Science* 18: 540-544 (In Chinese with English Summary).
37. J.M. Reeves, A. R. Chivas, A Garcia, S. Holt, M. J. Couapel, B.G Jones , D Cendoin, D Fink, The sedimentary record of paleo-environmental and sea level change in the Gulf of Carpentaria , Australia, though the last glacial cycle, *Quaternary Science*, 2006
38. P. Kong, D. Fink, C. Na, F. Huang , Cosmogenic ¹⁰Be dating of moraines in Tianshan, Central Asia, *Quaternary Research*, 2006.
39. James Shulmeister, Chris S. M. Turney, David Fink, Rewi M. Newnham , Brent V. Alloway, Developing an Event Stratigraphy for Australasian Climate Change, *EOS, Vol. 87 (No: 29) pp283, 18 July, 2006*
40. Penny, D., C. Pottier, R.J. Fletcher, M. Barbetti, D. Fink, and Q. Hua (2006), Vegetation and land-use at Angkor, Cambodia: a dated pollen sequence from the Bakong temple moat, *Antiquity*, 80, 599-614.

41. Amiro, B.D., Orchansky, A.L., Barr, A.G., Black, T.A., Chambers, S.D., Chapin III, F.S., Goulden, M.L., Litvak, M., Liu, H.P., McCaughey, J.H., McMillan, A., and Randerson, J.T., 2006: 'The effect of post-fire stand age on the boreal forest energy balance', *Agricultural and Forest Meteorology*, 140, 41-50. doi:10.1016/j.agrformet.2006.02.014. Procite #2006-190.
42. Randerson, J.T., Liu, M.G., Flanner, M.G., Chambers, S.D., Jin, Y., Hess, P.G., Pfister, G., Mack, M.C., Treseder, K.K., Welp, L.R., Chapin III, F.S., Harden, J.W., Goulden, M.L., Lyons, E., Neff, J.C., Schuur, E.A.G., and Zender, C.S., 2006: 'Boreal forest fire cools northern climate', *Science*, 17 November 2006, 1130-1132. Procite #2006-191.
43. Irannejad, P., and Henderson-Sellers, A., 2006: 'Evaluation of AMIP II global climate model simulations of the land-surface water budget and its components over the GEWEX-CEOP regions', *J. Hydrometeorology*, 8, 304-326. Procite #2005-134.
44. Martinschitz, K.J., Boesecke, P., Garvey, C.J., Gindl, W. and Keckes, J., 2006. Structural changes in cyclically deformed dry coir fibers studied by in-situ synchrotron X-ray diffraction. *Journal of Material Science (In Press)*.
45. Bocking, T., Wong, E. L. S., James, M., Watson, J. A., Brown, C. L., Chilcott, T.C., Barrow, K. D. and H. G. L. Coster. Immobilization of Dendrimers on Si-C Linked Carboxylic Acid-terminated Monolayers on Silicon(111). *Thin Solid Film (In Press)*.
46. Lenne, T., Bryant, G., Garvey, C. J., Keiderling, U. and K.L. Koster, 2006. Location of sugars in multilamellar membranes at low hydration. *Physica B 385-386*: 862-864.
47. Garvey, C.J., Knott, R.B., Searson, M. and J.P. Conroy, 2006. USANS study of wood structure *Physica B 385-386*: 877-879.
48. Rodgers, L.E., Knott, R.B., Holden, P.J., Foster, L.J.R. and J.R. Bartlett. The Low Resolution Structure of Lipase B from *Candida antarctica* in Solution. *Biophysical Chemistry (submitted)*.
49. Russell, R.A., Holden, P.J., Garvey, C.J., Wilde, K.L., Hammerton, K.M. and L.J. Foster, 2006. Investigation of the phase morphology of bacterial PHA inclusion bodies by contrast variation SANS. *Physica B 385-386*: 859-861.
50. Rodgers, L.E., Knott, R.B., Holden, P.J., Pike, K.J., Hanna, J.V., Foster, L.J.R. and J.R. Bartlett, 2006. Structural evolution and stability of sol-gel biocatalysts. *Physica B 385-386*: 508-510.
51. Foster, L.J.R., Knott, R., Sanguanchaipaiwong, V. and P.J. Holden. Polyhydroxyalkanoate based natural-synthetic hybrid copolymer films: a small angle neutron scattering study. *Physica B 385-386*: 770-772.
52. Garvey, C.J., Parker, I.H., Simon, G.P. and A.K. Whittaker, 2006. The hydration of paper studied with solid state magnetisation exchange spectroscopy. *Holzforschung 60*, 409-416.
53. Foster, LJR; Russell, RA; Sanguanchaipaiwong, V; Stone, DJM; Hook, JM & Holden PJ., 2006. Biosynthesis and Characterisation of Deuterated Polyhydroxyoctanoate (PHO) *Biomacromolecules 7*: 1344-1349
54. Wong, E.L.S. and J. J. Gooding, 2006. Charge Transfer through DNA: A Selective Electrochemical DNA Biosensor, *Analytical Chemistry 78*: 2138-2144.
55. Gell, P., Fluin, J., Tibby, J., Haynes, D., Khanum, S.I., Walsh, B., Hancock, G., Harrison, J., Zawadzki, A., Little, F. (2006) Changing fluxes of sediments and salts as recorded in the Lower Murray wetlands, Australia. Sediment Dynamics and the Hydromorphology of Fluvial Systems (Proceedings of a symposium held in Dundee, UK, July 2006). IAHS Publication 306.
56. Ochs, M., Davis, J.A., Olin, M., Payne, T.E., Tweed, C.J., Askarieh, M.M. and Altmann, S. (2006) Use of thermodynamic sorption models to derive radionuclide Kd values for performance assessment: selected results and recommendations from the NEA sorption project. *Radiochimica Acta 94*: 779-785.

57. Payne, T.E., and Airey, P.L. (2006). Radionuclide Migration at the Koongarra Uranium Deposit, Northern Australia – Lessons from the Alligator Rivers Analogue Project. *Physics and Chemistry of the Earth*, 31:572-586.
58. Mazumder, D. Saintilan, N. and Williams, R. J. (2006). Trophic relationships between itinerant fish and crab larvae in temperate Australian saltmarsh. *Journal of Marine and Freshwater Research*.57: 193-199.
59. Mazumder, D. Saintilan, N. and Williams, R. J. (2006). Fish assemblages in three tidal saltmarsh and mangrove flats in temperate NSW, Australia: a comparison based on species diversity and abundance. *Wetlands Ecology and Management* 14: 201-209.
60. Outola¹, J. Filliben¹, K.G.W Inn¹, Ciara McMahon^{1a}, G.A. Peck², J. Twining², S.G. Tims³, L.K.Fifield³, P.Smedley⁴, M.P. Antón⁵, C. Gascó⁵, J. La Rosa^{6,1}, M.K.Pham⁶, A. Raaum⁷, H.Wei⁸, G.C. Krijger⁹, P.Bouisset¹⁰, A.E. Litherland¹¹, W.E. Kieser¹¹, M.Betti¹², L. Aldave de las Heras¹², G. H. Hong¹³, E. Holm¹⁴, L. Skipperud¹⁵, A.V. Harms¹⁶, A. Arinc¹⁶, M.Youngman¹⁷, D.Arnold¹⁸, H. Wershofen¹⁸, D.S. Sill¹⁹, S. Bohrer¹⁹, Q.J. Dahlgaard²⁰, I.W.Croudace²¹, P.E. Warwick²¹, T.Ikäheimonen²², S.M. Vakulovsky²³, J.A. Sanchez-Cabeza²⁴, (2006) Characterization of the NIST seaweed Standard Reference Material. *Applied Radiation and Isotopes* 64 (10-11), 1242-1247.
61. Jordan, T. B., A. J. Seen, and G. E. Jacobsen. (2006). Levoglucosan as an atmospheric tracer for woodsmoke. *Atmospheric Environment*, 40:5316-5321.
62. Che Doering , Riaz Akber , Henk Heijnis; Vertical distributions of ²¹⁰Pb excess, ⁷Be and ¹³⁷Cs in selected grass covered soils in Southeast Queensland, Australia, *Journal of Environmental Radioactivity* 87 (2006) 135-147.
63. Williams, N.J., Harle, K.J, Gale, S.J. and Heijnis, H; The vegetation history of the last glacial-interglacial cycle in eastern New South Wales, Australia. *Journal of Quaternary Science* (2006) 21 (7) 735-750.
64. SIMON G. HABERLE, JOHN TIBBY*, SOPHIA DIMITRIADIS† and HENK HEIJNIS; The impact of European occupation on terrestrial and aquatic ecosystem dynamics in an Australian tropical rain forest, *Journal of Ecology* 2006 94, 987–1002.
65. Nelly Blair, K.E.Prince, R.D. Faulkner, A.R. Till (2006) Locating plant residues within soil aggregates using SEM and SIMS. *Journal of Scanning Microscopy*.