



CSIR outputs

Contributing to the global knowledge pool

Worldwide, the research paradigm is in the process of expanding into e-research and open scholarship. This implies new ways of collaboration, dissemination and re-use of research results, specifically *via* the web. Online research output repositories – although not yet fully networked in a coordinated way – have become an important vehicle through which South African collections could be made accessible to the rest of Africa and ultimately, the rest of the world.

The CSIR's institutional repository of research publications – Research Space launched in August 2007 – remains the only open access, online repository by a South African research council.

Highlights during the past financial year include an increase in the number of research items accessible from the repository to 2 424, the introduction of a structured quality control system and requests for the CSIR to supply case study information for conferences locally and in New Zealand.

In a quest to disseminate its output as wide as is possible, the CSIR contributes its repository content to a variety of international harvesting services. As a result, the CSIR currently serves on the Board of the WorldWideScience.org initiative – an international science gateway (see <http://worldwidescience.org/>).

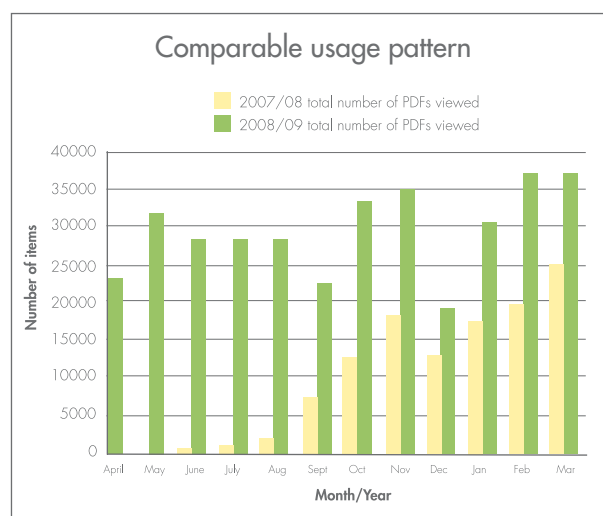
Furthermore, the organisation has contributed to institutional repository training to some 120 South African librarians.

Because of this exposure, the CSIR was invited to co-present a seminar and deliver a conference paper on the challenges of adhering to copyright requirements when managing an institutional repository at an agricultural information conference in Accra, Ghana, in July 2009.

The number of items downloaded from Research Space increased from 113 327 in 2007/08 to 340 616 in 2008/09. A monthly comparable usage pattern for the past two financial years (since June 2007) follows below. On average, 20 000 articles are downloaded from the repository per month.

The CSIR's publication equivalents also increased significantly from the previous financial years, demonstrated by the table below. The following pages list research published in 2008.

View <http://researchspace.csir.co.za/dspace>



Publication equivalent data

Year	External publications for which publication equivalents are assigned				Other external publications			Total publication equivalents
	Articles in accredited journals	Conference papers (Peer reviewed)	Books	Book chapters	Journal articles (Other)	Conference papers & presentations (Other)	Books	
2006/07	129	115	2	27	43	250	0	220.0
2007/08	180	202	12	50	31	136	0	343.0
2008/09	208	393	9	38	69	228	5	451.5

Books and book chapters

A

Abbott GR, De Jager P, Gasa N. 2008. Health: looking after the Nation's health. In: *DBSA 2008 Infrastructure Barometer: Investment in Infrastructure Essential to Fight Poverty and Unemployment*, p.146-183.

Alexander P, Lotriet H, Phahlamohlaka J, Van Loggerenberg J. 2008. Collaboration: adding a commercial face to the SEIDET profile. In: Phahlamohlaka J, Braun M, Romijn H, Roode D (eds.). *Community-Driven Projects: Reflections on a Success Story: a Case Study of Science Education and Information Technology in South Africa*, p.207- 219.

Ashton PJ. 2008. Disputes and conflicts over water in Africa. In: Mlambo N (ed.). *Violent Conflicts, Fragile Peace: Perspectives on Africa's Security*, p.119-135.

Ashton PJ, Hardwick D, Breen CM. 2008. Changes in water availability and demand within South Africa's shared river basins as determinants of regional social and economical resilience. In: Burns M, Weaver A (eds.). *Exploring Sustainability Science: A Southern African Perspective*, p.279-310.

Ashton PJ, Turton AR. 2008. Water and security in Sub-Saharan Africa: emerging concepts and their implications for effective water resource management in the Southern African region. In: Brauch HG, Grin J, Mesjasz C, Behera NC, Chourou B, Spring OU, Liotta PH, Kameri-Mbote P (eds.). *Globalisation and Environmental Challenges, Vol 2: Facing Global Environmental Change: Environmental, Human, Energy, Food, Health and Water Security Concepts*. Berlin: Springer Verlag, Chapter 55.

Audouin M, Hattingh J. 2008. Moving beyond modernism in environmental assessment and management. In: Burns M, Weaver A (eds.). *Exploring Sustainability Science: A Southern African Perspective*, p.205-242.

B

Burns M, Weaver A (eds.). 2008. *Exploring Sustainability Science: A Southern African Perspective*.

D

De Lange WJ, Wise RM, Nahman A. 2008. Evaluation beyond valuation: towards a framework for assessing social-ecological trade-offs in South Africa. In: Burns M, Weaver A (eds.). *Exploring Sustainability Science: A Southern African Perspective*, p. 243-278.

De Waal A, Venter JP, Barnard E. 2008. Applying topic modelling to forensic data. In: Ray I, Shenoi S (eds.). *Advances in Digital Forensics IV*, p.115-126.

Du Plessis C. 2008. A conceptual framework for understanding social-ecological systems. In: Burns M, Weaver A (eds.). *Exploring Sustainability Science: A Southern African Perspective*, p.59-90.

F

Funke NS, Nortje K, Rascher J, Turton A. 2008. The evolution of water governance in South Africa: lessons from a resilience theory-based analysis of the Khoisan and gold mining social-ecological systems. In: Burns M, Weaver A (eds.). *Exploring Sustainability Science: A Southern African Perspective*, p.311-337.

G

Gerber A, Van Der Merwe A, Barnard A. 2008. A functional semantic web architecture. In: Bechhofer S, Hauswirth M, Hoffmann J, Koubarakis M (eds.). *The Semantic Web: Research and Applications*, p.273-287.

Grosse CU, Linzer LM. 2008. Signal-Based AE analysis. In: Grosse CU, Masayasu O (eds.). *Acoustic Emission Testing: Basics for Research: Applications in Civil Engineering*, p.53-100.

H

Hunter L, Fan J. 2008. Measuring and predicting fabric and garment drape. In: Fairhurst C (ed.). *Advances in Apparel Production*, p.7-25.

Hunter L. 2008. The impact of cotton fibre properties on textile processing performance, quality and costs. In: International Trade Centre Staff, Estur G (eds.). *Cotton Exporter's Guide*, p.42-53.

J

John MJ, Anandjiwala RD, Thomas S. 2008. Characterisation of interfaces in composites using micro-mechanical techniques. In: Mishra MK, Yagci Y (eds.). *Handbook of Vinyl Polymers: Radical Polymerization, Process and Technology*. Second Edition, p.689-716.

K

Kunert K, Vorster J, Chikwamba RK, Schlüter U. 2008. Biotechnology entrepreneurship and education: a South African experience. In: Friedman Y (ed.). *Best Practices in Biotechnology Education*, p.3-12.

Kurz JH, Koppel S, Linzer LM, Schechinger B, Grosse CU. 2008. Source localisation. In: Grosse CU, Masayasu O (eds.). *Acoustic Emission Testing: Basics for Research: Applications in Civil Engineering*, p. 101-148.

L

Le Maitre DC, O'Farrell PJ. 2008. Social-ecological resilience in a dry environment. In: Burns M, Weaver A (eds.). *Exploring Sustainability Science: A Southern African Perspective*, p.339-381.

Leary N, Adejuwon J, Bailey V, Barros V, Batima P, Caffera M, Chinvano S, Conde C, De Comarmond A, De Sherbinin A, Downing T, Eakin H, Nyong A, Opondo M, Osman B, Payet R, Puhlin F, Puhlin J, Sanjak E, Ratnisiri J, Von Maltitz GP, Wehbe M, Yin Y, Ziervogel G. 2008. For whom the bell tolls: vulnerabilities in a changing climate. In: Leary N, Adejuwon J, Barros V, Burton I, Kuikarni J, Lasco R (eds.). *Climate Change and Vulnerability*, p.33-48.

Lotriet H, Phahlamohlaka J. 2008. An activity theory perspective on action research, LAN and internet development interventions at SEIDET. In: Phahlamohlaka J, Braun M, Romijn H, Roode D (eds.). *Community-Driven Projects: Reflections on a Success Story: a Case Study of Science Education and Information Technology in South Africa*, p.193-206.

M

Maritz J, Naude AH, Badenhorst W. 2008. Developing a mesoscale geoframe. In: Gajos M, Styblinska M (eds.). *Geoinformation Challenges*, p.119-130.

O

O'Farrell PJ, Le Maitre DC, Gelderblom C, Bonora D, Hoffman MT, Reyers B. 2008. Applying a resilience framework in the pursuit of sustainable land-use development in the Little Karoo, South Africa. In: Burns M, Weaver A (eds.). *Exploring Sustainability Science: A Southern African Perspective*, p.383-432.

O'Kennedy MM, Crampton BG, Ozias-Akins P. 2008. Pearl millet. In: Kole C, Hall TC (eds.). *Compendium of Transgenic Crop Plants: Transgenic Cereals and Forage Grasses*, p.177-189.

P

Patanaik A, Anandjiwala RD, Rengasamy RS, Ghosh A, Pal H. 2008. *Nanotechnology in Fibrous Materials: a New Perspective*.

Peter C. 2008. Complexity based modelling for sustainability and resilience of social-ecological systems. In: Burns M, Weaver A (eds.). *Exploring Sustainability Science: A Southern African Perspective*, p. 471-505.

Phahlamohlaka J. 2008. The origin, philosophy and management of SEIDET. In: Phahlamohlaka J, Braun M, Romijn H, Roode D (eds.). *Community-Driven Projects: Reflections on a Success Story: a Case Study of Science Education and Information Technology in South Africa*, p.3-9.

Phahlamohlaka J, Braun M. 2008. A review of the development of SEIDET. In: Phahlamohlaka J, Braun M, Romijn H, Roode D (eds.). *Community-Driven Projects: Reflections on a Success Story: a Case Study of Science Education and Information Technology in South Africa*, p.51-75.

Phahlamohlaka J, Braun M, Romijn H, Roode D (eds.). 2008. *Community-Driven Projects: Reflections on a Success Story: a Case Study of Science Education and Information Technology in South Africa*.

R

Reyers B, Ginsburg AE, Nel JL, O'Farrell PJ, Roux DJ, Cowling RM. 2008. From conservation biology to conservation science: moving beyond disciplinary divides. In: Burns M, Weaver A (eds.). *Exploring Sustainability Science: A Southern African Perspective*, p.135-178.

Ribbens H, Everitt P, Noah M. 2008. The impact of an adequate road environment on the safety of non-motorised road users. In: Van Niekerk A, Suffla S, Seedat M (eds.). *Crime, Violence and Injury Prevention in South Africa: Data to Action*, p.48-69.

Roux DJ, Murray K, Van Wyk E. 2008. Learning to learn for social-ecological resilience: balancing strategy options in public sector organisations. In: Burns M, Weaver A (eds.). *Exploring Sustainability Science: A Southern African Perspective*, p.599-625.

S

Scholes RJ, Mennell K (eds.). 2008. *Elephant management: a scientific assessment of South Africa*.

Strizik M, Zelinger Z, Venkataraman S. 2008. LIDAR for ground- and airborne trace gas detection. In: Lackner M (ed.). *Lasers in Chemistry: Probing and Influencing Matter*, Vol 1, Chapter 2, 35pp.

Swai HS, Chelule P, Semete B, Kalombo L. 2008. Nanotechnology in drug delivery for malaria and tuberculosis treatment. In: Reisner DE (ed.). *Bionanotechnology: Global Prospects*, Chapter 16, p.187-197.

V

Van Huyssteen E, Oranje M. 2008. From promising preaching to piloting the promise and teaching what is promising in planning practice. In: Burns M, Weaver A (eds.). *Exploring Sustainability Science: A Southern African Perspective*, p. 507-536.

Velupillai HM, Mokhonoana PM. 2008. Evaluation of registry data removal by shredder programs. In: Ray I, Sheno S (eds.). *Advances in Digital Forensics IV*, p.51-58.

Von Maltitz GP, Scholes RJ, Erasmus B, Letsoalo A. 2008. Adapting conservation strategies to climate change in Southern Africa. In: Neil Leary, J Adejuwon, Vicente Barros, Ian Burton, J Kuikarni, R Lasco (eds.). *Climate Change and Adaptation*, p.28-52.

Von Maltitz GP, Scholes RJ. 2008. Vulnerability of southern African biodiversity to climate change. In: Leary N, Adejuwon J, Barros V, Burton I, Kuikarni J, Lasco R (eds.). *Climate Change and Vulnerability*, p.33-48.

W

Will C. 2008. An approach to tracking whether change is sustainable in complex social-ecological systems: improving effectiveness of state of the environment reporting. In: Burns M, Weaver A (eds.). *Exploring Sustainability Science: A Southern African Perspective*, p.569-598.

Journal articles

A

Abdul Gaffar MY, Nel WAJ, Inggs MR. 2008. Quaternion-based transformation for extraction of image-generating Doppler for ISAR. *IEEE Geoscience and Remote Sensing Letters*, 5(4), p.560-563.

Allsop. MH, De Lange WJ, Veldtman R. 2008. Valuing insect pollination services with cost of replacement. *PLoS ONE*, 3(9), p.1-8.

Anandjiwala RD, Boguslavsky L. 2008. Development of needle-punched nonwoven fabrics from flax fibers for air filtration applications. *Textile Research Journal*, 78(7), p.614-624.

Andrew JE, Grzeskowiak V, Kerr I. 2008. Hexenuronic acid in South African grown *Eucalyptus* hybrid clones. *Tappi Journal*, 7(3), p.27-32.

Anochie-Boateng J. 2008. Permanent deformation behavior of naturally occurring bituminous sands. *Transportation Research Record: Journal of the Transportation Research Board*, 2059, p.31-40.

Archibald S. 2008. African grazing lawns: how fire, rainfall and grazer numbers interact to affect grass community states. *Journal of Wildlife Management*, 72(2), p.492-501.

Austin LM, Cloete TE. 2008. Safety aspects of handling and using fecal material from urine-diversion toilets: a field investigation. *Water Environment Research*, 80(4), p.308-315.

B

Barnard E, Wissing D. 2008. Vowel variation in Southern Sotho: an acoustic investigation. *Southern African Linguistics and Applied Language Studies*, 26(2), p.255-265.

Barros MEC, Crampton MC, Marais GJ, Lezar S. 2008. A DNA-based method to quantify *Stenocarpella maydis* in maize. *Maydica*, 53, p.125-129.

Batterman SA, Chernyak SM, Gounden Y, Matoane M, Naidoo RN. 2008. Organochlorine pesticides in ambient air in Durban, South Africa. *Science of the Total Environment*, 397(1-3), p.119-130.

Bernhardi EH, Bollig C, Esser MJD, Forbes A, Botha LR, Jacobs C. 2008. A single-element plane-wave solid-state laser rate equation model. *South African Journal of Science*, 104(9-10), p.389-393.

Bernhardi EH, Cilliers PJ, Gaunt CT. 2008. Improvement in the modelling of geomagnetically induced currents in southern Africa. *South African Journal of Science*, 104(7-8), p.265-272.

Bernhardi EH, Forbes A, Bollig C, Esser MJD. 2008. Estimation of thermal fracture limits in quasi-continuous-wave end-pumped lasers through a time-dependent analytical model. *Optics Express*, 16(15), p.11115-11123.

Biggs R, Simons H, Bakkenes M, Scholes RJ, Eickhout B, Van Vuuren D, Alkemade R. 2008. Scenarios of biodiversity loss in southern Africa in the 21st century. *Global Environmental Change: Human and Policy Dimensions*, 18(2), p.296-309.

Birkholtz L-M, Blatch G, Coetzer TL, Hoppe HC, Human E, Morris EJ, Ngcete Z, Oldfield LC, Roth RL, Shonhai A, Stephens L, Louw AI. 2008. Heterologous expression of plasmodial proteins for structural studies and functional annotation. *Malaria Journal*, 7(197), p.1-20.

Boca MB, Pretorius E, Kgaje CG, Apostolides Z. 2008. Assessment of MEKC suitability for residue drug monitoring on pharmaceutical manufacturing equipment. *Journal of Pharmaceutical and Biomedical Analysis*, 46(4), p.631-638.

Bode ML, Buddoo SR, Minnaar SH, Du Plessis CA. 2008. Extraction, isolation and NMR data of the tetraether lipid calditoglycerocaldarchaeol (GDNT) from *Sulfolobus metallicus* harvested from a bioleaching reactor. *Chemistry and Physics of Lipids*, 154(2), p.94-104.

Boyle M, Sichel C, Fernandez-Ibanez P, Arias-Quiroz GB, Iriarte-Puna M, Mercado A, Ubomba-Jaswa E, McGuigan KG. 2008. Bactericidal effect of solar water disinfection under real sunlight conditions. *Applied and Environmental Microbiology*, 74(10), p.2997-3001.

Brady D, Jordaan J, Simpson C, Chetty A, Arumugam C, Moolman FS. 2008. Spherozymes: a novel structured self-immobilisation enzyme technology. *BMC Biotechnology*, 8(8), Article 8.

Brent AC, Oelofse SHH, Godfrey L. 2008. Advancing the concepts of industrial ecology in South African institutions: science policy. *South African Journal of Science*, 104(1-2), p.9-12.

Brent AC, Pretorius MW. 2008. Sustainable development: a conceptual framework for the technology management field of knowledge and a departure for further research. *South African Journal of Industrial Engineering*, 19(1), p.31-52.

Burger L, Forbes A. 2008. Kaleidoscope modes in large aperture Porro prism resonators. *Optics Express*, 16(17), p.12707-12714.

Burger L, Litvin IA, Forbes A. 2008. Simulating atmospheric turbulence using a phase-only spatial light modulator. *South African Journal of Science*, 104, p.129-134.

Burke LM, Brozel VS, Venter SN. 2008. Construction and evaluation of a gfp-tagged *Salmonella typhimurium* strain for environmental applications. *Water SA*, 34(1), p.19-24.

Busgeeth K, Siegfried N. 2008. Development and implementation of an HIV/AIDS trials management system: a geographical information systems approach. *Southern African Journal of HIV Medicine*, 30, p.60-64.

C

Chakauya E, Coxon KM, Wei M, MacDonald MV, Barsby T, Abell C, Smith AG. 2008. Towards engineering increased pantothenate (Vitamin B5) levels in plants. *Plant Molecular Biology*, 68(4-5), p.493-503.

Chetty AS, Steynberg T, Moolman FS, Nilen RWN, Joubert A, Richter PW. 2008. Hydroxyapatite-coated polyurethane for auricular cartilage replacement: an in vitro study. *Journal of Biomedical Materials Research Part A*, 84(2), p.475-82.

Chopra S, Meyer T, Wong KS. 2008. Iterated belief change and the recovery axiom. *Journal of Philosophical Logic*, 37(5), p.501-520.

Cobbing JE, Hobbs PJ, Meyer R, Davies J. 2008. A critical overview of transboundary aquifers shared by South Africa. *Hydrogeology Journal*, 16(6), p.1207-1214.

Colvin CA, Saayman IC. 2008. Challenges to groundwater governance: a case study of groundwater governance in Cape Town, South Africa. *Water Policy*, 9, Supplement 2, p.127-148.

Cowling RM, Egoh B, Knight AT, O'Farrell PJ, Reyers B, Rouget M, Roux DJ, Welz A, Wilhelm-Rechman A. 2008. An operational model for mainstreaming ecosystem services for implementation. *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*, 105(28), p.9483-9488.

Crampton BG, Berger DK. 2008. Nitric oxide mediated transcriptional changes in pearl millet. *South African Journal of Botany*, 74(2), p.364-365.

Crampton BG, Berger DK. 2008. The salicylic acid signalling pathway confers tolerance to a biotrophic rust pathogen in pearl millet. *South African Journal of Botany*, 74(2), p.385-386.

Cyrus DP, MacKay CF, Weerts SP. 2008. Intrusion of beach-disposed dredger spoil into the Mhlathuze Estuary, South Africa, and its impact on *Zostera capensis*. *African Journal of Aquatic Science*, 33(3), p.223-231.

D

Dabrowski JM, Ashton PJ, Murray K, Leaner JJ, Mason RP. 2008. Anthropogenic mercury emissions in South Africa: coal combustion in power plants. *Atmospheric Environment*, 42(27), p.6620-6626.

Davel M, Barnard E. 2008. Pronunciation prediction with Default & Refine. *Computer Speech and Language*, 22, p.374-393.

De Korte GJ. 2008. The influence of near-dense material on the separation efficiency of dense-medium processes. *International Journal of Coal Preparation and Utilization*, 28(2), p.69-93.

De Michele C, Vezzoli R, Pavlopoulos H, Scholes RJ. 2008. A minimal model of soil water-vegetation interactions forced by stochastic rainfall in water-limited ecosystems. *Ecological Modelling*, 212(3-4), p.397-407.

Dean WRJ, Le Maitre DC. 2008. The birds of the Soyo area, northwest Angola. *Malimbus*, 30(1), p.1-18.

Debba P, Carranza EJM, Stein A, Van der Meer FD. 2008. Deriving optimal exploration target zones on mineral prospectivity maps. *Mathematical Geosciences*, 41(4), p.421-446.

Dhlamini MS, Terblans JJ, Ntwaeaborwa OM, Ngaruiya JM, Hillie KT, Botha JR, Swart HC. 2008. Photoluminescence properties of powder and pulsed laser: deposited PbS nanoparticles in SiO₂. *Journal of Luminescence*, 128(12), p.1997-2003.

Dlodlo N, Hunter L, Cele CD, Botha AF, Metelerkamp RGM. 2008. An expert yarn engineering system. *Tekstil ve Konfeksiyon*, 18(11), p.48-55.

Dlodlo N, Hunter L, Cele CD. 2008. A knowledge-based system to train the South African rural farmers through a vsat-enabled internet service. *Tekstil ve Konfeksiyon*, 18(2), p.159-164.

Dlodlo N, Khalala G. 2008. Demystifying the shrinking pipeline of women in ICT education and careers: a South African case study. *Journal for New Generation Sciences*, 6(2), p.16-46.

Du Preez M, Conroy RM, Wright JA, Sibonginkosi M, Potgieter N, Gundry SW. 2008. Use of ceramic water filtration in the prevention of diarrheal disease: a randomized controlled trial in rural South Africa and Zimbabwe. *American Journal of Tropical Medicine and Hygiene*, 97(5), p.696-701.

Du Preez M, Le Roux W, Potgieter N, Venter SN. 2008. The genetic relatedness of *E-coli* associated with post-collection drinking water contamination in rural households. *Water SA*, 34(1), p.107-111.

E

Edwards A, Taela M. 2008. Feasibility of screening distortion product otoacoustic emissions to monitor cochlear functioning in noise-exposed mineworkers. *Occupational Health Southern Africa*, 14(1), p.18-21.

Egoh B, Reyers B, Rouget M, Richardson DM, Le Maitre DC, Van Jaarsveld AS. 2008. Mapping ecosystem services for planning and management. *Agriculture, Ecosystems & Environment*, 127(1-2), p.135-140.

Endah R, Beyene G, Kiggundu A, Van den Berg N, Schlüter U, Kunert K, Chikwamba RK. 2008. Elicitor and *Fusarium*-induced expression of NPR1-like genes in banana. *Plant Physiology and Biochemistry*, 46(11), p.1007-1014.

F

Fedotov I, Gai Y, Polyani Y, Shatalov MY. 2008. Analysis for an N-stepped Rayleigh bar with sections of complex geometry. *Applied Mathematical Modelling*, 32(1), p.1-11.

Ferreira JG, Hawkins AJ, Monteiro PMS, Moore H, Service M, Pascoe PL, Ramos L, Sequeira A. 2008. Integrated assessment of ecosystem-scale carrying capacity in growing areas. *Aquaculture*, 275(1-4), p.138-151.

Forsyth GG, Van Wilgen BW. 2008. The recent fire history of the Table Mountain National Park and implications for fire management. *Koedoe: African Protected Area Conservation and Science*, 50(1), p.3-9.

Fouche G, Cragg GM, Pillay P, Kolesnikova NI, Maharaj VJ, Senabe JV. 2008. *In vitro* anticancer screening of South African plants. *Journal of Ethnopharmacology*, 119(3), p.455-461.

Fourie CJS, Cole P, Van Rooy JL. 2008. Three-dimensional in-situ small movement elasticity modulus estimations of the subsurface using a seismic technique. *Africa Geoscience Review*, 15(1), p.1-10.

G

Gerber IB, Laukens K, De Vijlder T, Witters E, Dubery IA. 2008. Proteomic profiling of cellular targets of lipopolysaccharide-induced signalling in *Nicotiana tabacum* BY-2 cells. *Biochimica et Biophysica Acta*, 1784(11), p.1750-1762.

Ghosh A, Patanaik A, Anandjiwala RD, Rengasamy RS. 2008. A study on dynamic friction of different spun yarns. *Journal of Applied Polymer Science*, 108(5), p.3233-3238.

Giesselmann UC, Wiegand T, Meyer J, Vogel M, Brandl R. 2008. Spatial distribution of communal nests in a colonial breeding bird: benefits without costs? *Austral Ecology*, 33(5), p.607-613.

Gouws JF, Majazi T. 2008. A mathematical technique for the design of near-zero-effluent batch processes. *Water SA*, 34(3), p.291-295.

- Govender M, Chetty K, Naiken V, Bulcock H. 2008. A comparison of satellite hyperspectral and multispectral remote sensing imagery for improved classification and mapping of vegetation. *Water SA*, 34(2), p.147-154.
- Govender S, Swart P. 2008. Surfactant formulations for multi-functional surface modification. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 331(1-2), p.97-102.
- Grootboom AW, O'Kennedy MM, Mkhonza NL, Kunert K, Chakauya E, Chikwamba RK. 2008. *In vitro* culture and plant regeneration of sorghum genotypes using immature zygotic embryos as explant source. *International Journal of Botany*, 4(4), p.450-455.
- Guduri BR, Luyt S. 2008. Structure and mechanical properties of polycarbonate modified clay nanocomposites. *Journal of Nanoscience and Nanotechnology*, 8(4), p.1880-1885.
- Gupta R, Das S. 2008. Spatial Bayesian methods of forecasting house prices in six metropolitan areas of South Africa. *South African Journal of Economics*, 76(2), p.298-313.
- Gush MB. 2008. Measurement of water-use by *Jatropha curcas* L. using the heat-pulse velocity technique. *Water SA*, 34(5), p.579-584.
- H**
- Haffejee M, Brent AC. 2008. Evaluation of an integrated asset life-cycle management (ALCM) model and assessment of practices in the water utility sector. *Water SA*, 34(2), p.285-290.
- Hakl H, Le Roux WH. 2008. Vertical activity estimation using 2D radar. *Scientia Militaria: South African Journal of Military Studies*, 36(2), p.60-76.
- Hall G, Woodborne SM, Scholes M. 2008. Stable carbon isotope ratios from archaeological charcoal as palaeoenvironmental indicators. *Chemical Geology*, 247(3-4), p.384-400.
- Hargitai H, Racz I, Anandjiwala RD. 2008. Development of hemp fiber reinforced polypropylene composites. *Journal of Thermoplastic Composite Materials*, 21(2), p.165-174.
- Hato MJ, Ray SS, Luyt AS. 2008. Nanocomposites based on polyethylene and polyhedral oligomeric silsesquioxanes, 1-microstructure, thermal and thermomechanical properties. *Macromolecular Materials and Engineering*, 293(9), p.752-762.
- Hattingh J, Claassen M. 2008. Securing water quality for life. *International Journal of Water Resources Development*, 24(3), p.401-415.
- Heelemann S, Proches S, Rebelo AG, Van Wilgen BW, Porembski S, Cowling RM. 2008. Fire season effects on the recruitment of non-sprouting serotinous *Proteaceae* in the eastern (bimodal rainfall) fynbos biome, South Africa. *Austral Ecology*, 33, p.119-127.
- Heyns PSVH, Patrick MJ, Turton AR. 2008. Transboundary water resource management in Southern Africa: meeting the challenge of joint planning and management in the Orange River Basin. *International Journal of Water Resources Development*, 24(3), p.371-383.
- Hjelmager J, Moellering H, Cooper AK, Delgado T, Rajabifard A, Rapant P, Danko D, Huet M, Laurent D, Aalders H, Iwaniak A, Abad P, Duren U, Martynenko A. 2008. An initial formal model for spatial data infrastructures. *International Journal of Geographical Information Science*, 22(11-12), p.1295-1309.
- Hobbs PJ, Oelofse SHH, Rascher J. 2008. Management of environmental impacts from coal mining in the upper Olifants river catchment as a function of age and scale. *International Journal of Water Resources Development*, 24(3), p.417-431.
- Hui D, Biggs R, Scholes RJ, Jackson RB. 2008. Measuring uncertainty in estimates of biodiversity loss: the example of biodiversity intactness variance. *Biological Conservation*, 141(4), p.1091-1094.
- I**
- Ivanchev LH, Wilkinson D, Govender G, Du Preez W, Bean R. 2008. Rheo-processing of semi-solid metal alloys: a new technology for manufacturing automotive and aerospace components. *South African Journal of Science*, 104(7-8), p. 257-259.
- J**
- Janssen H-G, Swindells C, Gunning P, Wang W, Grun C, Mahabir K, Maharaj VJ, Ap.s PJ. 2008. Quantification of appetite suppressing steroid glycosides from *Hoodia gordonii* in dried plant material, purified extracts and food products using HPLC-UV and HPLC-MS methods. *Analytica Chimica Acta*, 617(1-2), p.200-207.
- Jaqadeesh D, Rajulu AV, Guduri BR. 2008. Tensile properties of polycarbonate-coated natural fabric *Hildegardia populifolia*. *Journal of Reinforced Plastics and Composites*, 27(16/17), p.1833-1838.
- John MJ, Anandjiwala RD. 2008. Recent developments in chemical modification and characterization of natural fiber-reinforced composites. *Polymer Composites*, 29(2), p.187-202.
- John MJ, Francis B, Varughese KT, Thomas S. 2008. Effect of chemical modification on properties of hybrid fibre biocomposites. *Composites Part A*, 39, p.352-363.
- John MJ, Thomas S. 2008. Biofibres and biocomposites. *Carbohydrate Polymers*, 71, p.343-364.
- Johnson DL, Lysko A. 2008. Comparison of MANET routing protocols using a scaled indoor wireless grid. *Mobile Networks and Applications*, 13(1-2), p.82-96.
- Jonathan E. 2008. *In vivo* sweat film layer thickness measured with Fourier-domain optical coherence tomography (FD-OCT). *Optics and Lasers in Engineering*, 46(6), p.424-427.
- K**
- Katumba G, Mothibinyane TR, Mwakikunga BW. 2008. FTIR and Raman spectroscopy of carbon nanoparticles in SiO₂, ZnO and NiO matrices. *Nanoscale Research Letters*, 3(11), p.421-426.
- Katumba G, Olumekor L, Forbes A, Makiwa G, Mwakikunga B, Lu J, Wackelgard E. 2008. Optical, thermal and structural characteristics of carbon nanoparticles embedded in ZnO and NiO as selective solar absorbers. *Solar Energy Materials and Solar Cells*, 92(10), p.1285-1292.
- Kempeneers P, Zarco-Tejada PJ, North PRJ, De Backer S, Delalieux S, Sepulcre-Canto G, Morales F, Van Aardt JAN, Sagardoy R, Cop. in P, Scheunders P. 2008. Model inversion for chlorophyll estimation in open canopies from hyperspectral imagery. *International Journal of Remote Sensing*, 29(17-18), p.5093-5111.
- Kistin EJ, Ashton PJ. 2008. Adapting to change in transboundary rivers: an analysis of treaty flexibility on the Orange-Senqu River basin. *International Journal of Water Resources Development*, 24(3), p.385-400.
- Knoesen D, Arendse CJ, Halindintwali S, Muller T. 2008. Extension of the lifetime of tantalum filaments in the hot-wire (Cat) Chemical Vapor Deposition process. *Thin Solid Films*, 516(5), p.822-825.
- Kumile CM, Tlale NS, Bright G. 2008. Aspects of modular mechatronics in South Africa. *R&D journal*, 24(2), p.23-30.
- Kutsch WL, Hanan N, Scholes RJ, McHugh I, Kubheka W, Eckhardt H, Williams C. 2008. Response of carbon fluxes to water relations in a savanna ecosystem in South Africa. *Biogeosciences*, 5(6), p.1797-1808.
- L**
- Labuschagne C, Brent AC. 2008. An industry perspective of the completeness and relevance of a social assessment framework for project and technology management in the manufacturing sector. *Journal of Cleaner Production*, 16(3), p.253-262.
- Labuschagne PW, Germishuizen WA, Verryn SMC, Moolman FS. 2008. Improved oxygen barrier performance of poly(vinyl alcohol) films through hydrogen bond complex with poly(methyl vinyl ether-co-maleic acid). *European Polymer Journal*, 44(7), p.2146-2152.
- Laloo R, Maharajh D, Görgens J, Gardiner NS. 2008. Functionality of a *Bacillus cereus* biological agent in response to physiological variables encountered in *Cyprinus carpio* aquaculture. *Applied Microbiology and Biotechnology*, 79(11), p.111-118.

- Lamberth S, Van Niekerk L, Hutchings K. 2008. Comparison of, and the effects of altered freshwater inflow on, fish assemblages of two contrasting South African estuaries: the cool-temperate Olifants and the warm-temperate Breede. *African Journal of Marine Science*, 30(2), p.331-336.
- Landman K. 2008. Gated neighbourhoods in South Africa: an appropriate urban design approach. *Urban Design International*, 13(4), p.241-252.
- Le Maitre DC, Colvin CA. 2008. Assessment of the contribution of groundwater discharges to rivers using monthly flow statistics and flow seasonality. *Water SA*, 34(5), p.549-564.
- Le Maitre DC, Krug RM, Hoffmann JH, Gordon AJ, Mgidi NT. 2008. *Hakea sericea*: development of a model of the impacts of biological control on population dynamics and rates of spread of an invasive species. *Ecological Modelling*, 212(3/4), p.342-358.
- Le Maitre DC, Thuiller W, Schonegevel LY. 2008. Developing an approach to defining the potential distributions of invasive plant species: a case study of *Hakea* species in South Africa. *Global Ecology and Biogeography*, 17(5), p.569-584.
- Lemanski C, Landman K, Durrington M. 2008. Divergent and similar experiences of 'gating' in South Africa: Johannesburg, Durban and Cape Town. *Urban Forum*, 19(2), p.133-158.
- Lessing MM. 2008. 'n Model vir inligtingsekerheidsbestuur gebaseer op wêreldstandaarde. *Suid-Afrikaanse Tydskrif vir Natuurwetenskap en Tegnologie*, 27(2), p.150-151.
- Letsie M, Allopi D. 2008. Maqalika reservoir: utilisation and sustainability of Maqalika reservoir as a source of potable water supply for Maseru in Lesotho. *IMIESA*, 33(7), p.23, 25, 27, 29-31, 33.
- Levecque P, Gammon DW, Kinfe HH, Jacobs P, De Vos D, Sels B. 2008. Tandem epoxidation-alcoholysis or epoxidation-hydrolysis of glycals catalyzed by titanium(IV) isopropoxide or Venturolo's phosphotungstate complex. *Advanced Synthesis & Catalysis*, 350(10), p.1557-1568.
- Lhermitte S, Verbesselt J, Jonckheere I, Nackaerts K, Van Aardt J, Verstraeten WW, Coppin P. 2008. Hierarchical image segmentation based on similarity of NDVI time series. *Remote Sensing of Environment*, 112(2), p.506-521.
- Litvin IA, Forbes A. 2008. Bessel-Gauss resonator with internal amplitude filter. *Optics Communications*, 281(9), p.2385-2392.
- Liu I-S, Takawira F, Xu HJ. 2008. A hybrid token-CDMA MAC protocol for wireless ad hoc networks. *IEEE Transaction on Mobile Computing*, 7(5), p.557-569.
- Lombard GE, Oliveira JC, Fito P, Andrés A. 2008. Osmotic dehydration of pineapple as a pre-treatment for further drying. *Journal of Food Engineering*, 85(2), p.277-284.
- Lotz M, Brent AC. 2008. A review of carbon dioxide capture and sequestration and the Kyoto Protocol's clean development mechanism and prospects for Southern Africa. *Journal of Energy in Southern Africa*, 19(1), p.13-24.
- Loveday PW. 2008. Simulation of piezoelectric excitation of guided waves using waveguide finite elements. *IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control*, 55(9), p.2038-2045.
- M**
- Mafusire C, Forbes A, Michaelis MM, Snedden GC. 2008. Optical aberrations in a spinning pipe gas lens. *Optics Express*, 16(13), p.9850-9856.
- Mafusire C, Forbes A, Snedden G, Michaelis MM. 2008. The spinning pipe gas lens revisited. *South African Journal of Science*, 104(7&8), p.260-264.
- Maharajh D, Lalloo R, Gorgens J. 2008. Effect of an exponential feeding regime on the production of *Rhodotorula araucariae* epoxide hydrolase in *Yarrowia lipolytica*. *Letters in Applied Microbiology*, 47(6), p.520-525.
- Maharajh D, Roth RL, Lalloo R, Simpson C, Mitra RK, Gorgens J, Ramchuran SO. 2008. Multicopy expression and fed-batch production of *Rhodotorula araucariae* epoxide hydrolase in *Yarrowia lipolytica*. *Applied Microbiology and Biotechnology*, 79(2), p.235-244.
- Maheswari CU, Guduri BR, Rajulu AV. 2008. Properties of lignocellulose tamarind fruit fibers. *Journal of Applied Polymer Science*, 110(4), p.1986-1989.
- Maheswari CU, Reddy KO, Rajulu AV, Guduri BR. 2008. Tensile properties and thermal degradation parameters of tamarind fruit fibers. *Journal of Reinforced Plastics and Composites*, 27(16/17), p.1827-1832.
- Maity A, Ray SS, Hato MJ. 2008. The bulk polymerisation of N-vinylcarbazole in the presence of both multi- and single-walled carbon nanotubes: a comparative study. *Polymer*, 49(12), p.2857-2865.
- Maity A, Ray SS. 2008. Conducting nanocomposites of poly(N-vinylcarbazole) with single-walled carbon nanotubes. *Journal of Nanoscience and Nanotechnology*, 8(4), p.1728-1734.
- Majeke B, Van Aardt JAN, Cho MA. 2008. Imaging spectroscopy of foliar biochemistry in forestry environments. *Southern Forests*, 70(3), p.275-285.
- Makinde OD, Maserumule RL. 2008. Thermal criticality and entropy analysis for a variable viscosity Couette flow. *Physica Scripta*, 78(11), p.015402.
- Malgas GF, Arendse CJ, Cele NP, Cummings FR. 2008. Effect of mixture ratios and nitrogen carrier gas flow rates on the morphology of carbon nanotube structures grown by CVD. *Journal of Materials Science*, 43(3), p.1020-1025.
- Malgas GF, Arendse CJ, Mavundla S, Cummings FR. 2008. Interfacial analysis and properties of regioregular poly(3-hexyl thiophene) spin-coated on an indium tin oxide-coated glass substrate. *Journal of Materials Science*, 43(16), p.5599-5604.
- Martirosian OM, Barnard E. 2008. Speech-based emotion detection in a resource-scarce environment. *South African Computer Journal*, 40, p.18-22.
- Matlhoko L, Pillai SK, Ray SS, Augustyn WG, Moodley M. 2008. Purification of laser synthesized SWCNTs by different methods: a comparative study. *Journal of Nanoscience and Nanotechnology*, 8(11), p.6023-6030.
- Maweja K, Stumpf W. 2008. The design of advanced performance high strength low-carbon martensitic armour steels: microstructural considerations. *Materials Science and Engineering A*, 480(1/2), p.160-166.
- Maweja K, Stumpf W. 2008. The design of advanced performance high strength low-carbon martensitic armour steels, Part I: mechanical property considerations. *Materials Science and Engineering A*, 485(1/2), p.140-153.
- McCusker B, Schmitz PMU. 2008. Modelling land redistribution potential in Limpopo, South Africa. *South African Geographical Journal*, 90(2), p. 80-96.
- Mentz JC, Kotze P, Van Der Merwe A. 2008. Searching for the technology in Universities of Technology. *The South African Computer Journal*, 42, p.29-37.
- Meyers A, Chakauya E, Shepard E, Tanzer FL, Maclean J, Lynch A, Williamson A, Rybicki EP. 2008. Expression of HIV-1 antigens in plants as potential subunit vaccines. *BMC Biotechnology*, 8(53).
- Mkhonto D, de Leeuw NH. 2008. The effect of surface silanol groups on the deposition of apatite onto silica surfaces: a computer simulation study. *Journal of Materials Science: Materials in Medicine*, 19(1), p.203-216.
- Mnkeni PNS, Kutu FR, Muchaonyerwa P, Austin LM. 2008. Evaluation of human urine as a source of nutrients for selected vegetables and maize under tunnel house conditions in the Eastern Cape, South Africa. *Waste Management and Research*, 26(2), p.132-139.
- Moloto N, Sinha-Ray S, Moloto MJ. 2008. A facile route for the synthesis of poly(N-vinylcarbazole)/manganese sulphide quantum dots nanocomposites with enhanced optical properties. *Journal of Nanoscience and Nanotechnology*, 8(11), p. 6031-6037.
- Monteiro PMS, Van der Plas AK, Melice J-L, Florenchie P. 2008. Interannual hypoxia variability in a coastal upwelling system: ocean-shelf exchange, climate and ecosystem-state implications. *Deep Sea Research, Part 1: Oceanographic Research Papers*, 55(4), p.435-450.

- Motaung S, Maree J, De Beer M, Bologo L, Theron D, Baloyi J. 2008. Recovery of drinking water and by-products from gold mine effluents. *International Journal of Water Resources Development*, 24(3), p.433-450.
- Mujaju C, Chakauya E. 2008. Morphological variation of sorghum landrace accessions on-farm in semi-arid areas of Zimbabwe. *International Journal of Botany*, 4(4), p.376-382.
- Musee N, Aldrich C, Lorenzen L. 2008. New methodology for hazardous waste classification using fuzzy set theory, Part II: intelligent decision support system. *Journal of Hazardous Materials*, 157, p.94-105.
- Musee N, Lorenzen L, Aldrich C. 2008. New methodology for hazardous waste classification using fuzzy set theory, Part I: knowledge acquisition. *Journal of Hazardous Materials*, 154(1-3), p.1040-1051.
- Mwakikunga BW, Forbes A, Sideras-Haddad E, Arendse C. 2008. Optimization, yield studies and morphology of WO₃ nano-wires synthesized by laser pyrolysis in C₂H₂ and O₂ ambients-validation of a new growth mechanism. *Nanoscale Research Letters*, 3(10), p.372-380.
- Mwakikunga BW, Sideras-Haddad E, Forbes A, Arendse CJ. 2008. Raman spectroscopy of WO₃ nano-wires and thermo-chromism study of VO₂ belts produced by ultrasonic spray and laser pyrolysis techniques. *Physica Status Solidi A*, 205(1), p.150-154.
- N**
- Nahman A, Rigby D. 2008. Valuing blue flag status and estuarine water quality in Margate, South Africa. *South African Journal of Economics*, 76(4), p.721-737.
- Naidoo K, Rolfes H, Chetty AS, Easton K, Moolman FS, Richter PW, Nilen RWN. 2008. An emulsion preparation for novel micro-porous polymeric hemi-shells. *Materials Letters*, 62(2), p.252-254.
- Navntoft C, Ubomba-Jaswa E, McGuigan KG, Fernandez-Ibanez P. 2008. Effectiveness of solar disinfection using batch reactors with non-imaging aluminium reflectors under real conditions: natural well-water and solar light. *Journal of Photochemistry and Photobiology B: Biology*, 93, p.155-161.
- Nilen RWN, Richter PW. 2008. The thermal stability of hydroxyapatite in biphasic calcium phosphate ceramics. *Journal of Materials Science: Materials in Medicine*, 19(4), p.1693-1702.
- Nyilgira E, Viljoen AM, Van Heerden FR, Van Zyl RL, Van Vuuren SF, Steenkamp PA. 2008. Phytochemistry and in vitro pharmacological activities of South African *Vitex* (*Verbenaceae*) species. *Journal of Ethnopharmacology*, 119(3), p.680-685.
- O**
- Oberholster PJ, Botha A-M, Cloete TE. 2008. Biological and chemical evaluation of sewage water pollution in the Rietvlei nature reserve wetland area, South Africa. *Environmental Pollution*, 156(1), p.184-192.
- Oelofse SHH, Godfrey L. 2008. Defining waste in South Africa: moving beyond the age of 'waste'. *South African Journal of Science*, 104, p.242-246.
- Oelofse SHH. 2008. Protecting a vulnerable groundwater resource from the impacts of waste disposal: a South African waste governance perspective. *International Journal of Water Resources Development*, 24(3), p.477-489.
- O'Farrell PJ, Donaldson JS, Hoffman MT, Mader AD. 2008. Small mammal diversity and density on the Bokkeveld escarpment, South Africa: implications for conservation and livestock predation. *African Zoology*, 43(1), p.117-124.
- Olwoch JM, Reyers B, Engelbrecht FA, Erasmus BFN. 2008. Climate change and the tick-borne disease, Theileriosis (East Coast fever) in sub-Saharan Africa. *Journal of Arid Environments*, 72(2), p.108-120.
- Oosthuizen MA, Jinabhai C, Terblanche APS, Becker P. 2008. A transition in health status from childhood to adulthood and associated risk factors: a 13 year interval follow-up study in South Africa. *International Journal of Environmental Health Research*, 18(1), p.65-72.
- Orgun MA, Meyer T. 2008. Introduction to the special issue on advances in ontologies. *Expert Systems*, 25(3), p.175-178.
- P**
- Patanaik A, Anandjiwala RD. 2008. Water flow through the polypropylene-based geotextiles. *Journal of Applied Polymer Science*, 108(6), p. 3876-3880.
- Patnaik A, Rengasamy RS, Kothari VK, Bhatia SK. 2008. Some studies on hairiness reduction of polyester ring spun yarns by using air-nozzles during winding. *Journal of the Textile Institute*, 99(1), p.17-27.
- Pienaar M, Woodborne S, Wadley L. 2008. Optically stimulated luminescence dating at Rose Cottage Cave. *South African Journal of Science*, 104(1-2), p.65-70.
- Pillai SK, Augustyn WG, Rossouw MH, McCrindle MI. 2008. The effect of calcination on multi walled carbon nanotubes produced by dc-arc discharge. *Journal of Nanoscience and Nanotechnology*, 8(7), p.3539-3544.
- Pillai SK, Ray SS, Moodley M. 2008. Purification of multi-walled carbon nanotubes. *Journal of Nanoscience and Nanotechnology*, 8(12), p.6187-6207.
- Pillay P, Maharaj VJ, Smith PJ. 2008. Investigating South African plants as a source of new antimalarial drugs. *Journal of Ethnopharmacology*, 119(3), p.438-454.
- Pretorius L, Bosch SE. 2008. Containing overgeneration in Zulu computational morphology. *Southern African Linguistics and Applied Language Studies*, 26(2), p.209-216.
- R**
- Rashamuse KJ, Mutambanengwe CCZ, Whiteley CG. 2008. Enzymatic recovery of platinum(IV) from industrial wastewater using a biosulphidogenic hydrogenase. *African Journal of Biotechnology*, 7(8), p.1087-1095.
- Rengasamy RS, Patanaik A, Anandjiwala RD. 2008. Simulation of airflow in nozzle-ring spinning using computational fluid dynamics: study on reduction in yarn hairiness and the role of air drag forces and angle of impact of air current. *Textile Research Journal*, 78(5), p.412-420.
- Richardson DM, Van Wilgen BW, Nunez MA. 2008. Alien conifer invasions in South America: short fuse burning? *Biological Invasions*, 10(4), p.573-577.
- Ripamonti U, Richter PW, Nilen RWN, Renton L. 2008. The induction of bone formation by smart biphasic hydroxyapatite tricalcium phosphate biomimetic matrices in the non-human primate *Papio ursinus*. *Journal of Cellular and Molecular Medicine*, 12(6B), p.2609-2621.
- Roberts JW, Van Aardt JAN, Ahmed F. 2008. Assessment of image fusion procedures using entropy, image quality and multispectral classification. *Journal of Applied Remote Sensing*, 2, Art No 023522.
- Roberts L, Egan TJ, Joiner KA, Hoppe HC. 2008. Differential effects of quinoline anti-malarials on endocytosis in *Plasmodium falciparum*. *Antimicrobial Agents and Chemotherapy*, 52(5), p.1840-1842.
- Roux DJ, Ashton PJ, Nel JL, Mackay HM. 2008. Improving cross-sector policy integration and cooperation in support of freshwater conservation. *Conservation Biology*, 22(6), p.1382-1387.
- Roux DJ, Nel JL, Ashton PJ, Deacon AR, De Moor FC, Hardwick D, Hill L, Kleynhans CJ, Maree GA, Moolman J, Scholes RJ. 2008. Designing protected areas to conserve riverine biodiversity: lessons from a hypothetical redesign of the Kruger National Park. *Biological Conservation*, 141(1), p.100-117.
- S**
- Scholes RJ, Anderson F, Kenyon C, Napier J, Ngoepe P, Van Wilgen BW, Weaver A. 2008. Science councils in South Africa. *South African Journal of Science*, 104(11-12), p.435-438.
- Scholes RJ, Mace GM, Turner W, Geller GN, Jurgens N, Larigauderie A, Muchoney D, Walther BA, Mooney HA. 2008. Toward a global biodiversity observing system. *Science*, 321, p.1044-1045.
- Scott DF, Prinsloo FW. 2008. Longer-term effects of pine and eucalypt plantations on streamflow. *Water Resources Research*, 44(W00A08), p.1-8.

Scriba MR, Arendse CJ, Harting M, Britton DT. 2008. Hot-wire synthesis of Si nanoparticles. *Thin Solid Films*, 516(5), p.844-846.

Sileny J, Milev AM. 2008. Source mechanism of mining induced seismic events: resolution of double couple and non double couple models. *Tectonophysics*, 456(1-2), p.3-15.

Smith GG, Weitz N, Soltau C, Viljoen A, Luger S, Maartens L. 2008. Fate of fine sediment from dredger-based mining in a wave-dominated environment at Chameis Bay, Namibia. *Journal of Coastal Research*, 24(1), p.232-247.

Smith P, Martino D, Cai Z, Gwary D, Janzen H, Kumar P, McCarl B, Ogle S, O'Mara F, Rice C, Scholes RJ, Sirotenko O, Howden M, McAllister P, Pan G, Romanenkov V, Schneider U, Towprayoon S, Wattenbach M, Smith J. 2008. Greenhouse gas mitigation in agriculture. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 363(1492), p.789-813.

Sokoya O, Xu HJ, Takawira F. 2008. Performance evaluation of high rate space-time trellis-coded modulation using Gauss-Chebyshev quadrature technique. *IET Communications*, 2(5), p.658-663.

Somerset VS, Petrik L, Iwuoha E. 2008. Alkaline hydrothermal conversion of fly ash precipitates into zeolites 3: the removal of mercury and lead ions from wastewater. *Journal of Environmental Management*, 87(1), p.125-131.

Sowden M, Cairncross E, Wilson G, Zunckel M, Kirillova E, Reddy V, Hietkamp S. 2008. Developing a spatially and temporally resolved emission inventory for photochemical modelling in the City of Cape Town and assessing its uncertainty. *Atmospheric Environment*, 42(30), p.7155-7164.

Steenkamp CJ, Vogel JC, Fuls A, Van Rooyen N, Van Rooyen MW. 2008. Age determination of *Acacia erioloba* trees in the Kalahari. *Journal of Arid Environments*, 72(4), p.302-313.

Steenkamp LH, Brady D. 2008. Optimisation of stabilised carboxylesterase NP for enantioselective hydrolysis of naproxen methylester. *Process Biochemistry*, 43(2), p.1419-1426.

Steyn WJVD. 2008. Development of autoluminescent surfacings for concrete pavements. *Transportation Research Record: Journal of the Transportation Research Board*, 2070, p.22-31.

Strong PJ, Burgess JE. 2008. Fungal and enzymatic remediation of a wine lees and five wine-related distillery wastewaters. *Bioresource Technology*, 99(14), p.6134-6142.

Strong PJ, Burgess JE. 2008. Treatment methods for wine-related and distillery wastewaters: a review. *Bioremediation Journal*, 12(2), p.70-87.

Suridge AKJ, Brent AC. 2008. Development of a water state index to assess the severity of impacts on and changes in natural water resources. *Water Science and Technology*, 58(8), p.1595-1600.

T

Turner GR. 2008. An alternative method for the measurement of the mechanical impulse of a vertically directed blast. *Review of Scientific Instruments*, 79(7), p.075102-1-075102-4.

Turton A, Funke NS. 2008. Hydro-hegemony in the context of the Orange River Basin. *Water Policy*, 10(S2), p.51-69.

Turton AR, Ashton PJ. 2008. Basin closure and issues of scale: the Southern African hydrological complex. *International Journal of Water Resources Development*, 24(2), p.305-318.

Turton AR, Patrick MJ, Rascher J. 2008. Setting the scene: hydropolitics and the development of the South African economy. *International Journal of Water Resources Development*, 24(3), p.323-327.

U

Udahemuka G, Van Wyk BJ, Van Wyk MA, Van Den Bergh F. 2008. Robust fitting of diurnal brightness temperature cycles. *South African Computer Journal*, 40, p.31-36.

V

Van Aardt JAN, Norris-Rogers M. 2008. Spectral-age interactions in managed, even-aged *Eucalyptus* plantations: application of discriminant analysis and classification and regression trees approaches to hyperspectral data. *International Journal of Remote Sensing*, 29(6), p.1841-1845.

Van Aardt JAN, Wynne RH, Scivani JA. 2008. Lidar-based mapping of forest volume and biomass by taxonomic group using structurally homogenous segments. *Photogrammetric Engineering and Remote Sensing*, 74(8), p.1033-1044.

Van Biljon J, Kotze P. 2008. Cultural factors in a mobile phone adoption and usage model. *Journal of Universal Computer Science*, 14(16), p.2650-2679.

Van de Venter M, Roux S, Bungu LC, Louw J, Crouch NR, Grace OM, Maharaj V, Pillay P, Sewnarian P, Bhagwandin N, Folb P. 2008. Antidiabetic screening and scoring of 11 plants traditionally used in South Africa. *Journal of Ethnopharmacology*, 119(1), p.81-86.

Van Den Bergh F, Holloway JP, Pienaar M, Koen R, Elphinstone CD, Woodborne S. 2008. A comparison of various modelling approaches applied to cholera case data. *Orion: Journal of the Operations Research Society of South Africa*, 24(1), p.17-36.

Van Dyk HO, Barnard E. 2008. Naive Bayesian classifiers for multinomial features: a theoretical analysis. *South African Computer Journal*, 40, p.37-43.

Van Heerden CJ, Barnard E. 2008. Speaker specific variability of phoneme durations. *South African Computer Journal*, 40, p.44-50.

Van Heezik Y, Smyth A, Mathieu R. 2008. Diversity of native and exotic birds across an urban gradient in a New Zealand city. *Landscape and Urban Planning*, 87(3), p.223-232.

Van Wilgen BW, Reyers B, Le Maitre DC, Richardson DM, Schonegevel LY. 2008. A biome-scale assessment of the impact of invasive alien plants on ecosystem services in South Africa. *Journal of Environmental Management*, 89(4), p.336-349.

Van Wilgen BW. 2008. An assessment of the implementation and outcomes of recent changes to fire management in the Kruger National Park. *Koedoe: African Protected Area Conservation and Science*, 50(1), p.22-31.

Van Wyk E, Roux DJ, McCool SF. 2008. The impact of scientific information on ecosystem management: making sense of the contextual gap between information providers and decision makers. *Environmental Management*, 41(5), p.779-791.

Van Zyl LH. 2008. 2D and 3D low frequency aerodynamics. *The Aeronautical Journal*, 112(1136), p.609-612.

Van Zyl LH. 2008. Unsteady panel method for complex configurations including wake modelling. *Journal of Aircraft*, 45(1), p.276-285.

Vance-Borland K, Roux DJ, Nel J, Pressey B. 2008. From the mountains to the sea: where is freshwater conservation in the SCB Agenda? *Conservation Biology*, 22(3), p.505-507.

Verryn SD. 2008. Breeding for wood quality: a perspective for the future. *New Zealand Journal of Forestry Science*, 38(1), p.5-13.

Verstraete MM, Brink A, Scholes RJ, Beniston M, Smith MS. 2008. Climate change and desertification: where do we stand, where should we go? *Global and Planetary Change*, 64(3-4), p.105-110.

Vezzoli R, De Michele C, Pavlopoulos H, Scholes RJ. 2008. Dryland ecosystems: the coupled stochastic dynamics of soil water and vegetation and the role of rainfall seasonality. *Physical Review E*, 77(5), p.051908.

Von Bergmann HM, Forbes A, Roberts T, Botha LR. 2008. Acoustic waves in transversely excited atmospheric CO₂ laser discharges: effect on performance and reduction techniques. *Optical Engineering*, 47(8), p.084202-1-084202-7.

W

Wall K. 2008. "Crossing over": appropriate private sector principles, to operate more reliable public sector water services. *Journal for Transdisciplinary Research in Southern Africa*, 4(1), p.95-121.

Watson BP, Ryder JA, Kataka MO, Kuijpers JS, Leteane FP. 2008. Merensky pillar strength formulae based on back-analysis of pillar failures at Impala Platinum. *Journal of the Southern African Institute of Mining and Metallurgy*, 108, p.449-461.

Weaver A, Pope J, Morison-Saunders A, Lochner PA. 2008. Contributing to sustainability as an environmental impact assessment practitioner. *Impact Assessment and Project Appraisal*, 26(2), p.91-98.

Weerts SP, Cyrus DP. 2008. Inter-basin water transfer effects on the invertebrates of the Mvuzane River: a test of the SASS rapid biomonitoring protocol to assess the impact of flow modification. *Water SA*, 34(2), p.175-182.

Wessels KJ, Prince SD, Reshef I. 2008. Mapping land degradation by comparison of vegetation production to spatially derived estimates of potential production. *Journal of Arid Environments*, 72(10), p.1940-1949.

Woodborne S, Melice JL, Scholes RJ. 2008. Long-term sunspot forcing of savanna structure inferred from carbon and oxygen isotopes. *Geophysical Research Letters*, 35(2), p.L02711.

Z

Zerbian S, Barnard E. 2008. Phonetics of intonation in South African Bantu languages. *Southern African Linguistics and Applied Language Studies*, 26(2), p.235-254.

Zieleniewski M, Brent AC. 2008. Evaluating the costs and achievable benefits of extending technologies for uneconomical coal resources in South Africa: the case of underground coal gasification. *Journal of Energy in Southern Africa*, 19(4), p.21-31.

Zvinowanda CM, Okonkwo JO, Mpangela V, Phaleng J, Shabalala PN, Dennis T, Forbes P, Agyei NM, Ozoemena KI. 2008. Biosorption of toxic metals: the potential use of maize tassel for the removal of Pb(II) from aqueous solutions. *Fresenius Environmental Bulletin*, 17(7a), p.814-818.

Conference papers

A

Abeigne Ella LP, Van Den Bergh F, Van Wyk BJ, Van Wyk MA. 2008. A comparison of texture feature algorithms for urban settlement classification. *IEEE International GeoSciences and Remote Sensing Symposium (IGARSS)*, Boston, Massachusetts, USA, 6-11 July 2008, p.1308-1311.

Ajibesin AA, Chan HA, Dlodlo ME, Ferguson K. 2008. Efficient adaptive radio resource management algorithms for next generation wireless systems. *Southern Africa Telecommunication Networks and Applications Conference (SATNAC 2008)*, Wild Coast, Eastern Cape, 7-10 September 2008.

Alberts R, Pieterse V. 2008. Improving diffusion of information technology in communities in a developing world context. *Advances in Information Systems Research, Education and Practice (ISREP 2008) Conference*, Milan, Italy, 7-10 September 2008.

Ampofo-Ani N. 2008. Life cycle assessment: applications and implications for the greening of the South African construction sector. *Science Real and Relevant: 2nd CSIR Biennial Conference*, Pretoria, South Africa, 17-18 November 2008.

Anderson F. 2008. Radar sensor technology developments at CSIR DPSS in support of persistent, ubiquitous surveillance systems. *Science Real and Relevant: 2nd CSIR Biennial Conference*, Pretoria, South Africa, 17-18 November 2008.

Andrew JE, Chirat C, Mortha G, Grzeskowiak V. 2008. Modified ECF bleaching sequences for South African hardwood Kraft pulps. *International Pulp Bleaching Conference*, Quebec City, Canada, 2-5 June 2008, p.55-60.

Andrew JE, Grzeskowiak V, Kerr I. 2008. Hexenuronic acid in South African grown *Eucalyptus* hybrid clones. *International Pulp Bleaching Conference*, Quebec City, Canada, 2-5 June 2008, p.201-206.

Aron FO, Olwal TO, Kurien A, Hamam Y. 2008. Network preservation through a topology control algorithm for wireless mesh networks. *2nd IASTED Africa Conference on Modelling and Simulation (AfricaMS 2008)*, Gaborone, Botswana, 8-10 September 2008.

Aron FO, Olwal TO, Kurien A, Odhiambo MO. 2008. A distributed topology control algorithm to conserve energy in heterogeneous wireless mesh networks. *World Academy of Science, Engineering and Technology (WASET): 5th International Conference on Information and Communication Technologies ICT*, Paris, France, 4-6 July 2008, p.530-536.

B

Bachoo A, Van Den Bergh F, Gazendam AD. 2008. A comparison of data file and storage configurations for efficient temporal access of satellite image data. *Free and Open Source Software for Geospatial Conference, FOSS4G*, Cape Town, South Africa, 29 September-3 October 2008.

Badenhorst JAC, Davel M. 2008. Data requirements for speaker independent acoustic models. *19th Annual Symposium of the Pattern Recognition Association of South Africa (PRASA 2008)*, Cape Town, South Africa, 27-28 November 2008, p.147-152.

Baisitse TR, Forbes A, Katumba G, Botha JR, Engelbrecht JAA. 2008. Characterisation of InAs-based epilayers by FTIR spectroscopy. *Physica Status Solidi C, Special Issue: E-MRS 2007 Spring Meeting, Symposium F and Conference on Photonic Materials*, Strasbourg, France, 28 May-1 June 2007, 5(2), p.573-576.

Barnard E, Plauche M, Davel M. 2008. The utility of spoken dialog systems. *2008 IEEE Workshop on Spoken Language Technology*, Goa, India, 15-18 December 2008, p.13-16.

Barry M, Steyn H, Brent AC. 2008. Determining the most important factors for sustainable energy technology selection in Africa: application of the Delphi technique. *17th International Conference on the Management of Technology, IAMOT Conference 2008: Creating & Managing a Knowledge Economy*, Dubai, 6-10 April 2008.

Barry M, Steyn H, Brent AC. 2008. Determining the most important factors for sustainable energy technology selection in Africa: application of the Focus Group Technique. *Portland International Center for Management of Engineering and Technology (PICMET) Conference 2008: Technology Management for Sustainable Economies*, Cape Town, South Africa, 27-31 July 2008, p.181-187.

Baumbach J. 2008. Colour and pattern composition to blend objects into a natural environment. *AIC Interim Meeting 2008, Colour: Effects and Affects*, Stockholm, Sweden, 15-18 June 2008.

Baumbach J. 2008. Using the analytical hierarchy process to evaluate target signatures. *Land Warfare Conference*, Brisbane, Australia, 27-31 October 2008, p.29-34.

Bergh AO, Kleyn EG, Mckay AH. 2008. Preliminary studies on the utilisation of Berea Red Sands for sub-base and base construction. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC)*, Pretoria, South Africa, 7-11 July 2008.

Bernhardi EH, Bollig C, Forbes A, Esser MJD. 2008. Modelling end-pumped solid-state lasers. *13th Annual Symposium of the IEEE/LEOS Benelux Chapter*, Enschede, The Netherlands, 27-28 November 2008, p.147-150.

Bernhardi EH, Bollig C, Harris L, Esser MJD, Forbes A. 2008. Investigating thermal stresses in quasi-CW pumped Tm:YLF laser crystals. *Optical Society of America, 2008 Advanced Solid-State Photonics Topical Meeting*, Nara, Japan, 27-30 January 2008.

Bhagwan J, Wall K. 2008. A compendium of best practice and innovation in asset management of water services infrastructure. *Confluence of the Water Industry: Water Institute of Southern Africa (WISA) Biennial Conference 2008*, Sun City, South Africa, 18-22 May 2008.

Boguslavsky L, Tsehloane CD. 2008. Spunlaced and chemically bonded nonwovens for filtration applications: performance evaluation and comparison. *Science Real and Relevant: 2nd CSIR Biennial Conference*, Pretoria, South Africa, 17-18 November 2008.

Bolele K, Modungwa D, Tlale NS, Kumile CM. 2008. Mobility and kinematics analysis of a novel 5DOF hybrid manipulator for reconditioning of mould and die tools, Part 2. *15th International Conference on Mechatronics and Machine Vision in Practice*, Auckland, New Zealand, 2-4 December 2008, p.196-201.

Bologo TL, Maree JP, Motaung S, De Beer M. 2008. Removal of iron(III) from acid mine drainage (AMD). *WISA 2008 Biennial Conference and Exhibition*, Sun City Resort, South Africa, 18-22 May 2008.

Booth R, Meyer T. 2008. Equilibria in social belief removal. *11th International Conference on Principles of Knowledge Representation and Reasoning (KR 2008)*, Sydney, Australia, 16-19 September 2008, p.145-155.

Botha A, Ford M. 2008. "Digital Life Skills" for the young and mobile "Digital Citizens". *MLearn 2008 Conference on Mobile Learning: From Text to Context, Shropshire, United Kingdom, 7-10 October 2008*.

Botha A, Traxler J, Ford M. 2008. MobilED: a tool by any other name... *MLearn 2008 Conference on Mobile Learning: From Text to Context, Shropshire, United Kingdom, 7-10 October 2008*.

Botha A, Van Den Berg M, Batchelor J, Sedano CI. 2008. Ability through mobility. *3rd International Conference on e-Learning (ICEL 2008), Cape Town, South Africa, 26-27 June 2008*.

Botha A, Vosloo S, Kuner J, Van Den Berg M. 2008. Improving cross-cultural awareness and communication through mobile technologies. *MLearn 2008 Conference on Mobile Learning: From Text to Context, Shropshire, United Kingdom, 7-10 October 2008*.

Botha AF, Roux JA. 2008. The fibre, yarn and fabric properties of the cashmere component of South African indigenous goat hair. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Botha M, Ittmann HW. 2008. Logistics hubs: an integration of transport infrastructure. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.

Brent AC, Rogers DEC. 2008. Prioritising assessable sustainability performance indicators to manage renewable energy technologies in remote areas of Africa. *10th World Renewable Energy Congress and Exhibition (WREC X) 2008, Glasgow, Scotland, UK, 19-25 July 2008, p.2743-2750*.

Britz K, Heidema J, Meyer T. 2008. Semantic preferential subsumption. *11th International Conference on Principles of Knowledge Representation and Reasoning (KR 2008), Sydney, Australia, 16-19 September 2008, p.476-484*.

Burger L, Forbes A. 2008. Porro prism resonators: a new perspective. *Optical Technologies for Arming, Safing, Fuzing and Firing IV, San Diego, CA, USA, 13 August 2008*.

Busgeeth K, Brits A, Whisken JB. 2008. Potential application of remote sensing in monitoring informal settlements in developing countries where complimentary data does not exist. *Shaping the Future: Planning Africa Conference 2008, Johannesburg, South Africa, 14-16 April 2008, p.314-328*.

Busgeeth K, Van Den Bergh F, Whisken JB, Brits A. 2008. Potential application of remote sensing in monitoring informal settlements in South Africa where complimentary data does not exist. *Geoinformatics 2008 and Joint Conference on GIS and Built Environment, Guangzhou, China, 28-29 June 2008*.

Butgereit L. 2008. Using instant messaging over GPRS to help with school work. *2nd IFIP International Symposium on Wireless Communications and Information Technology in Developing Countries, Pretoria, South Africa, 6-7 October 2008*.

Butgereit LL. 2008. Dr Math Rocks! Using instant messaging to help pupils with mathematics homework. *IST-Africa 2008 Conference, Windhoek, Namibia, 7-9 May 2008*.

Butgereit LL. 2008. IM Dr Math: using instant messaging in a mathematics tutoring project. *3rd International Conference on e-Learning (ICEL 2008), Cape Town, South Africa, 26-27 June 2008*.

Butgereit LL. 2008. 'Thumb tribe' maths wars! *14th Annual National Congress of the Association for Mathematics Education of South Africa (AMESA) 2008, Port Elizabeth, South Africa, 30 June-4 July 2008*.

C

Cannoo BR, Gledhill IMA, Cooper AK, Greben JM. 2008. Navier-Stokes wave models for investigations of breakwater characteristics. *6th South African Conference on Computational and Applied Mechanics (SACAM 2008), Cape Town, 26-28 March 2008, p.127-134*.
Chakwizira J, Mashiri M, Nhemachena C. 2008. Using the integrated rural mobility and access (IRMA) approach in prospering rural South Africa. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Chakwizira J, Mashiri MAM. 2008. Some insights into the intersection of physical planning and governance in Zimbabwe. *Shaping the future: Planning Africa Conference 2008, Johannesburg, South Africa, 14-16 April 2008, p.178-200*.

Chakwizira J. 2008. Technology and knowledge transfer for development. *Knowledge to Remobilise Africa: 2nd Biennial Knowledge Management Africa Conference, Nairobi, Kenya, 17-19 July 2007*.

Chifura A, Nkomo P, Chadwick J. 2008. A comparison of the performance and security of free and open source smart card offcard APIs. *Southern African Telecommunication Network and Applications (SATNAC) Conference, Wild Coast, 8-10 September 2008, p.473-474*.

Cho M, Sobhan I, Skidmore AK, De Leeuw J. 2008. Discriminating species using hyperspectral indices at leaf and canopy scales. *21st Congress of the International Society for Photogrammetry and Remote Sensing (ISPRS): Silk Road for Information from Imagery, Beijing, China, 3-11 July 2008, p.369-376*.

Cho M, Van Aardt JAN, Majeke B, Main R. 2008. Evaluating the seasonality of remote sensing indicators of system state for *Eucalyptus grandis* growing on different site qualities. *IEEE International Geoscience and Remote Sensing Symposium, Boston, Massachusetts, USA, 7-11 July 2008, p.487-90*.

Cilliers A, Nel WAJ. 2008. Helicopter parameter extraction using joint time-frequency and tomographic techniques. *2008 International Conference on Radar, Adelaide, 2-5 September 2008, p.598-603*.

Coetzee L, Viviers I. 2008. Web standards facilitating accessibility in a digitally inclusive South Africa: perspectives from developing the South African National Accessibility Portal. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Coetzee L, Viviers MI. 2008. Accessibility observations of visually impaired users using the South African National Accessibility Portal. *IST-Africa 2008 Conference, Windhoek, Namibia, 7-9 May 2008*.

Coetzee S, Cooper AK. 2008. Can the South African address standard (SANS 1883) work for small local municipalities? *Free and Open Source Software for Geospatial Conference, FOSS4G, Cape Town, South Africa, 29 September-3 October 2008*.

Conradie DCU, Ras H, Mentz F. 2008. The use of agent based simulation for traffic safety assessment. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.

Conradie DCU, Roux E. 2008. Quality management in construction project design and management. *5th Post Graduate Conference on Construction Industry Development, Bloemfontein, South Africa, 16-18 March 2008*.

Cooper AK, Coetzee S. 2008. The South African address standard and initiatives towards an international address standard. *Free and Open Source Software for Geospatial Conference, FOSS4G, Cape Town, South Africa, 29 September-3 October 2008*.

Cooper AK. 2008. Overview of an address and purpose of the workshop. *ISO Workshop on Address Standards: Considering the Issues Related to an International Address Standard, Copenhagen, Denmark, 25 May 2008*.

Cornelissen RJ. 2008. Inconsistency in gravimetric sampling pumps and cyclones. *12th United States/North American Mine Ventilation Symposium, Reno, Nevada, USA, 9-11 June 2008*.

D

Darvishzadeh R, Skidmore A, Schlerf M, Atzberger C, Corsi F, Cho M. 2008. Estimation of leaf area index and chlorophyll for a Mediterranean grassland using hyperspectral data. *21st Congress of the International Society for Photogrammetry and Remote Sensing (ISPRS): Silk Road for Information from Imagery, Beijing, China, 3-11 July 2008, p.471-478*.

Das S, Khuluse S, Elphinstone CD. 2008. A risk-based approach to assessing climate impacts. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

- Davrajh S, Naidoo T, Bright G, Tlale NS, Kumile CM. 2008. Automated visual inspection of moving custom parts. *15th International Conference on Mechatronics and Machine Vision in Practice, Auckland, New Zealand, 2-4 December 2008*, p.245-250.
- De Beer M, Fisher C, Sadzik E. 2008. Towards quantifying horizontal stresses of free-rolling rubber tyres on road surfacings. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.
- De Beer M, Maina JW. 2008. Some fundamental definitions of the elastic parameters for homogeneous isotropic linear elastic materials in pavement design and analysis. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.
- De Beer M. 2008. Stress-In-Motion (SIM): a new tool for road infrastructure protection? *International Conference on Heavy Vehicles: Heavy Vehicle Transport Technology HVTT 10 and Weigh-In-Motion ICWIM 5, Paris, France, 19-22 May 2008*, p.591-604.
- De Villiers JP, Leuschner FW, Geldenhuys R. 2008. Centi-pixel accurate real-time inverse distortion correction. *Optomechatronic Technologies 2008, San Diego, USA, 17-19 November 2008*.
- De Waal A, Barnard E. 2008. Evaluating topic models with stability. *19th Annual Symposium of the Pattern Recognition Association of South Africa (PRASA 2008), Cape Town, South Africa, 27-28 November 2008*, p.79-84.
- De Witt JJ, Nel WAJ. 2008. Range Doppler dynamic range considerations for dechirp on receive radar. *5th European Radar Conference, Amsterdam, The Netherlands, 30-31 October 2008*, p.136-139.
- De Witt JJ, Van Rooyen GJ. 2008. A self-calibrating quadrature mixing front-end for SDR. *IEEE Radio and Wireless Symposium (RWS 2008), Orlando, Florida, USA, 22-24 January 2008*.
- Debba P, Carranza EJM, Stein A, Van der Meer FD. 2008. Optimal exploration target zones. *Free and Open Source Software for Geospatial Conference, FOSS4G, Cape Town, South Africa, 29 September-3 October 2008*.
- Debba P, Stein A, Van der Meer FD, Carranza EJM, Lucieer A. 2008. Field sampling from a segmented image. *International Conference on Computational Science and its Applications (ICCSA 2008), Perugia, Italy, 30 June-3 July 2008*, p.756-768.
- Denneman E, Marais H, Sadzik ES. 2008. Multi-laboratory precision of Marshall design related tests. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.
- Denneman E, Sadzik ES. 2008. Forensic investigation into the performance of hot-mix asphalt. *Asphalt: Roads for Life, 4th Euroasphalt and Eurobitumen Congress, Copenhagen, Denmark, 21-23 May 2008*.
- Denneman E, Steyn WJVD, Maina JW, Sadzik ES. 2008. Evaluation of deformation response of HMA under APT and wheel tracking tests. *Accelerated Pavement Testing (APT) 2008, 3rd International Conference, Madrid, Spain, 1-3 October 2008*.
- Denneman E, Steyn WJVD, Maina JW, Sadzik ES. 2008. Moisture related test protocols for HVS testing. *Accelerated Pavement Testing (APT) 2008, 3rd International Conference, Madrid, Spain, 1-3 October 2008*.
- Diale M, Buchner SJ, Buthelezi Z, Gledhill IMA, Grayson DJ, Kgabi NA. 2008. Women in physics in South Africa: the story to 2008. *Women in physics: 3rd IUPAP International Conference on Women in Physics, Seoul (South Korea), 8-10 October 2008*, p.169-170.
- Dlodlo N, Beyers R. 2008. High-school girls in a fabrication engineering environment: a South African experience. *IADIS International Conference on Cognition and Exploratory Learning in Digital Age (CELDA 2008), Freiburg, Germany, 3-15 October 2008*, p.351-356.
- Dlodlo N, Ford M, Marques L. 2008. Utilising the Living Labs approach in the design of a digital platform for Singa. *South African Institute of Computer Scientists and Information Technologists (SAICSIT) 2008 Conference: Riding the Wave of Technology, Wilderness, South Africa, 6-8 October 2008*.
- Dlungwana WS, Roux E, Setswalo L, Lazarus S. 2008. Implementation of the integrated emerging contractor development mode: towards enhanced competitions for small construction firms. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.
- Du Plessis C. 2008. Understanding cities as social-ecological systems. *World Sustainable Building Conference, Melbourne, Australia, 21-25 September 2008*.
- Du Plessis L, Coetzee NF, Burmas N, Harvey JT, Monismith CL. 2008. The heavy vehicle simulator in accelerated pavement testing: a historical overview and new developments. *Accelerated Pavement Testing (APT) 2008, 3rd International Conference, Madrid, Spain, 1-3 October 2008*.
- Du Plessis L, Rust FC, Horak E, Nokes WA, Holland TJ. 2008. Cost benefit analysis of the California HVS program. *Accelerated Pavement Testing (APT) 2008, 3rd International Conference, Madrid, Spain, 1-3 October 2008*.
- Du Preez WB, Damm OFRA, Trollip NG, John MJ. 2008. Advanced materials for application in the aerospace and automotive industries. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.
- Duncker LC, Matsebe GN. 2008. Prejudices and attitudes toward reuse of nutrients from urine diversion toilets in South Africa. *33rd Water, Engineering and Development Centre (WEDC) International Conference, Accra, Ghana, 7-11 April 2008*, p.108-113.
- Durrheim RJ. 2008. Rock engineering for deep and high stress mining: risks, research, implementation and regulation. *21st World Mining Congress & Expo 2008, Sosnowiec, Poland, 7-11 September 2008*.
- Duvenhage A, Duvenhage B. 2008. An alternative to dead reckoning for model state quantisation when migrating to a quantised discrete event architecture. *22nd European Conference on Modelling and Simulation (ECMS2008), Nicosia, Cyprus, 3-6 June 2008*.
- Duvenhage A, Terblanche L. 2008. The evolution of a C2 protocol gateway. *Simulation Interoperability Standards Organization (SISO) Euro SIW 2008 Conference, Edinburgh, Scotland, 16-19 June 2008*.
- Duvenhage B, Nel JJ. 2008. The contribution of static and dynamic load balancing in a real-time distributed air defence simulation. *SimTecT 2008 Conference: Simulation: Maximising Organisational Benefits, Melbourne, Australia, 12-15 May 2008*.
- E**
- Engelbrecht AD, North BC, Hadley TD. 2008. Clean coal technology: gasification of South African coal. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.
- Engelbrecht AD, North BC, Hadley TD. 2008. Clean coal technology: gasification of South African coal. *Triennial Industrial Fluidisation South Africa (IFSA 2008) Conference, Johannesburg, South Africa, 19-20 November 2008*, p.188-202.
- Engelbrecht C, Brent AC. 2008. Towards modelling macro influencing factors to address South African energy challenges: a focus on electricity demand and climate change. *Portland International Center for Management of Engineering and Technology (PICMET) Conference 2008: Technology Management for Sustainable Economies, Cape Town, South Africa, 27-31 July 2008*, p.188-196.
- Erasmus E, Anandjiwala RD. 2008. Enhancement of mechanical properties and interfacial adhesion by chemical modification of natural fibre reinforced polypropylene composites. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.
- Esser MJD, Bollig C, Preussler DR. 2008. Diode-end-pumped Tm:GdVO4 laser at selected wavelengths. *Advanced Solid-State Photonics Topical Meeting, Nara, Japan, 27-30 January 2008*.

F

Fedotov I, Shatalov M, Mwambakana JN. 2008. Roots of transcendental algebraic equations: a method of bracketing roots and selecting initial estimations. *Technology and its Integration into Mathematics Education Conference (TIME), Buffelspoort, South Africa, 22-26 September 2008*, p.162-173.

Ferguson K. 2008. Adapting model for convergence of optimal MINMAX bit allocation in INTRA-frame video coding. *3rd International Conference on Broadband Communications, Information Technology & Biomedical Applications, Pretoria, South Africa, 23-26 November 2008*, p.24-29.

Foko T, Amory A. 2008. Social constructivism in games based learning in the South African context. *ED-MEDIA 2008: World Conference on Educational Multimedia, Hypermedia and Telecommunications, Vienna, Austria, 30 June-4 July 2008*.

Forbes A, Long CS, Litvin I, Loveday PW, Belyi V, Kazak NS. 2008. Variable flattened Gaussian beam order selection by dynamic control of an intracavity diffractive mirror. *Laser Beam Shaping IX, San Diego, CA, USA, 11 August 2008*.

Forbes A, Ngcobo SH, Esser DMJ, Preussler DR, Bollig C. 2008. Laser beam propagation characteristics of incoherently added diode bars. *Laser Beam Shaping IX, San Diego, CA, USA, 11 August 2008*.

Ford M, Botha A. 2008. From e-learning to m-learning: practical use of the cell phone for teaching and learning in the South African classroom. *3rd International Conference on e-Learning (ICEL 2008), Cape Town, South Africa, 26-27 June 2008*.

Ford M. 2008. Mobile instant messaging: the "killer application" for e(m)government in Africa? *IST-Africa 2008 Conference, Windhoek, Namibia, 7-9 May 2008*.

Fouche G, Moodley N, Maharaj V. 2008. Ten years of bioprospecting activities at the CSIR: BP4 as a model. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

G

Gazendam AD. 2008. Building and refining general purpose computing clusters in an emerging HPC oriented research environment. *22nd International Symposium on High Performance Computing Systems and Applications (HPCS 2008), Quebec City, Canada, 9-11 June 2008*.

Gelderblom H, Kotze P. 2008. Designing technology for young children: what we can learn from theories of cognitive development. *South African Institute of Computer Scientists and Information Technologists (SAICSIT) 2008 Conference: Riding the Wave of Technology, Wilderness, South Africa, 6-8 October 2008*, p.66-75.

Gerryts BA, Buys AJ. 2008. R&D as a source of innovation in South Africa. *Portland International Center for Management of Engineering and Technology (PICMET) Conference 2008: Technology Management for Sustainable Economies, Cape Town, South Africa, 27-31 July 2008*, p.337-343.

Gerryts BA, Naidoo K, Barker D. 2008. CSIR aeronautical research contribution to the RSA aerospace industry: a historical perspective. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Gibberd JT. 2008. The sustainable building assessment tool: integrating sustainability into current design and building processes. *World Sustainable Building Conference, Melbourne, Australia, September, 21-25, 2008*.

Godfrey L, Nahman A. 2008. Are economic instruments the solution to sustainable waste recycling in South Africa? *19th Waste Management Conference of the IWMSA (WasteCon 2008), Durban, South Africa, 6-10 October 2008*.

Goldbach OD, Rangasamy T, Linzer LM, Kataka MO, Spottiswoode SM. 2008. Optimum lead-lag distances in South African gold mines. *The 6th International Symposium on Ground Support in Mining and Civil Engineering Construction, Cape Town, South Africa, 30 March-3 April 2008*.

Goncalves DP. 2008. Developing systems engineers. *Portland International Center for Management of Engineering and Technology (PICMET) Conference 2008: Technology Management for Sustainable Economies, Cape Town, South Africa, 27-31 July 2008*, p.1963-1972.

Goncalves DP. 2008. Processes and beyond. *INCOSE 2008, 18th International Symposium of INCOSE: Systems Engineering for the Planet, Utrecht, The Netherlands, 15-19 June 2008*.

Goss H, Oranje M, Van Huyssteen E. 2008. Strengthening intergovernmental coordination in support of regional development: attempts, tools and reflections. *Planning Africa 2008: Shaping the Future, Johannesburg, South Africa, 13-16 April 2008*.

Gouws JF, Majazi T. 2008. Synthesis of zero effluent multipurpose batch processes using effective scheduling. *18th European Symposium on Computer Aided Process Engineering (ESCAPE 18), Lyon, France, 1-4 June 2008*.

Gouws JF, Majazi T. 2008. Wastewater minimisation using inherent storage capacity in multipurpose batch plants: an unexplored dimension. *11th Conference on Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction, Prague, Czech Republic, 24-28 August 2008*.

Govender G, Ivanchev LH, Burger HP, Knutsen R, Kunene G. 2008. Weldability of SSM rheo processed aluminium alloy A356. *10th International Conference on Semi-Solid Processing of Alloys and Composites (S2P), Aachen, Germany and Liege, Belgium, 16-18 September 2008*, p.773-778.

Govender G, Moller H. 2008. Evaluation of surface chemical segregation of semi-solid cast aluminium alloy A356. *10th International Conference on Semi-Solid Processing of Alloys and Composites (S2P), Aachen, Germany and Liege, Belgium, 16-18 September 2008*, p.433-438.

Govender S. 2008. Monitoring of endocrine disrupting chemicals in surface water. *International Symposium on Sanitary and Environmental Engineering, Florence, Italy, 24-27 June 2008*.

Greben HA, Nemaangani P, Oelofse SHH. 2008. Decreasing the waste stream while increasing the energy supply in South Africa. *19th Waste Management Conference of the IWMSA (WasteCon 2008), Durban, South Africa, 6-10 October 2008*, p.241-249.

Greben HA, Nemaangani P, Oelofse SHH. 2008. From organic waste to energy: a feasible option in South Africa? *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Greben JM, Cooper AK, Gledhill IMA, De Villiers R. 2008. Numerical modelling of structures of dolosse and their interaction with waves. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Greeff M, Coetzee L, Alberts R, Easton H. 2008. Evaluating an interactive voice response system for persons with disabilities. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Greeff M, Coetzee L, Pistorius M. 2008. Usability evaluation of the South African National Accessibility Portal interactive voice response system. *South African Institute of Computer Scientists and Information Technologists (SAICSIT) 2008 Conference: Riding the Wave of Technology, Wilderness, South Africa, 6-8 October 2008*, p.76-85.

Greeff M, Engelbrecht AP. 2008. Solving dynamic multi-objective problems with vector evaluated particle swarm optimisation. *IEEE World Congress on Computational Intelligence (WCCI): IEEE Congress on Evolutionary Computation (CEC), Hong-Kong, 1-7 June 2008*, p.2922-2929.

Green CA, Breetzke K, Jacobs N. 2008. Urban-rural demarcation within a metropolitan area: a methodology for using small area disaggregation. *Planning Africa 2008: Shaping the Future, Johannesburg, South Africa, 13-16 April 2008*.

Greyling E, Smith R. 2008. An innovative ICT solution to steer rural communities to global understanding: a case study from Durban, South Africa. *18th Standing Conference of Eastern, Central and Southern Africa Library and Information Associations (SCECSAL), Lusaka, Zambia, 15-18 July 2008*, p.301-316.

Griffith DJ, Le Roux FPJ, Schwering PBW, Holloway M. 2008. Measurement of atmospheric MTF in a littoral environment. *Electro-Optical and Infrared Systems: Technology and Applications V Conference, Cardiff, Wales, UK, 15-18 September 2008*.

Gumede T, Plauche M, Sharma A. 2008. Evaluating the potential of automated telephony systems in rural communities: field assessment for Project LWAZI of HLT Meraka. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

H

Herselman PL, De Wind HJ. 2008. Improved covariance matrix estimation in spectrally inhomogeneous sea clutter with application to adaptive small boat detection. *International Conference on Radar, Adelaide, Australia, 2-5 September 2008*, p.94-99.

Hietkamp S, Engelbrecht A, Scholes RJ, Golding A. 2008. The potential for sequestration of carbon dioxide in South Africa carbon capture and storage in South Africa. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Hobbs PJ. 2008. Groundwater levels and dolomite: nuisance or necessity? *Problem Soils in South Africa, Seminar of the South African Institution of Civil Engineering, Midrand, South Africa, 3-4 November 2008*, p.213-223.

Holtzhausen S, Matsebe O, Tlale NS, Bright G. 2008. Autonomous underwater vehicle motion tracking using a Kalman filter for sensor fusion. *15th International Conference on Mechatronics and Machine Vision in Practice, Auckland, New Zealand, 2-4 December 2008*, p.103-108.

Holtzhausen S, Matsebe O, Tlale NS. 2008. Autonomous underwater vehicle for research and rescue operations. *Robotics and Mechatronics Symposium, Bloemfontein, South Africa, 11 November 2008*, p.60-65.

Horak E, Maina JW, Guiamba D, Hartman A. 2008. Correlation study with the light weight deflectometer in South Africa. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.

J

Johnson D, Roux K. 2008. Building rural wireless networks: lessons learnt and future directions. *2008 ACM Workshop on Wireless Networks and Systems for Developing Regions, San Francisco, California, USA, 19 September 2008*, p.17-22.

Jovanovic NZ, Bugan RDH, Frantz G, De Clercq W, Fey M. 2008. Hydrosalinity fluxes in a small scale catchment of the Berg River (South Africa). *Water Pollution IX, 9th International Conference on Water Pollution: Modelling, Monitoring and Management, Alicante, Spain, 9-11 June 2008*, p.603-612.

Jovanovic NZ, Majola KA, Ginster M, Adams S. 2008. Preferential flow modelling in the vadose zone using MACRO 5.0: Cape Flats sands and Mpumalanga clays case studies (South Africa). *4th International Conference on Waste Management and the Environment, Granada, Spain, 2-4 June 2008*, p.373-382.

Jovanovic NZ. 2008. The use of treated effluent for agricultural irrigation: current status in the Bottellary catchment (South Africa). *Sustainable Irrigation, Management, Technologies and Policies II: 2nd International Conference on Sustainable Irrigation, Management, Technologies and Policies, Alicante, Spain, 11-13 June 2008*, p.371-380.

K

Kareem TR, Chan HA, Ntlatlana N. 2008. Design improvement of dynamic channel selection scheme for multi-radio wireless mesh networks. *3rd International Conference on Broadband Communications, Information Technology & Biomedical Applications (BroadCom' 08), Pretoria, South Africa, 23-26 November 2008*, p.351-357. Kareem TR, Matthee KW, Chan HA, Ntlatlana N. 2008. A dynamic channel assignment scheme for multi-radio wireless mesh networks. *Southern Africa Telecommunication Networks and Applications Conference (SATNAC 2008), Wild Coast, Eastern Cape, 7-10 September 2008*.

Kareem TR, Matthee KW, Chan HA, Ntlatlana N. 2008. Adaptive priority based distributed dynamic channel assignment for multi-radio wireless mesh networks. *Ad-hoc, Mobile and Wireless Networks, 7th International Conference, ADHOC-NOW 2008, Sophia Antipolis, France, 10-12 September 2008*, 5198, p.321-332.

Karsten AE. 2008. Effect of wavelength, epidermal thickness and skin type on the required dose for photodynamic therapy. *International Conference of the World Association of Laser Therapy (WALT 2008), Sun City, South Africa, 19-22 October 2008*, p.137-143.

Karsten AE. 2008. What is the effect of different skin types on the required dose for photodynamic therapy? *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Kataka MO, Sellers EJ, Singh N. 2008. Elastic and inelastic numerical modelling of remnant mining layouts. *6th South African Conference on Computational and Applied Mechanics (SACAM 2008), Cape Town, South Africa, 25-28 March 2008*, p.177-184.

Katumba G, Forbes A, Olumekor L, Makiwa G. 2008. Quantifying the efficacy of solar selective absorber materials: the case of carbon nanoparticles dispersed in SiO₂, ZnO and NiO matrices. *Optical Modelling and Measurements for Solar Energy Systems II, San Diego, CA, USA, 13 August 2008*.

Katumba G, Makiwa G, Baisitse TR, Olumekor L, Forbes A, Wäckelgård E. 2008. Solar selective absorber functionality of carbon nanoparticles embedded in SiO₂, ZnO and NiO matrices. *Physica Status Solidi C, Special Issue: E-MRS 2007 Spring Meeting, Symposium F and Conference on Photonic Materials, Strasbourg, France, 28 May-1 June 2007*, 5(2), p.549-551.

Katumba G, Olumekor L, Forbes A. 2008. Selective solar absorbers: a cost effective solution for access to clean energy in rural Africa. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Keet CM, Alberts R, Gerber A, Chimamiwa G. 2008. Enhancing web portals with ontology-based data access: the case study of South Africa's accessibility portal for people with disabilities. *OWL: Experiences and Directions (OWLED 2008), 5th International Workshop, Karlsruhe, Germany, 26-27 October 2008*.

Kekana SL, Steyn WJVD. 2008. Evaluating the effects of compaction of hot mix asphalt on selected laboratory test. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.

Kellett BJ, Griffin DK, Bingham R, Campbell RN, Forbes A, Michaelis MM. 2008. Space polypropulsion. *High-Power Laser Ablation VII, Taos, New Mexico, USA, 20-24 April 2008*.

King DJ, Ssamula B. 2008. An evaluation of the planned Gautrain feeder and distribution system. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.

Kleyn EG, Bergh AO. 2008. Some practical aspects regarding the handling of dolerite for base and sub-base construction. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.

Kleynhans N, Barnard E. 2008. A channel normalization technique for speech recognition in mismatched conditions. *19th Annual Symposium of the Pattern Recognition Association of South Africa (PRASA 2008), Cape Town, South Africa, 27-28 November 2008*, p.115-118.

Kohler E, Harvey JT, Du Plessis L, Theyse HL. 2008. Evaluation of precast concrete slabs using a heavy vehicle simulator. *Accelerated Pavement Testing (APT) 2008, 3rd International Conference, Madrid, Spain, 1-3 October 2008*.

Kotze P, Renaud K. 2008. Do we practise what we preach in formulating our design and development methods? *International Federation for Information Processing (IFIP) Conference: Engineering Interactive Systems, Salamanca, Spain, 22-24 March 2007*, p.567-585.

Kuijpers JS, Watson BP, Henry G. 2008. Nonlinear elastic behaviour of Bushveld rock. *1st Southern Hemisphere International Rock Mechanics Symposium (SHIRMS2008)*, Perth, Australia, 16-19 September 2008.

Kuijpers JS. 2008. Support coverage: an essential component in effective support design. *6th International Symposium on Ground Support in Mining and Civil Engineering Construction: an ISRM-Sponsored Regional Symposium*, Cape Town, South Africa, 30 March-3 April 2008.

Kunene G, Govender G, Ivanchev LH, Knutsen R, Burger HP. 2008. The influence of heat treatments for laser welded semi solid metal cast A356 alloy on the fracture mode of tensile specimens. *10th International Conference on Semi-Solid Processing of Alloys and Composites (S2P)*, Aachen, Germany and Liege, Belgium, 16-18 September 2008, p.169-174.

L

Labuschagne FJJ. 2008. The CSIR Nyendaweb: instrument of the ITS LAB laboratory and research and development platform. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC)*, Pretoria, South Africa, 7-11 July 2008,

Le Roux LJ, Hietkamp S, Cummings F. 2008. Dye solar cells: a different approach to solar energy. *Science Real and Relevant: 2nd CSIR Biennial Conference*, Pretoria, South Africa, 17-18 November 2008.

Le Roux WH. 2008. Interoperability requirements for a South African joint command and control test facility. *2008 European Simulation Interoperability Workshop (08E-SIW-015)*, Edinburgh, Scotland, 16-19 June 2008, p.87-96.

Leaner J, Binedell M, Oosthuizen R, Matookane M, Mason R, Macmillan P. 2008. Risk assessment of the mercury footprint in selected rivers of South Africa. *14th International Conference on Heavy Metals in the Environment, Taipei, Taiwan*, 16-23 November 2008.

Lebelo RS, Fedotov I, Shatalov M. 2008. Solution of heat equation with variable coefficient using derive. *Technology and its Integration into Mathematics Education Conference (TIME)*, Buffelspoort, South Africa, 22-26 September 2008, p.129-137.

Leenen L, Ghose A. 2008. Branch and bound algorithms to solve semiring constraint satisfaction problems. *10th Pacific Rim International Conference on Artificial Intelligence (PRICAI-08)*, Hanoi, Vietnam, 15-19 December 2008.

Lessing M, Von Solms B. 2008. Live forensic acquisition as alternative to traditional forensic processes. *IT Incident Management & IT Forensics (IMF 2008)*, Mannheim, Germany, 23-25 September 2008.

Lessing M, Von Solms SH. 2008. Building a world class information security governance model. *IST-Africa 2008 Conference*, Windhoek, Namibia, 7-9 May 2008.

Lessing MM, Weissenberger L. 2008. No age discrimination for biometrics. *Information Security South Africa (ISSA) Conference 2008*, School of Tourism & Hospitality (STH), University of Johannesburg, South Africa, 7-9 July 2008.

Letebele MO, Mareitwa KP, Mokonyama M. 2008. Design implications of incorporating employee profiles and workplace activity levels in travel demand management led parking demand assessments. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC)*, Pretoria, South Africa, 7-11 July 2008.

Litvin I, Loveday PW, Long CS, Kazak NS, Belyi V, Forbes A. 2008. Intracavity mode competition between classes of flat-top beams. *Laser Beam Shaping IX Conference*, San Diego, USA, 10-11 August 2008.

Litvin IA, McLaren MG, Forbes A. 2008. Propagation of obstructed Bessel and Bessel-Gauss beams. *Laser Beam Shaping IX*, San Diego, CA, USA, 11 August 2008.

Long CS, Loveday PW, Forbes A. 2008. A piezoelectric deformable mirror for intra-cavity laser adaptive optics. *Industrial and Commercial Applications of Smart Structures Technologies 2008*, San Diego, California, USA, 9-13 March 2008.

Long CS, Loveday PW, Forbes A. 2008. Development of a piezoelectric adaptive mirror for laser beam control. *11th International Conference on New Actuators*, Bremen, Germany, 9-11 June 2008, p.584-587.

Long CS, Loveday PW, Groenwold AA. 2008. Applications of finite elements with drilling degrees of freedom in structural topology optimization. *6th South African Conference on Computational and Applied Mechanics (SACAM 2008)*, Cape Town, 26-28 March 2008, p.39-51.

Long CS, Loveday PW, Groenwold AA. 2008. Development and evaluation of axisymmetric finite elements with rotational degrees of freedom. *6th South African Conference on Computational and Applied Mechanics (SACAM 2008)*, Cape Town, 26-28 March 2008, p.27-38.

Louw JA. 2008. Speect: a multilingual text-to-speech system. *19th Annual Symposium of the Pattern Recognition Association of South Africa (PRASA 2008)*, Cape Town, South Africa, 27-28 November 2008, p.165-168.

Loveday PW, Long CS, Broughton BA, Monk JS, Corderley G. 2008. Development of piezoelectric actuators for UAV applications. *6th South African Conference on Computational and Applied Mechanics (SACAM 2008)*, Cape Town, South Africa, 26-28 March 2008, p.160-167.

Loveday PW, Long CS, Forbes A, Land K. 2008. Modelling and optimization of a deformable mirror for laser beam control. *6th South African Conference on Computational and Applied Mechanics (SACAM 2008)*, Cape Town, 26-28 March 2008, p.219-228.

Loveday PW, Long CS. 2008. Modelling and measurement techniques for guided wave transduction. *6th South African Conference on Computational and Applied Mechanics (SACAM 2008)*, Cape Town, 26-28 March 2008, p.168-176.

Loveday PW. 2008. Measurement of modal amplitudes of guided waves in rails. *Smart Structures and Materials 2008: Health Monitoring of Structural and Biological Systems*, San Diego, 10-13 March 2008.

Lunin BS, Shatalov MY. 2008. Balancing of thin-walled resonators for low-cost solid-state gyroscopes. *Jubilee 15th Saint Petersburg International Conference on Integrated Navigation Systems*, Saint Petersburg, Russia, 26-28 May 2008, p.32-33.

Lysko A, Johnson DL. 2008. A numerical study of propagation effects in a wireless mesh test bed. *The 6th WSEAS International Conference on Applied Electromagnetics, Wireless and Optical Communications (ELECTROSCIENCE '08)*, Trondheim, Norway, 2-4 July 2008, p.41-46.

Lysko A. 2008. On calculation of radiation field integrals for higher-order basis functions in conical thin wire MoM formulation. *The 6th WSEAS International Conference on Applied Electromagnetics, Wireless and Optical Communications (ELECTROSCIENCE '08)*, Trondheim, Norway, 2-4 July 2008, p.104-109.

M

Mabuza LO, Brent AC, Mapako M. 2008. The management of renewable energy technologies in remote areas of Africa: towards a framework for sustainable technology transfer. *17th International Conference on the Management of Technology, IAMOT Conference 2008: Creating & Managing a Knowledge Economy*, Dubai, 6-10 April 2008.

Macagnano EV. 2008. Intelligent urban environments: towards e-inclusion of the disabled and the aged in the design of a sustainable city of the future: a South African example. *5th International Conference on Urban Regeneration and Sustainability: the Sustainable City 2008*, Skiathos, Greece, 24-26 September 2008, p.537-548.

Mafiri MT, Nyareli TN, Ngwenya B, Vogt DR. 2008. Borehole radar as a tool to optimize mine layouts and production. *Science Real and Relevant: 2nd CSIR Biennial Conference*, Pretoria, South Africa, 17-18 November 2008.

Maharaj VJ, Senabe JV, Horak RM. 2008. Hoodia: a case study at CSIR. *Science Real and Relevant: 2nd CSIR Biennial Conference*, Pretoria, South Africa, 17-18 November 2008.

Maharajh DM, Lalloo R. 2008. Indigenous algae: potential factories for biodiesel production. *Science Real and Relevant: 2nd CSIR Biennial Conference*, Pretoria, South Africa, 17-18 November 2008.

- Main R, Cho M, Van Aardt J, Majeke B. 2008. A comparison between sensors with different spectral resolutions, relative to the Sumbandila satellite, for assessing site quality differences, in *Eucalyptus grandis* plantations. *14th Australasian Remote Sensing and Photogrammetry Conference, Darwin, Australia, 29 September-3 October 2008*.
- Maina JW, De Beer M. 2008. Improved performance evaluation of road pavements by using measured tyre loading. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.
- Maina JW, Denneman E, De Beer M. 2008. Introduction of new road pavement response modelling software by means of benchmarking. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.
- Maina JW, Ozawa Y, Matsui K. 2008. Approximate analysis of rigid plate loading on elastic multi-layered systems. *6th International Conference on Road and Airfield Pavement Technology, Sapporo, Japan, 20-23 July 2008*.
- Maina JW, Ozawa Y, Matsui K. 2008. Influence of cross-anisotropy material behavior on back-calculation analysis of multi-layered systems. *6th International Conference on Road and Airfield Pavement Technology, Sapporo, Japan, 20-23 July 2008*.
- Majavu W, Van Zyl T, Marwala T. 2008. Classification of web resident sensor resources using latent semantic indexing and ontologies. *IEEE International GeoSciences and Remote Sensing Society (IGARSS) Symposium, Boston, Massachusetts, USA, 6-11 July 2008, p.518-523*.
- Makiwa G, Katumba G, Olumekor L. 2008. Synthesis and optical characterization of C-SiO₂ and C-NiO sol-gel composite films for use as selective solar absorbers. *Optical Modelling and Measurements for Solar Energy Systems II, San Diego, CA, USA, 13 August 2008*.
- Makoni EN, Meiklejohn CL, Coetzee M J. 2008. Distilling a 'new regionalist' planning agenda for South Africa: is the provincial growth and development strategy (PGDS) measuring up? *Shaping the Future: Planning Africa Conference 2008, Johannesburg, South Africa, 14-16 April 2008, p.294-313*.
- Manus N, Wall K, Moodley K. 2008. The IAM strategy to keep our water services clean and fresh and reliable. *Water Distribution Systems Analysis: 10th Annual Conference, Kruger National Park, South Africa, 17-20 August 2008*.
- Mapako M, Nangammbi D, Mosomane L. 2008. Rural electrification in the energy policies of the SADC region. *16th International Conference on the Domestic Use of Energy, Cape Town, South Africa, 18-19 March 2008*.
- Marais M, Duveskog M, Dlodlo N. 2008. TekkiKids: experiences in implementing technology clubs in a South African context. *3rd International Conference on e-Learning (ICEL 2008), Cape Town, South Africa, 26-27 June 2008*.
- Maritz J. 2008. Using GPS data loggers to measure rural accessibility in South Africa. *12th International Conference GIS Polonia 2008: Geoinformation Challenges, Zakopane & Krakow, Poland, 8-12 September 2008*.
- Maritz MF, Mostert FJ, Terblanche TJ. 2008. An analytical investigation of the energy-volume relationship observed in concrete targets penetrated by shaped charge jets. *24th International Symposium on Ballistics, New Orleans, USA, 22-26 September 2008, p.838-845*.
- Martirosian O, Davel M. 2008. Acoustic analysis of diphthongs in Standard South African English. *19th Annual Symposium of the Pattern Recognition Association of South Africa (PRASA 2008), Cape Town, South Africa, 27-28 November 2008, p.153-157*.
- Masekamela I, Tlale NS, Kumile CM. 2008. Design of a real-time open architecture controller for a reconfigurable machine tool. *Robotics and Mechatronics Symposium, Bloemfontein, South Africa, 11 November 2008*.
- Masekamela I, Tlale NS, Kumile CM. 2008. Design of a real-time open architecture controller for a reconfigurable machine tool. *11th Mechatronics Forum Biennial International Conference, Limerick, Ireland, 23-25 June 2008*.
- Masekoameng E, Leaner J, Godfrey L, Pacyna J, Pacyna E. 2008. An assessment of mercury sources in selected solid waste streams of South Africa. *14th International Conference on Heavy Metals in the Environment, Taipei, Taiwan, 16-23 November 2008*.
- Masekoameng E, Rogers DEC, Oelofse SHH. 2008. Application of multi-criteria decision analysis (MCDA) for BPEO studies for waste management licensing in South Africa. *19th Waste Management Conference of the IWMSA (WasteCon 2008), Durban, South Africa, 6-10 October 2008*.
- Mashiri M, Chakwizira J, Nhemachena C. 2008. Rejecting the inevitability of poverty: empowering women for sustainable rural livelihoods through community-based employment-intensive rural infrastructure maintenance projects. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.
- Mashiri MAM, Madzikigwa B, Chakwizira J, Nyoni P, Makgalemane M. 2008. Integrated rural mobility and access: mainstreaming environmental issues in community transport planning and construction projects. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.
- Mashiri MAM, Maponya G, Nkuna Z, Dube S, Chakwizira J, Marrian B. 2008. Unpacking the relationship between rural healthcare, mobility and access. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.
- Mashiri MAM, Nkuna Z, Chakwizira J, Maponya G. 2008. Strengthening informal healthcare delivery: gender perspectives. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.
- Maspero EL, Ittmann HW. 2008. The rise of humanitarian logistics. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.
- Masuku EP, Moller H, Govender G, Ivanchev LH. 2008. The rheocasting of Al-Cu alloy A201 with different silver content. *10th International Conference on Semi-Solid Processing of Alloys and Composites (S2P), Aachen, Germany and Liege, Belgium, 16-18 September 2008*.
- Mathe MK, Mkwizwa TS, Cukrowski I. 2008. Nano-electrochemical deposition of fuel cells electrocatalysts. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.
- Matsebe O, Holtzhausen S, Kumile CM, Tlale NS. 2008. Modelling the kinematics of an autonomous underwater vehicle for range-bearing simultaneous localization and mapping. *15th International Conference on Mechatronics and Machine Vision in Practice, Auckland, New Zealand, 2-4 December 2008, p.441-446*.
- Matyila NA, Malete G. 2008. Investigating a tool for modelling the supply-side profile of South Africa's built environment professionals. *5th Post Graduate Conference on Construction Industry Development, Bloemfontein, South Africa, 16-18 March 2008*.
- McDuling J, Abbott GR. 2008. Service life and sustainable design methods: a case study. *11th International Conference on Durability of Building Materials and Components, Istanbul, Turkey, 11-14 May 2008*.
- Mcferren GA, Van Zyl T, Van Der Merwe M, Du Preez M. 2008. User requirements for sensor web based scientific workflows in the cholera research domain. *IEEE International Geoscience and Remote Sensing Symposium, Boston, Massachusetts, USA, 7-11 July 2008*.
- Meiklejohn CL, Goss H, Whisken JB. 2008. Achieving focused infrastructure investment in South Africa: technical advances in provincial spatial planning. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.
- Mgangira MB, Paige Green P. 2008. Evaluation of damage to a road and sports complex on expansive clays. *Case Histories in Geotechnical Engineering: 6th International Conference and Symposium in Honour of Professor James K. Mitchell, Arlington, Virginia, USA, 11-16 August 2008*.

- Mgangira MB, Paige Green P. 2008. Premature distress of a pavement on expansive black cotton soil in the Horn of Africa. *Problem Soils in South Africa Conference, Midrand, Gauteng, South Africa, 3-4 November 2008*, p.123-129.
- Mgangira MB. 2008. Microstructural pavement material characterization: some examples. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.
- Michaelis MM, Forbes A, Bingham R, Kellett BJ, Mathye A. 2008. Lasers in space. *High-Power Laser Ablation VII, Taos, New Mexico, USA, 20-24 April 2008*.
- Modise M, Leenen L. 2008. Socio-technical systems approach to peace support operations. *IFIP TC9 Workshop on ICT Uses in Warfare and the Safeguarding of Peace, Pretoria, South Africa, 24 July 2008*.
- Mdungwa D, Bolele K, Tlale NS, Kumile CM, Shaik AA. 2008. Mobility and kinematics analysis of a novel 5-DOF hybrid manipulator for reconditioning of mould and die tools, Part 1. *15th International Conference on Mechatronics and Machine Vision in Practice, Auckland, New Zealand, 2-4 December 2008*, p.447-451.
- Mdungwa D, Tlale NS, Kumile CM. 2008. Design of a novel parallel reconfigurable machine tool. *11th Mechatronics Forum Biennial International Conference, Limerick, Ireland, 23-25 June 2008*.
- Moes H. 2008. Probability and risk criteria for channel depth design and channel operation. *PIANC International Navigation Seminar, Beijing, China, 26-30 May 2008*, p.475-481.
- Mohammed SO, Labuschagne FJJ. 2008. Can draconian law enforcement solve the South African road safety crisis? *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.
- Mokonyama MT, Kistan KF. 2008. Public transport service design requirements for the changing face of the South African customer. *2nd European Road Transport Research Arena (TRA) Conference, Ljubljana, Slovenia, 21-24 April 2008*.
- Moller H, Govender G, Stumpf WE. 2008. The natural and artificial aging response of semi-solid metal processed alloy A356. *10th International Conference on Semi-Solid Processing of Alloys and Composites (S2P), Aachen, Germany and Liege, Belgium, 16-18 September 2008*, p.737-742.
- Moshapo S, Ngassam EK. 2008. Enterprise interoperability: towards a framework for enterprise applications deployment in emerging economy SMEs. *14th International Conference on Concurrent Enterprising (ICE) 2008, Lisbon, Portugal, 23-25 June 2008*.
- Mosomane L, Knight R, Mapako M. 2008. Perceptions around energy among small enterprises in electrified and non-electrified areas of Mankweng (Ga-Mamabolo) in the Limpopo Province of South Africa. *16th International Conference on the Domestic Use of Energy, Cape Town, South Africa, 18-19 March 2008*.
- Motsepe K, Fedotov I, Shatalov M, Joubert SV. 2008. A numerical computation of special functions with applications to physics. *Technology and its Integration into Mathematics Education Conference (TIME), Buffelspoort, South Africa, 22-26 September 2008*, p.153-161.
- Mpofu K, Kumile CM, Tlale NS. 2008. Adaptation of commercial off the shelf modules for reconfigurable machine tool design. *15th International Conference on Mechatronics and Machine Vision in Practice, Auckland, New Zealand, 2-4 December 2008*, p.144-150.
- Musee N. 2008. Nanotechnology risks: a waste management perspective from developing countries. *19th Waste Management Conference of the IWMSA (WasteCon 2008), Durban, South Africa, 6-10 October 2008*.
- N**
- Nahman A, Godfrey L, Wise RM. 2008. Market-based instruments in South Africa: a review. *2nd International Conference on Environmental Economics and Investment Assessment, University of Cadiz, Spain, 28-30 May 2008*.
- Naidoo K, Skews BW. 2008. High-speed imaging of dynamic shock wave reflection phenomena. *28th International Congress on High-Speed Imaging and Photonics, Canberra, Australia, 9-14 November 2008*.
- Naidoo S, Dube C. 2008. Usability and information access challenges in complex simulation models. *IADIS Multi Conference on Computer Science and Information Systems, Amsterdam, The Netherlands, 25-27 July 2008*.
- Namoshe M, Tlale NS, Kumile CM, Bright G. 2008. Open middleware for robotics. *15th International Conference on Mechatronics and Machine Vision in Practice, Auckland, New Zealand, 2-4 December 2008*, p.202-207.
- Nangammbi D, Knight R, Mapako M. 2008. Perceptions around energy use, problems and related issues among small enterprises in unelectrified areas of Thohoyandou and Turfloop, Limpopo province, South Africa. *16th International Conference on the Domestic Use of Energy, Cape Town, South Africa, 18-19 March 2008*.
- Napier JAL, Malan DF. 2008. Numerical simulation of a multi-reef tabular mining layout in a South African platinum mine. *1st Southern Hemisphere International Rock Mechanics Symposium (SHIRMS 2008), Perth, Western Australia, 16-19 September 2008*, p.367-378.
- Naude AH, Van Huyssteen E, Goss H. 2008. Geospatial analysis platform and tools: supporting planning and decision making across scales, borders, sectors and disciplines. *Shaping the future: Planning Africa Conference 2008, Johannesburg, South Africa, 14-16 April 2008*, p.329-348.
- Naude B. 2008. ICT, warfare and peace: food for thought. *IFIP TC9 Workshop on ICT Uses in Warfare and the Safeguarding of Peace, Pretoria, South Africa, 24 July 2008*, p.48-54.
- Ndwe TJ, Barnard E, Dlodlo M, Mashao D, Kuun C, Sharma A. 2008. Openphone user engagement and requirements solicitation in low literacy users. *Human-Computer Interaction Symposium, Milan, Italy, 7-10 September 2008*, p.189-193.
- Ndwe TJ, Dlodlo ME, Kuun C, Sharma A. 2008. Focus groups in rural user studies. *5th International Conference on Cybernetics and Information Technologies, Systems and Applications (CITSA 2008) in the Context of the International Conference on Engineering Education, Instructional Technology, Assessment and E-learning (EIAE 07), Orlando, USA, 29 June-02 July 2008*, p.180-184.
- Ngorima E, Nkuna Z, Manase G. 2008. Addressing rural health and poverty through water sanitation and hygiene: gender perspectives. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.
- Ngwangwa HM, Heyns PS, Labuschagne FJJ, Kululanga GK. 2008. An overview of the neural network based technique for monitoring of road condition via reconstructed road profiles. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.
- Nhamo G. 2008. Waste management in South Africa: institutional and legal discords: a call for constitutional and related laws' reform. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.
- Nhemachena C, Chakwizira J, Mashiri M. 2008. Managing climate-related stresses in southern Africa's agricultural sector. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.
- Nienaber RC, Smith E, Barnard A, Van Zyl T. 2008. Software agent technology supporting risk management in SPM. *IADIS International Conference on Applied Computing, Algarve, Portugal, 10-13 April 2008*.
- Nordengen PA, Prem H, Lyne PWL. 2008. Performance-based standards (PBS) vehicles for transport in the agricultural sector. *81st Annual Congress of the South African Sugar Technologists' Association, Durban, South Africa, 29-31 July 2008*, p.445-453.

Nordengen PA, Prem H, Mai L. 2008. An initiative to introduce a performance-based standards (PBS) approach for heavy vehicle design and operations in South Africa. *10th International Symposium on Heavy Vehicle Transport Technologies, Paris, France, 19-22 May 2008*, p.73-84.

Nordengen PA. 2008. The road transport management system: a self regulation initiative to promote load optimisation, vehicle maintenance and driver wellness in heavy vehicle transport in South Africa. *2nd European Road Transport Research Arena (TRA) Conference, Ljubljana, Slovenia, 21-24 April 2008*.

Norsworthy J, Marrian B, Mashiri MAM. 2008. Towards greater pragmatism in planning: a growing challenge for planners. *Planning Africa 2008: Shaping the Future, Johannesburg, South Africa, 13-16 April 2008*.

Ntlatlapa N. 2008. A routing metric and algorithm for IEEE802.16 mesh networks. *3rd International Conference on Broadband Communications, Information Technology & Biomedical Applications (BroadCom' 08), Pretoria, South Africa, 23-26 November 2008*, p.324-328.

O

Oelofse SHH, Godfrey L, Rascher J, Sherwood L. 2008. Minimising the effects of waste on society: a waste governance perspective. *19th Waste Management Conference of the IWMSA (WasteCon 2008), Durban, South Africa, 6-10 October 2008*, p.877-884.

Oelofse SHH, Godfrey L. 2008. Towards improved waste management services by local government: a waste governance perspective. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Olivier JC, Wessels KJ, Araya S. 2008. Detection of land cover change using an artificial neural network within a temporal sliding window on MODIS time series data. *IEEE International GeoSciences and Remote Sensing Society (IGARSS) Symposium, Boston, Massachusetts, USA, 6-11 July 2008*.

Olivrin GJ, Van Zijl L. 2008. South African sign language assistive translation. *IATED International Conference on Assistive Technologies 2008, Baltimore, Maryland, USA, 16-18 April 2008*.

Olwal T, Okech J, Hamam Y, Kurien A, Odhiambo M. 2008. Increasing supported VoIP flows in WMNs through link-based aggregation. *2nd IFIP International Symposium on Wireless Communications and Information Technology in Developing Countries, Pretoria, South Africa, 6-7 October 2008*.

Olwal TO, Aron F, Van Wyk BJ, Hamam Y, Ntlatlapa N, Johnson DL. 2008. Transmission probability-based dynamic power control for multi-radio mesh networks. *Southern Africa Telecommunications Networks and Applications Conference (SATNAC 2008), Wild Coast, Eastern Cape, 7-10 September 2008*.

Olwal TO, Aron F, Van Wyk BJ, Hamam Y, Ntlatlapa N, Odhiambo M. 2008. Improved distributed dynamic power control for wireless mesh networks. *Ad-hoc, Mobile and Wireless Networks, 7th International Conference, ADHOC-NOW 2008, Sophia Antipolis, France, 10-12 September 2008*.

Olwal TO, Aron F, Van Wyk BJ, Hamam Y, Ntlatlapa N. 2008. Decentralized cross-layer dynamic power control for wireless mesh networks. *3rd International Conference on Broadband Communications, Information Technology & Biomedical Applications (BroadCom' 08), Pretoria, South Africa, 23-26 November 2008*, p.245-252.

Oosthuizen R, Roodt JHS. 2008. Credible defence capability: command and control at the core. *Land Warfare Conference, Brisbane, Australia, 27-31 October 2008*.

Osburn L. 2008. A literature review on the application of titanium dioxide reactive surfaces on urban infrastructure for depolluting and self-cleaning applications. *5th Post Graduate Conference on Construction Industry Development, Bloemfontein, South Africa, 16-18 March 2008*.

P

Padayachee J, Masekamela I, Bright G, Tlale NS, Kumile CM. 2008. Modular reconfigurable machines incorporating modular open architecture control. *15th International Conference on Mechatronics and Machine Vision in Practice, Auckland, New Zealand, 2-4 December 2008*, p.127-132.

Page OA, Mokonyama MT. 2008. Service design: pre-trip planning for international visitors attending the 2010 Soccer World Cup. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.

Paige-Green P, Turner D. 2008. The preliminary identification of problem soils for infrastructure projects. *Problem Soils in South Africa Conference, Midrand, Gauteng, South Africa, 3-4 November 2008*, p.25-34.

Paige-Green P. 2008. A reassessment of some road material stabilization problems. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.

Paige-Green P. 2008. Dispersive and erodible soils: fundamental differences. *Problem Soils in South Africa Conference, Midrand, Gauteng, South Africa, 3-4 November 2008*, p.59-65.

Parsons S, Abbott GR, De Jager P. 2008. MDR and XDR-TB: revolutionising our approach to facility design for long-term care facilities. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Patanaik A, Anandjiwala RD. 2008. Modelling water permeability in needle-punched nonwovens using finite element analysis. *6th South African Conference on Computational and Applied Mechanics (SACAM 2008), Cape Town, South Africa, 26-28 March 2008*, p.135-141.

Patanaik A, Jacobs V, Anandjiwala RD. 2008. Experimental study and modelling of the electrospinning process. *86th Textile Institute World Conference, Hong Kong, 18-21 November 2008*, p.1160-1168.

Peche M, Davel M, Barnard E. 2008. Porting a spoken language identification system to a new environment. *19th Annual Symposium of the Pattern Recognition Association of South Africa (PRASA 2008), Cape Town, South Africa, 27-28 November 2008*, p.103-107.

Phahlamohlaka J, Twinomurizi H, Ojo R, Mahlangu Z, Masanabo L. 2008. Assessing the quality of the 'TurnStormer' thinklet as a collaboration engineering building block for the implementation of the promotion of Administrative Justice Act of South Africa. *Workshop of the International Federation for Information Processing (IFIP) Working Group: Towards an ICT Research Agenda for African Development, Pretoria, South Africa, 23-24 September 2008*, p.5-16.

Phahlamohlaka J. 2008. Globalisation and national security issues for the state: implications for national ICT policies. *Social Dimensions of Information and Communication Technology Policy: Proceedings of the 8th International Conference on Human Choice and Computers (HCC8), IFIP TC 9, Pretoria, South Africa, 25-26 September 2008*, p.95-107.

Phelp DT. 2008. Digital image monitoring to optimise safe port operations. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Pienaar JE, Goosen P. 2008. Does the CSIR have the sensor capabilities to put South Africa on the radar screen? *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Pillay DL, Sebake MD. 2008. Assessing post apartheid settlement growth patterns using remote sensing and GIS: a case study of Cape Town metropolitan area. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Pillay P, Naidoo D, Maharaj V, Moodley N, Sewnarain P, Van Rooyen S, Mithembu XS, Khorombi TE. 2008. South African plants as a source of drugs to treat infectious diseases: TB, malaria and HIV. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Piise-Boshomane MM, Marais MA, Morris CF, Roux K, Van Rensburg R, Herselman ME, Makan AK, Mulder I. 2008. Catalysing innovation: the promise of the Living Lab Approach in South Africa. *Prato CIRN 2008, Community Informatics Conference, ICTs for Social Inclusion: What is the Reality? Prato, Italy, 27-30 October 2008*.

Pityana SL, Rossouw R. 2008. Laser alloyed Al-Ni-Fe coatings. *27th International Congress on Applications of Lasers and Electro-Optics (ICALEO 2008)*, Orlando, Florida, USA, 20-23 October 2008, p.55-60.

Potgieter S, Land K, Sparrow RW. 2008. Microfluidics as a tool for micro-manipulation. *International Conference of the World Association of Laser Therapy*, Sun City, South Africa, 19-22 October 2008, p.151-155.

R

Rao S, Gledhill IMA, Hartline BK, Lakhdar ZB, Maclachlan AJ, Mack K, Mehta A, Wu L-A, Zhang H. 2008. Personal professional development. *Women in Physics: 3rd IUPAP International Conference on Women in Physics*, Seoul, South Korea, 8-10 October 2008, p.7-10.

Reinecke JD, Snyman IM, Ahmed R, Beetge FJ. 2008. Blast characterisation through impulse measurements. *Science Real and Relevant: 2nd CSIR Biennial Conference*, Pretoria, South Africa, 17-18 November 2008.

Reinecke JD, Snyman IM, Ahmed R, Beetge FJ. 2008. Vehicle landmine protection validation testing. *Science Real and Relevant: 2nd CSIR Biennial Conference*, Pretoria, South Africa, 17-18 November 2008.

Rens GB, Ferrein A, Van der Poel E. 2008. Extending DTGolog to deal with POMDPs. *19th Annual Symposium of the Pattern Recognition Association of South Africa (PRASA 2008)*, Cape Town, South Africa, 27-28 November 2008, p.49-54.

Reyers B, Van Wilgen BW, Nel JL, Le Maitre DC, O'Farrell PJ, Wise RM, Forsyth GG, Smith-Adao LB, Ntshosho P, Egoh B. 2008. Making the most of South Africa's natural capital. *Science Real and Relevant: 2nd CSIR Biennial Conference*, Pretoria, South Africa, 17-18 November 2008.

Ribbens H, Pillay S. 2008. Ward based community road safety performance benchmarking, monitoring and intervention programmes in the City of Johannesburg. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC)*, Pretoria, South Africa, 7-11 July 2008.

Roberts JW, Van Aardt JAN, Ahmed FB. 2008. Medium resolution image fusion: does it enhance forest structure assessment? *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Vol. XXXVII, Part B8, Beijing, China, 3-11 July 2008, p.1053-1058.

Roberts MKC, Spottiswoode SM, Henry G, Kuijpers JS, Perriit SH, Jager AJ, Guler G, Majiet S. 2008. Exploring the possibility of mining the stabilising pillars in South African gold mines. *42nd US Rock Mechanics Symposium and 2nd US-Canada Rock Mechanics Symposium*, San Francisco, USA, 29 June-2 July 2008.

Robertson J, Lessing M, Nare S. 2008. Preparedness and response to cyber threats require a CSIRT. *IFIP TC9 Workshop on ICT Uses in Warfare and the Safeguarding of Peace*, Pretoria, South Africa, 24 July 2008, p.84-94.

Rogers DEC, Brent AC. 2008. Renewable rural electrification: prediction of sustainability in South Africa. Case study: wind and solar photo-voltaic with lead acid battery storage. *Science Real and Relevant: 2nd CSIR Biennial Conference*, Pretoria, South Africa, 17-18 November 2008.

Rohwer MB, Mathe MK, Hietkamp S, Modibedi RM, Nonjola PT, Masombuka T. 2008. Fuel cell research: towards efficient energy. *Science Real and Relevant: 2nd CSIR Biennial Conference*, Pretoria, South Africa, 17-18 November 2008.

Roodt JHS, Le Roux WH, Oosthuizen R. 2008. Simulation for doctrine development and training: modelling the cognitive domain of the OODA loop. *Land Warfare Conference*, Brisbane, Australia, 27-31 October 2008, p.213-220.

Rust FC, McCutcheon RT, Coetzee L. 2008. Transport research: quo vadis? *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC)*, Pretoria, South Africa, 7-11 July 2008.

Rust FC, Van Wyk LV, Ittmann HW, Kistan KF. 2008. The role of R&D (Research and Development) in transport infrastructure in South Africa. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC)*, Pretoria, South Africa, 7-11 July 2008.

S

Sabatta DG. 2008. Vision-based topological map building and localisation using persistent features. *Robotics and Mechatronics Symposium*, Bloemfontein, South Africa, 11 November 2008, p.66-71.

Schmitz PMU. 2008. Using supply chain management to enable GIS units to improve their response to their customers' needs. *Proceedings of the Academic Track of the 2008 Free and Open Source Software for Geospatial (FOSS4G) Conference Incorporating the GISSA 2008 Conference*, Cape Town, South Africa, 29 September-3 October 2008.

Schwering PBW, Bezuidenhout DF, Gunter WH, Le Roux FPJ, Sieberhagen RH. 2008. IRST infrared background analysis of bay environments. *Infrared Technology and Applications XXXIV: Proceedings of SPIE*, 6940, p.69401E.

Sebake TN, Gibberd JT. 2008. Assessing the sustainability performance of the 2010 FIFA World Cup stadia using the sustainable building assessment tool (SBAT) for stadia. *5th Post Graduate Conference on Construction Industry Development*, Bloemfontein, South Africa, 16-18 March 2008.

Sebake TN. 2008. A review of appropriateness of international environmental assessment tools for a developing country. *World Sustainable Building Conference*, Melbourne, Australia, 21-25 September 2008.

Sebake TN. 2008. Developing the sustainable building assessment tool for stadia. *World Sustainable Building Conference*, Melbourne, Australia, 21-25 September 2008.

Sebake TN. 2008. Limitations of implementing sustainable construction principles in the conventional South African design approach. *3rd Built Environment Conference*, Cape Town, South Africa, 6-8 July 2008.

Sedano CI, Botha A, Marais M, Sutinen E. 2008. Merging real life experiences with technical knowledge in a playful manner: a case in e-inclusion. *3rd International Conference on e-Learning (ICEL 2008)*, Cape Town, South Africa, 26-27 June 2008.

Seleka TS, Pityana SL, Labuschagne K, Fedotova T. 2008. The influence of various surface conditions during laser transformation hardening. *ICALEO 2007: 26th International Congress on Applications of Lasers and Electro-Optics*, Orlando, Florida, USA, 29 October-1 November 2007.

Seleka TS, Pityana SL, Ulbrich M, Rampedi DL. 2008. Quantitative analysis of retained austenite in laser melted martensitic stainless steel. *ICALEO 2007: 26th International Congress on Applications of Lasers and Electro-Optics*, Orlando, Florida, USA, 29 October-1 November 2007.

Semete B, Kalombo L, Chelule P, Benadie Y, Booyens L, Katata L, Naidoo S, Swai HS. 2008. Novel nanoparticles for tuberculosis chemotherapy. *Science Real and Relevant: 2nd CSIR Biennial Conference*, Pretoria, South Africa, 17-18 November 2008.

Senekal FP. 2008. Traffic sign detection and classification using colour and shape cues. *19th Annual Symposium of the Pattern Recognition Association of South Africa (PRASA 2008)*, Cape Town, South Africa, 27-28 November 2008, p. 131-136.

Sentongo V, Chan HA, Dlodlo ME, Ferguson K. 2008. Comparative analysis of media pipeline plug-in architectures. *Southern Africa Telecommunication Networks and Applications Conference (SATNAC 2008)*, Wild Coast, Eastern Cape, 7-10 September 2008, p.525-526.

Shaik AA, Tlale NS, Bright G. 2008. 2 DOF resolution adjustment laser position sensor. *15th International Conference on Mechatronics and Machine Vision in Practice*, Auckland, New Zealand, 2-4 December 2008, p.266-271.

Shatalov M, Fedotov I, Joubert SV. 2008. A novel method of interpolation and extrapolation of functions by a linear initial value problem. *Technology and its Integration into Mathematics Education Conference (TIME)*, Buffelspoort, South Africa, 22-26 September 2008, p.93-100.

Shatalov M, Greeff JC, Fedotov I, Joubert SV. 2008. Parametric identification of the model with one predator and two prey species. *Technology and its Integration into Mathematics Education Conference (TIME)*, Buffelspoort, South Africa, 22-26 September 2008, p.101-109.

- Shatalov MY, Joubert SV, Coetzee CE, Pretorius WE. 2008. The influence of internal prestress and damping inhomogeneity on the evolution of standing waves in rotating spherical shells. *15th International Congress on Sound and Vibration, Daejeon, Korea, 6-10 July 2008*, p.1672-1679.
- Shatalov MY, Joubert SV, Pretorius WE. 2008. On dynamics of quasi-standing waves in a planar thin annular disc subjected to inertial rotation and internal prestress. *15th International Congress on Sound and Vibration, Daejeon, Korea, 6-10 July 2008*, p.1657-1663.
- Shatalov MY. 2008. On nonlinear generalization of Rayleigh-Love and Bishop theories of longitudinal vibrations of bars. *18th International Symposium on Nonlinear Acoustics (ISNA), Stockholm, Sweden, 7-10 July 2008*, p.315-318.
- Si YL, Debba P, Skidmore AK, Toxopeus AG, Li L. 2008. Spatial and temporal patterns of global H5N1 outbreaks. *21st Congress of the International Society for Photogrammetry and Remote Sensing (ISPRS): Silk Road for Information from Imagery, Beijing, China, 3-11 July 2008*, p.69-74.
- Sigama NJ, Eloff P, Greben HA. 2008. Mine water treatment using grass cellulose, rumen inoculum and sulphate reducing bacteria at 25°C. *WISA 2008 Biennial Conference and Exhibition, Sun City Resort, South Africa, 18-22 May 2008*.
- Singh A, Karsten AE, Dam JS. 2008. Determination of optical properties of tissue and other bio-materials. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.
- Singh A, Karsten AE, Dam JS. 2008. Robustness and accuracy of the calibration model for the determination of the optical properties of chicken skin. *International Conference of the World Association of Laser Therapy (WALT 2008), Sun City, South Africa, 19-22 October 2008*, p.165-169.
- Sivakumar V, Moema D, Bollig C, Sharma A, Mbatha N, Malinga S, Mengistu G, Bencherif H, Keckhut P. 2008. LIDAR for atmosphere research over Africa. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.
- Sivakumar V, Moema D, Sharma A, Mbatha N, Bollig C, Malinga S, Mengistu G, Bencherif H, Keckhut B. 2008. LIDAR for atmosphere research over Africa: a trilateral research programme (LARA-Trip). *24th International Laser Radar Conference, Boulder, Colorado, USA, 23-27 June 2008*, p.742-745.
- Sivakumar V, Sharma A, Moema D, Bollig C, Van Der Westhuizen C, Van Wyk H. 2008. CSIR NLC South Africa: mobile LIDAR system description. *24th International Laser Radar Conference, Boulder, Colorado, USA, 23-27 June 2008*, p.99-102.
- Smit JC, Cilliers JE, Baker CJ, Hanekom JJ. 2008. X-band high range resolution radar measurements of sea surface forward scatter at low grazing angles. *2008 IEEE Radar Conference, Rome, Italy, 26-30 May 2008*, p.2031-2034.
- Smith AC, Foko T, Van Deventer A. 2008. Quantifying the visual perception skills of pre-school testees using a novel tangible electronic test instrument. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.
- Smith AC, Krause C. 2008. Providing disabled persons in developing countries access to computer games through a novel gaming input device. *International Conference Series on Disability, Virtual Reality and Associated Technologies with Artibilitation, Maia, Portugal, 8-11 September 2008*, p.199-204.
- Smith AC. 2008. A low-cost, low-energy tangible programming system for computer illiterates in developing regions. *TEDC 2008, 5th International Workshop on Technology for Innovation and Education in Developing Countries, Makerere University, Kampala, Uganda, 31 July-2 August 2008*.
- Smith AC. 2008. Towards an affordable alternative educational video game input device. *IST-Africa 2008 Conference, Windhoek, Namibia, 7-9 May 2008*.
- Smith P, Mostert FJ, Snyman IM. 2008. Comparison of methods to measure the blast impulse loading of an explosive charge. *24th International Symposium on Ballistics, New Orleans, USA, 22-26 September 2008*, p.1226-1234.
- Sokoya O, Maharaj BT. 2008. Channel estimation for space-time trellis coded-OFDM systems based on nonoverlapping pilot structure. *Southern Africa Telecommunication Networks and Applications Conference (SATNAC 2008), Wild Coast, Eastern Cape, 7-10 September 2008*.
- Somerset VS, Leaner J, Williams C, Mason R, Iwuoha E. 2008. The development of electrochemical sensors for the determination of mercury in freshwater systems. *WISA 2008 Biennial Conference and Exhibition, Sun City Resort, South Africa, 18-22 May 2008*.
- Sparrow RW. 2008. Non-linear microscopy and its applications for the study of the structure and dynamics of biological systems. *International Conference of the World Association of Laser Therapy, Sun City, South Africa, 19-22 October 2008*, p.75-82.
- Spottiswoode SM, Linzer LM, Majiet S. 2008. Energy stiffness of mine models and seismicity. *1st Southern Hemisphere International Rock Mechanics Symposium (SHIRMS 2008), Perth, Western Australia, 16-19 September 2008*, p.693-707.
- Srinivasu VV. 2008. RF electrostatics in small particles of oxides: a review. *International Workshop on Mesoscopic, Nanoscopic and Macroscopic Materials (IWMNMM-2008), Bhubaneswar, India, 2-4 January 2008*, p.411-421.
- Steenkamp K, Wessels KJ, Archibald SA, Von Maltitz G. 2008. Long-term phenology and variability of Southern African vegetation. *IEEE International GeoSciences and Remote Sensing Society (IGARSS) Symposium, Boston, Massachusetts, USA, 6-11 July 2008*.
- Steenkamp K, Wessels KJ, Archibald SA, Von Maltitz G. 2008. Long-term phenology and variability of Southern Africa. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.
- Stevenson L, Britz K, Horne T. 2008. KT and S4 satisfiability in a constraint logic environment. *PRICAI 2008: Trends in Artificial Intelligence, 10th Pacific Rim International Conference on Artificial Intelligence, Hanoi, Vietnam, 15-19 December 2008*, 5351, p.370-381.
- Stewart R, Donovan SJ, Haarhoff J, Vogt DR. 2008. AziSA: an architecture for underground measurement and control networks. *2nd International Conference on Wireless Communications in Underground and Confined Areas, Val-d'Or, Quebec, Canada, 25-27 August 2008*, p.227-230.
- Steyn WJVD, Denneman E, Mahlangu S. 2008. A comparison between the permanent deformation behaviour of a standard and a rut resistant HMA mix. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.
- Steyn WJVD, Denneman E. 2008. Simulation of temperature conditions on APT of HMA mixes. *Accelerated Pavement Testing (APT) 2008, 3rd International Conference, Madrid, Spain, 1-3 October 2008*.
- Steyn WJVD, Jones DJ, Sadzik ES. 2008. Analysis of the performance of a long life pavement in South Africa using the HVS. *Accelerated Pavement Testing (APT) 2008, 3rd International Conference, Madrid, Spain, 1-3 October 2008*.
- Steyn WJVD. 2008. Research and application of nanotechnology in transportation. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.
- Stopforth R, Holtzhausen S, Bright G, Tlale NS, Kumile CM. 2008. Robots for search and rescue purposes in urban and underwater environments: a survey and comparison. *15th International Conference on Mechatronics and Machine Vision in Practice, Auckland, New Zealand, 2-4 December 2008*, p.526-530.
- Swartbooi AM, North BC. 2008. Synthesis of carbon nanotubes using fluidized bed technology. *Triennial Industrial Fluidisation South Africa (IFSA 2008) Conference, Johannesburg, South Africa, 19-20 November 2008*, p.300-307.
- Swartbooi AM. 2008. Large-scale energy storage: investigating improvements of redox flow batteries. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Szewczuk S. 2008. Hybrid mini-grid: electricity for communities not connected to the national electricity grid based on renewable energy resources. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

T

Taute BJE. 2008. Safety and security in the CSIR: growing the impact. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Tavir R, Wise RM, Van Der Merwe M, Winkler H. 2008. The potential for, and costs of, reducing greenhouse gas emissions from nonenergy sources in South Africa. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Terhorst AL, Moodley D, Simonis I, Frost P, Mcferren GA, Roos S, Van Den Bergh F. 2008. Using the sensor web to detect and monitor the spread of vegetation fires in Southern Africa. *GeoSensor Networks, 2nd International Conference, GSN 2006, Boston, Massachusetts, USA, 1-3 October 2006*, p.239-251.

Tlale NS, De Villiers M. 2008. Kinematics and dynamics modelling of a mecamum wheeled mobile robot. *15th International Conference on Mechatronics and Machine Vision in Practice, Auckland, New Zealand, 2-4 December 2008*, p.703-708.

Tlale NS, Steyn JL, Govender S. 2008. Technical cost modelling for a novel semi-solid metal (SSM) casting processes for automotive component manufacturing. *EUROMOT 2008: 3rd European Conference on Management of Technology, Nice, France, 17-19 September 2008*.

Tlale NS. 2008. Advanced manufacturing technologies for improved competitiveness of the South African manufacturing industry. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Toudjeu IT, Van Wyk BJ, Van Wyk MA, Van Den Bergh F. 2008. Global image feature extraction using slope pattern spectra. *5th International Conference on Image Analysis and Recognition (ICIAR), Povo de Varzim, Portugal, 25-27 June 2008*, p.640-649.

Turton A. 2008. Three strategic water quality challenges that decision-makers need to know about and how the CSIR should respond. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

U

Ubomba-Jaswa E, Boyle MAR, McGuigan KG. 2008. Inactivation of enteropathogenic *E. coli* by solar disinfection (SODIS) under simulated sunlight conditions. *Radiation Damage in Biomolecular Systems, The Royal College of Surgeons, Dublin, Ireland, 19-22 June 2007*. Published in *Journal of Physics: Conference Series*, 101, p.4.

V

Van Biljon J, Kotze P, Renaud K. 2008. Mobile phone usage of young adults: the impact of motivational factors. *Conference of the Computer-Human Interaction Special Interest Group (CHISIG) of Australia on Computer-Human Interaction, Cairns, Australia, 8-12 December 2008*, p.57-64.

Van Den Berg M, Botha A, Krause C, Tolmay JP, Van Zyl P. 2008. MobilED: A step backwards to look ahead. *MLearn 2008 Conference on Mobile Learning: From Text to Context, Shropshire, United Kingdom, 7-10 October 2008*.

Van Der Merwe A, Kroeze JH. 2008. Development and implementation of an institutional repository within a Science, Engineering and Technology (SET) environment. *South African Institute of Computer Scientists and Information Technologists (SAICSIT) 2008 Conference: Riding the wave of technology. Wilderness, South Africa, 6-8 October 2008*, p.237-281.

Van Deventer A. 2008. Science and technology awareness for preschool children: a case study. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Van Dyk E, Barnard E. 2008. Binary naive Bayesian classifiers for correlated Gaussian features: a theoretical analysis. *19th Annual Symposium of the Pattern Recognition Association of South Africa (PRASA 2008), Cape Town, South Africa, 27-28 November 2008*, p.9-14.

Van Heerden R, Vorster J. 2008. Analysis of passwords. *IFIP TC9 Workshop on ICT Uses in Warfare and the Safeguarding of Peace, Pretoria, South Africa, 24 July 2008*, p.61-75.

Van Heerden RP, Vorster JS. 2008. Using Markov models to crack passwords. *3rd International Conference on i-Warfare and Security, Omaha, Nebraska, USA, 24-25 April 2008*, p.387-394.

Van Niekerk DR, Barnard E. 2008. Acoustic cues identifying phonetic transitions for speech segmentation. *19th Annual Symposium of the Pattern Recognition Association of South Africa (PRASA 2008), Cape Town, South Africa, 27-28 November 2008*, p.55-59.

Van Rensburg JFJ, Veldsman AW, Lahde K. 2008. Social entrepreneurship: a foundation for "creative capitalism" in rural African communities. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Van Wyk LV. 2008. Do green building assessment criteria meet sustainability imperatives? A critical analysis. *3rd Built Environment Conference (ASOCSA), 6-8 July, 2008, Cape Town*.

Van Wyk LV. 2008. Open standard building in South Africa: new concepts, strategies and technologies. *5th Post Graduate Conference on Construction Industry Development, Bloemfontein, South Africa, 16-18 March 2008*.

Van Zyl JE, Labuschagne FJJ. 2008. Attractive methods for tracking minibus taxis for public transport regulatory purposes. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008*.

Van Zyl P, Fogwill TA. 2008. Empowering African scientists: an investigation into a CD-based installer for scubuntu. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Van Zyl TL. 2008. GEOSS from orbit, a sensor web approach. *International Geoscience and Remote Sensing Symposium, Boston, Massachusetts, USA, 7-11 July 2008*, p.134-137.

Varzinczak IJ. 2008. Action theory contraction and minimal change. *11th International Conference on Principles of Knowledge Representation and Reasoning (KR 2008), Sydney, Australia, 16-19 September 2008*, p.651-661.

Veerasamy N, Eloff JHP. 2008. The application of non-quantitative modelling in the analysis of a network warfare environment. *World Academy of Science, Engineering and Technology Conference, Paris, France, 4-6 July 2008*, p.567-573.

Veerasamy N, Eloff JHP. 2008. Towards a framework for a network warfare capability. *ISSA 2008 Innovative Minds Conference, Johannesburg, South Africa, 7-9 July 2008*, p.405-422.

Veerasamy N, Eloff JPH. 2008. Understanding the elementary considerations in a network warfare environment: an introductory framework. *IFIP TC9 Workshop on ICT Uses in Warfare and the Safeguarding of Peace, Pretoria, South Africa, 24 July 2008*, p.95-108.

Venter JP. 2008. ICT support for command and control at big events. *IFIP TC9 Workshop on ICT Uses in Warfare and the Safeguarding of Peace, Pretoria, South Africa, 24 July 2008*, p.57-60.

Vieira R, Van Den Bergh F, Van Wyk BJ. 2008. Fiducial-based monocular 3D displacement measurement of breakwater armour unit models. *19th Annual Symposium of the Pattern Recognition Association of South Africa (PRASA 2008), Cape Town, South Africa, 27-28 November 2008*, p.97-102.

Vogt DR, Brink AVZ, Stewart R, Donovan SJ, Haarhoff J, Ferreira G. 2008. AziSA: improving mining decisions with real time data. *3rd International Platinum Conference: Platinum in Transformation, Sun City, South Africa, 6-9 October 2008*, p.231-238.

Vogt DR, Brink VZ, Donovan SJ, Ferreira G, Haarhoff J, Harper GS, Stewart R, Van Schoor AM. 2008. Mining research for enhanced competitiveness. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008*.

Vogt DR, Nyareli T. 2008. Experimentally achieving borehole antenna radar directivity in the time domain in the presence of strong mutual coupling. *70th European Association of Geoscientists and Engineers (EAGE) Conference, Rome, Italy, 9-12 June 2008.*

Vogt DR, Nyareli TN. 2008. Borehole radar directionality in the time domain in small aperture antennas. *12th International Conference on Ground Penetrating Radar, Birmingham, United Kingdom, 16-19 June 2008.*

Vogt DR. 2008. Design of a slimline directional borehole radar antenna using FDTD. *12th International Conference on Ground Penetrating Radar, Birmingham, UK, 16-19 June 2008.*

Vogt DR. 2008. Determining radar velocity of rocks in-situ using a modified borehole radar system. *12th International Conference on Ground Penetrating Radar, Birmingham, UK, 16-19 June 2008.*

Von Maltitz GP, Brent AC. 2008. Assessing the biofuel options for Southern Africa. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008.*

Vorster J, Van Heerden R. 2008. Information warfare: an information management perspective. *IFIP TC9 Workshop on ICT Uses in Warfare and the Safeguarding of Peace, Pretoria, South Africa, 24 July 2008, p.76-83.*

W

Walker A, Butler L, Bright G, Tlale NS, Kumile C. 2008. Mobile materials handling platform interface architecture for mass production environments. *15th International Conference on Mechatronics and Machine Vision in Practice, Auckland, New Zealand, 2-4 December 2008, p.133-137.*

Wall K, Bhagwan J, Ive O. 2008. Unlocking the potential of franchising partnerships to improve water service compliance. *Confluence of the Water Industry: Water Institute of Southern Africa (WISA) Biennial Conference 2008, Sun City, South Africa, 18-22 May 2008.*

Wall K, Bhagwan J, Oliver I. 2008. Water services and franchising partnership principles flowing together for improved delivery. *Water Distribution Systems Analysis: 10th Annual Conference, Kruger National Park, South Africa, 17-20 August 2008, p.64-72.*

Wall K, Manus A, Moodley K, Boshoff L, Ottermann A. 2008. The DWAF water services IAM strategy positioned within the context of other major national IAM initiatives. *Confluence of the Water Industry: Water Institute of Southern Africa (WISA) Biennial Conference 2008, Sun City, South Africa, 18-22 May 2008.*

Wall K, Nordengen PA, Abbott GR, Paige Green P, Roux MP. 2008. CSIR's advocacy and support of infrastructure asset management. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008.*

Wall K. 2008. Applying franchising principles to improving water and sanitation services reliability. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008.*

Wall K. 2008. Innovative water service operation and maintenance: exploration of franchising partnerships. *3rd Annual Appropriate Water Technologies Conference of the Water Institute of Southern Africa (WISA), Johannesburg, South Africa, 20-12 October 2008.*

Wall K. 2008. Managing infrastructure and underpinning the planned environment. *Shaping the Future: Planning Africa Conference 2008, Johannesburg, South Africa, 14-16 April 2008, p.112-120.*

Wall K. 2008. Progress with the national infrastructure maintenance strategy. *Partnership for Research and Progress in Transportation: 27th Southern African Transport Conference (SATC), Pretoria, South Africa, 7-11 July 2008.*

Wall K. 2008. Water supply: reshaper of Cape Town's local government a century ago. *Water Distribution Systems Analysis: 10th Annual Conference, Kruger National Park, South Africa, 17-20 August, 2008.*

Wambua P, Anandjiwala RD, Langdon G, Nurick G. 2008. Blast testing of natural fibre and hybrid composites. *SEICO 08, SAMPE (Society for the Advancement of Materials and Process Engineering) Europe International Conference and Forum: Composites Forever Affordable, Durable, Sustainable and Creatable, Paris, France, 31 March-2 April 2008.*

Watson BP, Kuijpers JS, Henry G, Palmer CE, Ryder JA. 2008. Nonlinear rock behavior and its implications on deeper-level platinum mining. *3rd International Platinum Conference: Platinum in Transformation, Sun City, South Africa, 6-9 October 2008, p.103-110.*

Watson BP, Mosomane SM, Kuijpers JS, Roberts DP. 2008. The residual strength of a 2.5m wide Bushveld Merensky reef crush pillar. *6th International Symposium on Ground Support in Mining & Civil Engineering Construction, Cape Town, South Africa, 30 March-3 April 2008.*

Wessels KJ, Pretorius DJ, Prince SD. 2008. The reality of rangeland degradation mapping with remote sensing: the South African experience. *14th Australasian Remote Sensing and Photogrammetry Conference, Darwin, Australia, 29 September-3 October 2008.*

West NJ, Jandrell IR, Forbes A. 2008. Remote triggering of high voltage systems by laser-induced plasmas. *Optical Technologies for Arming, Safing, Fuzing, and Firing IV, San Diego, CA, USA, 13 August 2008.*

Whyte TN, Snyman IM, Meel BL. 2008. Prediction of injuries caused by explosive events: a case study of a hand grenade incident in South Africa. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008.*

Williams CR, Leaner JJ, Petersen CL, Somerset VS, Mason RP, Bernier G. 2008. Progress towards undertaking a national survey of mercury levels in South African water resources. *14th International Conference on Heavy Metals in the Environment, Taipei, Taiwan, 16-23 November 2008.*

Williams QR, Greeff M, Boshemane S, Alberts R. 2008. Designing future technologies for disabled people in a developing country. *IST-Africa 2008 Conference, Windhoek, Namibia, 7-9 May 2008.*

Wilsenach JA, De Beer M, Motaung S, Bologo TL, Radebe V, Moalusi M, Maree J. 2008. Recovery of drinking water and by-products from gold mine effluents via alkali-barium-calcium processing. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008.*

Woodborne S, Pienaar M, Van Der Merwe M. 2008. Mitigating the future impact of cholera epidemics. *Science Real and Relevant: 2nd CSIR Biennial Conference, Pretoria, South Africa, 17-18 November 2008.*

X

Xing B, Tlale NS, Bright G. 2008. Mechatronic design of a reconfigurable machining machine. *IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications, Beijing, China, 12-15 October 2008, p.136-141.*

Xing B, Tlale NS, Bright G. 2008. The application of mechatronic design approach in a reconfigurable manufacturing environment. *15th International Conference on Mechatronics and Machine Vision in Practice, Auckland, New Zealand, 2-4 December 2008, p.138-143.*

Z

Zhao T, Debba P, Stein A. 2008. Geochemical sampling scheme optimization on mine wastes based on hyperspectral data. *21st Congress of the International Society for Photogrammetry and Remote Sensing (ISPRS): Silk Road for Information from Imagery, Beijing, China, 3-11 July 2008, p.1529-1532.*