

## **Telecommunications, Electronics, Photonics and Sensors**Faculty Research Unit

## **Recent Publications**

Ahmed S and Faulkner M (2011). "Optimized interference canceling for colocated base station transceivers", IEEE Transactions on Vehicular Technology 60 (9), 4175-4183

Ahmed, Waqas, Jason Gao, Himal Suraweera and Michael Faulkner (2009) Comments on "Analysis of cognitive radio spectrum access with optimal channel reservation". IEEE Transaction on Wireless Communication. 8 (9): 4488-4491.

Bal, Harpreet Kaur, Fotios Sidiroglou, Scott Wade, Zourab Brodzeli, Greg Baxter and Stephen Collins (2010) Fibre Bragg grating transverse strain sensing using reflections at twice the Bragg wavelength. Measurement Science & Technology. 21 (9): 094004.

Bal, Harpreet Kaur, Fotios Sidiroglou, Stephen Collins and Zourab Brodzeli (2010) Multiplexing of fibre optic reflective sensors using Bragg gratings. Measurement Science & Technology. 21 (9): 094011.

Bassoo, Vandana, Kevin Tom, Abdul Kader Mustafa, Ellie Cijva, Henrik Sjoland and Michael Faulkner (2009), A potential transmitter architecture for future generation green wireless base station. EURASIP Journal on Wireless Communication and Networking. 2009: 1-8.

Bassoo, Vandana, Lance Linton and Michael Faulkner (2010) Analysis of distortion in pulse modulation converters for switching radio frequency power amplifiers. IET Microwaves, Antennas & Propagation. 4 (12): 2088-2096.

Drieberg M, Zheng F-C and Ahmad R, 2011. "MICPA: A client-assisted channel assignment scheme for throughput enhancement in WLANs", IEEE Transactions on Vehicular Technology 60 (9), 4497–4508.

Koziol, Bernhard, Greg Baxter and Stephen Collins (2010) Dependence of fluorescence lifetime in praseodymium-doped silica optical fibres upon strain and temperature. Journal of Optics. 12 (1): 015407.

Lai, Daniel T H, Rezaul K Begg and Marimuthu Palaniswami (2009) Computational intelligence in gait research: A perspective on current applications and future challenges. IEEE Transactions on Information Technology in Biomedicine. 13 (5): 687-702.

Lai, Daniel T.H, Simon Taylor and Rezaul Begg (2010) Prediction of foot clearance parameters as a precursor to forecasting the risk of tripping and falling. Human Movement Science (in press, November 2011).

Lai, Daniel T.H., Pazit Levinger, Rezaul Begg, Wendy Gilleard and Marimuthu Palaniswami (2009) Automatic recognition of gait patterns exhibiting patellofemoral pain syndrome using a support vector machine approach. IEEE Transactions on Information Technology in Biomedicine. 13 (5): 810-817.

Levinger P, Lai D, Menz, H., Morrow, A., Feller, J., Bartlett, J., Bergman, N., Begg, R. (2011), "Swing limb mechanics and minimum toe clearance in people with knee osteoarthritis", Gait and Posture, (in press 2011)

Levinger, Pazit, Daniel T H Lai, Rezaul K Begg, Kate E Webster and Julian A Feller (2009) The application of Support Vector Machines for detecting recovery from knee replacement surgery using spatio-temporal gait parameters. Gait & Posture. 29: 91-96.

Mehdi, Ahmed, Aladin Zayegh, Rezaul Begg and Rubbiya Ali (2010) GI based fuzzy clustering for the diagnosis of cardiac arrhythmia. International Journal of Computational Intelligence and Applications. 9 (2): 105-123.

Mustafa, Abdul K. and Michael Faulkner (2010) Theoretical analysis of hole punch signal conditioning for high efficiency EER power amplifiers. EURASIP Journal on Wireless Communications and Networking. 2010: 1-8.

Shilton A, Lai D, Palaniswami M (2011) "A note on octonionic support vector regression", IEEE Transactions on Systems, Man, and Cybernetics: Part B., (99)1-6.

Shilton, Alistair, Daniel T H Lai and Marimuthu Palaniswami (2009) A division algebraic framework for multidimensional support vector regression. IEEE Transactions on Systems, Man and Cybernetics Part B. 40 (2): 517-528

Shilton, Alistair, Daniel T.H Lai and Palaniswami Marimuthu (2010) A division algeraic framework for multidimensional support vector regression. IEEE Transactions on Systems, Man and Cybernetics Part B. 40 (2): 517-528.

Sidiroglou F, Roberts A and Baxter G W, 2011. "Probing the erbium ion distribution in silica optical fibers with fluorescence based measurements", Journal of Non-Crystalline Solids 357, 3847-3852.

Tikka A C, Faulkner M and Al-Sarawi, S F, 2011. "Secure wireless actuation of an implanted microvalve for drug delivery applications", Smart Materials and Structures 20 (10), art. no. 105011

Venkatkumar, Venkat, Thomas Haustein and Michael Faulkner (2010) Relaying results for indoor coverage in long-term evolution and beyond. European Transactions on Telecommunications. 21 (8): 770-779.

Venkatkumar, Venkat, Thomas Haustein and Mike Faulkner (2010) Joint admission control and resource allocation for multiuser loading in LTE networks. Lecture Notes in computer Science. 6294: 421-435.

Yam, Sui Pan, Zourab Brodzeli, Betty Kouskousis, Claire Rollinson, Scott Wade, Greg Baxter and Stephen Collins (2009) Fabrication of a  $\pi$ -phase-shifted fiber Bragg grating at twice the Bragg wavelength with the standard phase mask technique. Optics Letters. 34 (13): 2021-2023.

Yam, Sui Pan, Zourab Brodzeli, Scott Wade, Claire Rollinson, Greg Baxter and Stephen Collins (2009), Use of first-order diffraction wavelengths corresponding to dual-grating periodicities in a single fibre Bragg grating for simultaneous temperature and strain measurement. Measurement Science & Technology. 20 (3): 034008.