

## LIST OF PUBLICATIONS

### Book

(1) **Dragnevski, K. I.**, *Microstructural Evolution of deeply undercooled metallic melts. Examples of Cu and Cu-based alloys*, ISBN-10: 3639101731, ISBN-13: 978-3639101737, 2008;

### Guest Editor - Micro and Nanosystems, Special Issue

(2) Dragnevski, K.I., Editorial: Recent Applications of *In-situ* Mechanical Characterisation on Micro- & Nano-systems, **Micro & Nanosystems**, Vol. 4(2), p 85, 2012;

(3) **Dragnevski, K.I.**, *A brief overview of in-situ mechanical testing in the Environmental Scanning Electron Microscope*, **Micro & Nanosystems**, Vol. 4(2), pp 92-96, 2012;

(4) Maitland, A., **Dragnevski, K. I.** & Cocks, A.C.F., *A 'simple' method for in-situ observation of crack mechanisms in ceramic materials in the Environmental Scanning Electron Microscope*, **Micro & Nanosystems**, Vol. 4(2), pp 106-110, 2012;

### Journal Articles

(5) Tan Sui, **Kalin Dragnevski**, Tee K. Neo, Alexander M. Korsunsky, *Mechanisms of failure in porcelain-veneered sintered zirconia restorations (accepted to be published in Proceedings of the 13<sup>th</sup> International Conference on Fracture, June, 16-21, 2013, Beijing, China)*;

(6) **Dragnevski, K.I.**, Li, P. & Cocks, A.C.F., *Crack growth mechanisms in thermal barrier coatings (in preparation)*;

(7) Islam, O., Siviour, C.R. & **Dragnevski, K.I.**, *Optimisation of the conditions for studying amide monolayers using the ESEM/EDX approach (in preparation)*;

(8) Beth Mortimer, Daniel R. Drodge, Kalin I. Dragnevski, Clive R. Siviour, Chris Holland, *In situ tensile tests of single silk fibres in an Environmental Scanning Electron Microscope (submitted to Journal of Materials Science)*;

(9) Islam, O., Siviour, C.R. & **Dragnevski, K.I.**, *In-situ ESEM observations of colloidal failure mechanisms using the Brazilian disk test (submitted to Experimental Techniques)*;

(10) Islam, O., **Dragnevski, K.I.** & Siviour, C.R., *On some aspects of latex drying – ESEM observation*, **Progress in Organic Coatings**, Vol. 75(4), pp 444-448, 2012;

(11) **Dragnevski, K.I.**, Routh, A.F., Donald, A.M. & Murray, M.W., *A model for cracking of latex dispersions – an ESEM experiment*, **Langmuir**; Vol. 26(11), pp 7747-7751, 2010;

(12) Tea-Sung Jun, **Dragnevski K.I.**, Korsunsky, A.M., *Microstructure, Residual Strain, and Eigenstrain Analysis of Dissimilar Friction Welding Joints*, **Materials & Design**, Vol. 31, pp S121-S124, 2010;

- (13) Dave, S., Song, X., Hofmann, F., **Dragnevski, K.I.**, Korsunsky, A.M., *Digital image correlation and finite element analysis of inter- and intra-granular deformation*, **Procedia Engineering**, Vol. 1, pp 197-200, 2009;
- (14) **Dragnevski, K.I.**, Donald, A.M., Taylor, P., Murray, W. M., Bone E. & Davies, S, *Latex film formation in the Environmental Scanning Electron Microscope*, **Macromolecular Symposia**, Vol. 281, pp 119-125, 2009;
- (15) **Dragnevski, K.I.**, Donald, A.M, Clarke, S.M & Maltby, A., *Novel Applications of (E)SEM and EDX for the study of molecularly thin amide monolayers on polymer films*, **Colloids & Surfaces A: Physicochemical and Engineering Aspects**, Vol. 337, pp 47-51, 2009;
- (16) **Dragnevski, K.I.** & Donald, A.M., *Structure-property relationship in aging acrylic latex films* **Progress in Organic Coatings**, Vol. 65, pp 19-24, 2009;
- (17) **Dragnevski, K.I.**, Fairhead, T.W., Balsod R. & Donald, A.M., *A new tensile stage for in-situ examination of the mechanical properties of 'super'-elastic materials* **Review of Scientific Instruments**, Vol. 79, 126107, 2008;
- (18) **Dragnevski, K.I.** & Donald, A.M., *Drying behaviour of a novel acrylic latex for solvent free architectural coatings*, **Waterbourne & High Solids Coatings**, Vol. 29 (10), 2008;
- (19) **Dragnevski, K.I.** & Donald, A.M., *An Environmental Scanning Electron Microscopy examination of the film formation mechanism of novel acrylic latex*, **Colloids and Surfaces A: Physicochemical and Engineering Aspects**, Vol. 317 (1-3) pp 551-556, 2008;
- (20) **Dragnevski, K.I.** & Donald, A.M., *Microstructural evolution of a novel acrylic latex*, **Progress in Organic Coatings**, Vol. 61 (1) pp. 63-67, 2008;
- (21) **Dragnevski, K.I.** & Donald, A.M., *Applications of Environmental Scanning Electron Microscopy in the study of drying novel latex films*, **Journal of Physics Conference Series**, Vol. 126. 012077, pp. 1-4, 2008;
- (22) **Dragnevski, K.I.** & Donald, A.M., *Environmental Scanning Electron Microscopy for the study of acrylic latex in wet state*, **High Tech Materials Alert in Technical Insights** published by Frost & Sullivan, November, 2007;
- (23) **Dragnevski, K.I.**, Cochrane, R.F., Mullis, A.M., *The solidification of undercooled melts via twinned dendritic growth*, **Metallurgical & Materials Transactions A** 35A (10): pp. 3211-3220, 2004;
- (24) Mullis, A.M., **Dragnevski, K.I.**; Cochrane, R.F., *The transition from the dendritic to the seaweed growth morphology during the solidification of deeply undercooled metallic melts*, **Materials Science and Engineering A: Structural**, 375-377, pp.157-162, 2004;
- (25) **Dragnevski, K.I.**; Mullis, A.M.; Cochrane, R.F., *The effect of experimental variables on the levels of melt undercooling*, **Materials Science and Engineering A: Structural**, 375, pp.485-487, 2004;

- (26) **Dragnevski, K.I.**; Cochrane, R.F.; Mullis, A.M., *The mechanism for spontaneous grain refinement in undercooled pure Cu melts*, **Materials Science and Engineering A: Structural**, 375, pp.479-484, 2004;
- (27) Mullis, A.M.; **Dragnevski, K.I.**, Cochrane, R.F., *Mechanically deformed primary dendritic structures observed during the solidification of undercooled melts*, **Solidification & Crystallization**, Weinheim, Wiley-VCH, ISBN: 3527310118, pp.175-184, 2004;
- (28) **Dragnevski, K.I.**; Cochrane, R.F.; Mullis, A.M., *Experimental Evidence for Dendrite Tip Splitting in Deeply Undercooled, Ultra-High Purity Cu*, **Physical Review Letters**, 89, pp.2155021-2155024, 2002;
- (29) **Dragnevski, K.I.**, Mullis, A.M.; Walker, D.J.; Cochrane, R.F., *Mechanical deformation of dendrites by fluid flow during the solidification of undercooled melts*, **Acta Materialia**, 50, pp.3743-3755, 2002;
- (30) **Dragnevski, K.I.** & Kovachev, P., *Investigation of the coarsening mechanisms during heat treatment of rapidly solidified AlSi7 alloy with additions of Mg and Fe*, **Scientific Reports**, Scientific-Technical Union of Mechanical Engineering, Sofia, Bulgaria, ISSN 1310-3946, VI (5), pp. 229-234, 1999.