

Publications for the period Oct 2011-Mar 2012

Dana L Ilea and Paul F. Whelan. "Image Segmentation based on the Integration of Colour-Texture Descriptors - A Review", *Pattern Recognition, Volume 44, Issues 10-11, October-November 2011, Pages 2479-2501.*

Huber HJ, Connolly NM, Dussmann H, Prehn JH. A structured approach to the study of metabolic control principles in intact and impaired mitochondria. *Mol Biosyst.* 2012 Mar;8(3):828-42.

Kedziora KM, Prehn JH, Dobrucki J, Bernas T. Method of calibration of a fluorescence microscope for quantitative studies. *J Microsc.* 2011 Oct;244(1):101-11.

Würstle ML, Laussmann MA, Rehm M. - The central role of initiator caspase-9 in apoptosis signal transduction and the regulation of its activation and activity on the apoptosome. *Exp Cell Res.* 2012 Feb 28.

Vader P, van der Meel R, Symons MH, Fens MH, Pieters E, Wilschut KJ, Storm G, Jarzabek M, Gallagher WM, Schiffelers RM, Byrne AT. Examining the role of Rac1 in tumor angiogenesis and growth: a clinically relevant RNAi-mediated approach. *Angiogenesis.* 2011 Dec;14(4):457-66.

Laussmann MA, Passante E, Hellwig CT, Tomiczek B, Flanagan L, Prehn JH, Huber HJ, Rehm M. - Proteasome inhibition can impair caspase-8 activation upon sub-maximal stimulation of apoptotic tumour necrosis factor-related apoptosis inducing ligand (TRAIL) signalling. *J Biol Chem,* 2012 Mar 9;

Hellwig CT, Rehm M. - TRAIL signalling and synergy mechanisms used in TRAIL-based combination therapies. *Mol Cancer Ther.* 2012 Jan;11(1):3-13

O'Connor AE, Mc Gee MM, Likar Y, Ponomarev V, Callanan JJ, O'shea DF, Byrne AT, Gallagher WM. Mechanism of cell death mediated by a BF₂-chelated tetraaryl-azadipyrromethene photodynamic therapeutic: dissection of the apoptotic pathway in vitro and in vivo. *Int J Cancer.* 2012 Feb 1;130(3):705-15.

Alzamora A, O'Mahony F, Bustos V, Rapetti-Mauss R, Urbach V, L. Cid P, Sepúlveda FV, Harvey BJ. Sexual dimorphism and oestrogen regulation of KCNE3 expression modulates the functional properties of KCNQ1 K⁺ channels. *J Physiol.* 2011 Nov 1;589(Pt 21):5091-107.

Jennings C, O'Grady A, Cummins R, Murer B, Al-Alawi M, Madden SF, Mutti L, Harvey BJ, Thomas W, Kay EW. Sustained expression of steroid receptor coactivator SRC-2/TIF-2 is associated with better prognosis in malignant pleural mesothelioma. *Journal of Thoracic Oncology, Volume 6, Number 11, November 2011; PMID 22011668*

Khamis RY, Johns M, Thom S, Mayet J, McConnell E, Stanton A, Jeyapalan S, Annon S, Wrigley S, Hughes A, Haskard DO. IgG anti-malonaldehyde-LDL antibodies are associated with low risk

of cardiovascular events in a substudy of the anglo-scandinavian cardiac outcomes trial (Ascot), and are unrelated To LDL, CRP levels and statin treatment. *Heart*. 2011 Oct;97(20)

Johnson T, Gaunt TR, Newhouse SJ, Padmanabhan S, Tomaszewski M, Kumari M, Morris RW, Tzoulaki I, O'Brien ET, Poulter NR, Sever P, Shields DC, Thom S, Wannamethee SG, Whincup PH, Brown MJ, Connell JM, Dobson RJ, Howard PJ, Mein CA, Onipinla A, Shaw-Hawkins S, Zhang Y, Davey Smith G, Day IN, Lawlor DA, Goodall AH; Cardiogenics Consortium, Fowkes FG, Abecasis GR, Elliott P, Gateva V; Global BPgen Consortium, Braund PS, Burton PR, Nelson CP, Tobin MD, van der Harst P, Glorioso N, Neuvirth H, Salvi E, Staessen JA, Stucchi A, Devos N, Jeunemaitre X, Plouin PF, Tichet J, Juhanson P, Org E, Putku M, Söber S, Veldre G, Viigimaa M, Levinsson A, Rosengren A, Thelle DS, Hastie CE, Hedner T, Lee WK, Melander O, Wahlstrand B, Hardy R, Wong A, Cooper JA, Palmén J, Chen L, Stewart AF, Wells GA, Westra HJ, Wolfs MG, Clarke R, Franzosi MG, Goel A, Hamsten A, Lathrop M, Peden JF, Seedorf U, Watkins H, Ouwehand WH, Sambrook J, Stephens J, Casas JP, Drenos F, Holmes MV, Kivimaki M, Shah S, Shah T, Talmud PJ, Whittaker J, Wallace C, Delles C, Laan M, Kuh D, Humphries SE, Nyberg F, Cusi D, Roberts R, Newton-Cheh C, Franke L, Stanton AV, Dominiczak AF, Farrall M, Hingorani AD, Samani NJ, Caulfield MJ, Munroe PB. Blood pressure loci identified with a gene-centric array. *Am J Hum Genet*. 2011 Dec 9;89(6):688-700.

Salvi E, Kutalik Z, Glorioso N, Benaglio P, Frau F, Kuznetsova T, Arima H, Hoggart C, Tichet J, Nikitin YP, Conti C, Seidlerova J, Tikhonoff V, Stolarz-Skrzypek K, Johnson T, Devos N, Zagato L, Guarrera S, Zaninello R, Calabria A, Stancanelli B, Troffa C, Thijs L, Rizzi F, Simonova G, Lupoli S, Argiolas G, Braga D, D'Alessio MC, Ortu MF, Ricceri F, Mercurio M, Descombes P, Marconi M, Chalmers J, Harrap S, Filipovsky J, Bochud M, Iacoviello L, Ellis J, Stanton AV, Laan M, Padmanabhan S, Dominiczak AF, Samani NJ, Melander O, Jeunemaitre X, Manunta P, Shabo A, Vineis P, Cappuccio FP, Caulfield MJ, Matullo G, Rivolta C, Munroe PB, Barlassina C, Staessen JA, Beckmann JS, Cusi D. Genomewide Association Study Using a High-Density Single Nucleotide Polymorphism Array and Case-Control Design Identifies a Novel Essential Hypertension Susceptibility Locus in the Promoter Region of Endothelial NO Synthase. *Hypertension*. 2012 Feb;59(2):248-55.

Michalak Z., Lebrun A., diMiceli M., Rousset M.C., de Bock F., Crespel A., Coubes P., Henshall D.C., Lerner-Natoli M., Rigau V. IgG leakage may contribute to neuronal dysfunction in drug-refractory epilepsies with blood-brain barrier disruption *J. Neuropathol. Exp. Neurol.* 71, 826-838 (2012)

Skorupa A, King MA, Aparicio IM, Dussmann H, Coughlan K, Breen B, Kieran D, Concannon CG, Marin P, Prehn JH. Motoneurons secrete angiogenin to induce RNA cleavage in astroglia. *J Neurosci*. 2012 Apr 11;32(15):5024-38.

Mallon, C. T.; Walshe, A.; Forster, R.J.; Keyes, T.E.; Baker, R.J. 2012. The Physical Characterisation and Reactivity of the Uranyl Peroxide [UO₂(O₂)(H₂O)₂].2H₂O: Implications for Storage of Spent Nuclear Fuels. *Inorganic Chemistry*, 51, 15, pp8509-8515.

Walsh, J.J.; Zeng, Q.; Forster, R.J.; Keyes, T.E. 2012. Highly Luminescent Ru(II) Metallopolymers: Photonic and Redox Properties in Solution and as Thin Films. *Photochemical And Photobiological Sciences*, 11, 10, pp1547-1557.

Walsh, J.J.; Zhu, J.; Forster, R.J.; Keyes, T.E. 2012. Self-Assembled Composites of Luminescent Ru(II) Metallopolymers and the Dawson polyoxometalate α -[Mo₁₈O₅₄(SO₄)₂]₄-Photophysics and Visible Sensitization of Photoelectrochemistry. *Dalton Transactions*, 41, 33, pp9928-9937

Elaine Spain , Eoin Brennan , Hazel McArdle , Tia E. Keyes , and Robert J. Forster. 2012. High Sensitivity DNA Detection Based on Regioselectively Decorated Electrocatalytic Nanoparticles *Anal. Chem.*, 84 (15), pp 6471–6476

Jie Zhu, James J. Walsh, Alan M. Bond, Tia E. Keyes, and Robert J. Forster. 2012. Ruthenium Metallopolymer: Dawson Polyoxomolybdate α -[Mo₁₈O₅₄(SO₄)₂]₄- Adduct Films: Sensitization for Visible Photoelectrocatalysis. *Langmuir*, 28 (37), pp 13536–13541

Martinho, P. N., Gildea, B., Harris, M. M., Lemma, T., Naik, A. D., Müller-Bunz, H., Keyes, T. E., Garcia, Y. and Morgan, G. G. 2012. Cooperative Spin Transition in a Mononuclear Manganese(III) Complex. *Angew. Chem., Dec 2012, Vol 51, Issue 50, 12597–12601.*

Martinho, P. N., Lemma, T., Gildea, B., Picardi, G., Müller-Bunz, H., Forster, R. J., Keyes, T. E., Redmond, G. and Morgan, G. G. 2012. Template Assembly of Spin Crossover One-Dimensional Nanowires. *Angew. Chem, Nov 2012, Vol 51, Issue 48, 11995-11999*

Tivnan, Amanda; Orr, Wayne Shannon; Gubala, Vladimir; et al. Inhibition of Neuroblastoma Tumor Growth by Targeted Delivery of MicroRNA-34a Using Anti-Disialoganglioside GD(2) Coated Nanoparticles. *Plos One*, 7, 5, pp e38129

Nooney, Robert I.; McCormack, Eoin; McDonagh, Colette. Optimization of size, morphology and colloidal stability of fluorescein dye-doped silica NPs for application in immunoassays. *Analytical and Bioanalytical Chemistry*, 404, 10, pp 2807-2818

Würstle ML, Laussmann MA, Rehm M. The central role of initiator caspase-9 in apoptosis signal transduction and the regulation of its activation and activity on the apoptosome. *Exp Cell Res.* 2012 Jul 1;318(11):1213-20. *Epub 2012 Feb 28 (Special Issue on Cell Death Signalling).*

Verriere V, Higgins G, Al-Alawi M, Costello RW, McNally P, Chiron R, Harvey BJ, Urbach V. Lipoxin A4 stimulates calcium-activated chloride currents and increases airway surface liquid height in normal and cystic fibrosis airway epithelia. *PLoS One.* 2012;7(5):e37746.
Saxena R, Elbers CC, Guo Y, Peter I, Gaunt TR, Mega JL, Lanktree MB, Tare A, Castillo BA, Li YR, Johnson T, Bruinenberg M, Gilbert-Diamond D, Rajagopalan R, Voight BF, Balasubramanyam A, Barnard J, Bauer F, Baumert J, Bhangale T, Böhm BO, Braund PS, Burton PR, Chandrupatla HR, Clarke R, Cooper-DeHoff RM, Crook ED, Davey-Smith G, Day IN, de Boer A, de Groot MC, Drenos F, Ferguson J, Fox CS, Furlong CE, Gibson Q, Gieger C, Gilhuys-Pederson LA, Glessner JT, Goel A,

Gong Y, Grant SF, Grobbee DE, Hastie C, Humphries SE, Kim CE, Kivimaki M, Kleber M, Meisinger C, Kumari M, Langae TY, Lawlor DA, Li M, Lobmeyer MT, Maitland-van der Zee AH, Meijs MF, Molony CM, Morrow DA, Murugesan G, Musani SK, Nelson CP, Newhouse SJ, O'Connell JR, Padmanabhan S, Palmen J, Patel SR, Pepine CJ, Pettinger M, Price TS, Rafelt S, Ranchalis J, Rasheed A, Rosenthal E, Ruczinski I, Shah S, Shen H, Silbernagel G, Smith EN, Spijkerman AW, Stanton A, Steffes MW, Thorand B, Trip M, van der Harst P, van der A DL, van Iperen EP, van Setten J, van Vliet-Ostaptchouk JV, Verweij N, Wolffenbuttel BH, Young T, Zafarmand MH, Zmuda JM; Look AHEAD Research Group; DIAGRAM consortium, Boehnke M, Altshuler D, McCarthy M, Kao WH, Pankow JS, Cappola TP, Sever P, Poulter N, Caulfield M, Dominiczak A, Shields DC, Bhatt DL, Zhang L, Curtis SP, Danesh J, Casas JP, van der Schouw YT, Onland-Moret NC, Doevendans PA, Dorn GW 2nd, Farrall M, FitzGerald GA, Hamsten A, Hegele R, Hingorani AD, Hofker MH, Huggins GS, Illig T, Jarvik GP, Johnson JA, Klungel OH, Knowler WC, Koenig W, März W, Meigs JB, Melander O, Munroe PB, Mitchell BD, Bielinski SJ, Rader DJ, Reilly MP, Rich SS, Rotter JI, Saleheen D, Samani NJ, Schadt EE, Shuldiner AR, Silverstein R, Kottke-Marchant K, Talmud PJ, Watkins H, Asselbergs FW, de Bakker PI, McCaffery J, Wijmenga C, Sabatine MS, Wilson JG, Reiner A, Bowden DW, Hakonarson H, Siscovick DS, Keating BJ.. Large-scale gene-centric meta-analysis across 39 studies identifies type 2 diabetes loci . *Am J Hum Genet.* 2012 Mar 9;90(3):410-25

Deshmukh HA, Colhoun HM, Johnson T, McKeigue PM, Betteridge DJ, Durrington PN, Fuller JH, Livingstone S, Charlton-Menys V, Neil A, Poulter N, Sever P, Shields DC, Stanton AV, Chatterjee A, Hyde C, Calle RA, Demicco DA, Trompet S, Postmus I, Ford I, Jukema JW, Caulfield M, Hitman GA; CARDS, ASCOT, and PROSPER Investigators. Genome-wide association study of genetic determinants of LDL-c response to atorvastatin therapy: importance of Lp(a). *J Lipid Res.* 2012 May;53(5):1000-11.

Meehan M, Parthasarathi L, Moran N, Jefferies CA, Foley N, Lazzari E, Murphy D, Ryan J, Ortiz B, Fabius AW, Chan TA, Stallings RL. Protein tyrosine phosphatase receptor delta acts as a neuroblastoma tumor suppressor by destabilizing the aurora kinase A oncogene. *Mol Cancer.* 2012 Feb 5;11:6.

Jennifer Dorney, Franck Bonnier, Amaya Garcia, Alan Casey, Gordon Chambers, Hugh J. Byrne, Identifying and localizing intracellular nanoparticles using Raman Spectroscopy. *Analyst, Mar, 137, 1111-1119 (2012)*