

## ARTICLES IN 2015

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- *Cholinium-based ion gels as solid electrolytes for long-term cutaneous electrophysiology*, M. Isik, T. Lonjaret, H. Sardon, R. Marcilla, T. Herve, G. G. Malliaras, E. Ismailova and D. Mecerreyes, *J. Mater. Chem. C*, **2015**, 3, 8942
- *Optimization of a planar all-polymer transistor for characterization of barrier tissue*, M. Ramuz, K. Margita, A. Hama, P. Leleux, J. Rivnay, R.M. Owens, *ChemPhysChem*, **2015**, 16(6):1210-6
- *Using white noise to gate organic transistors for dynamic monitoring of cultured cell layers*, J. Rivnay, P. Leleux, A. Hama, M. Ramuz, M. Huerta, G.G. Malliaras and R.M. Owens, *Scientific Reports*, **2015**, 5, 11613
- *Localized Neuron Stimulation with Organic Electrochemical Transistors on Delaminating Depth Probes*, A. Williamson, M. Ferro, P. Leleux, E. Ismailova, A. Kaszas, T. Doublet, P. Quilichini, J. Rivnay, B. Rózsa, G. Katona, C. Bernard, and G.G. Malliaras, *Adv. Mater.*, **2015**, 27, 30, 4405-4410
- *Monitoring of cell layer coverage and differentiation with the organic electrochemical transistor*, M. Ramuz, A. Hama, J. Rivnay, P. Leleux, and R.M. Owens, *J. Mater. Chem. B*, **2015**, 3, 5971-5977
- *High Performance Transistors for Bioelectronics Through Tuning of Channel Thickness*, J. Rivnay, P. Leleux, M. Ferro, M. Sessolo, A. Williamson, D.A. Koutsouras, D. Khodagholy, M. Ramuz, X. Strakosas, R.M. Owens, C. Benar, J.-M. Badier, C. Bernard, and G.G. Malliaras, **2015**, *Sci. Adv.* 1, e1400251
- *3D Conducting Polymer Platforms for Electrical Control of Protein Conformation and Cellular Functions*, A. M.-D. Wan, S. Inal, T. Williams, K. Wang, P. Leleux, L. Estevez, E.P. Giannelis, C. Fischbach, G.G. Malliaras, D. Gourdon, *J. Mater. Chem. B*, **2015**, 3, 5040-5048
- *Controlling Epileptiform Activity with Organic Electronic Ion Pumps*, M. A. Williamson, J. Rivnay, L.Kergoat, A. Jonsson, S. Inal, I. Uguz, M. Ferro, A. Ivanov, D.T. Simon, M. Berggren, G.G. Malliaras, and C. Bernard, *Adv. Mater*, **2015**, 27, 20, 3138-3144
- *Organic electrochemical transistors for cell-based impedance sensing*, J. Rivnay, M. Ramuz, P. Leleux, A. Hama, M. Huerta, R.M. Owens, *Applied Physics Letters*, **2015**, 106,04330
- *Organic electrochemical transistors used for clinical applications*, P. Leleux, J. Rivnay, T. Lonjaret, J.-M. Badier, C. Bénar, P. Chauvel, G.G. Malliaras, *Advanced Healthcare Materials*, **2015**, 4, 1, 142-147

### SUBMITTED FOR PUBLICATION:

- *Organic electrochemical transistors for recording broad-band neural activity*, J.

Rivnay, P. Leleux, M. Sessolo, D. Khodagholy, M. Focchi, X. Strakosas, A. Hama, G.G. Malliaras, *Science Advances*, submitted

- *Organic electronic ion pump for control of epileptiform activity*, A. Williamson, J. Rivnay, M. Ferro, S. Inal, I. Uguz, A. Ivanov, M. Berggren, C. Bernard, G.G. Malliaras, *Advanced Materials*, submitted
- *Patterning of conducting polymers on textiles for health monitoring*, S. Takamatsu, T. Lonjaret, D. Crisp, J.M. Badier, G.G. Malliaras, E. Ismailova, *Advanced Materials*, submitted