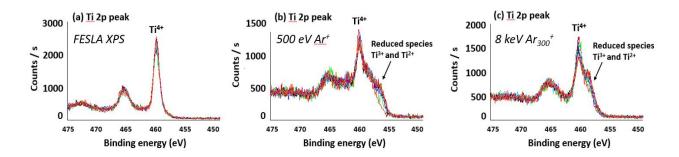
Femtosecond laser ablation (FESLA) XPS – A novel XPS depth profiling technique for optical/electrical thin films and multi-layered structures

M.A.Baker¹, S.R.Bacon^{1,2}, S.J.Sweeney¹, A.Bushell², T. Nunney² R.G.White²

¹Faculty of Engineering and Physical Sciences, University of Surrey, Guildford, Surrey, GU2 7XH, UK, ²ThermoFisher Scientific, 1 The Feldbridge Centre, Imberhorne Lane, East Grinstead, West Sussex, RH19 1XP, UK

A comparison of the Ti 2p peak for FESLA XPS, Ar+ and Ar_n+ bombardment during depth profiling of TiO₂ showing the retention of chemical state information for FESLA XPS whilst Ar+ and Ar_n+ result in the preferential sputtering of oxygen.



³ James Watt School of Engineering, College of Science and Engineering, University of Glasgow, G12 8LT, UK