



Integration of Metamaterials with Optical Fibre Technologies

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***Abstract* – We will review recent advances in metamaterials research that aims to develop switchable and tuneable functional nanostructures. Metamaterials research has migrated from the study of metallic plasmonic structures and now also embraces a large variety of advanced material platforms, including dielectrics, semiconductors, superconductors, topological insulators and complex hybrid systems. We will talk about coherent control of metasurfaces, all-optical and electro-optical switching with reconfigurable nano-optomechanical and phase-change metamaterials and the way functional metamaterials can be integrated into fibre platform.**