Title: 3D Printing of Sensors: a focus on Filament Freeform Fabrication

Abstract: 3D printing will improve mechatronic devices deeply, shaping highly complex objects and embedding external components in complex structures. In literature, customized costly and complex solutions have been proposed. On the other hand, the development of repeatable procedures, involving commercially available materials and machines, could lead to a disruptive diffusion of 3D additive manufacturing formechatronic micro components. The potential of Filament Freeform Fabrication (FFF), also known as Fused Deposition Modeling (FDM), will be presented starting from the current research in this field.