3. Wearable electro mechanical sensor transforms mechanical stimulus into electrical signals. The main electromechanical sensors we focus on are strain and pressure sensors, which correspond to two main mechanical stimuli. According to their mechanisms, resistive and capacitive sensor attracts more attentions due to their simple structures, mechanisms, preparation method and low cost. Various kinds of nanomaterials have been developed to fabricate them, including carbon nano-materials, metallic and conductive polymers. They have great potentials on health monitoring, speech recognition and related human machine interface applications,