

Chromogenic Textiles

Vincenzo MAIORANO, CNR NANOTEC

Chromogenic materials have the characteristic of modifying their optical properties as a result of the application of an external stimulus, which can be an electric potential, UV light, heat, etc. Although chromogenic technologies (electrochromism, photochromism, thermochromism, etc.) have now reached a good maturity if applied to rigid and non-deformable substrates, there are currently numerous open issues regarding their integration on flexible and stretchable supports, such as fabrics. The development of innovative materials and processes to match the mechanical requirements of fabrics and the technical requirements of performing devices have paved the way to new application scenarios in the field of smart clothings, fashion, technical fabrics.