Investigation of Heating Behaviour of E-Textile Structures

Authors : Hande Sezgin, Senem Kursun Bahadır, Yakup Erhan Boke, Fatma Kalaoğlu

Abstract : Electronic textiles (e-textiles) are fabrics that contain electronics and interconnections with them. In this study, two types of base yarns (cotton and acrylic) and three conductive steel yarns with different linear resistance values ($14\Omega/m$, $30\Omega/m$, $70\Omega/m$) were used to investigate the effect of base yarn type and linear resistance of conductive yarns on thermal behavior of e-textile structures. Thermal behavior of samples were examined by thermal camera.

Keywords : conductive yarn, e-textiles, smart textiles, thermal analysis

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