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Investigation of Heating Behaviour of E-Textile Structures

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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 etextile structures. Thermal behavior of samples were examined by thermal camera.

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

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