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Surface modification of polyester fabric with plasma pretreatment and carbon nanotube coating for antistatic property improvement

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ABSTRACT

This study introduced a green method to prepare antistatic polyester (PET) fabrics by plasma pretreatment and single-walled carbon nanotube (SWCNT) coating. The influences of plasma conditions and SWCNT coating parameters on antistatic property of PET fabrics were investigated. PET fabrics were pretreated under various plasma conditions such as different treatment times, output powers and working gases, and then SWCNT coating on the plasma treated PET fabrics was carried out by coating-dry-cure using various coating parameters including different SWCNT

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