

The effects of hydrochloric acid (HCl), hydrazine, methyl methacrylate (MMA), styrene and hexamethyldisiloxane (HMDSO) treatment by radio frequency (rf) plasma grafting on surface properties of wool and denim fabrics were investigated. During plasma treatments, processing time was varied under optimized plasma conditions (50 W, rf: 13.56 MHz). All fabrics were comprehensively investigated by means of scanning electron microscopy-energy dispersive X-ray spectroscopy (SEM-EDS) and contact angle measurements. Our experimental data show that the rf- plasma processing has an important effect on the wettability properties of wool and denim fabrics. The results indicated that HCl plasma treatment significantly improves the hydrophilicity of wool and denim fabrics.