

Table of Contents

Preface

Characterization of Nanoporous Poly(Lactic Acid) Microfibers Using a Simplified Centrifugal Spinning Method K. Yamada and C. Narita	1
Ag Doping and rGO Coupling of TiO₂ within Polysiloxane Matrix for the Ecofriendly Development of High-Performance Cotton Fabric M.M. Rashid, M. Zorc, B. Simončič, I. Jerman and B. Tomšič	9
Novel Knit Structure with Adjustable Tensile Behaviour Based on Combined Weft/Warp Technology S. Hellmann, C. Sachse, E. Häntzsche and C. Cherif	17
Silica-Containing Phosphorus-Based Sol-Gel Finishing to Improve Flame Retardant Performance of Cotton Fabrics V. Trovato, G. Iacono, G. Malucelli and G. Rosace	23
Analysis of the Influence of Fiber Orientations in Carbon Fiber Reinforced Composites on their Structural Properties Based on Eddy Current Measurements J. Mersch, T. Gereke, A. Nocke and C. Cherif	29
New Approaches to 3D Non-Crimp Fabric Manufacturing L. Hahn, P. Penzel, D. Friese, M. Stümpel, H. Michler, B. Beckmann, M. Curbach and C. Cherif	37
Micromechanical Modelling of the Deformation Mechanisms Friction-Spun Yarn from Recycled Carbon Fibres T.G. Lang, M.M.B. Hasan, A. Abdkader, C. Cherif and T. Gereke	47
Tensile Properties of Different Yarn Structures Based on Recycled Carbon Fibre for Sustainable Thermoset Composites M.M.B. Hasan, A. Abdkader, T.G. Lang, T. Gereke and C. Cherif	55
Computational Evaluation of Weaving Process on Mechanical Stiffness of Plain Weave Fabric Y. Zhang, H. Miyaki, J. Zhang and A. Sakuma	63
Development of a Process to Continuously Mercerise Loose-Stock Cotton L. Arnold and R. Padhye	73
Comfort Properties and Antimicrobial Activity of Cotton and Nylon/PU Knits Treated with Microcapsules Containing Sea Buckthorn Oil B. Sarmandakh and E. Yi	81