

ARTICLES

- 463 Effect of polyester and elastane linear density on the physical and mechanical properties of dual-core-spun cotton yarns
Abdul Jabbar, Usman Tariq, Tanveer Hussain, Abdul Basit, AbdulMoqeeet Hai, and Muhammad Zubair
- 472 Development of functional wool fabric by treatment with aqueous and alkaline extracts of *Cinnamomum camphora* plant leaves
Asfandiyar Khan, Muhammad Tahir Hussain, Huiyu Jiang, and Seema Gul
- 482 A new assessment on mechanical properties of jute fiber mat with egg shell powder/nanoclay-reinforced polyester matrix composites
K. Ganesan, C. Kailasanathan, M. R. Sanjay, P. Senthamaraikannan, and S. S. Saravanakumar
- 491 Application of myrrh extract as an eco-friendly dye and antimicrobial agent on wool and silk fabrics part 2: antimicrobial activity and fastness property
Asmaa Abdullah Salem and Hanan Abdullah Al Amoudi
- 505 Numerical Study of Frequency and Deflection Responses of Natural Fiber (Luffa) Reinforced Polymer Composite and Experimental Validation
Hitesh B. Bisen, Chetan Kumar Hirwani, Rajesh Kumar Satankar, Subrata Kumar Panda, Kulmani Mehar, and Brijesh Patel
- 520 Recycling of Cotton Fibers Separated from the Waste Blend Fabric
Wang Shuhua, Yu Xiaoying, Chen Xiaogang, Hou Wensheng, and Niu Mei
- 532 Novel Sericin/Viscose Rayon-Based Biocomposite: Preparation and Characterization
Ravindra D. Kale, Vikrant G. Gorade, and Omkar Parmaj
- 542 Effect of Chemical Treatment on the Tensile Strength Behavior of Coir Geotextiles
Vivek, Rakesh Kumar Dutta, and Raman Parti
- 557 Effect of Herbal Extract Treatment on the Moisture Management Properties of Cotton Knitted Fabrics
Karuppuswamy Chandrasekaran and Muthusamy Senthilkumar
- 573 Improvement in mechanical properties of sponge-gourd fibers through different chemical treatment as demonstrated by utilization of the Weibull distribution model
Taimur -Al-Mobarak, M. F. Mina, and M. A. Gafur
- 589 Engineering properties of five varieties of coconuts (*Cocos nucifera* L.) for efficient husk separation
R. Pandiselvam, M.R. Manikantan, Anjineyulu Kothakota, G.K. Rajesh, Shameena Beegum, S.V. Ramesh, V. Niral, and K.B. Hebbar
- 598 On the Dynamic Performance of Flax Fiber Composite Beams Manufactured at Different Relative Humidity Levels
Huaizhong Li, Abdul Moudood, Wayne Hall, Gaston Francucci, and Andreas Öchsner
- 609 Application of β -sheet proteins as a compatibilizer in injection molding of kenaf core/polypropylene composites
Yutaka Kawahara, Tomohiro Yamamoto, Kiyoshi Yamamoto, Yoshimitsu Ikeda, and Yukihiro Nishikawa

Volume 17 Number 5 2020

- 623 Scope of Sustainable Pretreatment of Cotton Knit Fabric Avoiding Major Chemicals
Md. Abdul Hannan, Papia Haque, S M Fijul Kabir, and Mohammed Mizanur Rahman
- 635 Eco-friendly food products as source of natural colorant for wool yarn dyeing
Shahid Adeel, Mahwish Salman, Shazia Anwar Bukhari, Khadija Kareem, Fazal-ur- Rehman, Atya Hassan, and Mohammad Zuber
- 650 Investigation of mechanical factor of soil reinforced with four types of fibers: An integrated experimental and extreme learning machine approach
Ankit Garg, Sanandam Bordoloi, Somnath Mondal, Jun-Jun Ni, and S Sreedeeep
- 665 High Dye Fixation Pad-Steam Dyeing of Cotton Fabrics with Reactive Dyes Based on Hydrophobic Effect
Dawu Shu, Kuanjun Fang, Xiuming Liu, Yuqing Cai, and Fangfang An
- 676 A Comparative Study of the Mechanical Properties of Jute Fiber and Yarn Reinforced Concrete Composites
Mohammad Zakaria, Mashud Ahmed, Mozammel Hoque, and Abu Shaid
- 688 Free vibration analysis of a composite reinforced with natural fibers employing finite element and experimental techniques
Thomas P, Jenarthanan MP, and Sreehari VM
- 700 Assessment of Ichu Fibers Extraction and Their Use as Reinforcement in Composite Materials
S. Mori, C. Tenazoa, S. Candiotti, E. Flores, and S. Charca
- 716 Studying the Tensile Properties at the First Break of Multiple-Yarn Structure Fancy Gimp Yarns Using the Design of Experiments
Malek Alshukur and Alex Fotheringham
- 726 Mercerizing Extraction and Physicochemical Characterizations of Lignocellulosic Fiber from the Leaf Waste of *Mikania micrantha* Kunth ex H.B.K
Chaw Jiang Lim, Mahashanon Arumugam, Chan Kiang Lim, and Gwendoline Cheng Lian Ee
- 738 The Dimensional Distribution of Kenaf and Apocynum Fibers
Jing Liu, Yan Song, Guangting Han, Yuhui Han, Yuanyuan Zhang, and Wei Jiang
- 745 Sustainable extraction and dyeing of microwave-treated silk fabric using arjun bark colorant
Shahid Adeel, Fazal-ur- Rehman, Abdul Hameed, Noman Habib, Shumaila Kiran, Khalid Mahmood Zia, and Mohammad Zuber
- 759 Mechanical, morphological, and thermogravimetric analysis of alkali-treated Cordia-Dichotoma natural fiber composites
B. Madhusudhan Reddy, Y. Venkata Mohana Reddy, B. Chandra Mohan Reddy, and R. Meenakshi Reddy
- 769 Extraction and Characterization of Novel Natural Cellulosic Fibers from Pigeon Pea Plant
Nijandhan. Kulandaivel, R. Muralikannan, and KalyanaSundaram S

Volume 17 Number 6 2020

- 781 Polyvinyl Chloride Reinforced with Areca Sheath Fiber Composites—An Experimental Study
Subhakanta Nayak, Jyoti Ranjan Mohanty, Priya Ranjan Samal, and Bijoy Kumar Nanda

- 793 Effect of Transglutaminase Enzyme on Physico-mechanical Properties of Rambouillet Wool Fiber
Bhawna Soun, Devinder Kaur, and Seiko Jose
- 802 Research Progress on Tissue Culture and Genetic Transformation of Ramie
Xia An, Guanrong Jin, Xiahong Luo, Changli Chen, Wenlue Li, and Guanlin Zhu
- 809 Comparative Study of Starch Fibers Obtained by Electro-spinning of Indigenous, Commercial and Cationic Potato Starch
Cárdenas William A, Muñoz Prieto Efrén, Gómez-Pachón Edwin Yesid, and Vera-Graziano Ricardo
- 820 Influence of Sheep Wool on Slope Greening
Jan Broda and Andrzej Gawłowski
- 833 Effect of Various Chemical Treatments of *Prosopis juliflora* Fibers as Composite Reinforcement: Physicochemical, Thermal, Mechanical, and Morphological Properties
P. Madhu, M. R. Sanjay, P. Senthamarakannan, S. Pradeep, S. Siengchin, M. Jawaid, and M. Kathiresan
- 845 Influence of microwave power on mechanical properties of microwave-cured polyethylene/coir composites
Manoj Kumar Singh and Sunny Zafar
- 861 Uttarakhand: A State Rich in Plant Fibers
Nupur Srivastava and Deepali Rastogi
- 877 Effectiveness of Alkali and Sodium Bicarbonate Treatments on Sugar Palm Fiber: Mechanical, Thermal, and Chemical Investigations
Isma'ila Mukhtar, Zulkiflle Leman, Edi Syams Zainudin, and Mohammad Ridzwan Ishak
- 890 Mechanical Response of Novel 3D Woven Flax Composites with Variation in Z Yarn Binding
Madeha Jabbar, Yasir Nawab, Mehmet Karahan, Munir Ashraf, and Tanveer Hussain
- 906 Extraction and Characterization of Lignocellulosic Fibers from *Girardinia Bullosa* (Steudel) Wedd. (Ethiopian Kusha Plant)
Ravindra D. Kale, Tambizot Getachew Alemayehu, and Vikrant G. Gorade
- 921 Effect of Freezing-Thawing on Clayey Soils Reinforced with Human Hair Fibers
Necmi Yarbaşı