The Fiber Society 2017 Fall Meeting and Technical Conference and International Symposium on Materials from Renewables (ISMR)

Advanced, Smart, and Sustainable Polymers, Fibers, and Textiles

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The Fiber Society
c/o J. R. Gerde
P.O. Box 564
Ft. Meade, MD 20755-0564
USA

Phone: 703.921.7139

pam.fibersociety@gmail.com

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Curran Associates, Inc.
57 Morehouse Lane
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Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
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WEDNESDAY, November 8

7:30-9:00 **Registration** (Pecan Tree Galleria)
Breakfast (Mahler Hall)

8:30-9:00 **Opening Remarks** (Masters Hall)

- ***Sergiy Minko***, Conference Chair, University of Georgia
- ***David Lee***, Vice-president of Research, University of Georgia
- ***Laurence Schacher***, President, The Fiber Society
- ***Linda Kirk Fox***, Dean of the College of Family and Consumer Sciences, University of Georgia

Page:

9:00-10:10 **Plenary Session** (Masters Hall), Chair: ***Jason Locklin***

3 9:00-9:35 ***René Rossi***, Empa: *Smart Textiles for Continuous Health Monitoring*

4 9:35-10:10 ***Doug Hinchliffe***, USDA-ARS-SRRC: *Recent Advances in Chemical Modification and Processing of Cotton Fibers for Specific End-use Applications*

10:10 **Coffee Break** (Pecan Tree Galleria)

10:30−Noon: *Morning Sessions*

	Biomedical Applications of Fibers (Room T/U) Chair: ***Alexander Sidorenko***		
11	10:30-10:50	***Caroline Schauer*** Drexel University	*Antibacterial Properties of Electrospun Ti3C2Tx MXene-Chitosan Nanofibers*
12	10:50-11:10	***Suraj Sharma*** University of Georgia	*A Novel Approach for Preparation of Continuous Biodegradable Polyester-based Nano Sheath-Core Yarn for Biomedical Application*
13	11:10-11:30	***Patricia Annis*** University of Georgia	*Transfer of Particulates and Microorganisms from Carpet and Other Fabric Surfaces to Human Fingers and Human Skin-like Surfaces*
14	11:30-11:50	***Hui Cong*** North Carolina State University	*Comparison of Polydioxanone and Polyhydroxyalkanoate Barbed and Non-barbed Surgical Sutures: The Effect of Hydrolytic Degradation on Mechanical and Morphological Properties*

	Smart Fibers and Textiles (Masters Hall) Chair: ***Rudolf Hufenus***		
21	10:30-10:50	***Dirk Hegemann*** Empa	*Functionalization of Fibers Based on Continuous Plasma Treatment*
22	10:50-11:10	***Takeshi Kikutani*** Tokyo Institute of Technology	*Core Technologies for Creation of Smart Textiles*
23	11:10-11:30	***Jinlian Hu*** Hong Kong Polytechnic University	*Smart Natural Materials in Textiles*

	Fundamentals of Fibers and Textiles, Testing, and Characterization (Room W/V) Chair: ***Jintu Fan***		
31	10:30-10:50	***Konstantin Kornev*** Clemson University	*Wetting of Shaped Fibers*
32	10:50-11:10	***Nelyan López Pérez*** Purdue University	*Non-destructive Technique for Body Armor Lifetime Predictions*
33	11:10-11:30	***Wai Keung (Calvin) Wong*** Hong Kong Polytechnic University	*Intelligent Defect Detection System for Textile Manufacture*

12:00 **Lunch** (Mahler Hall)

1:00 ***Graduate Student Paper Competition*** (Masters Hall), Chair: ***Suraj Sharma***

N/A ● ***Darya Asheghali***, University of Georgia
Enhanced Alignment of the Neural Stem Cells on the Touch-Spun Nanofibrous Scaffolds for Nerve Regeneration

N/A ● ***Caroline Loss***, Universidade da Beira Interior
Influence of Some Structural Parameters of Textiles on Their Dielectric Behaviour

N/A ● ***Xi Wang***, Hong Kong Polytechnic University
Monitoring Elbow Flexions Using Circumferential Measurements Based on Novel Wearable Fabric Sensing Technology

2:30–3:30: *Afternoon Sessions I*

	Smart Fibers and Textiles (Masters Hall) Chair: ***Rudolf Hufenus***		
24	2:30- 2:50	***David Schmelzeisen*** RWTH Aachen University	*4D Textiles: Defined Shape-change Through 3D Printed Hybrid Textiles*
25	2:50- 3:10	***David Schmelzeisen for Inga Noll*** RWTH Aachen University	*Smart Fibers in Functional Textiles*

	Biomedical Applications of Fibers (Room T/U) Chair: ***Caroline Schauer***		
15	2:30- 2:50	***Alexander Sidorenko*** University of the Sciences	*Films and Fibers from Chitosan-graft-PLA Molecular Brush as Highly Adhesive Scaffolds for Human Skin and Bone Cells*
16	2:50- 3:10	***Frederic Heim*** ENSISA	*Trans-catheter Cardiovascular Surgery: How Crimping Can Affect the Durability of Implants*
17	3:10- 3:30	***Robert Keynton*** University of Louisville	*Direct-write Sacrificial and Biopolymer Fibers*

	Fundamentals of Fibers and Textiles, Testing, and Characterization (Room W/V) Chair: ***Jintu Fan***		
34	2:30- 2:50	***Donggang Yao*** Georgia Institute of Technology	*A Framework for Developing High-strength Polymer Fibers from Substantial Chain Extensions*
35	2:50- 3:10	***Chengqi Zhang*** Clemson University	*Morphological Transitions of Droplets on Ribbons*
36	3:10- 3:30	***Maxime Coddeville*** ENSAIT	*Development of a Testing Bench for Textile Electrodes*

3:30 **Coffee Break** (Pecan Tree Galleria)

4:00–6:00: *Afternoon Sessions II*

	Smart Fibers and Textiles (Masters Hall) Chair: ***Rudolf Hufenus***		
26	4:00- 4:20	***Yurong Yan*** South China University of Technology	*Liquid Core Fibers for Functional Textiles*
27	4:20- 4:40	***Ali Afzal*** National Textile University	*Development of Core-sheath Filament for SMART Textile Applications*
28	4:40- 5:00	***Anaëlle Talbourdet*** ENSAIT	*Micro- and Macroscopic Piezoelectric Structure for Energy Harvesting Based on PVDF Fibers*

	Fundamentals of Fibers and Textiles, Testing, and Characterization (Room W/V) Chair: ***Konstantin Kornev***		
37	4:00- 4:20	***Jintu Fan*** Cornell University	*Optimization of Fibrous Materials Based on Fractal Models of Permeability, Diffusivity, and Thermal Conductivity*
38	4:20- 4:40	***Mohammad Ali Zeeshan*** Baluchistan University	*Optimization of Ring Spinning Process Parameters of Cotton Yarn*
39	4:40- 5:00	***Runying Chen*** East Carolina University	*Identification of Natural Bast and Leaf Fibers Through DNA Extraction and Sequence Matching*

6:00-7:30 **Poster Session** (Lobby at Masters Hall)
Reception (Pecan Tree Galleria)

THURSDAY, November 9

7:30-9:00 **Registration** (Pecan Tree Galleria)
Breakfast (Mahler Hall)

9:00-10:10 **Plenary Session** (Masters Hall), Chair: ***Gajanan Bhat***
5 9:00-9:35 ***Michael R. Buchmeiser***, German Institutes of Textile and Fiber Research (DITF) and the University of Stuttgart: *Advances in High-performance Carbon, Ceramic, and Cellulosic Fibers*
6 9:35-10:10 ***Dean C. Webster***, North Dakota State University: *Highly Functional Biobased Resins for High-performance Thermosets*

10:10 **Coffee Break** (Pecan Tree Galleria)

10:30–Noon: *Morning Sessions*

	Nanocellulose (Room T/U) Chairs: ***You-Lo Hsieh and Suraj Sharma***		
43	10:30- 10:50	***Oded Shoseyov*** Hebrew University of Jerusalem	*Nature's Gift*
44	10:50- 11:10	***Heli Kangas*** VTT Technical Research Centre of Finland, Ltd.	*Advances in the Cellulose Nanofibril (CNF) Technologies and Applications*
45	11:10- 11:30	***Sergiy Minko*** University of Georgia	*Nanocellulose Hydrogels for Sustainable and Functional Coatings*

	Sustainable Polymer Materials (ISMR) (Masters Hall) Chairs: ***Jason Locklin, Chad Ulven, and Sameer Rahatekar***		
51	10:30- 10:50	***Michael Kessler*** North Dakota State University	*Thermosetting Polymers and Composites from Agricultural Oils*
52	10:50- 11:10	***Elsa Reichmanis*** Georgia Institute of Technology	*Polymers for Flexible Electronics: A Path to Sustainable Systems*
53	11:10- 11:30	***Michael Mang*** Danimer Scientific	*Industrial Applications of Medium Chain Length Poly(hydroxyalkanoates): From Feedstock to Finished Article*
54	11:30- 11:50	***Rudolf Hufenus*** Empa	*New Structural Model for Melt-spun P3HB Fibers*

	Functional Textiles and Fibers for Military Applications (Room W/V) Chair: ***Natalie Pomerantz***		
65	10:30- 10:50	***June Lum*** U.S. Army Natick Soldier Research, Development and Engineering Center	*Preparation and Characterization of PHMB-based Multifunctional Microcapsules for Use on Nylon: Cotton Textile*

66	10:50- 11:10	***Prabhakar Gulgunje*** Georgia Institute of Technology	*Structural and Functional Fibers*
67	11:10- 11:30	***Derek Dwyer*** Binghamton University	*Zirconium Hydroxide and Triethanolamine Incorporated Polyvinylidene Fluoride (PVDF)/ UiO-66 Polymer Composite Nanofibers with Enhanced Catalytic Activity Toward Chemical Agents and Simulants*
68	11:30- 11:50	***Grant Glover*** University of South Alabama	*Attachment of Gold, Quantum Dots, and MOFs to Fibers*

	Natural Fibers: Advanced Cellulose Fibers and Textiles (Room Y/Z) Chairs: ***Gang Sun and Rebecca Van Amber***		
73	10:30- 10:50	***Yiqi Yang*** University of Nebraska-Lincoln	*Accelerated Hydrolysis of Cellulosics after Dyeing with Reactive Dyes*
74	10:50- 11:10	***Li Huang*** Donghua University	*3D-Printing Bacterial Cellulose Microfiber-reinforced Silk-Gelatin Hydrogel Tissue Engineering Scaffold with Hierarchical Pores*
75	11:10- 11:30	***Sunghyun Nam*** U.S. Department of Agriculture	*Statistical Behavior of the Tensile Property of Heated Cotton Fiber*

12:00 **Lunch** (Mahler Hall)

1:00-1:35 **Plenary Session** (Masters Hall), Chair: ***Sergiy Minko***

7 1:00-1:35 ***Gregory C. Rutledge***, Massachusetts Institute of Technology: *Ultrafine High-performance Polymer Fibers*

1:40–3:20: *Afternoon Sessions I*

	Nanocellulose (Room Y) Chairs: ***You-Lo Hsieh and Suraj Sharma***		
46	1:40- 2:00	***Thomas Elder*** USDA-Forest Service	*Nanocellulosic Materials and Applications*
47	2:00- 2:20	***Shikha Shrestha*** Purdue University	*Effects of Different Types of Cellulose Nanocrystals on Mechanical, Thermal, and Morphological Properties of Polyvinyl Alcohol Composite Fibers*
48	2:20- 2:40	***Raha Saremi*** University of Georgia	*Nanocellulose Adhesion in Fibers and Polymer Thin Films*

	Sustainable Polymer Materials (ISMR) (Masters Hall) Chairs: ***Jason Locklin, Chad Ulven, and Sameer Rahatekar***		
55	1:40- 2:00	***Bharath Natarajan*** Georgetown University	*Composite Design Lessons from Nature: Use of Twisted Plywood, or Bouligand Structure, in Self-assembled Cellulose Nanocrystal Composites*
56	2:00- 2:20	***Andriy Voronov*** North Dakota State University	*Emulsion Polymerization of Plant Oil- derived Vinyl Monomers*
57	2:20- 2:40	***Sameer Rahatekar*** Cranfield University	*Manufacturing Regenerated Cellulose, Chitin, and Cellulose Biocomposite Fibres for Engineering and Biomedical Applications*
58	2:40- 3:00	***Ngoc Nguyen*** Oak Ridge National Laboratory	*Rheological Properties and Intermolecular Interactions of Auto-hydrolyzed Lignocellulose in 1-ethyl-3-methylimidazolium Acetate Ionic Liquid*

	Functional Textiles and Fibers for Military Applications (Room W/V) Chair: ***Natalie Pomerantz***		
69	1:40- 2:00	***Elizabeth Welsh*** U.S. Army Natick Soldier Research, Development and Engineering Center	*Photo-responsive Metal Oxide Nanoparticle-based Fibers*
70	2:00- 2:20	***Molly Richards*** U.S. Army Natick Soldier Research, Development and Engineering Center	*Effect of Lamination and Aerosol Liners on Thermal Burden and Chemical Protection*

	Bhuvenesh Goswami: A Life in Textiles (Room Z) Chairs: ***Artan Sinoimeri and Subhash Batra***		
81	1:40- 2:00	***Phil Brown*** Clemson University	*A Better Fig Leaf or Beyond the Fig Leaf*
82	2:00- 2:20	***Rajesh Anandjiwala*** CSIR Materials Science and Manufacturing	*Sound Insulation Applications of Natural Fiber Nonwovens*
83	2:20- 2:40	***Smita Bais-Singh*** Ahlstrom-Munksjo Nonwovens, LLC	*Unidirectional Fiber Reinforcement with Improved Resin Flow Properties*
84	2:40- 3:00	***Martin King*** North Carolina State University	*Can Tissue Engineering Reverse the Aging Process? The Role of Textile Scaffolds in Regenerating Living Tissues and Organs*

	Nanofibers and Nanofibrous Materials (Room T/U) Chairs: ***Yuris Dzenis and Gajanan Bhat***		
91	1:40- 2:00	***You-Lo Hsieh*** University of California-Davis	*Cellulose I and II Nanofibers and Functional Products*
92	2:00- 2:20	***Leitao Cao*** Donghua University	*Ultralight Nanofiber Aerogels for Efficient Sound Absorption*
93	2:20- 2:40	***Yang Si*** University of California-Davis	*Daylight-driven Rechargeable Nanofibrous Membranes with Robust Antibacterial and Antivirus Activity*
94	2:40- 3:00	***Kiana LaBombard*** Auburn University	*Carbon Nanotube- and Nanoclay-reinforced Fibrous Materials to Improve Properties*

3:20 **Coffee Break** (Pecan Tree Galleria)

3:50−5:30: *Afternoon Sessions II*

	Sustainable Polymer Materials (ISMR) (Masters Hall) Chairs: ***Jason Locklin, Chad Ulven, and Sameer Rahatekar***		
59	3:50- 4:10	***Caitlyn Clarkson*** Purdue University	*Cellulose Nanofibril/Polyethylene Glycol/ Polylactic Acid Composite Fibers by Melt Spinning*
60	4:10- 4:30	***Majid Sarmadi*** University of Wisconsin- Madison	*Farmlands for Plastics, Textiles, Dye, or Food: Are Bio-based Materials Really Sustainable?*
61	4:30- 4:50	***Oksana Zholobko*** North Dakota State University	*Enhancing Delivery and Immune Response of Peptide Vaccine by Polymer-Peptide Mixed Micellar Assemblies*

	Bhuvenesh Goswami: A Life in Textiles (Room Z) Chairs: ***Artan Sinoimeri and Subhash Batra***		
85	3:50- 4:10	***Yogi Goswami*** University of South Florida	*Photo-Electrochemical Oxidation (PECO) Technology Review*
86	4:10- 4:30	***Vinoo Sharma*** INVISTA SARL	*Fiber Science Approach in Materials Development: Airbag Fabrics*

87	4:30-4:50	***Michael Ellison*** Clemson University	*B.C. Goswami: Self-described Textile Man at Clemson*
88	4:50-5:10	***Subhash Batra*** North Carolina State University	*From the Beginning: Personal Reflections Since 1979*

	Nanofibers and Nanofibrous Materials (Room T/U) Chairs: ***Yuris Dzenis and Gajanan Bhat***	
95	3:50-4:10	***Yaewon Park*** North Carolina State University	*Effect of Surface Chemistry of Nanofibers on Mineral Coating*
96	4:10-4:30	***Yuyao Li*** Donghua University	*Moisture and Oily Molecules Stable Nanofibrous Electret Membranes for Effectively Capturing PM $_{2.5}$*

	Natural Fibers: Advanced Cellulose Fibers and Textiles (Room Y) Chairs: ***Gang Sun and Rebecca Van Amber***		
76	3:50-4:10	***Gang Sun*** University of California-Davis	*A Comprehensive Investigation on Crosslinking Cellulose with Polycarboxylic Acids and Wrinkle-free Cotton*
77	4:10-4:30	***Kaijian Wu*** Donghua University	*Studies on the Properties and Phase Morphology of Cellulose/Aromatic Polysulfonamide Alloy Fibers*
78	4:30-4:50	***Chad Ulven*** North Dakota State University	*Influence of Strain Rate on Flax Fiber Properties*

5:30 ***The Fiber Society*** **Annual Business Meeting —*Members Only***

5:30 Buses to transfer to Botanical Garden (group I)
6:15 Buses to transfer to Botanical Garden (group II)
6:15 Reception (Botanical Garden)
7:30 Banquet and Award Ceremony (Botanical Garden)
9:15 Buses return to Georgia Center

FRIDAY, November 10

7:30-9:00 **Registration** (Pecan Tree Galleria)
Breakfast (Mahler Hall)

9: 00-9:35 **Plenary Session** (Masters Hall), Chair: ***Suraj Sharm***
8 9:00-9:35 ***Yuris Dzenis***, University of Nebraska-Lincoln: *Ultrastrong/Tough Continuous Bionanofibers*

9:40−10:40: *Morning Sessions I*

	Nanofibers and Nanofibrous Materials (Masters Hall) Chairs: ***Yuris Dzenis and Rongguo Zhao***		
97	9:40-10:00	***Taylor Stockdale*** University of Nebraska-Lincoln	*Incorporation of Electrospun Nanofibers into Composites Using Chemical Vapor Deposition*
98	10:00-10:20	***Laurence Schacher*** ENSISA	*Development of Hierarchical Structures-based MOFs and Polymeric Nanofibers*
101	10:20-10:40	***Chunhui Xiang*** Iowa State University	*Biodegradable Bacterial Cellulose Nanocomposites Reinforced with Electrospun Poly(lactic acid)/Lipids Nanofibers*

	Natural Fibers: Protein Fibers and Textiles (Room Y/Z) Chairs: ***Gang Sun and Rebecca Van Amber***		
109	9:40-10:00	***George Fytas*** Max Planck Institute for Polymer Research	*Spider Silk Fiber: A Hypersonic Phononic Nature Metamaterial*

110	10:00- 10:20	***Rebecca Van Amber*** Deakin University	*Eri Silk and Silk Blend Protein Fiber Fabrics: Physical Properties and Consumer Acceptability*
111	10:20- 10:40	***Jaime Grunlan*** Texas A&M University	*Smart and Friendly Flame Retardant Nanocoatings for Natural and Synthetic Fibers*

	Fiber-reinforced Composites (Room T/U) Chair: ***Srikanth Pilla***		
115	9:40- 10:00	***Kasthuri Venkatesh*** Technical University of Liberec	*Study of Compression Behavior of Fiber-reinforced Sandwich Composite*
116	10:00- 10:20	***Veera Aditya Yerra*** Clemson University	*Design Optimization of a Carbon Fiber-reinforced Thermoplastic Composite Vehicle Door Assembly for Weight Reduction*
117	10:20- 10:40	***Pardhvi Shah*** Clemson University	*Factory Layout Design and Cost Modeling of a Carbon Fiber-reinforced Thermoplastic Composite Vehicle Door Assembly*

	Advances in Braiding, Weaving, and Design (Room V/W) Chair: ***Yordan Kyosev***		
123	9:40- 10:00	***Katalin Küster*** Hochschule Niederrhein	*Investigation of the Bending and Tensile Properties of Braided Bi- and Triaxial and Unidirectional Thermoplastic Composites*
124	10:00- 10:20	***Yordan Kyosev*** Hochschule Niederrhein	*Process Emulation-based Modeling of Complex Braided and Woven Structures*
125	10:20- 10:40	***Miguel Carvalho*** University of Minho	*Preliminary Results of an Anthropometric Data Collection of Portuguese Children with Overweight and Obesity*

10:30 **Coffee Break** (Pecan Tree Galleria)

11:00−12:20: *Morning Sessions II*

	Nanofibers and Nanofibrous Materials (Masters Hall) Chair: ***Yuris Dzenis and Rongguo Zhao***		
102	11:00- 11:20	***Gajanan Bhat*** University of Georgia	*Structure and Properties of Inorganic Fullerene-reinforced Elastomeric Nonwoven-based Composites*
103	11:20- 11:40.	***Hande Gül Atasağun*** Dokuz Eylül University	*A Multi-criteria Decision-making Approach for Assessing Thermophysiological Comfort Properties of Underwear Fabrics*
104	11:40- 12:00	***Viraj Shah*** Dow Chemical Company	*Dow Solutions for Soft, Efficient Nonwovens Produced with ASPUN™ MB Meltblown Fiber Resins*
105	12:00- 12:20	***Numan Hoda*** Akdeniz University	*Effect of Process Parameters on Fiber Diameters of Polypropylene Microfibers Produced by Melt Blowing in a Biax Line*

	Fiber-reinforced Composites (Room T/U) Chair: ***Srikanth Pilla***		
118	11:00- 11:20	***Sai Aditya Pradeep*** Clemson University	*Advancements in the Prediction of Mechanical Behavior of Supercritical Foamed Short Fiber Thermoplastic Composites*
119	11:20- 11:40	***Anmol Kothari*** Clemson University	*Interfacial Mechanical Interlocking of Reinforced Thermoplastic Composites*
120	11:40- 12:00	***Ting Zheng*** Clemson University	*Microcellular Foaming of Polypropylene-Cellulose Nanocrystal Composites*

Poster Session

Wednesday, November 8 ● 6 – 7:30 PM ● Masters Hall Lobby ● Suraj Sharma, Chair

	Title	Presenter
131	*The Influence of Nanocomposite Materials on the Scattering Properties of Polyethylene*	Yassine Ait-El-Aoud
132	*Infrared Applications of Braided Touch-spun Nano- and Microfibers*	Darya Asheghali
133	*Structural and Mechanical Properties of Commercially Available Flushable Nonwovens*	Hande Gül Atasağun
134	*Structure and Properties of Polypropylene Graphene Composite Filaments*	Homeira Azari
135	*Polyhydroxyalkanoate-based Nanofibrous Structures and Their Application in the Biomedical Field*	Apurba Banerjee
136	*Sustainability in Carpet Industry: Challenges and Recent Developments*	Victoria Caldwell
137	*Plant Oil-based Acrylic Monomers for Free Radical Polymerization and Their Feasibility for Latex Synthesis*	Zoriana Demchuk
138	*Soft Electrospun SiO_2 Nanofibrous Membranes with Enhanced Tensile Strength for Thermal Insulation*	Lvye Dou
139	*PVDF Nanofibers with High Piezoelectric Performance via Touch Spinning Process*	Huipu Gao
140	*Aligned Webs of Silica Nanofibers with Controlled Density*	Alexey Gruzd
141	*The Comparison of Polyvinylidene Fluoride (PVDF) and Polypropylene (PP) Barbed Sutures in Patellar Tendon*	Yihan Huang
142	*New Polymer Resin from Camelina Oil for Packaging Application*	Elizabeth Hughes
143	*Water Vapor Permeability and Mechanical Properties of Fabric Coated with Stimuli-responsive Shape Memory Polyurethane*	Md Anwar Jahid
144	*Study on the Feasibility of Textile Electrodes for Respiration-sensing Garments*	Dong Jin Jeon
145	*Study of the Air Drying and Epoxy-Amine-cured Coatings Derived from Renewable-based Poly(vinyl ether)s*	Deep Kalita
146	*Application of Fibrous Collagen and Tropoelastin in Vascular Tissue Engineering*	Martin King
148	*Development and Polymerization of Methacrylate Functionalized Kraft Lignin Resin*	Eric Krall
149	*Ultrathin Mesh-like Polyacrylonitrile Nanonet Membranes with High-efficiency Air Filtration*	Hui Liu
150	*Chemical Crosslinked Thermoplastic Polymer Nanofiber Aerogels with Superelasticity and Superoleophilicity for Removal of Oils and Organic Solvents*	Jianwei Lu
151	*Fabrication of CeO_2 Fibers via Electrospinning Using Sol-Gel Method*	Jianxiang Ma
152	*Feasibility and Methodology in the Research of Fashion Design in China During the Ming Dynasty via Water and Land Paintings*	Meng Niu

154	*Natural Indigo-based Nanocellulose Gel Dyeing of Cotton Textiles*	Smriti Rai
155	*Antimicrobial Textiles to Reduce the Need for Laundering of Chemical/Biological Garments*	Molly Richards
153	*Blends of Biosynthethic and Natural Fibers for Eco-efficient Yarns and Carpets*	D. Schmelzeisen for I. Noll
156	*Structural Analysis of Melt-processed Polyethylene Products Containing Micro-fibrillated Cellulose Fibers*	Yuta Sekiguchi
157	*Polystyrene-grafted Soybean Oil as a Processing Oil for SBR Rubber Compounds*	Olena Shafranska
158	*Metal Oxide Nanoparticle-Polymer Interactions*	Peter Stenhouse
159	*Aligned Drawn Fibers Improve the Axon Infiltration into Spinal Cord Bridges*	Kateřina Strnadová
160	*Nanofibrous Composite Membrane with Ultrafine Nanonet Structure for High-flux and Low-pressure Microfiltration*	Ning Tang
161	*Superelastic and Superhydrophobic Nanofibrous Aerogels for Oil/Water Separation*	Fei Wang
162	*Effect of Shortening Velocity is Constant in the Circumferential Strain-Torque Biomechanical Model: Another Evidence*	Xi Wang
163	*Transfer of Paint Dust from Different Carpets*	Shuangyan Wu
164	*Preparation and Thermal Management of Fatty Acid Ester @ Silica/Polyamide 6 Energy Storage Thermostat Material*	Wei Xia
165	*Developing Sustainable and Smart Solar Power-controlled Apparel*	Chunhui Xiang
166	*Harvesting Irregular Mechanical Energy by Triboelectric Nanogenerator Based on Cost-effective Thermoplastic Polymer Nanofiber*	Shan Yan
167	*A Comparative Study on the In Vitro Hemodynamics of Polyester Heart Valves*	Atieh Yousefi
168	*Catalyzed Non-isocyanate Polyurethane (NIPU) Coatings from Bio-based Cyclic Carbonates*	Arvin Yu
169	*Fabrication of Environmental Waterproof and Breathable Macroporous Membranes via Electrospinning Using Green Solvent*	Xi Yu
170	*Selective Degradation of Fibrillated Nanocellulose Materials*	Andrey Zakharchenko
171	*Chitosan-treated Antibaterial 3D Knitted Spacer Fabric as a Wound Dressing*	DaXian Zha
172	*The Influence of Polyester Melt in Spinneret Hole with Shear Flow on Spinning Dynamics*	Fan Zhang
173	*Soft TiO_2 Nanofibrous Membrane for Efficient Water Purification*	Meng Zhang
174	*In Vitro Accelerated Fatigue Performance of Stent Grafts Deployed in a Patient's Aortic Aneurysm Using a Chimney Approach*	Runqian Zhang
175	*Polymeric Cellulosomes for Cellulose Bioconversion*	Oksana Zholobko
176	*Preparation and Antibacterial Activity of PET/Cu_2O Nano Composite Fiber*	Jialiang Zhou
177	*Effect of Gauge Length and Test Speed on Fiber Strength Utilization in Staple Spun Yarns*	Zakariya Zubair