

## Technical Program of the 2<sup>nd</sup> ISNCM in Tianjin, China (May 16-17, 2019)

### Main Symposium

May 16, 2019, Thursday Morning Sessions

Opening Ceremony (Conference Hall)    Chairman: Xuejun Pan

08:30-09:00	Welcome Remarks by <b>Fuping Lu</b> , Tianjin University of Science & Technology, China
	Remarks by <b>Xingyu Jiang</b> , Academic Committee of the 2 <sup>nd</sup> ISNCM, China
	Remarks by <b>Zhenlei Cao</b> , China Technical Association of Paper Industry, China
Plenary Speech 1 (Conference Hall)    Chairman: Xingyu Jiang	
09:00-09:40	<a href="#">Xuejun Pan</a> , Tianjin University of Science & Technology, China; University of Wisconsin, USA
	<a href="#">Preparation and Mechanistic Study of Cellulose II Nano-Materials (Nanocrystals and Aerogels) from Cellulose and Whole Biomass.</a>
Plenary Speech 2 (Conference Hall)    Chairman: Xingyu Jiang	
09:40-10:20	<a href="#">Lars A Berglund</a> , KTH Royal Institute of Technology, Sweden
	<a href="#">Cellulose Nanomaterials-Nanostructural Control and Technical Considerations.</a>
10:20-10:40	Tea/Coffee Break
Plenary Speech 3 (Conference Hall)    Chairman: Xuejun Pan	
10:40-11:20	<a href="#">Liangbing Hu</a> , University of Maryland, USA
	<a href="#">Wood Nanotechnologies.</a>
Plenary Speech 4 (Conference Hall)    Chairman: Xuejun Pan	
11:20-12:00	<a href="#">Feng Xu</a> , Beijing Forestry University, China
	<a href="#">Preparation and Application of Nanocellulosic Functional Materials.</a>
12:00-13:00	Lunch

May 16, 2019, Thursday Afternoon Sessions

	Session 1 (Conference Hall)	Session 2 (Room 1)	Session 3 (Room 2)
Session Chairman	<b>Chao Tian</b>	<b>Min Wu</b>	<b>Yongjian Xu</b>
13:30-14:00 (Invited Speaker)	To be determined. Speaker: <b>Lars Sandberg</b> BillerudKorsnäs Co., Sweden	Cellulose Nanomaterials by Mechanochemical Treatments. Speaker: <b>Shigenori Kuga</b> University of Tokyo, Japan	Controllable Fabrication and Biomedical Applications of Functional Bacterial Cellulose. Speaker: <b>Guang Yang</b> Huazhong University of Science & Technology, China
14:00-14:20	Nanocellulose-Assistant Carbon Aerogels for Flexible Pressure Sensor. Speaker: <b>Linxin Zhong</b> South China University of Technology, China	Preparation and Performance of A Novel Proton Exchange Membrane Based on Nanocellulose Grafted with Purine Structure. Speaker: <b>Guanglei Zhao</b> South China University of Technology, China	Heterologous Expression of Endoglucanases and Application in Preparation of Nanocellulose Using Avicel as Substrate. Speaker: <b>Jian Zhao</b> Shandong University, China
14:20-14:40	High Efficiency Electrospun Nanocellulose/ Sulfonated Poly(aryl Ether Ketone) Containing Carboxylic Groups for Proton Exchange Membrane. Speaker: <b>Wei Hu</b> Northeast Normal University, China	Effect of Enzymatic Pretreatment Conditions on Properties of Pulp and Cellulose Nanofibrils. Speaker: <b>Shin Young Park</b> Seoul National University, Korea	Stimuli-Responsive Cellulose Nanofiber-Derived Porous Materials. Speaker: <b>Xiaofeng Sui</b> Donghua University, China
14:40-15:00	Simultaneous Preparation and Functionalization of Cellulose Nanocrystals and Their Use for Multilayer Composite Films Preparation. Speaker: <b>Arun Saini</b> Shaanxi University of Science and Technology, China	Strength Improvement of PCC Containing Paper by Co-Refining of PCC and CNF. Speaker: <b>Shunxi Song</b> Shaanxi University of Science & Technology, China	The Strategy of Using Innocuous Citric Acid to Prepare Carboxylic Nanocellulose in One-Step. Speaker: <b>Tao Song</b> South China University of Technology, China
15:00-15:20	Coffee/Tea Break		

**May 16, 2019, Thursday Afternoon Sessions**

	Session 4 (Conference Hall)	Session 5 (Room 1)	Session 6 (Room 2)
<b>Session Chairman</b>	<b>Zhong Liu</b>	<b>Xiaoying Wang</b>	<b>Wei Hu</b>
<b>15:20-15:50 (Invited Speaker)</b>	Different Strategies to Prepare Nanocelluloses. Speaker: <b>Yonghao Ni</b> University of New Brunswick, Canada	A Novel Process for Nanocellulose via Cellulose Oxalate. Speaker: <b>Monica EK</b> KTH Royal Institute of Technology, Sweden	Engineering Bio-Inspired Transparent and Homogenous Cellulose Nanocrystals-Lignin UV Protection Films. Speaker: <b>Zhihua Jiang</b> Auburn University, USA
<b>15:50-16:10</b>	Tailored and Integrated Production of Functional Cellulose Nanocrystals and Cellulose Nanofibrils via Sustainable Formic Acid Hydrolysis: Kinetic Study and Characterization. Speaker: <b>Bin Li</b> Qingdao Institute of Bioenergy and Bioprocess Technology, Chinese Academy of Sciences, China	An Environment-Friendly and Robust Cellulose Nanocrystal Superhydrophobic Coating for Self-Cleaning and Oil-Water Separation Prepared only by Simple Spraying. Speaker: <b>Shaoyi Lyu</b> Research Institute of Wood Industry, Chinese Academy of Forestry, China	Superhydrophobic Magnetic Cellulose Nanocrystals for Particle-Stabilized Droplet. Speaker: <b>Hui Wu</b> Fujian Agriculture and Forestry University, China
<b>16:10-16:30</b>	Functional 2D/3D Materials from Nanocellulose. Speaker: <b>Lei Dai</b> Shaanxi University of Science and Technology, China	Engineering Nanocellulose-Based ECM Mimics for Biomedical Application. Speaker: <b>Jun Liu</b> Jiangsu University, China	Preparation of Cellulose Aerogel Made from Nanofibrillated Cellulose. Speaker: <b>Chen Gong</b> China National Pulp and Paper Research Institute Co. Ltd., China
<b>16:30-16:50</b>	Utilization of Nanocellulose Materials in Upstream Petroleum Industry: Prospect and Challenge. Speaker: <b>Bing Wei</b> Southwest Petroleum University, China	Cellulose Triacetate Porous Membranes via Combined Nonsolvent-Thermally Induced Phase Separation. Speaker: <b>Qingyun Wu</b> Ningbo University, China	Nanocellulose-Templated Synthesis of TiO <sub>2</sub> Nanocomposites for Water Purification. Speaker: <b>Yanxiang Li</b> Institute of Process Engineering, Chinese Academy of Sciences, China
<b>16:50-17:10</b>	Nanocellulose Preparations and Applications Related in Pulp & Paper Industry. Speaker: <b>Hongbin Liu</b> Tianjin University of Science & Technology, China	Preparation and Properties of Biodegradable Nanocomposite Films Reinforced with Nanocrystalline Cellulose. Speaker: <b>Yanjun Tang</b> Zhejiang Sci-Tech University, China	Preparation and Application of Precipitated Calcium Carbonate-Cellulose Nanofibril Composite Filler in Filler-Containing Paper. Speaker: <b>Ming He</b> Qilu University of Technology, China
<b>18:00-19:00</b>	<b>Dinner</b>		

**May 17, 2019, Friday Morning Sessions**

	Session 7 (Conference Hall)	Session 8 (Room 1)	Session 9 (Room 2)
<b>Session Chairman</b>	<b>Guigan Fang</b>	<b>Fangong Kong</b>	<b>Monica EK</b>
<b>08:30-09:00 (Invited Speaker)</b>	Nanofibrillated Cellulose for Green-Based Waxy Paper and Stabilizing Pickering Emulsion. Speaker: <b>Huining Xiao</b> University of New Brunswick, Canada	Cellulose-Based Biocompatible Injectable Hydrogel Composite for pH-Responsive and Controllable Drug Delivery. Speaker: <b>Zhaohui Tong</b> University of Florida, USA	Cellulose: A Sustainable Platform for Organized Matter. Speaker: <b>Yan Xu</b> Jilin University, China
<b>09:00-09:30 (Invited Speaker)</b>	Manufacture of A Deep-Red Nano-Ink Based on Nanocellulose and Reactive Red 120. Speaker: <b>Shiyu Fu</b> South China University of Technology, China	Application of Lignonanocellulose Fibrils in Polymer Systems. Speaker: <b>Ning Yan</b> University of Toronto, Canada	Progress in Preparation and Application of Carboxyethylated Micro- and Nanofibrillated Cellulose. Speaker: <b>Jinghuan Chen</b> China National Pulp and Paper Research Institute Co. Ltd., China
<b>09:30-09:50</b>	3D Bio-Printing of Cell-Laden Bio-Polyurethane/ Cellulose Nanofibres Composite Hydrogel. Speaker: <b>Chandravati Yadav</b> Indian Institute of Technology, India	Functional Nanocelluloses Fabricated by Chemical Pre-Treatment. Speaker: <b>Haisong Qi</b> South China University of Technology, China	Preparation of Nanocellulose and Its Application of Fabricating High-Strength and Intelligent Xylan-Based Hydrogels. Speaker: <b>Junli Ren</b> South China University of Technology, China
<b>09:50-10:10</b>	Preparation of Nanocellulose-Based Flame-Retardant Membrane and Its Application in Paper Products. Speaker: <b>Xingye An</b> Tianjin University of Science & Technology, China	Improvement to the Reactivity of Eucalyptus Fibers Using A Combined Mechanical Process. Speaker: <b>Yan Lin</b> Institute of Chemical Industry of Forestry Products, Institute of Chemical Industry of Forest Products, Chinese Academy of Forestry, China	Preparation and Properties of Nano Cellulose and Various Type of Thermoplastic Resin Composite and Its Biodegradability Effect. Speaker: <b>Ryohei Mori</b> 1. Green Science Alliance Co.,Ltd., Kawanishi-City, Hyogo Prefecture, Japan 2. Fuji Pigment Co.,Ltd., Kawanishi-City, Hyogo Prefecture, Japan
<b>10:10-10:30</b>	Coffee/Tea Break		

May 17, 2019, Friday Morning Sessions

	Session 10 (Conference Hall)	Session 11 (Room 2)	Session 12 (Room 3)
Session Chairman	Huining Xiao	Lijun Wang	Qingxi Hou
10:30-11:00 (Invited Speaker)	Nanocellulose-Based Functional Paper with Chitosan/ Inorganic Nanocomposites. Speaker: <b>Xiaoying Wang</b> South China University of Technology, China	Synthesis of CuFe <sub>2</sub> O <sub>4</sub> / Cellulose Nanocrystals Magnetic Composites and Its Catalysis Properties. Speaker: <b>Sufeng Zhang</b> Shaanxi University of Science and Technology, China	Removal of Cu (II), Pb (II) and Cr(VI) from Aqueous Solutions Using Nanocomposite Based on Cellulose Nanocrystal and Polyvinylamine. Speaker: <b>Qinghua Xu</b> Qilu University of Technology, China
11:00-11:20	Mechanism and Application of Cholesteric Cellulose Nanocrystals. Speaker: <b>Dagang Liu</b> Nanjing University of Information Science & Technology, China	Strong and Water Resistant Cellulose Nanopaper with Photo-Thermal Effect Prepared Based on a Sustainable Method. Speaker: <b>Chao Liu</b> Qingdao Institute of Bioenergy and Bioprocess Technology, Chinese Academy of Sciences, China	Green Preparation and Characterization of Cellulose Nanocrystal Film via Composite Enzymatic Hydrolysis for Wearable Gas Sensor. Speaker: <b>Wenhao Shen</b> South China University of Technology, China
11:20-11:40	Highly Transparent and Clear Nanopaper Substrates for High-Performance Amorphous In-Ga-Zn-O/Al <sub>2</sub> O <sub>3</sub> Thin-Film Transistors. Speaker: <b>Zhiqiang Fang</b> South China University of Technology, China	Fabrication of Lignocellulose Nanofiber as Functionan Cellulose Nanomaterial for Numerous Applications. Speaker: <b>Chinomso Ewulonu</b> Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, China	Cellulose Nanocrystals-Based Delivery Platforms for Hydrophobic Drugs and Their Potential Applications. Speaker: <b>Yulong Wang</b> Changsha University of Science & Technology, China
11:40-12:00	Mild Delignification to Produce Holo cellulose Fibers for Materials with High Strength and Transparency. Speaker: <b>Xuan Yang</b> KTH Royal Institute of Technology, Sweden	Combined Application of CNF and Latex for Improving Barrier Properties of Paper. Speaker: <b>Simyub Yook</b> Seoul National University, Korea	Micro Fibrillated Cellulose Reinforced Chitosan Coating on Kraft Paper. Speaker: <b>Jannatun Nayeem</b> Bangladesh Council for Scientific and Industrial Research, Bangladesh
12:00-13:00	<b>Lunch</b>		

May 17, 2019, Friday Afternoon Sessions	
13:30-15:00	Poster Presentation (Conference Hall)
15:00-15:30	Tea/Coffee Break
Plenary Speech 5 (Conference Hall) Chairman: Yonghao Ni	
15:30-16:10	<a href="#">Yoshiharu Nishiyama, National Center for Scientific Research, France</a>
	<a href="#">Challenges and Chances Offered by Nanocellulose: a Ubiquitous and Unique Building Block.</a>
Plenary Speech 6 (Conference Hall) Chairman: Yonghao Ni	
16:10-16:50	<a href="#">Satoshi Hirata, National Institute of Advanced Industrial Science and Industry, Japan</a>
	<a href="#">R&amp;D and Industrialization of Cellulose Nanomaterials in Japan.</a>
Closing Ceremony (Conference Hall) Chairman: Yonghao Ni	
16:50-17:20	Announcements of the 3 <sup>rd</sup> ISNCM 2021
	Announcements of the 4 <sup>th</sup> IPEC 2020
	Remarks by <b>Chunyu Cao</b> , China Technical Association of Paper Industry, China
	Conference Closing Remarks by <b>Fuping Lu</b> , Tianjin University of Science & Technology, China
18:30-20:30	Conference Banquet

Poster List			
No.	Title	Authors	Organization/ Institution
1	Green Macro Preparation and Mechanism Research of Nanocellulose Based on Radiation Degradation Effect	Bei Yang <sup>1,2</sup> , Guoshi Cui <sup>1,2*</sup> , Hongying Zhao <sup>1,2</sup> , Xingjuan Shu <sup>1,2</sup> , and Ru Fan <sup>1,2</sup>	<sup>1</sup> Henan Kegao Radiation Chemical Technology Co. Ltd. <sup>2</sup> Henan Key Laboratory for Radiation Chemistry Advanced Materials
2	Fluorescent Aerogels Based on Chemical Crosslinking Between Green Nanocellulose and Carbon Dots for Optical Sensor	Bolang Wu, and Ning Lin*	Wuhan University of Technology
3	Preparation of Cellulose Aerogel Made from Nanofibrillated Cellulose	Chen Gong*, Jianping Ni, Yu Shi, Xiaobo Yang, Yanzhao Liu, and Chao Tian*	China National Pulp and Paper Research Institute Co., Ltd.
4	Preparation, Characterization and Mechanical Properties in Nanopapers of Holocellulose Nanofibrils from Bagasse	Cunzhi Zhang <sup>1</sup> , Guixian Chen <sup>1</sup> , Jie Yu <sup>1</sup> , Xiao Feng <sup>1</sup> , and Haisong Qi <sup>1,2*</sup>	<sup>1</sup> South China University of Technology <sup>2</sup> Guangdong Engineering Research Center for Green Fine Chemicals
5	Green, Recyclable Additives for Miniaturization and Nanotexturization of Regular Cellulosic Paper	Dong Wu, Limei Li, Ying Wang, Zhengren Meng, Xueren Qian, Yongsheng Wang, and Jing Shen*	Northeast Forestry University
6	Preparation and Characterization of Nanocellulose-Based Electroactive Composites	Fang Wang, Chong Xie, Liying Qian, Beihai He, and Junrong Li*	South China University of Technology
7	Microfibrillated Cellulose Enhancement to Mechanical and Conductive Properties of Biocompatible Hydrogels	Fengcai Lin, Zi Wang, Lirong Tang, Biao Huang*, and Beili Lu*	Fujian Agriculture and Forestry University

8	In-Situ Precipitation Synthesis of Fe <sub>3</sub> O <sub>4</sub> @wood Sponge and Its Application in Fenton-Like Degradation of Methylene Blue	Guixian Chen <sup>1</sup> , Cunzhi Zhang <sup>1</sup> , Ming Wang <sup>1</sup> , and Haisong Qi <sup>1,2*</sup>	<sup>1</sup> South China University of Technology <sup>2</sup> Guangdong Engineering Research Center for Green Fine Chemicals
9	A Novel Method to Prepare Lignocellulose Nanofibrils Directly from Bamboo Chips	Hailong Lu <sup>1,2</sup> , Lili Zhang <sup>1,2</sup> , Jinxia Ma <sup>1</sup> , Zhibin He <sup>2</sup> , Xiaofan Zhou <sup>1*</sup> , and Yonghao Ni <sup>2</sup>	<sup>1</sup> Nanjing Forestry University <sup>2</sup> University of New Brunswick
10	Preparation of Lithium Ion Composite Battery Separator from Rice Husk	Haixia Zhu*, Junrong Li, and Liying Qian	South China University of Technology
11	Study on the Critical Concentration of Clogging in High-Pressure Homogenizer	Haowei Hu <sup>1</sup> , Haoji <sup>2</sup> , Jiali Pu <sup>1</sup> , Yulong Tian <sup>1</sup> , Qi Zhang <sup>2</sup> , and Xuejin Zhang <sup>1*</sup>	<sup>1</sup> Zhejiang University of Science and Technology <sup>2</sup> Zhejiang Kaifeng Special Paper Co. Ltd.
12	Preparation of Acyl Functionalized Cellulose Nanocrystals via A One-Step Strategy from Cellulose Pulp	Hui Wang, Hongxiang Xie, and Chuanling Si*	Tianjin University of Science and Technology
13	Investigation on Application of Cellulose Derivatives/ Rare Earth Metal Ions Composites on Fluorescent Cellulosic Paper	Huiming Liu, Jun Ye, and Jian Xiong*	South China University of Technology
14	Carboxymethyl Chitosan as An Imine-Based Dynamic Covalent Crosslinker for Generating Self-Healing Hydrogels from Cellulose Micro/ Nanocrystals	Jia Zhang, Xueren Qian, and Jing Shen*	Northeast Forestry University



15	Preparation of Nanofibrillated Cellulose and Application in Reinforced PLA/ Starch Nanocomposite Film	Jiangchun Mao, Ruonan Zhao, Xiaoyu Wang, Danning Fu, and Yanjun Tang*	Zhejiang Sci-Tech University
16	Healable Polyacrylamide/ Cellulose Nanofibers Nanocomposite Hydrogels with Excellent Mechanical Properties	Jianquan Wang*, Xiaofu Dai, Jiabao Niu, and Ziqiang Shao	Beijing Institute of Technology
17	Preparation of CMC/ SiO <sub>2</sub> / CNFs Composite Film and Its Properties	Jianxin Liu <sup>1,2</sup> , Bo Wang <sup>1,2</sup> , Yongzhi Wang <sup>1,2</sup> , Ken Chen <sup>1,2</sup> , and Ziqiang Shao <sup>1,2*</sup>	<sup>1</sup> Beijing Institute of Technology <sup>2</sup> Beijing Engineering Research Centre of Cellulose and Its Derivatives
18	Effects of Different Pretreatment on Barrier Properties of Lignin-Containing Nanocellulose Films	Jiaqian Luo, Yanqun Su*, Jingang Liu, and Jinghuan Chen	China National Pulp and Paper Research Institute Co., Ltd.
19	Oxidized Microcrystalline Cellulose Improve the Application Properties of Thermoplastic Starch-Based Composite Films	Jie Chen, Yahui Meng, Zhu Long*, Ruqiang Zhang, and Guoliang Zhang	Jiangnan University
20	Preparation of Carboxymethyl Nanocellulose Fibers with Tree-Like Structure and Its Effect on Stabilizing Pickering Emulsions	Jie Wei, and Ziqiang Shao*	Beijing Institute of Technology
21	Controllable Pore Structure and Physical Properties of Nanofibrillated Cellulose (NFC)-Based Foam Materials	Jinbao Li*, Xue Yang, Huijuan Xiu, Jingyi Nie, Feiyan Ma, Pan Feng, and Xin Zhao	Shaanxi University of Science & Technology
22	Nucleation-Induced Regenerated Cellulose I	Jinfeng Liu <sup>1,2</sup> , Shigenori Kuga <sup>1</sup> , Min Wu <sup>1*</sup> , and Yong Huang <sup>1*</sup>	<sup>1</sup> Technical Institute of Physics and Chemistry, CAS <sup>2</sup> University of Chinese Academy of Sciences

23	Preparation and Pore Regulation of Carboxyethylated Micro-/ Nano-Cellulose Films	Jinghuan Chen <sup>1,2</sup> , Jingang Liu <sup>1,2*</sup> , Meican Li <sup>1</sup> , Yanfen Du <sup>1,2</sup> , Bisong Wang <sup>1,2</sup> , and Hongcai Li <sup>1,2</sup>	<sup>1</sup> China National Pulp and Paper Research Institute Co. Ltd. <sup>2</sup> National Engineering Laboratory of Pulp and Paper
24	Lignin-Containing Nanocellulose Films Prepared from Corncob Residue	Jinghuan Chen <sup>1,2</sup> , Jingang Liu <sup>1,2*</sup> , Yanqun Su <sup>1,2</sup> , Ruijuan Zhang <sup>1,2</sup> , and Zehong Xu <sup>1,2</sup>	<sup>1</sup> China National Pulp and Paper Research Institute Co. Ltd. <sup>2</sup> National Engineering Laboratory of Pulp and Paper
25	Application of Nanofibrillated Cellulose in Controlled Release and Long-Term Antibacterial Composites	Jinpeng Li <sup>1</sup> , Bin Wang <sup>1*</sup> , Kefu Chen <sup>1</sup> , Xiaojun Tian <sup>2</sup> , Jinsong Zeng <sup>1</sup> , Jun Xu <sup>1</sup> , Wenhua Gao <sup>1</sup> , and Zhou Ge <sup>1</sup>	<sup>1</sup> South China University of Technology <sup>2</sup> SDIC Biotech Investment Co., Ltd.
26	Adsorption of Ni(II) from Aqueous Solutions by Amino-Terminated Hyperbranched Polymer Grafted Dialdehyde-Based Nanocellulose	Jinwei Chen, Shibin Shang, Mingguai Shen, and Dan Wang*	Institute of Chemical Industry of Forest Products, CAF
27	Compressible Aerogel Based on Cellulose Nanofibrils for Methyl Orange and Copper Ion Removal	Juntao Tang <sup>1*</sup> , Feiping Zhao <sup>2</sup> , and Kam Chiu Tam <sup>2</sup>	<sup>1</sup> Central South University <sup>2</sup> University of Waterloo
28	Preparation and Characterization of Paper Softeners by Copolymerization of Polyurethane and Amino Silicone Oil	Kaijie Cheng, and Xiumei Zhang*	Zhejiang Sci-Tech University
29	High-Efficiency Transfer of Fingerprints from Various Surfaces Using Nanofibrillated Cellulose	Keying Long <sup>1,2</sup> , Yang Liu <sup>2</sup> , Hanbing Mi <sup>2</sup> , Ruitao Cha <sup>2*</sup> , and Xingyu Jiang <sup>2,3,4*</sup>	<sup>1</sup> Research Institute of Wood Industry, Chinese Academy of Forestry <sup>2</sup> National Center for NanoScience and Technology <sup>3</sup> Southern University of Science and Technology <sup>4</sup> University of Chinese Academy of Sciences

30	Influence Factor of Zero-Span Tensile Strength	Kunpeng Li, Beihai He, Lihong Zhao*, and Haidong Li	South China University of Technology
31	Dyed Cellulose Nanocrystals as Reinforcement Lipstick Substrates for Inhibiting Color Migration	Lei Kang, Jian Jia, Jinpeng Li, Bin Wang*, Jinsong Zeng, Wenhua Gao, Jun Xu, and Kefu Chen	South China University of Technology
32	A Nanocellulose-Reinforced Gel Polymer Electrolyte towards Long-Life and Dendrite-Free Lithium Metal Anodes	Lei Li <sup>1,2</sup> , Ken Chen <sup>1,2</sup> , and Ziqiang Shao <sup>1,2*</sup>	<sup>1</sup> Beijing Institute of Technology <sup>2</sup> Beijing Engineering Research Centre of Cellulose and Its Derivatives
33	Preparation of Nanocellulose by Cellulase Hydrolysis under Sonication-Assisted	Linna Lu, and Qilin Lu*	Minjiang University
34	Preparation of Multifunctional Cellulosic Fabric Based on Graphene/ TiO <sub>2</sub> Nano Composite	Rahman Md Mostafizur, Dayoung Hong, Chao Wang, and Min Wu*	Technical Institute of Physics and Chemistry, Chinese Academy of Sciences
35	Effects of Cellulose Nanocrystals on the Performance of Transformer Insulating Paper	Meicun Kang, Qijie Chen*, Zhi Rong, Zhangyang Zong, and Xin Gao	Changsha University of Science and Technology
36	A Facile Method to Prepare Strong Cellulose Nanopaper with Excellent Water Resistance	Meiyan Wu, Guang Yu, Chao Liu, Yuedong Zhang, and Bin Li*	Qingdao Institute of Bioenergy and Bioprocess Technology, Chinese Academy of Sciences

37	Synthesis of 1-Allyl-3-Methylimidazolium Chloride and Its Application in Dissolving Cotton Fibers	Mengke Zhao <sup>1,2</sup> , Sufeng Zhang <sup>1,3</sup> , Guigan Fang <sup>2*</sup> , and Kuizhong Shen <sup>2</sup>	<sup>1</sup> Shaanxi University of Science and Technology <sup>2</sup> Institute of Chemical Industry of Forestry Products <sup>3</sup> South China University of Technology
38	Synergistic Effects of Microwave and Sonication via Molten Solid Acid Hydrolysis on the Fabrication of Functionalized Cellulose Nanocrystals with High Efficiency	Qilin Lu <sup>1</sup> , Linna Lu <sup>1</sup> , and Biao Huang <sup>2*</sup>	<sup>1</sup> Minjiang University <sup>2</sup> Fujian Agriculture and Forestry University
39	A Facile Preparation Strategy for Conductive and Magnetic Agarose Hydrogels with Reversible Restorability Composed of Nanofibrillated Cellulose, Polypyrrole, and Fe <sub>3</sub> O <sub>4</sub>	Qinhua Wang, Kai Liu, Lihui Chen, Liulian Huang, Yonghao Ni*, Zhenwei Xu, Shan Lin, and Hongping Wang	Fujian Agriculture and Forestry University
40	Preparation of Cellulose Nanocrystals via a Mixed H <sub>2</sub> SO <sub>4</sub> / Oxalic Acid Hydrolysis	Rui Xu, Zhufan Zou, Hui Wang, Xianghao Yang, Hongxiang Xie*, and Chuanling Si*	Tianjin University of Science and Technology
41	Mathematical Modelling and Dynamic Kinetics of Heterogeneous Enzymatic Pretreatment of Softwood Fiber	Shengdan Wang, Wenhua Gao*, Kefu Chen, and Jinsong Zeng	South China University of Technology
42	Preparation and Characterization of Nanocrystalline Cellulose/ Polyvinylidene Fluoride Ultrafiltration Membranes Blended with Graphene Oxide	Shujuan Yang, Qinfeng Zou, and Liping Zhang*	Beijing Forestry University
43	Comparison of the Effects of Two Additives on the Brittleness of Cellulose Nanocrystals	Tao Lin*, Jing Li, Dingjun Zhang, and Min Duan	Shaanxi University of Science and Technology

44	Aminosilane-Grafted Spherical Cellulose Nanocrystal Aerogel with High CO <sub>2</sub> Adsorption Capacity	Tianmeng Zhang, Yang Zhang*, Hua Jiang, and Xiaoyu Wang	Nanjing Forestry University
45	Heterologous Expression of Endoglucanases and Application in Preparation of Nanocellulose Using Avicel as Substrate	Tiantian Yang, Xuezhi Li, and Jian Zhao*	Shandong University
46	Cellulose-Based Material for Effectively Removing Radionuclides from Seawater	Ting Wang <sup>1,2</sup> , Jinpei Li <sup>1,2*</sup> , Min Wu <sup>1,2*</sup> , and Yong Huang <sup>1*</sup>	<sup>1</sup> Technical Institute of Physics and Chemistry, Chinese Academy of Sciences <sup>2</sup> University of Chinese Academy of Sciences
47	A Novel Transparent and Flame Retardant Wood	Tongling Zhang <sup>1,2</sup> , Min Wu <sup>1*</sup> , and Yong Huang <sup>1</sup>	<sup>1</sup> Technical Institute of Physics and Chemistry, Chinese Academy of Sciences <sup>2</sup> University of Chinese Academy of Sciences
48	Sustainable Preparation of Surface-Functionalized Cellulose Nanofibrils via Formic Acid Hydrolysis Pretreatment Combined with High-Pressure Homogenization	Wei Liu <sup>1</sup> , Haishun Du <sup>2</sup> , Xinyu Zhang <sup>2</sup> , Xiaoyi Zhang <sup>1</sup> , Chuanling Si <sup>1*</sup> , and Bin Li <sup>3*</sup>	<sup>1</sup> Tianjin University of Science and Technology <sup>2</sup> Auburn University, Auburn <sup>3</sup> Qingdao Institute of Bioenergy and Bioprocess Technology, Chinese Academy of Sciences
49	Morphology Control for Tunable Optical Properties of Cellulose Nanofibrils Films	Weisheng Yang, and Hongqi Dai*	Nanjing Forestry University
50	Binary Strengthening and Toughening of MXene/ Cellulose Nanofiber Composite Paper with Nacre-Inspired Structure and Superior Electromagnetic Interference Shielding Properties	Wentao Cao <sup>1,2</sup> , Feifei Chen <sup>2</sup> , Yingjie Zhu <sup>2*</sup> , Yonggang Zhang <sup>2</sup> , Yingying Jiang <sup>2</sup> , Mingguo Ma <sup>1*</sup> , and Feng Chen <sup>2*</sup>	<sup>1</sup> Beijing Forestry University <sup>2</sup> Shanghai Institute of Ceramics, Chinese Academy of Sciences

51	Conductive Cellulose Paper	Xi Chen, Min Wu*, and Yong Huang*	Technical Institute of Physics and Chemistry CAS
52	Simultaneously Strong and Tough All-Cellulose Nanocomposite Films by Controlling the Concentration of Regeneration Solution	Xiaofang Zhang, Tongping Zhang, and Yongxin Duan*	Qingdao University of Science & Technology
53	Ultrasoft Self-Healing Nanoparticle-Hydrogel Composites with Conductive and Magnetic Properties	Xiaofeng Pan*	Fujian Agriculture and Forestry University
54	Preparation of Highly Hydrophobic Cellulose Nanofiber/ Polylactic Acid Composite Aerogels as Effective Oil-Water Separation	Xiaojun Qi, and Hongxia Liu*	Guilin University of Technology
55	Separation of Cellulose Nanofibers Based on Their Length by Spiral Microchannel	Xiaojun Wang, Qijun Ding, Runyu Li, Jinsong Zeng*, and Kefu Chen	South China University of Technology
56	Water-Dispersible, Thermoplastic, and Microcellulosic Fibers as Building Blocks for Structurally Reversible Paper	Xiaoyan Yu, Jian Li, Yujia Pei, Xueren Qian, and Jing Shen*	Northeast Forestry University
57	Preparation and Properties of Polylactic Acid-Polyaniline-Nanocomposite Films in the Presence of Nanocrystalline Cellulose	Xiaoyu Wang, Ruonan Zhao, Jiangchun Mao, Danning Fu, and Yanjun Tang*	Zhejiang Sci-Tech University

58	Green Preparation of High Purity Nanocellulose via Hydrothermal Treatment and Magnesium Oxide Catalyzed Delignification Process	Xiaoyu Wang <sup>1</sup> , Yetao Jiang <sup>1*</sup> , Miao Zuo <sup>2</sup> , Chao Tang <sup>3</sup> , and Yubo Yan <sup>3</sup>	<sup>1</sup> Huaiyin Normal University <sup>2</sup> Xiamen University <sup>3</sup> Huaiyin Normal University
59	Green Preparation and Characterization of Cellulose Nanocrystal Film via Composite Enzymatic Hydrolysis for Wearable Gas Sensor	Xin Tong <sup>1,2</sup> , Jing Zhou <sup>1</sup> , Wenhao Shen <sup>1*</sup> , and Xiaoquan Chen <sup>1</sup>	<sup>1</sup> South China University of Technology <sup>2</sup> University of Electronic Science and Technology of China
60	High Transparency and Optical Haze Cellulose Nanopaper as Ultraviolet Filter	Xin Zhang, Fafa Song, Zhao Zhang, and Xinping Li <sup>*</sup>	Shaanxi University of Science and Technology
61	A Novel Conductive Cellulose Nanopaper with Excellent Electromagnetic Interference Shielding Property	Xinpeng Che <sup>1,2</sup> , Chao Liu <sup>1</sup> , Huanfei Xu <sup>2</sup> , and Bin Li <sup>1*</sup>	<sup>1</sup> Qingdao Institute of Bioenergy and Bioprocess Technology, Chinese Academy of Sciences <sup>2</sup> Qingdao University of Science and Technology
62	Preparation and Properties of Thermoresponsive Carboxymethyl Cellulose/Poly(NVCL-co-AM) Composite Hydrogel	Xinxin Yang, He Liu <sup>*</sup> , and Dan Wang	Institute of Chemical Industry of Forestry Products, Chinese Academy of Forestry
63	Preparation of Immobilized Enzyme onto Cellulose Nanocrystals Based on Waste Paper	Xinyue Xing, Ying Han <sup>*</sup> , Qiwen Jiang <sup>*</sup> , Xing Wang, and Yao Li	Dalian Polytechnic University
64	Preparation of Salt Tolerance and Thermal Stability Cellulose Nanofibril Hydrogels and Its Application in Oil Well Cementing	Xiongli Liu <sup>1,5</sup> , An Wang <sup>1,5</sup> , Chunping Wang <sup>1,5</sup> , Jialei Qu <sup>1,5</sup> , Bin Chen <sup>3</sup> , Zhong guang Wang <sup>3</sup> , Binbin Wu <sup>3</sup> , Bing Wei <sup>4</sup> , Zhaoyang Yuan <sup>2</sup> , and Yangbing Wen <sup>1,5*</sup>	<sup>1</sup> Tianjin University of Science and Technology <sup>2</sup> Michigan State University <sup>3</sup> CNOOC Drilling & Production Technology Research Institute <sup>4</sup> Southwest Petroleum University <sup>5</sup> Tianjin Woodelf Biotechnology Co. Ltd.

65	In Situ Precipitation of CuS Nanocrystals on Cellulose Nanofibers with Quaternized Chitosan as Stabilizer and Adhesive to Prepare Composite Paper for High-Performance Supercapacitors	Xiujie Huang <sup>1</sup> , Yichen Li <sup>2</sup> , Chuanfu Liu <sup>2</sup> , Xiaoying Wang <sup>2*</sup> , and Runcang Sun <sup>3</sup>	<sup>1</sup> Northeast Forestry University <sup>2</sup> South China University of Technology
66	Preparation of Nanocelluloses from Gramineae	Xuelian Zhang <sup>1*</sup> , Xuewen Huang <sup>1</sup> , Meng Wang <sup>2</sup> , and Feng Xu <sup>2</sup>	<sup>1</sup> Hulunbuir University <sup>2</sup> Beijing Forestry University
67	Preparation of Lignocellulose Nanofibers Through a Facile and Eco-Friendly Method	Xuran Liu <sup>1,2</sup> , Min Wu <sup>1,2*</sup> , and Yong Huang <sup>1*</sup>	<sup>1</sup> Technical Institute of Physics and Chemistry, Chinese Academy of Sciences <sup>2</sup> Center of Materials Science and Optoelectronics Engineering, University of Chinese Academy of Sciences
68	Mesoporous Polydopamine Nanoparticles Wrapped with Graphene Oxide and Physically Crosslinked in Nanocellulose Hydrogels for Drug Delivery	Yingying Liu <sup>1,2</sup> , Qing Fan <sup>3</sup> , Weiyuan Zhang <sup>3</sup> , Chao Liu <sup>1</sup> , Bin Li <sup>1*</sup> , and Youming Li <sup>2*</sup>	<sup>1</sup> Qingdao Institute of Bioenergy and Bioprocess Technology, Chinese Academy of Sciences <sup>2</sup> South China University of Technology <sup>3</sup> Qingdao University
69	Using Water-Soluble Macromolecules to Improve the Stability of Cellulose Nanofibrils (Cnfs) Aqueous Dispersion	Yi Zhou <sup>1,2</sup> , Jie Wei <sup>1,2</sup> , Yanyan Lv <sup>1,2</sup> , and Ziqiang Shao <sup>1,2*</sup>	<sup>1</sup> Beijing Institute of Technology <sup>2</sup> Beijing Engineering Research Centre of Cellulose and Its Derivatives
70	Nanocellulose in Functional Packaging Applications	Yong Lv <sup>1,3*</sup> , Shuhua Tong <sup>2</sup> , Ci Song <sup>1</sup> , and Gaorong Han <sup>3</sup>	<sup>1</sup> Yiwu industrial & commercial college <sup>2</sup> Zhejiang Jinchang Specially Paper Co., Ltd. <sup>3</sup> Zhejiang University
71	Preparation and Performance of A Novel Proton Exchange Membrane Based on Nanocellulose Grafted with Purine Structure	Yuanyuan Chen, Guanglei Zhao <sup>*</sup> , Sihan Zhang, Chong Xie, and Jiming Wang	South China University of Technology



72	Modification of Cellulose Nanocrystals and Their Reinforced PLA Composite	Yuanyuan Yin <sup>1</sup> , Xiuzhi Tian <sup>1</sup> , and Xue Jiang <sup>1,2*</sup>	<sup>1</sup> Jiangnan University <sup>2</sup> South China University of Technology
73	A Pickering Emulsion Route to 1,4-DHAQ@CNF/ PLA Composite Aerogel as Fluorescent Probes for Cu <sup>2+</sup> Detection	Yupeng Guan, Changbing Zhou, Xiaojun Qi, Xinyue Liu, and Hongxia Liu*	Guilin University of Technology
74	Cinnamate-Functionalized Cellulose Nanocrystals as UV-Shielding Nanofillers in Sunscreen and Transparent Polymer Films	Zhen Zhang <sup>1,2</sup> , Boya Zhang <sup>2</sup> , Nathan Grishkewich <sup>2</sup> , Richard Berry <sup>3</sup> , and Kam C. Tam <sup>2*</sup>	<sup>1</sup> South China Normal University, Guangzhou <sup>2</sup> University of Waterloo <sup>3</sup> CelluForce Inc.
75	Nano-Enabled “Smart” Cellulosic Hydrogels from Regular Papermaking Fibers	Zhongfei Yuan, Xueren Qian, and Jing Shen*	Northeast Forestry University
76	Green, Simple, and Low-Cost Method for Preparing Fluorescent Nitrogen-Doping Carbon Dots from Cigarette Filters	Ziming Zhao, Tingting Chu*, and Yanzhu Guo*	Dalian Polytechnic University