

CELLULOSE CHEMISTRY AND TECHNOLOGY

**ADVANCES IN THE CHEMISTRY, PHYSICS AND TECHNOLOGY OF
POLYSACCHARIDES AND LIGNIN**

57♦2023

9 - 10 ♦ SEPTEMBER -
DECEMBER

C O N T E N T S

WENJUAN FANG, KAIXIANG JIANG, LIUYUAN GENG, YUHUAN SHI, PENGWEI FAN and YOUQIANG ZHANG, Molecular dynamics study on the effect of moisture content on the mechanical properties of amorphous cellulose	923-933
ALICHO JAMES, MODISE SEKOMENG JOHANNES, MTUNZI FAKS FANYANA, FRANCIS OJO and OKOLI JOSEPH BAMIDELE, Extraction and characterization of α -cellulose-rich residue from maize (<i>Zea mays</i> L.) husk	935-944
NOVITRI HASTUTI, DIAN ANGGRAINI INDRAWAN, KYOHEI KANOMATA and TAKUYA KITAOKA, Influence of aspect ratio of TEMPO-oxidized cellulose nanofibers (TOCNs) from wood pulp on polymeric membrane properties	945-952
ANNA MECHSHANOVA, VLADILEN POLYAKOV and TEMENUZHKA RADOYKOVA, Obtaining balsamic poplar bud essential oil by the barothermal method and studying the effect of its aqueous emulsions on seed germination and growth of tomato plants.....	953- 962
ALEKSANDR S. KAZACHENKO, FERIDE AKMAN, YAROSLAVA D. BEREZHNAIA, NATALYA VASILIEVA, OLGA YU. FETISOVA, NOUREDDINE ISSAOUI, ZHOUYANG XIANG, ANNA S. KAZACHENKO, TIMUR IVANENKO, SVETLANA NOVIKOVA, OMAR M. AL-DOSSARY and LEDA G. BOUSIAKOU, Sulfation of birch wood xylan with sulfamic acid in the presence of activators: experiment and theory.....	963-980
MUHAMMAD IRFAN, MISBAH GHAZANFAR, HAFIZ ABDULLAH SHAKIR, MUHAMMAD KHAN, MOHMMED AHMED A. ASIRI, SHAUKAT ALI, IRFAN AHMAD and MARCELO FRANCO, Statistical optimization of NaOH pretreatment of pine needles using Box-Behnken design for bioethanol production	981-991
MUHAMMAD AJAZ HUSSAIN, ABDULLAH SHAHEEN, SYED ZAJIF HUSSAIN, IRSHAD HUSSAIN, MUHAMMAD TAHIR HASEEB and GULZAR MUHAMMAD, Carboxy-functionalized polysaccharide mediated green synthesis of antimicrobial silver nanoparticles	993-999

SHUJUN LU, YAJING ZHANG and WENLI YU, Astaxanthin inhibits cell proliferation, migration, invasion and induced apoptosis via AMPK-mTOR signaling pathway in hepatocellular carcinoma Hep 3B cells	1001-1008
YANG ZHANG, RENHAI ZOU, YUYANG WU, YUHANG YANG, DUOQING FU, TIANJIAO WANG, XINWANG CAO, SHENGYU LI and WEI KE, Degumming bamboo shoot shell fibers using a ternary deep eutectic solvent.....	1009-1015
NUR IZZAH ATIRAH MAT HUSSAIN, NURJANNAH SALIM, SITI NOOR HIDAYAH MUSTAPHA, IZAN IZWAN MISNON, MOHD HASBI AB RAHIM and RASIDI ROSLAN, Lignocellulose biomass delignification using acid hydrotrope as green solvent: a mini-review	1017-1028
SEMIHA YENIDOĞAN, CEM AYDEMİR and CANAN EKİNCİ DOĞAN, Packaging–food interaction and chemical migration	1029-1040
PITIPORN MANOKHOON, KHATHAPON PINPATTHANAPONG, NITHINART C. JUNTADECH and THANEEYA RANGSEESURIYACHAI, Effects of combined chemical and hydrothermal pretreatment on papyrus cellulose structure	1041-1051
AFONSO HENRIQUE TEIXEIRA MENDES and SONG WON PARK, Analysis of cellulosic fiber morphology influences on mass distribution uniformity in tissue paper through statistical geometry	1053-1064
MUHAMMED İBRAHİM BAHTIYARI, FAZLIHAN YILMAZ and HÜSEYİN BENLİ, ANTIBACTERIAL ACTIVITY AND STORAGE STABILITY OF HYGIENIC WET WIPES BASED ON SUSTAINABLE NATURAL INGREDIENTS	1065-1072
PRATIK PANDIT POTDAR, PREETINDER KAUR, MANPREET SINGH, MALHARI B. KULKARNI and SUBRAMANIAM RADHAKRISHNAN, Structure development and properties of plasticized PVA-starch-paddy straw composites	1073- 1085
LWAZI MAGUNGA, SIFISO I. MAGAGULA, MARY T. MOTLOUNG, KGOMOTSO LEBELO and MOKGAOTSA J. MOCHANÉ, Cellulose reinforced polyamide composites: effect of preparation method on composite properties	1087-1105
KALATHIL T. RAMLATH, PADUPPINGAL SAJNA, POOKKUTH NUSRATH and CHERUMADATHIL RAJESH, Isolation and characterisation of cellulose fibre from <i>Pennisetum polystachyon</i> and its application in biocomposites with ethylene propylene diene monomer rubber	1107-1120
EDGAR ONOFRE BUSTAMANTE, ANA CECILIA ESPINDOLA-FLORES and ANA KAREN CÁRDENAS DE LA FUENTE, Study of integration, distribution and degradation of sugarcane bagasse fiber as partial replacement for fine aggregate in concrete samples.....	1121-1132
SHANA JEBIN VALIYA PEEDIYAKKAL, RAJESH CHERUMADATHIL and FASEENA NAMBIDUMANNIL, Morphological, mechanical, organic vapour permeation properties and biodegradability of poly(ethylene-co-vinyl acetate)/waste pistachio shell-derived cellulose composite membranes	1133-1147

TRANG THI CAM TRUONG, NGA THI THUY DUONG and HA MANH BUI, Fabrication and characterization of sugarcane bagasse based cellulose acetate/zeolite (CA/Ze) material for elimination of Pb and Cu ions from aqueous solutions.....1149-1159