

Zaib Jahan

Associate Professor

School of Chemical & Materials Engineering

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About

Dr. Zaib Jahan is working as Associate Professor in the School of Chemical & Materials Engineering. Dr. Zaib Jahan has a PhD in Membrane Technology. Dr. Zaib Jahan has published 62 research articles & conference papers having a citation count of 2970, carried out 6 projects and filed 2 intellectual property.

Qualifications

PhD in Membrane Technology Norwegian University of Science and Technology , Norway	2015 - 2018
MS in Membrane Technology NUST, Islamabad , Pakistan	2012 - 2014
BS in Chemical Engineering UET Lahore , Pakistan	2006 - 2011

Experience

Associate Professor School of Chemical & Materials Engineering	2025- Present
Associate Professor School of Chemical & Materials Engineering	2024 - 2024
Assistant Professor School of Chemical & Materials Engineering	2023 - 2024
Assistant Professor School of Chemical & Materials Engineering	2021 - 2018
Assistant Professor School of Chemical & Materials Engineering	2018 - 2023
Assistant Professor School of Chemical & Materials Engineering	2018 - 2018
Lab Engineer School of Chemical & Materials Engineering	2011 - 2021
Assistant Professor NUST , H-12 Islamabad	2011 - 2022

Awards

FDP Won faculty development scholarship for higher studies.	2015
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Professional Memberships

PEC	Since 2011
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Research Projects

National Projects

4th ASEAN-Pakistan Conference on Materials Science (APCoMS 2025)	2025
Funding Agency: ASEAN Pakistan Collaboration Fund	
Amount: PKR 24,780,568.00	
Status: Approved_inprocess	
Technology Development for Local Fabrication of Effective Hemodialysis Membranes	2025
Funding Agency: Higher Education Commission of Pakistan	
Amount: PKR 12,051,000.00	
Status: Approved_inprocess	
Design and printing of self healing flexible perovskite solar cell devices	2024
Funding Agency: Pakistan Science Foundation	
Amount: PKR 9,065,000.00	
Status: Approved_inprocess	
Technology Development for Effective Fabrication and Reuse of hemodialysis Membranes	
Funding Agency: HEC-industry	
Amount: PKR 13,440,000.00	
Status: Approved_inprocess	
Development of high-capacity surface-engineered MXene composite for heavy metal removal from industrial wastewater	2021
Funding Agency: NUST	
Amount: PKR 300,000.00	
Status: Completed	
Development of Nano-composite membranes based on PVA (Polyvinyl Alcohol) and functionalized Nano-cellulose for Biogas upgrading	2019
Funding Agency: HEC	
Amount: PKR 456,526.00	
Status: Completed	

International Projects

Research Articles

Study of shape of zinc oxide nanoparticles on the in-vitro and in-vivo performance of polymeric hydrogels for wound dressing	2025
Hizbullah Malik Fatima Amir Zaib Jahan Usman Liaqat Saadia Andleeb Sulalit Bandyopadhyay Muhammad Bilal Khan Niazi	
International Journal of Pharmaceutics , Volume:674, Article Number 125482	
Impact Factor: 5.200 Quartile: 1 Citations: 1	
DOI: https://doi.org/10.1016/j.ijpharm.2025.125482	
Development and Evaluation of User-Friendly Modeled Approach for Sustainable Polymer Membranes for Advanced Hemodialysis	2025
Ahmed Khan Zaib Jahan Muhammad Ahsan Muhammad Bilal Khan Niazi Muhammad Nouman Aslam Khan Ahmed Sayed M. Metwally Farooq Sher	
Advanced Materials Interfaces , Volume:12, Issue:1, Article Number 2400435	
Impact Factor: 4.300 Quartile: 2	
DOI: https://doi.org/10.1002/admi.202400435	
Synergistic electrochemical performance of textile sludge based activated carbon with reduced graphene oxide as electrode for supercapacitor application	2025
Naveed Ahmed Khan Zaib Jahan Naseem Iqbal Muhammad Bilal Khan Niazi Rimsha Mehek	
Waste Management , Volume:191, Page:274-283	
Impact Factor: 7.1 Quartile: 1 Citations: 6	
DOI: https://doi.org/10.1016/j.wasman.2024.11.015	
Biodegradable maleic–itaconic polymer-coated phosphatic fertilizer improved phosphorous recovery in calcareous soil	2024
Mairaj Khalid Muhammad Bilal Khan Niazi Ghulam Haider Zaib Jahan Munir Zia Rafiq Ahmad Asim Hayat Tariq Shah	
Journal of Plant Nutrition and Soil Science, Volume 187, Issue 3, Pages 415-425	
Impact Factor: 2.600 Quartile: 1	
DOI: https://doi.org/10.1002/jpln.202300197	

Development and characterization of SA/PEG hydrogel membranes with Ag/ZnO nanoparticles for enhanced wound dressing <i>Sohail Zafar Gill Muhammad Bilal Khan Niazi Umar Shahzad Malik Zaib Jahan Saadia Andleeb Tahir Ahmed</i> <i>Materials Chemistry and Physics</i> , Volume 317, Article Number 129170 Impact Factor: 4.300 Quartile: 2 Citations: 10 DOI: https://doi.org/10.1016/j.matchemphys.2024.129170	2024
A multifunctional vanillin-infused chitosan-PVA hydrogel reinforced by nanocellulose and CuO-Ag nanoparticles as antibacterial wound dressing <i>Fatima Amir Dr Bilal Khan Niazi Umer shahzad Malik Zaib Jahan Saadia Andleeb Tahir Ahmed Zartasha Mustansar</i> <i>International Journal of Biological Macromolecules</i> , Volume:258, Article Number: 128831 Impact Factor: 8.2 Quartile: 1 Citations: 22 DOI: 10.1016/j.ijbiomac.2023.128831	2024
Zinc-Coated Urea with Gelatin-Enhanced Zinc Biofortification, Apparent Nitrogen Recovery, and Ryegrass Production <i>Bilal Abdullah Muhammad Bilal Khan Niazi Zaib Jahan Tariq Shah Umar Shahzad Malik Bilal Beig Abid Mahmood Ghulam Abbas Shah Zahid Iqbal</i> <i>Journal of Soil Science and Plant Nutrition</i> , Pages: 14 Impact Factor: 3.9 Quartile: 1 DOI: 10.1007/s42729-024-01649-5	2024
Development and testing of environment friendly nanohybrid coatings for sustainable agriculture technologies <i>Bilal Beig Muhammad Bilal Khan Niazi Farooq Sher Zaib Jahan Munir Zia Ghulam Abbas Shah Ayman A Ghfar Zahid Iqbal</i> <i>Environmental Research</i> , Volume 240, Article Number 117546 Impact Factor: 8.3 Quartile: 1 Citations: 11 DOI: https://doi.org/10.1016/j.envres.2023.117546	2024
Adsorptive recovery of phosphate using iron functionalized biochar prepared via co-pyrollysis of wheat straw and sewage sludge <i>Iqra Irfan Muhammad Ali Inam Waleed Usmani Rashid Iftikhar Zaib Jahan</i> <i>Environmental Technology and Innovation</i> , Volume 32, Article Number 103434 Impact Factor: 7.1 Quartile: 1 Citations: 15 DOI: https://doi.org/10.1016/j.eti.2023.103434	2023
Graphene-grafted bimetallic MOF membranes for hazardous & toxic contaminants treatment <i>Muhammad Bilal Khan Niazi Ayesha Rehman Zaib Jahan Tayyaba Noor Farhan Javed Sarah I Othman Mostafa R. Abukhadra Alam Nawaz</i> <i>Chemosphere</i> , Volume 340, Article Number 139721 Impact Factor: 8.8 Quartile: 1 Citations: 6 DOI: https://doi.org/10.1016/j.chemosphere.2023.139721	2023
Development of ZnO-GO-NiO membrane for removal of lead and cadmium heavy metal ions from wastewater <i>Arslan Maqbool Ameen Shahid Zaib Jahan Muhammad Bilal Khan Niazi Muhammad Ali Inam Ahmad M.Taifeek Emadeldin M Kamel Muhammad Saeed Akhtar</i> <i>Chemosphere</i> , Volume 338, Article Number 139622 Impact Factor: 8.8 Quartile: 1 Citations: 18 DOI: https://doi.org/10.1016/j.chemosphere.2023.139622	2023
Effect of zinc oxide and zinc oxide nanoparticles coating on urea diffusion and its release kinetics for design and development of slow-release fertilizer: an experimental and numerical investigation <i>Bilal Beig Muhammad Bilal Khan Niazi Baseer Ullah Ahmed Nadeem Gondal Zaib Jahan Munir Zia Nouman Ahmad</i> <i>Journal of Coatings Technology and Research</i> , Pages 1-15 Impact Factor: 2.3 Quartile: 3 Citations: 10 DOI: https://doi.org/10.1007/s11998-023-00810-6	2023
Wood as a green and sustainable alternative for environmentally friendly & flexible electronic devices <i>Nouman Ahmed Hizbullah Malik Muhammad Bilal Khan Niazi Waheed Miran Ahmed M. Tawfeek Zaib Jahan Emadeldin M. Kamel Muhammad Saeed Akhtar</i> <i>Chemosphere</i> , Volume 336, Article Number 139213 Impact Factor: 8.8 Quartile: 1 Citations: 10 DOI: 10.1016/j.chemosphere.2023.139213	2023
Biodegradable Polymer Encapsulated Nickel Nanoparticles for Slow Release Urea Promotes Rhode Grass Yield and Nitrogen Recovery <i>Bilal Beig Muhammad Bilal Khan Niazi Zaib Jahan Ghulam Abbas Shah Zahid Iqbal</i>	2023

Impact Factor: 5.3 | **Quartile:** 1 | **Citations:** 17

DOI: 10.1007/s10924-022-02729-2

Vanillin cross-linked hydrogel membranes interfacial reinforced by carbon nitride nanosheets for enhanced antibacterial activity and mechanical properties

2023

Umer Shahzad malik Qixiang Duan Muhammad Bilal Khan Niazi Zaib Jahan Usman Liaqat Farqooq Sher Yanchang Gan Honghao Hou
Chinese Chemical Letters, Volume 34, Issue 4, ID:108071

Impact Factor: 8.455 | **Quartile:** 1 | **Citations:** 24

DOI: <https://doi.org/10.1016/j.ccllet.2022.108071>

Development and testing of zinc sulfate and zinc oxide nanoparticle coatings over urea fertilizer to improve N and Zn use efficiency

2023

Bilal Beig Muhammad Bilal Khan Niazi Zaib Jahan Ghulam Haider Munir Zia Ghulam Abbas Shah Zahid Iqbal Asim Hayat
Frontiers in Plant Science, Volume 13, Article Number 1058219

Impact Factor: 6.627 | **Quartile:** 1 | **Citations:** 26

DOI: 10.3389/fpls.2022.1058219

Polyvinyl alcohol and aminated cellulose nanocrystal membranes with improved interfacial compatibility for environmental applications

2022

Saleem Ahmad Zaib Jahan Muhammad Bilal Khan Niazi Tayyaba Noor Ofaira Azhar Farooq Sher Honghao Hou Emina Karahmet Shere
Environmental Research, Volume 214, Part 1, Article Number 113793

Impact Factor: 8.431 | **Quartile:** 1 | **Citations:** 44

DOI: <https://doi.org/10.1016/j.envres.2022.113793>

Cellulose acetate based sustainable nanostructured membranes for environmental remediation

2022

Ayesha Rehman Zaib Jahan Tayyaba Noor Muhammad Bilal Khan Niazi Muhammad Aftab Akram Farqooq Sher Emina Karahmet Sher
Chemosphere, Volume 307, Part 1, Article Number 135736

Impact Factor: 8.943 | **Quartile:** 1 | **Citations:** 56

DOI: <https://doi.org/10.1016/j.chemosphere.2022.135736>

Role of zinc-coated urea fertilizers in improving nitrogen use efficiency, soil nutritional status, and nutrient use efficiency of test crops

2022

Bilal Abdullah Muhammad Bilal Khan Niazi Zaib Jahan Obaid Khan Ameen Shahid Ghulam Abbas Shah Babar Azeem Zahid Iqbal Abid Mahmood
Frontiers in Environmental Science, Volume 10, Article Number 888865

Impact Factor: 5.411 | **Quartile:** 2 | **Citations:** 7

DOI: <https://doi.org/10.3389/fenvs.2022.888865>

Facile coating of micronutrient zinc for slow release urea and its agronomic effects on field grown wheat (*Triticum aestivum* L.)

2022

Bilal Beig Muhammad Bilal Khan Niazi Zaib Jahan Munir Zia Ghulam Abbas Shah Zahid Iqbal Inamullah Douna
Science of the Total Environment, Volume 838, Part 1, Article Number 155965

Impact Factor: 9.8 | **Quartile:** 1 | **Citations:** 22

DOI: <https://doi.org/10.1016/j.scitotenv.2022.155965>

High-Selective Separation Performance of CO₂ from CH₄ by Interfacial Engineering of Ultra-low-dose Bimetallic Pyrazine-MOF based Mixed Matrix Membranes

2022

Hassan Raza Khan Zaib Jahan Muhammad Bilal Khan Niazi Tayyaba Noor Honghao Hou Sikander Rafiq
Carbon Capture Science & Technology, Volume 3, Article Number 100048

Impact Factor: N/A | **Citations:** 18

DOI: <https://doi.org/10.1016/j.ccst.2022.100048>

Challenges and recent trends with the development of hydrogel fiber for biomedical applications

2022

Pau Loke Show Muhammad Bilal Khan Niazi Reema Ansar Sidra Saqib Ahmad Mukhtar Muhammad Shahid Zaib Jahan Salik Javed Kakar Bushra Uzair
Muhammad Mubashir Sami Ullah Hooi Ren Lim Kuan ShiongKhoo
Chemosphere, Volume 287, Part 1, Article Number 131956

Impact Factor: 7.086 | **Quartile:** 1 | **Citations:** 39

DOI: <https://doi.org/10.1016/j.chemosphere.2021.131956>

Green synthesis and evaluation of calcium-based nanocomposites fertilizers: A way forward to sustainable agricultural

2021

Obaid Khan Muhammad Bilal Khan Niazi Ghulam Abbas Shah Abu Huzafa Zaib Jahan Maqsood Sadiq Farooq Sher
Journal of the Saudi Society of Agricultural Sciences, Volume 20, Issue 8, Pages 519-529

Impact Factor: 0 | **Citations:** 26

DOI: <https://doi.org/10.1016/j.jssas.2021.06.005>

Starch and polyvinyl alcohol environment friendly biodegradable nanocomposites for slow releasing of urea fertilizers <i>Nida Zafar Muhammad Bilal Khan Niazi Farooq Sher Ushna Khalid Zaib Jahan Ghulam Abbas Shah Munir Zia</i> <i>Chemical Engineering Journal Advances</i> , Volume 7, Article Number 100123 Impact Factor: 0 Citations: 101 DOI: https://doi.org/10.1016/j.ceja.2021.100123	2021
Metal Organic Frameworks Derived Sustainable Polyvinyl Alcohol/Starch Nanocomposite Films as Robust Materials for Packaging Applications <i>Naveed Ahmed Khan Muhammad Bilal Khan Niazi Farooq Sher Zaib Jahan Tayyaba Noor Ofaira Azhar Tazien Rashid Naseem Iqbal Naseem Iqbal</i> <i>Polymers</i> , 13(14), 2307 Impact Factor: 4.329 Quartile: 1 Citations: 71 DOI: https://doi.org/10.3390/polym13142307	2021
Cellulose acetate-polyvinyl alcohol blend hemodialysis membranes integrated with dialysis performance and high biocompatibility <i>Ofaira Azhar Zaib Jahan Farooq Sher Muhammad Bilal Khan Niazi Salik Javed Kakar Muhammad Shahid</i> <i>Materials Science and Engineering C-Materials for Biological Applications</i> , Volume 126, Article Number 112127 Impact Factor: 8.457 Quartile: 1 Citations: 125 DOI: https://doi.org/10.1016/j.msec.2021.112127	2021
Fabrication and characterization of carbon-based nanocomposite membranes for packaging application <i>Misbah Iqbal Muhammad Bilal Khan Niazi Zaib Jahan TAHIR AHMED Zakir Hussain Farooq Sher</i> <i>Polymer Bulletin</i> , Pages 1-22 Impact Factor: 2.843 Quartile: 3 Citations: 29 DOI: https://doi.org/10.1007/s00289-021-03763-1	2021
NiFe₂O₄/SiO₂ nanostructures as a potential electrode material for high rated supercapacitors <i>Mutawara Mahmood Baig Erum Pervaiz Misbah azad Zaib Jahan Muhammad Bilal Khan Niazi Sherjeel Mahmood Baig</i> <i>Ceramics International - Please attach published paper</i> , Volume 47, Issue 9, Pages 12557-12566 Impact Factor: 5.532 Quartile: 1 Citations: 59 DOI: https://doi.org/10.1016/j.ceramint.2021.01.113	2021
Synthesis-structure-property relationship of nitrogen-doped porous covalent triazine frameworks for pre-combustion CO₂ capture <i>Ahmad Mukhtar Sami Ullah Abrar Inayat Sidra Saqib Nurhayati Binti Mellon Mohammed Ali Assiri Abdullah G Al-Sehemi Muhammad Bilal Khan Niazi Zaib Jahan Mohamad Azmi Bustam Muhammad Ibrahim</i> <i>Energy</i> , Volume 216, Article Number 119230 Impact Factor: 8.857 Quartile: 1 Citations: 26 DOI: https://doi.org/10.1016/j.energy.2020.119230	2021
Mimic Enzyme Based Cellulose Nanocrystals/PVA Nanocomposite Membranes for Enrichment of Biogas as a Natural Gas Substitute <i>Zaib Jahan Muhammad Bilal Khan Niazi Saeed Gul Farooq Sher Salik Javed Kakar May-Britt Hagg Øyvind Weiby Gregersen</i> <i>Journal of Polymers and the Environment</i> , Pages 1-11 Impact Factor: 4.705 Quartile: 1 Citations: 37 DOI: https://doi.org/10.1007/s10924-020-02014-0	2021
Improving functional properties of PVA/starch-based films as active and intelligent food packaging by incorporating propolis and anthocyanin <i>Pakeeza Mustafa Zaib Jahan Muhammad Bilal Khan Niazi Sikander Rafiq Tahir Ahmad Umair Sikander Farhan Javaid</i> <i>Polymers & Polymer Composites</i> , Pages 1-13 Impact Factor: 2.000 Quartile: 3 Citations: 32 DOI: https://doi.org/10.1177/0967391120973503	2020
Biodegradable Polymer Coated Granular Urea Slows Down N Release Kinetics and Improves Spinach Productivity <i>Bilal Beig Zaib Jahan Muhammad Bilal Khan Niazi Salik Javed Kakar Ghulam Abbas Shah Muhammad Shahid Munir Zia Midrar Ul Haq Muhammad Imtiaz Rashid</i> <i>Polymers</i> , Volume 12(11), Article Number 2623 Impact Factor: 4.329 Quartile: 1 Citations: 48 DOI: https://doi.org/10.3390/polym12112623	2020
Biogas upgrading with novel cellulose nano-crystals and polyvinyl amine nanocomposite membranes	2020

Zaib Jahan Muhammad Bilal Khan Niazi Uzair Saeed Erum Pervaiz Farooq Sher

Polymer Testing, Volume 91, Article Number 106867

Impact Factor: 4.282 | **Quartile:** 1 | **Citations:** 47

DOI: <https://doi.org/10.1016/j.polymertesting.2020.106867>

Enhancing hydrogen production from steam electrolysis in molten hydroxides via selection of non-precious metal electrodes

2020

Zaib Jahan Farooq Sher Nawar K. Al-Shara Sania Z. Iqbal George Z. Chen

International Journal of Hydrogen Energy, Volume 45, Issue 53, Pages 28260-28271

Impact Factor: 5.816 | **Quartile:** 2 | **Citations:** 67

DOI: <https://doi.org/10.1016/j.ijhydene.2020.07.183>

Mechanical and thermal properties of carboxymethyl fibers (CMF)/PVA based nanocomposite membranes

2020

Zaib Jahan Muhammad Bilal Khan Niazi Arooj Ahmed Bushra Uzair Ahmad Mukhtar Øyvind Weiby Gregersen

Journal of Industrial and Engineering Chemistry, Volume 90, Pages 122-131

Impact Factor: 6.064 | **Quartile:** 1 | **Citations:** 34

DOI: <https://doi.org/10.1016/j.jiec.2020.07.004>

Torrefied biomass fuels as a renewable alternative to coal in co-firing for power generation

2020

Zaib Jahan Farooq Sher Aqsa Yaqoob Farrukh Saeed Shengfu Zhang Jiri Jaromir Klemes

Energy, Volume 209, Article Number 118444

Impact Factor: 7.147 | **Quartile:** 1 | **Citations:** 113

DOI: <https://doi.org/10.1016/j.energy.2020.118444>

Synthesis and Characterization of PVA/Starch Hydrogel Membranes Incorporating Essential Oils Aimed to be Used in Wound Dressing Applications

2020

Farrukh Altaf Muhammad Bilal Khan Niazi Zaib Jahan Tahir Ahmad Muhammad Aftab Akram Amna Safdar Muhammad Shoaib Butt Tayyaba Noor Farooq Sher

Journal of Polymers and the Environment, Pages 1-19

Impact Factor: 3.667 | **Quartile:** 2 | **Citations:** 145

DOI: <https://doi.org/10.1007/s10924-020-01866-w>

Slow-Release Urea Prills Developed Using Organic and Inorganic Blends in Fluidized Bed Coater and Their Effect on Spinach Productivity

2020

Bilal Beig Muhammad Bilal Khan Niazi Zaib Jahan Erum Pervaiz Ghulam Abbas Shah Midrar Ul Haq Mazhar Iqbal Zafar Munir Zia

Sustainability, Volume 12, Issue 15, Article Number 5944

Impact Factor: 3.251 | **Quartile:** 2 | **Citations:** 41

DOI: [doi:10.3390/su12155944](https://doi.org/10.3390/su12155944)

Effect of Zn-Cyclen Mimic Enzyme on Mechanical, Thermal and Swelling Properties of Cellulose Nanocrystals/PVA Nanocomposite Membranes

2020

Zaib Jahan Arooj Ahmed Sikander Rafiq Farrukh Jamil Øyvind Weiby Gregersen Muhammad Bilal Khan Niazi

Journal of polymers and the Environment, Volume 28, Pages 1921-1933

Impact Factor: 3.667 | **Quartile:** 2 | **Citations:** 8

DOI: <https://doi.org/10.1007/s10924-020-01737-4>

In-Vitro and In-Vivo Study of Superabsorbent PVA/Starch/g-C₃N₄/Ag@TiO₂ NPs Hydrogel Membranes for Wound Dressing

2020

Erum Pervaiz Arooj Ahmed Muhammad Bilal Khan Niazi Zaib Jahan Tahir Ahmad Arshad Hussain Hussnain Ahmed Janjua Zakir Hussain

European Polymer Journal, Volume 130, Article Number 109650

Impact Factor: 4.598 | **Quartile:** 1 | **Citations:** 101

DOI: [DOI: 10.1016/j.eurpolymj.2020.109650](https://doi.org/10.1016/j.eurpolymj.2020.109650)

PVA/starch/propolis/anthocyanins rosemary extract composite films as active and intelligent food packaging materials

2020

Pakeeza Mustafa Tahir Ahmed Muhammad Bilal Khan Niazi Zaib Jahan Ghufrana Samin Arshad Hussain Salman Raza Naqvi

Journal of Food Safety, Volume 40, Issue 1, Article Number e12725

Impact Factor: 1.953 | **Quartile:** 3 | **Citations:** 102

DOI: doi.org/10.1111/jfs.12725

Enhancing the Thermal, Mechanical and Swelling Properties of PVA/Starch Nanocomposite Membranes Incorporating g-C₃N₄

2020

Erum Pervaiz Arooj Ahmed Muhammad Bilal Khan Niazi Zaib Jahan Ghufrana Samin Taqi Mehran Arshad Hussain

Journal of Polymers and the Environment, Volume 28, Pages 100-115

Impact Factor: 3.667 Quartile: 2 Citations: 62 DOI: https://doi.org/10.1007/s10924-019-01592-y	
Slow-release urea fertilizer from sulfur, gypsum, and starch-coated formulations Ayaz Mehmood Muhammad Bilal Khan Niazi Arshad Hussain Bilal Beig Zaib Jahan Nida Zafar Munir Zia <i>Journal of Plant Nutrition</i> , Volume 42, Issue 10, Pages 1218-1229 Impact Factor: 1.132 Quartile: 3 Citations: 37 DOI: https://doi.org/10.1080/01904167.2019.1609502	2019
Phosphorylated nanocellulose fibrils/PVA nanocomposite membranes for biogas upgrading at higher pressure Zaib Jahan Muhammad Bilal Khan Niazi May-Britt Hagg Øyvind Weiby Gregersen Arshad Hussain <i>Separation Science and Technology</i> , - Impact Factor: 1.718 Quartile: 3 Citations: 27 DOI: 10.1080/01496395.2019.1592192	2019
Effect of ultra-violet cross-linking on the properties of boric acid and glycerol co-plasticized thermoplastic starch films Bahram Khan Muhammad Bilal Khan Niazi Zaib Jahan Wasif Farooq Salman Raza Naqvi Majid Ali Israr Ahmed Arshad Hussain <i>Food Packaging and Shelf Life</i> , Volume 19, Pages 184-192 Impact Factor: 4.244 Quartile: 1 Citations: 25 DOI: 10.1016/j.fpsl.2018.05.006	2019
Decoupling the effect of membrane thickness and CNC concentration in PVA based nanocomposite membranes for CO₂/CH₄ separation Zaib Jahan Muhammad Bilal Khan Niazi May-Britt Hägg Øyvind Weiby Gregersen <i>Separation and Purification Technology</i> , Volume 204, Pages 220-225 Impact Factor: 5.107 Quartile: 1 Citations: 43 DOI: https://doi.org/10.1016/j.seppur.2018.04.076	2018
Cellulose nanocrystal/PVA nanocomposite membranes for CO₂/CH₄ separation at high pressure Muhammad Bilal Khan Niazi May-Britt Hägg Øyvind Weiby Gregersen Zaib Jahan <i>Journal of Membrane Science</i> , NULL Impact Factor: 7.015 Quartile: 1 Citations: 79 DOI: https://doi.org/10.1016/j.memsci.2018.02.061	2018
Preparation and characterization of PVA/nanocellulose/Ag nanocomposite films for antimicrobial food packaging Tahir Ahmad Muhammad Salman Sarwar Muhammad Bilal Khan Niazi Zaib Jahan Arshad Hussain <i>Carbohydrate Polymer</i> , Volume 184, Pages 453-464 Impact Factor: 6.044 Quartile: 1 Citations: 420 DOI: 10.1016/j.carbpol.2017.12.068	2018
Effect of drying parameters on the physical, morphological and thermal properties of spray-dried inulin Israr Ahmed Muhammad Bilal Khan Niazi Zaib Jahan Dr. Salman Raza Naqvi <i>Journal of Polymer Engineering</i> , NULL Impact Factor: 1.072 Quartile: 4 Citations: 8 DOI: https://doi.org/10.1515/polyeng-2017-0064	2018
Mechanical, thermal and swelling properties of cellulose nanocrystals/PVA nanocomposites membranes Zaib Jahan Muhammad Bilal Khan Niazi Øyvind Weiby Gregersen <i>Journal of Industrial and Engineering Chemistry</i> , NULL Impact Factor: 4.978 Quartile: 1 DOI: https://www.sciencedirect.com/science/article/pii/S1226086X1730432X?via%3Dihub	2018
Mechanical, thermal and swelling properties of phosphorylated nanocellulose fibrils/PVA nanocomposite membranes Muhammad Bilal Khan Niazi Zaib Jahan Sigrun Sofie Berg Øyvind Weiby Gregersen <i>Carbohydrate Polymers</i> , NULL Impact Factor: 5.158 Quartile: 1 Citations: 83 DOI: https://doi.org/10.1016/j.carbpol.2017.08.125	2017
Influence of Amphiphilic Plasticizer on Properties of Thermoplastic Starch Films Israr Ahmed Muhammad Bilal Khan Niazi Arshad Hussain Zaib Jahan <i>Polymer-Plastics Technology and Engineering</i> , NULL	2017

Impact Factor: 1.655 Quartile: 3 Citations: 12 DOI: http://dx.doi.org/10.1080/03602559.2017.1298803	
Influence of carboxylic acids on mechanical properties of thermoplastic starch by spray drying <i>Bahram Khan Muhammad Bilal Khan Niazi Dr. Arshad Hussain Zaib Jahan</i> <i>Fibers and Polymers</i> , NULL Impact Factor: 1.353 Quartile: 1 Citations: 6 DOI: DOI:10.1007/s12221-017-6769-8	2017
Synthesis and characterization of polymer membranes for hemodialysis <i>Zaib Jahan Arshad Hussain</i> <i>Journal of Porous Media</i> , Volume 19, Issue 6, Pages 557-565 Impact Factor: 1.144 Quartile: 3 Citations: 1 DOI: DOI:10.1615/JPorMedia.v19.i6.60	2016

Conference Proceedings

mechanical, thermal and swelling properties of cellulose nanocrystals/PVA nanocomposites membranes. <i>Zaib Jahan Muhammad Bilal Khan Niazi</i> <i>2 conference of membrane science 2017 Paris</i> , res.country(75,) Citations: N/A DOI: http://membranescience.alliedacademies.com/2017	2017
Addition of phosphorylated nanocellulose fibrils in PVA nanocomposite membranes for CO₂/CH₄ separation at higher pressure. <i>Zaib Jahan Muhammad Bilal Khan Niazi</i> <i>9 Trondheim CCS Conference(TCCS-9)</i> , res.country(166,) Citations: N/A DOI: https://www.sintef.no/en/events/tccs-9/	2017

Intellectual Property

Copyrights

Patents

Composition and Method of Manufacturing of Biodegradable Packaging from Sawdust and Corn Starch Status: Filed	2024
A method of production and composition of slow releasing polymer coated urea Status: Filed	2022

Industrial Designs

Trademarks