## **Musammir Khan**

## Associate Professor

School of Natural Sciences

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## **About**

Dr. Musammir Khan is working as Associate Professor in the School of Natural Sciences. Dr. Musammir Khan has a PhD in Physical Chemistry. Dr. Musammir Khan has published 22 research articles & conference papers having a citation count of 474, carried out 0 projects and filed 0 intellectual property.

#### Qualifications

PhD in Physical Chemistry Tianjin University , China	2010 - 2014
MPhil in Physical Chemistry	2007 - 2009
BSE, Karachi , pakistan (Duplicate)	
MSc in Chemistry  BSE, Karachi , pakistan (Duplicate)	2004 - 2007
BSc in Pre Medical	2002 - 2004
BSE, Karachi , pakistan (Duplicate)	
F.Sc in Pre Medical	2000 - 2002
BSE, Karachi , pakistan (Duplicate)	
Matric (SSC) in Science Group	1997 - 1999
BSE, Karachi , pakistan (Duplicate)	
Experience	
Associate Professor	2025- Present
School of Natural Sciences	
Associate Professor	2024 - 2024
School of Natural Sciences	
Associate Professor	2023 - 2024
School of Natural Sciences	
Assistant Professor	2019 - 2023
University of Wah, Pakistan , Department of Chemistry, University of Wah, Quaid Avenue Wah Cantt., Taxila, Rawalpindi, Pakistan	
Assistant Professor (IPFP)	2018 - 2019
University of Peshawar, Pakistan , Institute of Chemical Sciences, University of Peshawar, KPK, Pakistan	

Postdoc Fellowship 2015 - 2017

Tampere University of Technology, Finland , Faculty of Medicine and Health Technology, Tampere University, Korkeakoulunkatu 10, 33720 Tampere, Finland

Postdoc 2014 - 2015

Heidelberg University, Germany , Applied Physical Chemistry Institute for Physical Chemistry Im Neuenheimer Feld 253 D-69120 Heidelberg

## **Research Articles**

# Unveiling the antistatic, anticancer and antibacterial properties of boron nitride and ionic liquid blended polyurethane elastomer films

2025

Aroosa Farooq Musammir Khan Samra Farooq Azhar Mahmood Aneela Javed Aamra Imtiaz Anwar Khan Khadija Munawar Materials Chemistry and Physics, Volume 346, 131413

Impact Factor: 4.700 | Quartile: 2

DOI: https://doi.org/10.1016/j.matchemphys.2025.131413

Chitosan/graphene oxide based biocomposite dynamic films for enzyme-free biosensing application 2024 Muhammad Usama Musammir Khan Xingzhou Peng Junjie Wang Materials Science and Engineering: B, Volume 310, Article Number 117766 Impact Factor: 3.900 | Quartile: 2 DOI: https://doi.org/10.1016/j.mseb.2024.117766 2024 Preparation and characterization of hydroxyl-terminated polybutadiene graft ferrocene based composite Enayat Ur Rahman Abbas Khan Muhammad Humayun Musammir Khan Nasrullah Shah Noor Rehman Luqman Ali Shah Muhammad Sufaid Khan Mohameo Bououdina Journal of Polymer Research, Volume:31, Article Number:362 Impact Factor: 2.6 | Quartile: 3 | Citations: 2 DOI: https://doi.org/10.1007/s10965-024-04204-z Mechanical, Thermal, and Electrical Characterization of Polyethylene Glycol and PDI-Based 2024 Polyurethane Films for Durable Antistatic Applications Abid Zia Faisal Nawaz Janjua Aroosa Faroog Musammir Khan Polymers for Advanced Technologies, Volume35, Issue11, Article Number e6612 Impact Factor: 3.100 | Quartile: 2 | Citations: 1 DOI: https://doi.org/10.1002/pat.6612 TiO2 nano-filler and ionic liquid-blended polyurethane elastomer films for enhanced antistatic 2024 applications Aroosa Farooq Azhar Mahmood Musammir Khan Journal of materials science, Volume 59, Pages 10833-10843 Impact Factor: 3.500 | Quartile: 2 | Citations: 4 DOI: 10.1007/s10853-024-09792-1 Triphenylamine-AlEgens photoactive materials for cancer theranostics 2024 Musammir Khan Junjie Wang Zhengdong Li Changgiang Xie Xingzhou Peng Fabiao Yu Yan Wang Chinese Chemical Letters, Volume 35, Issue 6, Article Number: 108934 Impact Factor: 9.1 | Quartile: 1 | Citations: 12 DOI: 10.1016/j.cclet.2023.108934 Preparation and physicochemical characterization of starch/pectin and chitosan blend bioplastic films 2023 as future food packaging materials Musammir Khan Aqsa Arooj Khurram Shahzad Munawar Journal of Environmental Chemical Engineering, Volume: 12, Issue: 1, Article Number: 111825 Impact Factor: 7.7 | Quartile: 1 | Citations: 21 DOI: 10.1016/j.jece.2023.111825 Designing graphene oxide/silver nanoparticles based nanocomposites by energy efficient green 2022 chemistry approach and their physicochemical characterization Musammir Khan Mehreen Sajjab Fawad Ahmad Luqman Ali Shah Materials Science and Engineering: B, Volume 284, Article Number 115899 Impact Factor: 3.6 | Quartile: 2 | Citations: 13 DOI: https://doi.org/10.1016/j.mseb.2022.115899 Effects of Cu2+/Zn2+ on the electrochemical performance of polyacrylamide hydrogels as advanced 2022 flexible electrode materials Musammir Khan Syed Faizan Lugman Ali Shah Bakhtawara Daixin Ye Fawad Ahmad Muhammad Ismail RSC Advances, Volume 12, Issue 30, Pages 19072-19085 Impact Factor: 3.9 | Quartile: 2 | Citations: 8 DOI: https://doi.org/10.1039/D2RA02391A Green synthesis of controlled size gold and silver nanoparticles using antioxidant as capping and 2020 reducing agent Musammir Khan Fawad Ahmad Janne T. Koivisto Minna Kellomäki Colloids and Interface Science Communications, Volume 39, Article Number 100322 Impact Factor: 4.914 | Quartile: 1 | Citations: 44 DOI: https://doi.org/10.1016/j.colcom.2020.100322 Composite Hydrogels Using Bioinspired Approach with in Situ Fast Gelation and Self-Healing Ability as 2018 **Future Injectable Biomaterial** Musammir Khan Janne T. Koivisto Terttu I. Hukka Mikko Hokka Minna Kellomäki

ACS Applied Materials and Interfaces, Volume 10, Issue 14, Pages 11950-11960 Impact Factor: 8.456 | Quartile: 1 | Citations: 45 DOI: https://doi.org/10.1021/acsami.8b01351 Chemical derivatization and biofunctionalization of hydrogel nanomembranes for potential biomedical 2016 and biosensor applications Musammir Khan Swen Schuster Michael Zharnikov Physical Chemistry Chemical Physics, Volume:18, Issue:17, Page:12035-12042 Impact Factor: 4.123 | Quartile: 1 | Citations: 12 DOI: 10.1039/C5CP07840G 2015 Antimicrobial surfaces grafted random copolymers with REDV peptide beneficial for endothelialization Jing Yang Musammir Khan Li Zhang Xiangkui Ren Jintang Guo Yakai Feng Shuping Wei Wencheng Zhang Journal of Materials Chemistry B, Volume:3, Issue:39, Page:7682-7697 Impact Factor: 4.872 | Quartile: 1 | Citations: 33 DOI: https://doi.org/10.1039/C5TB01155H Surface Modification of Polycarbonate Urethane with Zwitterionic Polynorbornene via Thiol-ene Click-2015 **Reaction to Facilitate Cell Growth and Proliferation** Musammir Khan Jing Yang Changcan Shi Yakai Feng Wencheng Zhang Katie Gibney Gregory N. Tew Macromolecular Materials and Engineering, Volume 300, Issue 8, Pages 802-809 Impact Factor: 2.834 | Quartile: 1 | Citations: 23 DOI: 10.1002/mame.201500038 Surface tailoring for selective endothelialization and platelet inhibition via a combination of SI-ATRP 2015 and click chemistry using Cys-Ala-Gly-peptide Musammir Khan Jing Yang Changcan Shi Juan Lv Yakai Feng Wencheng Zhang Acta Biomaterialia, Volume:20, Page:69-81 Impact Factor: 6.008 | Quartile: 1 | Citations: 77 DOI: 10.1016/j.actbio.2015.03.032 2015 Effect of humidity on electrical conductivity of pristine and nanoparticle-loaded hydrogel nanomembranes Musammir Khan Swen Schuster Michael Zharnikov Journal of Physical Chemistry C, Volume:119, Issue:25, Page:14427-14433 Impact Factor: 4.509 | Quartile: 1 | Citations: 20 DOI: 10.1021/acs.jpcc.5b03572 Manipulation of polycarbonate urethane bulk properties via incorporated zwitterionic polynorbornene 2015 for tissue engineering applications Musammir Khan Jing Yang Changcan Shi Yakai Feng Wencheng Zhang Katie Gibney Gregory N. Tew Gregory N. Tew RSC Advances, Volume:5, Issue:15, Page:11284-11292 Impact Factor: 3.289 | Quartile: 2 | Citations: 20 DOI: 10.1039/C4RA14608E 2014 Biodegradable depsipeptide-PDO-PEG-based block copolymer micelles as nanocarriers for controlled release of doxorubicin Juan Lv Li Zhang Musammir Khan Xiangkui Ren Jintang Guo Yakai Feng Reactive and Functional Polymers, Volume 82, Pages 89-97 Impact Factor: 2.515 | Quartile: 1 | Citations: 21 DOI: 10.1016/j.reactfunctpolym.2014.06.005 2014 Regulation of the endothelialization by human vascular endothelial cells by ZNF580 gene complexed with biodegradable microparticles Changcan Shi Fanglian Yao Qian Li Musammir Khan Xiangkui Ren Yakai Feng Jiawen Huang Wencheng Zhang Biomaterials, Volume 35, Issue 25, Pages 7133-7145 Impact Factor: 8.557 | Quartile: 1 | Citations: 50 DOI: 10.1016/j.biomaterials.2014.04.110 Proliferation and migration of human vascular endothelial cells mediated by ZNF580 gene complexed 2014 with mPEG-b-P(MMD-co-GA)-g-PEI microparticles Changcan Shi Fanglian Yao Jiawen Huang Guoliang Han Qian Li Musammir Khan Yakai Feng Wencheng Zhang

DOI: 10.1039/C3TB21601B

Journal of Materials Chemistry B, Volume:2, Issue:13, Page:1825-1837

Impact Factor: 4.726 | Quartile: 1 | Citations: 41

# Biomimetic design of amphiphilic polycations and surface grafting onto polycarbonate urethane film as effective antibacterial agents with controlled hemocompatibility

Musammir Khan Yakai Feng Dazhi Yang Wei Zhou Hong Tian Ying Han Li Zhang Wenjie Yuan Jin Zhang Jintang Guo Wencheng Zhang Journal of Polymer Science, Part A: Polymer Chemistry, Volume:51, Issue:15, Page:3166-3176

Impact Factor: 3.245 | Quartile: 1 | Citations: 26

**DOI:** https://doi.org/10.1002/pola.26703