

# Ahmad Nawaz Khan

Assistant Professor  
School of Chemical & Materials Engineering

Email:  
Contact:  
LinkedIn:

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## About

Dr. Ahmad Nawaz Khan is working as Assistant Professor in the School of Chemical & Materials Engineering. Dr. Ahmad Nawaz Khan has a PhD in Polymer Nanocomposites. Dr. Ahmad Nawaz Khan has published 22 research articles & conference papers having a citation count of 763, carried out 1 projects and filed 0 intellectual property.

## Qualifications

|                                                                                                       |             |
|-------------------------------------------------------------------------------------------------------|-------------|
| <b>PhD in Polymer Nanocomposites</b><br>National Taiwan University of Science and Technology , Taiwan | 2006 - 2009 |
| <b>MS in Polymer Technology</b>                                                                       | 2003 - 2005 |
| <b>BSc in Metallurgy And Materials Engineering</b><br>UET Lahore , Pakistan                           | 1998 - 2002 |

## Experience

|                                                                          |               |
|--------------------------------------------------------------------------|---------------|
| <b>Assistant Professor</b><br>School of Chemical & Materials Engineering | 2023- Present |
| <b>Assistant Professor</b><br>School of Chemical & Materials Engineering | 2017 - 2010   |
| <b>Assistant Professor</b><br>School of Chemical & Materials Engineering | 2013 - 2023   |
| <b>Assistant Professor</b><br>School of Chemical & Materials Engineering | 2010 - 2013   |
|                                                                          | - Present     |

## Awards

Best Researcher Award

## Professional Memberships

PEC

## Research Projects

|                                                                                                                                                                                                                       |      |
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| <b>National Projects</b>                                                                                                                                                                                              |      |
| <b>Synthesis and characterization of electromagnetic absorbing properties of M type hexa-nanoferrites composite with conducting materials</b><br>Funding Agency: HEC<br>Amount: PKR 9,830,000.00<br>Status: Completed | 2017 |

International Projects

## Research Articles

**Structure – properties relationships of graphene and spinel nickel ferrites based poly(vinylidene fluoride) hybrid polymer nanocomposites for improved dielectric and EMI shielding characteristics**

2022

Ibrar Ahmad Ahmad Nawaz Khan Rahim Jan Iftikhar Hussain Gul

*Materials Research Bulletin*, Volume 148, Article Number 111687

**Impact Factor:** 5.4 | **Quartile:** 2 | **Citations:** 27

**DOI:** 10.1016/j.materresbull.2021.111687

**Enhanced Mechanical Properties of Functionalized BN nanosheets-Polymer Composites**

2020

M. Umer Farooq Rahim Jan Muhammad Azeem M. Adeel Umer Usman Liaqat Muhammad Aftab Akram Ahmad Nawaz Khan Imtiaz Ahmad Sajjad A. Khan Zeshan A. Umar

*Journal of Polymer Research*, Volume 27, Article Number 310

**Impact Factor:** 3.097 | **Quartile:** 2 | **Citations:** 18

**DOI:** 10.1007/s10965-020-02286-z

**Graphene-ferrites interaction for enhanced EMI shielding effectiveness of hybrid polymer composites**

2020

Sofia Javed Ibrar Ahmed Rahim Jan Ahmad Nawaz Khan Iftikhar Hussain Gul Ramsha Khan Muhammad Aftab Akram Ahmad Shafqat Hammad Mahmood Cheema Imtiaz Ahmad

*Materials Research Express*, Volume 7, Number 1, Article Number 016304

**Impact Factor:** 1.620 | **Quartile:** 4 | **Citations:** 34

**DOI:** 10.1088/2053-1591/ab62ed

**Strengthening of  $\beta$  polymorph in PVDF/FLG and PVDF/GO nanocomposites**

2019

Atif Islam Ahmad Nawaz Khan M Fayzan Shakir Kashif Islam

*Materials Research Express*, Article Number 015017, Pages 1-10

**Impact Factor:** 1.929 | **Quartile:** 3 | **Citations:** 51

**DOI:** <https://doi.org/10.1088/2053-1591/ab5f82>

**EMI shielding properties of polymer blends with inclusion of graphene nano platelets**

2019

Sofia Javed Muhammad Aftab Akram Hammad M. Cheema Muhammad Fayzan Shakir Ahmad Nawaz Khan Ramsha Khan Asra Tariq Muhammad Azeem Adeel Riaz Imtiaz Ahmad Rahim Jan Ahmed Shafqat

*Results in Physics*, Volume 14, Article Number 102365

**Impact Factor:** 4.019 | **Quartile:** 1 | **Citations:** 93

**DOI:** 10.1016/j.rinp.2019.102365

**PS/PANI/MoS<sub>2</sub> Hybrid Polymer Composites with High Dielectric Behavior and Electrical Conductivity for EMI Shielding Effectiveness**

2019

Abdul Saboor Saad Mahmood Khalid Rahim Jan Ahmad Nawaz Khan Tanveer Zia Muhammad Umer Farooq Shaista Afridi Muhammad Sadiq Muhammad Arif

*Materials*, Volume: 12, Issue: 17, Article Number: 2690

**Impact Factor:** 3.057 | **Quartile:** 2 | **Citations:** 30

**DOI:** 10.3390/ma12172690

**Mechanical, dielectric and EMI shielding response of styrene acrylonitrile, styrene acrylonitrile/polyaniline polymer blends, upon incorporation of few layer graphene at low filler loadings**

2018

Abdul Saboor Ahmad Nawaz Khan Rahim Jan Saqib Sharif Munawar Khan

*Journal of Polymer Research*, Vol.25, Article Number 248

**Impact Factor:** 1.530 | **Quartile:** 3 | **Citations:** 20

**DOI:** 10.1007/s10965-018-1648-6

**Preparation and Investigation of Ag Nanoparticles/TOPAS Nanocomposie Films for Packaging Applications**

2018

Hareem Zainab Zakir Hussain Ahmad Nawaz Khan Usman Liaqat Muhammad Bilal Khan Niazi Tahir Ahmed Baig

*Current Nanoscience*, Volume 14, Issue 6, Pages 538-544

**Impact Factor:** 1.586 | **Quartile:** 3 | **Citations:** 1

**DOI:** 10.2174/1573413714666180717114523

**Experimental and theoretical correlation of reinforcement trends in acrylonitrile butadiene styrene/single-walled carbon nanotubes hybrid composites**

2018

Ahmad Nawaz Khan Qaiser Waheed Rahim Jan KHURRAM YAQOOB Zulfiqar Ali Iftikhar Hussain Gul

*POLYMER COMPOSITES*, Volume: 39 Pages: E902-E908 Supplement: 2 Special Issue: SI

**Impact Factor:** 2.268 | **Quartile:** 2 | **Citations:** 11

**DOI:** 10.1002/pc.24321

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| <b>Fabrication and characterization of cellulose acetate/hydroxyapatite composite membranes for the solute separations in Hemodialysis</b><br><br><i>Arshad Hussain Aneela Hayder Ahmad Nawaz Khan Hizba Waheed</i><br><i>Polymer Bulletin</i> , Volume 75, Pages 1197–1210<br><br><b>Impact Factor:</b> 1.858   <b>Quartile:</b> 2   <b>Citations:</b> 15<br><b>DOI:</b> <a href="https://doi.org/10.1007/s00289-017-2084-1">https://doi.org/10.1007/s00289-017-2084-1</a>            | 2018 |
| <b>Synthesis and characterization of electrodeposited NiO thin film on electrode grade carbon plate for supercapacitor applications</b><br><br><i>Zakir Hussain Ahmad Nawaz Khan KHURRAM YAQOOB Imran Sohail</i><br><i>Materials Research Express</i> , Volume: 4 Issue: 11 Article Number: 116412<br><br><b>Impact Factor:</b> 1.151   <b>Quartile:</b> 4   <b>Citations:</b> 17<br><b>DOI:</b> 10.1088/2053-1591/aa997a                                                              | 2017 |
| <b>Evaluating Mechanical Properties of Few Layers MoS<sub>2</sub> Nanosheets-Polymer Composites</b><br><br><i>Rahim Jan Amir Habib Muhammad Bilal Khan Ahmad Nawaz Khan</i><br><i>Advances in Materials Science and Engineering</i> , Volume 2017, Article ID 3176808, pages:06<br><br><b>Impact Factor:</b> 1.372   <b>Quartile:</b> 3   <b>Citations:</b> 15<br><b>DOI:</b> DOI:10.1155/2017/3176808                                                                                 | 2017 |
| <b>Estimating EMI shielding effectiveness of graphene-polymer composites at elevated temperatures</b><br><br><i>Rahim Jan Ahmad Nawaz Khan Imtiaz Ahmad Abdul Saboor</i><br><i>Materials Research Express</i> , Volume 4, Number 8, Article No. 085605<br><br><b>Impact Factor:</b> 1.151   <b>Quartile:</b> 4   <b>Citations:</b> 26<br><b>DOI:</b> 10.1088/2053-1591/aa81e9                                                                                                          | 2017 |
| <b>Enhanced mechanical properties and biocompatibility of novel hydroxyapatite/TOPAS hybrid composite for bone tissue engineering applications</b><br><br><i>Qurat-ul-Ain Ahmad Nawaz Khan Mahboubah Nabavinia Muhammad Mujahid</i><br><i>Materials Science and Engineering C</i> , 0928-4931, Volume 75, Pages 807-815<br><br><b>Impact Factor:</b> 5.080   <b>Quartile:</b> 1   <b>Citations:</b> 21<br><b>DOI:</b> 10.1016/j.msec.2017.02.117                                       | 2017 |
| <b>Effect of Polymerization of Aniline on Thermal Stability, Electrical Conductivity and Band Gap of Graphene Oxide/Polyaniline Nanocomposites</b><br><br><i>Zakir Hussain Asim Riaz Adil Usman Muhammad Faheem Ahmad Nawaz Khan Shahid Soomro</i><br><i>International Journal of Electrochemical Science</i> , Volume 12, Issue 3, Pages 1785-1796<br><br><b>Impact Factor:</b> 1.369   <b>Quartile:</b> 4   <b>Citations:</b> 15<br><b>DOI:</b> 10.20964/2017.03.20                  | 2017 |
| <b>Enhancing dielectric and mechanical behaviors of hybrid polymer nanocomposites based on polystyrene, polyaniline and carbon nanotubes coated with polyaniline</b><br><br><i>Tanveer ul Haq Zia Ahmad Nawaz Khan Majid Hussain Ibrar Hassan Ittikhar Hussain Gul</i><br><i>Chinese Journal of Polymer Science</i> , Volume 34, Issue 12, Pages 1500-1509<br><br><b>Impact Factor:</b> 1.692   <b>Quartile:</b> 2   <b>Citations:</b> 25<br><b>DOI:</b> doi:10.1007/s10118-016-1867-4 | 2016 |
| <b>Enhanced mechanical, thermal and antimicrobial properties of poly(vinyl alcohol)/graphene oxide/starch/silver nanocomposites films</b><br><br><i>Adil Usman Zakir Hussain Asim Riaz Ahmad Nawaz Khan</i><br><i>Carbohydrate Polymers</i> , Volume 153, Pages 592-599<br><br><b>Impact Factor:</b> 4.811   <b>Quartile:</b> 1   <b>Citations:</b> 193<br><b>DOI:</b> 10.1016/j.carbpol.2016.08.026                                                                                   | 2016 |
| <b>Effect of polyaniline on the dielectric and EMI shielding behaviors of styrene acrylonitrile</b><br><br><i>KHURRAM YAQOOB Abdul Saboor Hammad M. Cheema Ahmed Shafqat Ahmad Nawaz Khan</i><br><i>Journal of Materials Science: Materials in Electronics</i> , Volume 27, Pages:9634-9641<br><br><b>Impact Factor:</b> 2.019   <b>Quartile:</b> 2   <b>Citations:</b> 33<br><b>DOI:</b> 10.1007/s10854-016-5021-4                                                                    | 2016 |
| <b>Uniaxial Drawing of Graphene-PVA Nanocomposites: Improvement in Mechanical Characteristics via Strain-Induced Exfoliation of Graphene</b><br><br><i>Rahim Jan Amir Habib Muhammad Aftab Akram Tanveer-ul-Haq Zia Ahmad Nawaz Khan</i><br><i>Nanoscale Research Letters</i> , Volume 11, Article Number: 377                                                                                                                                                                         | 2016 |

**Impact Factor:** 2.833 | **Quartile:** 2 | **Citations:** 35  
**DOI:** 10.1186/s11671-016-1595-2

**Investigating the reinforcement effect of few layer graphene and multi-walled carbon nanotubes in acrylonitrile-butadiene-styrene**

2016

*Qaiser Waheed Ahmad Nawaz Khan Rahim Jan*  
*Polymer*, Volume 97, Pages 496-503

**Impact Factor:** 3.684 | **Quartile:** 1 | **Citations:** 44  
**DOI:** 10.1016/j.polymer.2016.05.070

**Low resistivity ZnO-GO electron transport layer based CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub> solar cells**

2016

*Syed Saad Javaid Muhammad Imran Ahmad Zakir Hussain Muhammad Mujahid Ahmad Nawaz Khan Amir Habib*  
*AIP Advances*, Volume:6, Issue:6, Article Number:065303

**Impact Factor:** 1.568 | **Quartile:** 3 | **Citations:** 31  
**DOI:** 10.1063/1.4953397

**Glass transition behavior of poly(trimethylene 2,6-naphthalate) in nanoclay confinement**

2015

*Ahmad Nawaz Khan Wei-Tsung Chaung Aneela Hayder Po-Da Hong*  
*Composites: Polymer Science Series A*, Volume 57, Issue 6, Pages 874-882

**Impact Factor:** 0.760 | **Quartile:** 4 | **Citations:** 8  
**DOI:** DOI:10.1134/S0965545X15060127