

# MUHAMMAD FARAZ BHATTI

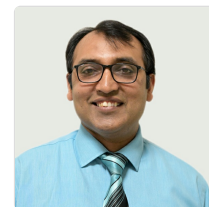
Professor

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## About

Dr. MUHAMMAD FARAZ BHATTI is working as Professor in the Atta-Ur-Rahman School of Applied Biosciences. Dr. MUHAMMAD FARAZ BHATTI has a PhD in Molecular Biology. Dr. MUHAMMAD FARAZ BHATTI has published 66 research articles & conference papers having a citation count of 911, carried out 7 projects and filed 2 intellectual property.

## Qualifications

<b>PhD in Molecular Biology</b> Imperial College London , United Kingdom	2007 - 2011
<b>Post Grad Diploma in Agriculture</b> University of Agriculture Faisalabad , Pakistan	2005 - 2007
<b>B.Sc (Hon) in Agriculture</b> University of Agriculture Faisalabad , Pakistan	2001 - 2005

## Experience

<b>Professor</b> Atta-Ur-Rahman School of Applied Biosciences	2022- Present
<b>Associate Professor</b> Atta-Ur-Rahman School of Applied Biosciences	2018 - 2022
<b>Assistant Professor</b> Atta-Ur-Rahman School of Applied Biosciences	2013 - 2018
<b>Assistant Professor</b> Atta-Ur-Rahman School of Applied Biosciences	2013 - 2013

## Awards

<b>Charles Wallace Fellow</b> Charles Wallace Trust Postdoctoral Fellowship awarded by British Council for year 2019-20 University of Manchester, UK	2019
<b>Bursary for Int. Course</b> Bursary was awarded to attend the prestigious International Course (Fungal Pathogen Genomics) at Wellcome Genome Campus Hinxton Cambridge, UK (13-18) May.	2018
<b>Bet Poster Award</b> Best poster award in conference on promoting safe and secure science organized by Academy of Sciences Malaysia and National Academy of Sciences, Engineering and Medicine, USA) Feb. 2018	2018
<b>Conference Travel Award</b> Travel sponsorship was awarded to attend and present a poster at conference on promoting safe and secure science organized by Academy of Sciences Malaysia and National Academy of Sciences, Engineering and Medicine, USA) at Sunway University Malaysia 5-9 Feb. 2018	2018
<b>Best Comm service teacher</b> Best Community Service Teacher Award 2016-17	2016
<b>Best Comm service teacher</b> Best Community Service Teacher Award 2014-15	
<b>Best Teacher Award</b> Best Teacher Award 2015-16	

Research Projects

National Projects

Formulation of Eco-friendly Trichoderma based Indigenous Bio-fertilizer for Management of Plant Diseases	2023
Funding Agency: PSF	
Amount: PKR 5,883,400.00	
Status: Approved_inprocess	
Establishment of Phage Therapy Center at NUST	2024
Funding Agency: NUST	
Amount: PKR 1,000,000.00	
Status: Approved_inprocess	
Therapeutic phage cocktails to combat colibacillosis in poultry	2023
Funding Agency: ZHAW Leading House Switzerland	
Amount: PKR 5,806,178.00	
Status: Approved_inprocess	
Training and awareness sessions for dairy farmers regarding various zoonotic infections in the hotspot areas of Pakistan	2022
Funding Agency: Swiss Universities Development and Cooperation Network (SUDAC)	
Amount: PKR 1,165,615.00	
Status: Completed	
Identification and transcriptional profiling of Arabidopsis thaliana and Tomato Mitogen Activated Protein Kinases against biotic and abiotic stress	2012
Funding Agency: HEC	
Amount: PKR 500,000.00	
Status: Completed	
Identification of mycoviral infections in various pathogenic Aspergillus species found in Pakistan	2012
Funding Agency: HEC	
Amount: PKR 500,000.00	
Status: Completed	
Identification and characterization of mycoviruses invading Botrytis species to exploit their potential as a biocontrol agent	2016
Funding Agency: HEC	
Amount: PKR 5,900,000.00	
Status: Completed	

International Projects

Research Articles

In silico identification and functional annotation of universal stress protein (USP) gene family in Chenopodium quinoa	2025
Hajira Imran Alvina Gul Rehan Zafar Paracha Rabia Amir Faiza Munir Muhammad Faraz Bhatti	
Scientific Reports , Volume 15, Article Number 18264	
Impact Factor: 3.800   Quartile: 1	
DOI: <a href="https://doi.org/10.1038/s41598-025-03264-5">https://doi.org/10.1038/s41598-025-03264-5</a>	
Overexpression of StDREB30 Gene Enhances Salt Stress Tolerance in Transgenic Potato	2024
Qurat-ul-ain Ali Faiza Munir Muhammad Faraz Bhatti Rabia Amir Alvina Gul	
Potato Research , Pages 1-23	
Impact Factor: 2.300   Quartile: 1	
DOI: <a href="https://doi.org/10.1007/s11540-024-09811-3">https://doi.org/10.1007/s11540-024-09811-3</a>	
Characterization of two novel fusariviruses co-infecting a single isolate of phytopathogenic fungus Botrytis cinerea	2024
Aqeel Ahmed Haris Ahmed Khan Atif Jamal Nasar Um Minullah MUHAMMAD FARAZ BHATTI	
Virus Genes , Volume:60, Issue:4, Page:402-411	
Impact Factor: 1.900   Quartile: 3	
DOI: <a href="https://doi.org/10.1007/s11262-024-02073-8">https://doi.org/10.1007/s11262-024-02073-8</a>	

<p><b>The complete mitochondrial genome of <i>Penicillium expansum</i>: Insights into the fungal evolution and phylogeny</b></p> <p><i>Mahnoor Malik Fatima Malik Tehsin Fatma Muhammad Qasim Hayat Atif Jamal Alvina Gul Muhammad Faraz Bhatti</i>  <i>Gene</i> , Volume 910, Article Number 148315</p> <p><b>Impact Factor:</b> 3.5   <b>Quartile:</b> 2   <b>Citations:</b> 2</p> <p><b>DOI:</b> 10.1016/j.gene.2024.148315</p>	2024
<p><b>Effect of hydraulic retention time on wastewater treatment and microalgal growth at low light intensity</b></p> <p><i>Ramsha Malik Sahar Saleem Muhammad Basharat Dr. Muhammad Faraz Bhatti Dr Zeshan</i>  <i>Algal Research</i> , Volume:80, Article Number: 103545</p> <p><b>Impact Factor:</b> 4.6   <b>Quartile:</b> 1   <b>Citations:</b> 2</p> <p><b>DOI:</b> 10.1016/j.algal.2024.103545</p>	2024
<p><b>Mycorrhizosphere bacteria inhibit greenhouse gas emissions from microplastics contaminated soil by regulating soil enzyme activities and microbial community structure</b></p> <p><i>Zeeshan Khan Ghulam Haider Fazal Adnan Zeshan Muhammad Faraz Bhatti Tariq Shah Parvaiz Ahmad</i>  <i>Journal of Environmental Management</i> , Volume 356, Article Number 120673</p> <p><b>Impact Factor:</b> 8.700   <b>Quartile:</b> 1   <b>Citations:</b> 8</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.jenvman.2024.120673">https://doi.org/10.1016/j.jenvman.2024.120673</a></p>	2024
<p><b>Identification of the odorant binding proteins of Western Flower Thrips (<i>Frankliniella occidentalis</i>), characterization and binding analysis of FoccOBP3 with molecular modelling, molecular dynamics simulations and a confirmatory field trial</b></p> <p><i>Zeeshan Zafar Martyn J. Wood Sidra Fatima MUHAMMAD FARAZ BHATTI Farooq A. Shah Zack Saud E. Joel Loveridge Ismail Karaca Tariq M. Butt</i>  <i>Journal of Biomolecular Structure and Dynamics</i></p> <p><b>Impact Factor:</b> 2.400   <b>Quartile:</b> 3</p> <p><b>DOI:</b> 10.1080/07391102.2024.2317990</p>	2024
<p><b>Biochar alleviated the toxic effects of PVC microplastic in a soil-plant system by upregulating soil enzyme activities and microbial abundance</b></p> <p><i>Attia Rubab Khalid Tariq Shah Muhammad Asad Ahmad Ali Eisha Samee Fazal Adnan Muhammad Faraz Bhatti Sven Marhan Claudia I. Kammann Ghulam Haider</i>  <i>Environmental Pollution</i> , Volume 332, Article Number 121810</p> <p><b>Impact Factor:</b> 8.9   <b>Quartile:</b> 1   <b>Citations:</b> 55</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.envpol.2023.121810">https://doi.org/10.1016/j.envpol.2023.121810</a></p>	2023
<p><b>Self-healing of recycled aggregate fungi concrete using <i>Fusarium oxysporum</i> and <i>Trichoderma longibrachiatum</i></b></p> <p><i>Nangyaley Khan Hammad Anis Khan Rao Arsalan Khushnood Muhammad Faraz Bhatti Danish Ilyas Baig</i>  <i>Construction and Building Materials</i> , Volume 392, Article Number 131910</p> <p><b>Impact Factor:</b> 7.693   <b>Quartile:</b> 1   <b>Citations:</b> 11</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.conbuildmat.2023.131910">doi.org/10.1016/j.conbuildmat.2023.131910</a></p>	2023
<p><b>The good, the bad and the cryptic: The multifaceted roles of mycoviruses and their potential applications for a sustainable agriculture</b></p> <p><i>Haris Ahmed Khan Luca Nerva Muhammad Faraz Bhatti</i>  <i>Virology</i> , Volume 585, Pages 259-269</p> <p><b>Impact Factor:</b> 2.800   <b>Quartile:</b> 3   <b>Citations:</b> 14</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.virol.2023.07.004">https://doi.org/10.1016/j.virol.2023.07.004</a></p>	2023
<p><b>Genome-wide identification and comparative in-silico characterization of <math>\beta</math>-galactosidase (GH-35) in ascomycetes and its role in germ tube development of <i>Aspergillus fumigatus</i> via RNA-seq analysis</b></p> <p><i>Danish Ilyas Baig Zeeshan Zafar Haris Ahmed Khan Amna Younus Muhammad Faraz Bhatti</i>  <i>Plos One</i> , Volume 18, Issue 6, Article Number e0286428</p> <p><b>Impact Factor:</b> 3.7   <b>Quartile:</b> 2   <b>Citations:</b> 2</p> <p><b>DOI:</b> <a href="https://doi.org/10.1371/journal.pone.0286428">https://doi.org/10.1371/journal.pone.0286428</a></p>	2023
<p><b>The presence of mycoviral infection attenuates the growth and pathogenicity of the phytopathogenic fungus <i>Botrytis cinerea</i> collected from strawberry fields in Pakistan</b></p> <p><i>Aqeel Ahmed Haris Ahmed Khan Atif Jamal Danish Ilyas Baig Tehsin Fatma Nasar Um Minullah Muhammad Faraz Bhatti</i>  <i>European Journal of Plant Pathology</i> , Pages 1-11</p> <p><b>Impact Factor:</b> 2.224   <b>Quartile:</b> 2   <b>Citations:</b> 2</p> <p><b>DOI:</b> <a href="https://doi.org/10.1007/s10658-023-02689-w">https://doi.org/10.1007/s10658-023-02689-w</a></p>	2023

<b>Functional annotation and comparative analysis of four Botrytis cinerea mitogenomes reported from Punjab, Pakistan</b> <i>Tehsin Fatma Haris Ahmed Khan Aqeel Ahmed Fazal Adnan Zeshan Nasar Um Minullah Muhammad Faraz Bhatti</i> <i>Saudi Journal of Biological Sciences</i> , Volume 30, Issue 4, Article Number 103605 <b>Impact Factor:</b> 4.052   <b>Quartile:</b> 2   <b>Citations:</b> 2 <b>DOI:</b> <a href="https://doi.org/10.1016/j.sjbs.2023.103605">https://doi.org/10.1016/j.sjbs.2023.103605</a>	2023
<b>High Occurrence of Multidrug-Resistant Escherichia coli Strains in Bovine Fecal Samples from Healthy Cows Serves as Rich Reservoir for AMR Transmission</b> <i>Amna Jalil Shabana Gul Muhammad Faraz Bhatti Muhammad Faisal Siddiqui Fazal Adnan</i> <i>Antibiotics-Basel</i> , Volume 12(1), Article Number 37 <b>Impact Factor:</b> 5.222   <b>Quartile:</b> 1   <b>Citations:</b> 11 <b>DOI:</b> <a href="https://doi.org/10.3390/antibiotics12010037">https://doi.org/10.3390/antibiotics12010037</a>	2022
<b>Genome mining, antimicrobial and plant growth-promoting potentials of halotolerant Bacillus paralicheniformis ES-1 isolated from salt mine</b> <i>Sajid Iqbal Muhammad Qasim Hazir Rahman Naeem Khan Rehan Zafar Paracha Muhammad Faraz Bhatti Aneela Javed Hussnain Ahmed Janjua</i> <i>Molecular Genetics and Genomics</i> , Pages 1-15 <b>Impact Factor:</b> 2.980   <b>Quartile:</b> 3   <b>Citations:</b> 21 <b>DOI:</b> <a href="https://doi.org/10.1007/s00438-022-01964-5">https://doi.org/10.1007/s00438-022-01964-5</a>	2022
<b>Identification of novel totiviruses from the ascomycetous fungus Geotrichum candidum</b> <i>Haris Ahmed Khan Hideki Kondo Sabitree Shahi Muhammad Faraz Bhatti Nobuhiro Suzuki</i> <i>Archives of Virology</i> , Pages 1-6 <b>Impact Factor:</b> 2.685   <b>Quartile:</b> 3   <b>Citations:</b> 2 <b>DOI:</b> <a href="https://doi.org/10.1007/s00705-022-05611-7">https://doi.org/10.1007/s00705-022-05611-7</a>	2022
<b>Mycovirus Hunting Revealed the Presence of Diverse Viruses in a Single Isolate of the Phytopathogenic Fungus Diplodia seriata From Pakistan</b> <i>Haris Ahmed Khan Paul Kipkemboi Telengech Hideki Kondo Muhammad Faraz Bhatti Nobuhiro Suzuki</i> <i>Frontiers in Cellular and Infection Microbiology</i> , Volume 12, Article Number 913619 <b>Impact Factor:</b> 6.073   <b>Quartile:</b> 1   <b>Citations:</b> 13 <b>DOI:</b> <a href="https://doi.org/10.3389/fcimb.2022.913619">https://doi.org/10.3389/fcimb.2022.913619</a>	2022
<b>Self-healing fungi concrete using potential strains Rhizopus oryzae and Trichoderma longibrachiatum</b> <i>Rao Arsalan Khushnood Ateeq Muhammad Ali Muhammad Faraz Bhatti Haris Ahmed Khan</i> <i>Journal of Building Engineering</i> , Volume 50, Article Number 104155 <b>Impact Factor:</b> 5.318   <b>Quartile:</b> 1   <b>Citations:</b> 26 <b>DOI:</b> <a href="https://doi.org/10.1016/j.jobbe.2022.104155">https://doi.org/10.1016/j.jobbe.2022.104155</a>	2022
<b>Odorant Binding Proteins (OBPs) and Odorant Receptors (ORs) of Anopheles stephensi: Identification and comparative insights</b> <i>Zeeshan Zafar Sidra Fatima Muhammad Faraz Bhatti Farooq A Shah Tariq M. Butt Zack Saud</i> <i>Plos One</i> , Volume 17(3), Article Number e0265896 <b>Impact Factor:</b> 3.240   <b>Quartile:</b> 2   <b>Citations:</b> 12 <b>DOI:</b> <a href="https://doi.org/10.1371/journal.pone.0265896">https://doi.org/10.1371/journal.pone.0265896</a>	2022
<b>A novel victorivirus from the phytopathogenic fungus Neofusicoccum parvum</b> <i>Haris Ahmed Khan Yukiyo Sato Hideki Kondo Atif Jamal Muhammad Faraz Bhatti Nobuhiro Suzuki</i> <i>Archives of Virology</i> , Volume 167, Pages 923-929 <b>Impact Factor:</b> 2.574   <b>Quartile:</b> 3   <b>Citations:</b> 8 <b>DOI:</b> <a href="https://doi.org/10.1007/s00705-021-05304-7">https://doi.org/10.1007/s00705-021-05304-7</a>	2022
<b>Genome-Wide Identification of Stress-Associated Proteins (SAPs) Encoding A20/AN1 Zinc Finger in Almond (Prunus dulcis) and Their Differential Expression during Fruit Development</b> <i>Alvina Gul Muhammad Faraz Bhatti Sidra Fatima Zeeshan Zafar</i> <i>Plants-Basel</i> , Volume 11(1), Article Number 117 <b>Impact Factor:</b> 3.935   <b>Quartile:</b> 1   <b>Citations:</b> 7 <b>DOI:</b> <a href="https://doi.org/10.3390/plants11010117">https://doi.org/10.3390/plants11010117</a>	2021
<b>Assessment of mycoviral diversity in Pakistani fungal isolates revealed infection by 11 novel viruses of a single strain of Fusarium mangiferae isolate SP1</b> <i>Haris Ahmed Khan Wajeeha Shamsi Atif Jamal Memoona Javaied Mashal Sadiq Tehsin fatma Aqeel Ahmed Maleeha Arshad Mubashra Waseem Samra Babar Midhat Mustafa Dogar Nasar Virk Hussnain Ahmed Janjua Nobuhiro Suzuki Hideki Kondo Muhammad Faraz Bhatti</i> <i>Journal of General Virology</i> , Volume 102(12), Article Number 001690	2021

<b>Impact Factor:</b> 3.891   <b>Quartile:</b> 2   <b>Citations:</b> 13 <b>DOI:</b> <a href="https://doi.org/10.1099/jgv.0.001690">https://doi.org/10.1099/jgv.0.001690</a>	
<b>Computational Assessment of Botrytis cinerea Lipase for Biofuel Production</b> <i>Tehsin Fatma Zeeshan Zafar Sidra Fatima Rehan Zafar Paracha Fazal Adnan Zeshan Nasar Virk Muhammad Faraz Bhatti</i> <i>Catalysts</i> , Volume 11(11), Article Number 1319 <b>Impact Factor:</b> 4.146   <b>Quartile:</b> 2   <b>Citations:</b> 5 <b>DOI:</b> <a href="https://doi.org/10.3390/catal11111319">https://doi.org/10.3390/catal11111319</a>	2021
<b>Comprehensive Analyses of NAC Transcription Factor Family in Almond (Prunus dulcis) and Their Differential Gene Expression during Fruit Development</b> <i>Zeeshan Zafar Sidra Fatima Muhammad Faraz Bhatti</i> <i>Plants</i> , Volume 10(10), Article Number 2200 <b>Impact Factor:</b> 3.935   <b>Quartile:</b> 1   <b>Citations:</b> 5 <b>DOI:</b> <a href="https://doi.org/10.3390/plants10102200">https://doi.org/10.3390/plants10102200</a>	2021
<b>Indoor and outdoor microbiological air quality in naturally and mechanically ventilated university libraries</b> <i>Ahmad Hassan Muhammad Zeeshan Ali Khan Muhammad Faraz Bhatti</i> <i>Atmospheric Pollution Research</i> , Volume 12, Issue 8, Article Number 101136 <b>Impact Factor:</b> 4.352   <b>Quartile:</b> 2   <b>Citations:</b> 33 <b>DOI:</b> <a href="https://doi.org/10.1016/j.apr.2021.101136">https://doi.org/10.1016/j.apr.2021.101136</a>	2021
<b>A second capsidless hadakavirus strain with 10 positive-sense single-stranded RNA genomic segments from Fusarium nygamai</b> <i>Haris Ahmed Khan Yukiyo Sato Hideki Kondo Atif Jamal Muhammad Faraz Bhatti Nobuhiro Suzuki</i> <i>Archives of Virology</i> , Pages 1-12 <b>Impact Factor:</b> 2.574   <b>Quartile:</b> 3   <b>Citations:</b> 24 <b>DOI:</b> <a href="https://doi.org/10.1007/s00705-021-05176-x">https://doi.org/10.1007/s00705-021-05176-x</a>	2021
<b>Scouting the receptor-binding domain of SARS coronavirus 2: a comprehensive immunoinformatics inquisition</b> <i>Muhammad Faraz Bhatti Zaira Rehman Ammad Fahim</i> <i>Future Virology</i> , Volume 16(2), Pages 117-132 <b>Impact Factor:</b> 1.831   <b>Quartile:</b> 4   <b>Citations:</b> 4 <b>DOI:</b> <a href="https://doi.org/10.2217/fvl-2020-0269">https://doi.org/10.2217/fvl-2020-0269</a>	2021
<b>Growth responses and rubisco activity influenced by antibiotics and organic amendments used for stress alleviation in Lactuca sativa</b> <i>Fakhria Wahid Sofia Baig Muhammad Faraz Bhatti Maria Manzoor Ittikhar Ahmed Muhammad Arshad</i> <i>Chemosphere</i> , Volume 264, Article Number 128433 <b>Impact Factor:</b> 7.086   <b>Quartile:</b> 1   <b>Citations:</b> 26 <b>DOI:</b> <a href="https://doi.org/10.1016/j.chemosphere.2020.128433">https://doi.org/10.1016/j.chemosphere.2020.128433</a>	2021
<b>Hadaka Virus 1: a Capsidless Eleven-Segmented Positive-Sense Single-Stranded RNA Virus from a Phytopathogenic Fungus, Fusarium oxysporum</b> <i>Muhammad Faraz Bhatti Wajeeha Shamsi Yukiyo Sato Atif Jamal Hideki Kondo Nobuhiro Suzuki</i> <i>mBio</i> , Volume 11, Issue 3, Article Number e00450-20 <b>Impact Factor:</b> 7.867   <b>Quartile:</b> 1   <b>Citations:</b> 57 <b>DOI:</b> 10.1128/mBio.00450-20	2020
<b>Plant uptake and leaching potential upon application of amendments in soils spiked with heavy metals (Cd and Pb)</b> <i>Muhammad Arshad Imran Hashmi Muhammad Faraz Bhatti Iram Gul Maria Manzoor Jean Kallerhof</i> <i>Journal of Environmental Management</i> , Volume 249, Article Number UNSP 109408 <b>Impact Factor:</b> 5.647   <b>Quartile:</b> 1   <b>Citations:</b> 69 <b>DOI:</b> 10.1016/j.jenvman.2019.109408	2019
<b>Formulation of active packaging system using Artemisia scoparia for enhancing shelf life of fresh fruits</b> <i>Javaria Hanif Nauman Khalid Rao Sanaullah Khan Muhammad Faraz Bhatti Mohammad Qasim Hayat Muhammad Ismail Saadia Andleeb Qaiser Mansoor Faria Khan Fahim Ameen Rumeza Hanif Muhammad Uzair Hashmi Hussnain Ahmed Janjua</i> <i>Materials Science and Engineering C</i> , Volume 100, Pages 82-93 <b>Impact Factor:</b> 5.880   <b>Quartile:</b> 1   <b>Citations:</b> 20 <b>DOI:</b> <a href="https://doi.org/10.1016/j.msec.2019.02.101">https://doi.org/10.1016/j.msec.2019.02.101</a>	2019

<p><b>The Route to 'Chemobrain' - Computational probing of neuronal LTP pathway</b></p> <p><i>Ammad Fahim Muhammad Faraz Bhatti Nasar um Minullah Virk Rehan Zafar Paracha Zaira Rehman Amjad Ali Amir Rashid</i></p> <p><i>Nature Scientific Reports</i> , Volume 9, Article Number 9630</p> <p><b>Impact Factor:</b> 4.011   <b>Quartile:</b> 1   <b>Citations:</b> 7</p> <p><b>DOI:</b> 10.1038/s41598-019-45883-9</p>	2019
<p><b>Molecular and biological characterization of a novel botybirnavirus identified from a Pakistani isolate of <i>Alternaria alternata</i></b></p> <p><i>Wajeeha Shamsi Yukiyo Sato Atif Jamal Sabitree Shahi Hideki Kondo Nobuhiro Suzuki Muhammad Faraz Bhatti</i></p> <p><i>Virus Research</i> , Volume 263, Pages 119-128</p> <p><b>Impact Factor:</b> 2.934   <b>Quartile:</b> 2   <b>Citations:</b> 28</p> <p><b>DOI:</b> 10.1016/j.virusres.2019.01.006</p>	2019
<p><b>Quaternized trimethyl functionalized chitosan based antifungal membranes for drinking water treatment</b></p> <p><i>Ayesha Tabriz Muhammad Azeem Ur Rehman Alvi Muhammad Bilal Khan Niazi Mehwish Batool Muhammad Faraz Bhatti Asim Laeeq Khan Asad U. Khan Tahir Jamil NASIR MEHMOOD AHMED</i></p> <p><i>Carbohydrate Polymers</i> , Volume 207, Pages 17-25</p> <p><b>Impact Factor:</b> 7.182   <b>Quartile:</b> 1   <b>Citations:</b> 70</p> <p><b>DOI:</b> <a href="https://doi.org/10.1016/j.carbpol.2018.11.066">https://doi.org/10.1016/j.carbpol.2018.11.066</a></p>	2019
<p><b>Characterization of Recombinant Poliovirus 2A Protease; A Potential Anti-Viral Drug Target</b></p> <p><i>Amna Younus Muhammad Faraz Bhatti Nasar Virk Muhammad Arshad Hussnain Janjua Robert Coutts</i></p> <p><i>Characterization of Recombinant Poliovirus 2A Protease; A Potential Anti-Viral Drug Target</i>, 2018110550</p> <p><b>Impact Factor:</b> -</p> <p><b>DOI:</b> 10.20944/preprints201811.0550.v1</p>	2018
<p><b>Homology Modeling of CTR1 Protein Kinase Domain in Solanaceae Species for Identification of Salient Features in terms of Structure and Function, and Interaction Analysis with Lipids</b></p> <p><i>Muhammad Faraz Bhatti Hira Iftikhar Nasar Virk</i></p> <p><i>Current Proteomics</i> , -</p> <p><b>Impact Factor:</b> 0.768   <b>Quartile:</b> 4</p> <p><b>DOI:</b> 10.2174/1570164615666180723145810</p>	2018
<p><b>Structural insights and characterization of human Npas4 protein</b></p> <p><i>Ammad Fahim Zaira Rehman Muhammad Faraz Bhatti Rehan Zafar Paracha Amjad Ali Nasar Virk Amir Rashid</i></p> <p><i>PeerJ</i> , NULL</p> <p><b>Impact Factor:</b> 2.358   <b>Quartile:</b> 2   <b>Citations:</b> 5</p> <p><b>DOI:</b> 10.7717/peerj.4978</p>	2018
<p><b>Microbial quality assessment of indoor air in a large hospital building during winter and spring seasons</b></p> <p><i>Ayesha Asif Muhammad Zeeshan Ali Khan Imran Hashmi Uzma Zahid Muhammad Faraz Bhatti</i></p> <p><i>Building and Environment</i> , NULL</p> <p><b>Impact Factor:</b> 4.820   <b>Quartile:</b> 1   <b>Citations:</b> 53</p> <p><b>DOI:</b> 10.1016/j.buildenv.2018.03.010</p>	2018
<p><b>Structure-Function Mutational Analysis and Prediction of the Potential Impact of High Risk Non-Synonymous Single-Nucleotide Polymorphism on Poliovirus 2A Protease Stability Using Comprehensive Informatics Approaches</b></p> <p><i>Amna Younus Saba Munawar Muhammad Faraz Bhatti Aqsa Ikram Faryal Mehish Awan Ishrat Jabeen Nasar Um Minullah Hussnain Ahmed Janjua Muhammad Arshad</i></p> <p><i>Genes</i> , Volume 9(5), Article Number 228</p> <p><b>Impact Factor:</b> 3.331   <b>Quartile:</b> 2   <b>Citations:</b> 1</p> <p><b>DOI:</b> 10.3390/genes9050228</p>	2018
<p><b>The mycovirus database an e-bank for mycoviral genomes</b></p> <p><i>Wajeeha Shamsi Atif Jamal Nasir Virk Muhammad Faraz Bhatti</i></p> <p><i>International Journal of Latest Trends in Engineering and Technology</i>, Special Issue ICRMR-2018, Vol 12, Issue 6, Page 007-011</p> <p><b>Impact Factor:</b> 0</p> <p><b>DOI:</b> 10.21172/1.126.02</p>	2018
<p><b>A Comprehensive Computational Mutation-Structure-Function Approach for G350 Sites among Poliovirus 2A Protease</b></p> <p><i>Amna Younus Muhammad Faraz Bhatti</i></p>	2017

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## Conference Proceedings

<b>STRUCTURAL CHARACTERIZATION OF NPAS4-ARNT DIMERIZATION THROUGH COMPUTATIONAL SIMULATION</b> <i>Ammad Fahim Zaira Rehman Muhammad Faraz Bhatti Nasar Virk Rehan Zafar Paracha</i> <i>Proceeding of the International Conference on Bioscience and Biotechnology</i> , res.country(157,)	2019
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Book Chapters

<b>Management of Phytopathogenic Fungal Infections: Traditional and Recent Implications</b> <i>Haris Ahmed Khan Tehsin Fatma Muhammad Ali Habiba Saeed Zeeshan Zafar Sidra Fatima Aqeel Ahmed Amber Malik MUHAMMAD FARAZ BHATTI</i> In: <i>Plant Diseases and Their Management: A Sustainable Approach</i> , 1st Edition, Chapter 9, Pages 261-291 <b>Citations:</b> N/A <b>DOI:</b> <a href="https://www.taylorfrancis.com/chapters/edit/10.1201/9781032722856-9/management-phytopathogenic-fungal-infections-traditional-recent-implications-haris-ahmed-khan-tehsin-fatma-muhammad-ali-habiba-saeed-zeeshan-zafar-sidra-fatima-aqeel-ahmed-amber-malik-muhammad-faraz-bhatti">https://www.taylorfrancis.com/chapters/edit/10.1201/9781032722856-9/management-phytopathogenic-fungal-infections-traditional-recent-implications-haris-ahmed-khan-tehsin-fatma-muhammad-ali-habiba-saeed-zeeshan-zafar-sidra-fatima-aqeel-ahmed-amber-malik-muhammad-faraz-bhatti</a>	2024
<b>CRISPR-Cas9-mediated genome editing in fungi: Current scenario and future implications in agriculture, health, and industry.</b> <i>Noor Ul Ain Malik Attia Rubab Khalid Alvina Gul Faiza Munir Ghulam Haider Muhammad Faraz Bhatti</i> In: <i>Targeted Genome Engineering via CRISPR/Cas9 in Plants</i> , 1st Edition, Chapter 3, Pages 35-62 <b>Citations:</b> 2 <b>DOI:</b> <a href="https://doi.org/10.1016/B978-0-443-26614-0.00022-9">doi.org/10.1016/B978-0-443-26614-0.00022-9</a>	2024
<b>Phytohormones, plant growth and development</b> <i>Noor Ul Ain Malik Oushna Fajer Laiba Amin Attiya Rubab Khalid Nabia Khan Muhammad Faraz Bhatti Faiza Munir Ghulam Haider Rabia Amir Alvina Gul</i> In: <i>Phytohormones and Stress Responsive Secondary Metabolites</i> , Chapter 14, Page:175-186 <b>Citations:</b> 3 <b>DOI:</b> <a href="https://doi.org/10.1016/B978-0-323-91883-1.00014-0">10.1016/B978-0-323-91883-1.00014-0</a>	2023
<b>Molecular Characterization of Medically Important Fungi: Current Research and Future Prospects</b> <i>Alvina Gul Kazi Muhammad Faraz Bhatti Amber Malik Tehsin Fatma Wajeeha Shamsi Haris Ahmad Khan Atif Jamal</i> In: <i>Book on Recent Trends in Mycological Research</i> , Chapter 15, Pages 335-369 <b>Citations:</b> N/A <b>DOI:</b> <a href="https://doi.org/10.1007/978-3-030-60659-6_15">https://doi.org/10.1007/978-3-030-60659-6_15</a>	2021
<b>Hallmark Attributes of Plant Transcription Factors and Potentials of WRKY, MYB and NAC in Abiotic Stresses</b> <i>Muhammad Faraz Bhatti Dr Alvina Gul Kazi Sami Ullah Jan Muhammad Jamil</i> In: <i>Book on Approaches for Enhancing Abiotic Stress Tolerance in Plants</i> , Chapter 25, Pages 441-458 <b>Citations:</b> N/A <b>DOI:</b> -	2019
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Editorial Activities

Reviewed Papers for Journals <b>Impact Factor:</b> 0.869	2018
Reviewed Papers for Journals	2018

## Intellectual Property

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### Copyrights

### Patents

**Development of alginate based thin film food packing system incorporated with algal derived antimicrobial ZnO nanoparticles** 2020

**Status:** Filed

**Novel biofuel production using functional lipase enzyme nanoparticles extracted from leftover biomass of mushroom industry as a sustainable clean energy source”** 2020

**Status:** Filed

### Industrial Designs

### Trademarks

## Trainings

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**Frontiers on Mycoviruses and Related Agricultural Sciences** 2021

**Partner:** Silkroad Agricultural Education and Research Innovation Alliance and Northwest A&F University China

**Duration:** 18-Dec-2021 to 18-Dec-2021