Naseer Muhammad Khan

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About

Dr. Naseer Muhammad Khan is working as Assistant Professor in the Military College of Engineering. Dr. Naseer Muhammad Khan has a PhD in Mining Engineering. Dr. Naseer Muhammad Khan has published 38 research articles & conference papers having a citation count of 355, carried out 0 projects and filed 0 intellectual property.

Qualifications

PhD in Mining Engineering 2019 - 2022
China University of Mining Technology - Beijing , China

MS in Mining Engineering 2014 - 2016
UET Peshawar , Pakistan

BS in Mining Engineering 2010 - 2014
UET Peshawar , Pakistan

Experience

Assistant Professor 2022- Present
Military College of Engineering

Lecturer 2022 - 2022
Military College of Engineering

Lecturer 2017 - 2022
BUITEMS, Quetta , BUITEMS, Quetta

Mining Engineer 2014 - 2016
Kakul Mining , Opposite meat market first floor supply bazar Abbottabad

Research Articles

Predicting residual strength of hybrid fibre-reinforced Self-compacting concrete (HFR-SCC) exposed to elevated temperatures using machine learning 2025

Muhammad Saud Khan Liqiang Ma Waleed Bin Inqiad Majid Khan Naseer Muhammad Khan Saad S. Alarifi

Case studies in construction materials, Volume:22, Article Number e04112

Impact Factor: 6.500 | **Quartile:** 1 | **Citations:** 9
DOI: https://doi.org/10.1016/j.cscm.2024.e04112

Interpretable machine learning approaches to assess the compressive strength of metakaolin blended sustainable cement mortar 2025

Naseer Muhammad Khan LIqiang Ma Waleed Bin Inqiad Muhammad Saud Khan Imtiaz Iqbal Muhammad Zaka Emad Saad S. Alarifi

Scientific Reports , Volume:15, Issue:1, Article Number: 19414

Impact Factor: 3.900 | **Quartile:** 1 | **Citations:** 2
DOI: https://doi.org/10.1038/s41598-025-01327-1

Soft-computing models for predicting plastic viscosity and interface yield stress of fresh concrete 2025

Waleed Bin Inqiad Muhammad Faisal Javed Deema Mohammed Alsekait Naseer Muhammad Khan Majid Khan Fahid Aslam Diaa Salama Abd Elminaam

Scientific Reports , Volume:15, Article Number: 10740

Impact Factor: 3.9 | **Quartile:** 1
DOI: https://doi.org/10.1038/s41598-024-77490-8

Spatiotemporal early prediction of rock damage in rock engineering based on infrared radiation monitoring technology 2025

Qiangqiang Gao Liqiang Ma Wei Liu Naseer Muhammad Khan Xiuzhe Wang Yanxiao Ni Kunpeng Yu Saad S. Alarifi

Engineering Fracture Mechanics , Volume:315, Article Number 110811

Impact Factor: 4.700 | **Quartile:** 1 | **Citations:** 2
DOI: https://doi.org/10.1016/j.engfracmech.2025.110811

Utilizing contemporary machine learning techniques for determining soilcrete properties 2025

Waleed Bin Inqiad Muhammad Saud Khan Naseer Muhammad Khan Zohaib Mehmood Muhammad Bilal Mohammed Sazid Saad S. Alarifi

Earth Science Informatics , Volume 18, Article Number 176

Impact Factor: 2.700 | **Quartile:** 2 | **Citations:** 4
DOI: https://doi.org/10.1007/s12145-024-01520-2

A study of residents' behavior in participating in smart waste sorting system based on structural equation modeling 2025

Ming Wang Kewang Cao Naseer Muhammad Khan Xiaoman Hu Yinuo Zhao Furong Dong

Journal of Material Cycles and Waste Management , Volume:27, Issue:1, Page:354-368

Impact Factor: 2.700 | **Quartile:** 3 | **Citations:** 1
DOI: 10.1007/s10163-024-02115-1

Comparative study of statistical computational approaches to investigate the degraded compressive strength of concrete under the freeze-thaw effect 2024

Yuanzhong Yang Naseer Muhammad Khan Muhammad Nasir Amin Ayaz Ahmad Kaffayatullah Khan Muhammad Tahir Qadir

Case studies in construction materials, Volume 21, Article Number e03744

Impact Factor: 6.500 | **Quartile:** 1
DOI: https://doi.org/10.1016/j.cscm.2024.e03744

Predicting compressive strength of hollow concrete prisms using machine learning techniques and explainable artificial intelligence (XAI) 2024

Waleed Bin Inqiad Elena Valentina Dumitrascu Robert Alexandru Dobre Naseer Muhammad Khan Abbas Hussein Hammood Sadiq N. Henedy Rana Muhammad Asad Khan

Heliyon , Volume 10, Issue 17, Article Number e36841

Impact Factor: 3.400 | **Quartile:** 1 | **Citations:** 8
DOI: https://doi.org/10.1016/j.heliyon.2024.e36841

Failure mode identification in reinforced concrete flat slabs using advanced ensemble neural networks 2024

Mohammad Sadegh Barkhordari Hadi Fattahi Danial Jahed Armaghani Naseer Muhammad Khan Mohammad Afraz Panagiotis G. Asteris

Multiscale and Multidisciplinary Modeling, Experiments and Design, Pages 1-15

Impact Factor: 1.900 | **Quartile:** 2 | **Citations:** 6
DOI: 10.1007/s41939-024-00554-9

Simulation Study on Value Cocreation Mechanism of Digital Creative Industry Innovation Ecosystem Based on SEM-SD Model 2024

Kewang Cao Furong Dong Naseer Muhammad Khan Tariq Feroze Ahmed Sayed M. Metwally

IEEE Transactions on Engineering Management, Volume 71, Pages 11297-11314

Impact Factor: 4.600 | **Quartile:** 1 | **Citations:** 2
DOI: 10.1109/TEM.2024.3416304

Comparison of boosting and genetic programming techniques for prediction of tensile strain capacity of Engineered Cementitious Composites (ECC) 2024

Waleed Bin Inqiad Muhammad Faisal Javed Muhammad Shahid Siddique Naseer Muhammad Khan Loai Alkhattabi Maher Abuhussain Hisham Alabduljabbar

Materials Today Communications, Volume 39, Article Number 109222

Impact Factor: 3.7 | **Quartile:** 2 | **Citations:** 13
DOI: https://doi.org/10.1016/j.mtcomm.2024.109222

Method for Rock Fracture Prediction and Early Warning: Insight from Fusion of Multi-Physics Field Information 2024

Qiangqiang Gao Liqiang Ma Wei Liu Naseer Muhammad Khan Saad.S. Alarifi Mohammed Sazid Waleed Bin Inqiad

Heliyon , Volume 10, Issue 10, Article Number e30660

Impact Factor: 3.4 | **Quartile:** 1 | **Citations:** 16
DOI: https://doi.org/10.1016/j.heliyon.2024.e30660

Analysis of fracture characteristics of saturated sandstone based on infrared radiation variance 2024

Lixiao Hou Liqiang Ma Kewang Cao Naseer Muhammad Khan Xiujuan Feng Zhitao Zhang Anye Cao Dangliang Wang Xuebin Wang

Physics and Chemistry of the Earth, Volume 133, Article Number: 103517, Pages: 15

Impact Factor: 3.7 | **Quartile:** 2 | **Citations:** 6
DOI: 10.1016/j.pce.2023.103517

Prediction of rock loading stages using average infrared radiation temperature under shear and uniaxial loading 2024

Liqiang Ma Naseer Muhammad Khan Tariq Feroze Mohammed Sazid Kewang Cao Sajjad Hussain Qiangqiang Gao Saad.S. Alarifi Hui Wang

Infrared Physics and Technology, Volume 136, Article Number: 105084, Pages: 19

Impact Factor: 3.3 | **Quartile:** 2 | **Citations:** 15

DOI: 10.1016/j.infrared.2023.105084

Predicting Sandstone Brittleness under Varying Water Conditions Using Infrared Radiation and Computational Techniques 2023

Naseer Muhammad Khan Liqiang Ma Muhammad Zaka Emad Tariq Feroze Qiangqiang Gao Saad.S. Alarifi Li Sun Sajjad Hussain Hui Wang

Water , Volume:16, Issue: 1, Article Number: 143

Impact Factor: 3.4 | **Quartile:** 2 | **Citations:** 5

DOI: 10.3390/w16010143

Quantitative characterization of constitutive model of mudstone under uniaxial loading after immersion in acid solution by infrared radiation 2023

Liqiang Ma Naseer Muhammad Khan Kewang Cao Yanfa Wu Sajjad Hussain Dongdong Niu Saad.S. Alarifi

Infrared Physics and Technology, Volume 135, Article Number 104997

Impact Factor: 3.3 | **Quartile:** 2 | **Citations:** 6

DOI: 10.1016/j.infrared.2023.104997

Investigating average infrared radiation temperature characteristics during shear and tensile cracks in sandstone under different water contents 2023

Naseer Muhammad Khan Liqiang Ma Tariq Feroze Dangliang Wang Kewang Cao Qiangqiang Gao Hui Wang Sajjad Hussain Zhitao Zhang Saad.S. Alarifi

Infrared Physics and Technology, Volume 135, Article Number 104968

Impact Factor: 3.3 | **Quartile:** 2 | **Citations:** 6

DOI: 10.1016/j.infrared.2023.104968

Infrared radiation constitutive model of sandstone during loading fracture 2023

Kewang Cao Furong Dong Liqiang Ma Naseer Muhammad Khan Sajjad Hussain Danial Jahed Armaghani

Infrared Physics and Technology, Volume 133, Article Number 104755

Impact Factor: 3.3 | **Quartile:** 2 | **Citations:** 7

DOI: 10.1016/j.infrared.2023.104755

Infrared radiation response mechanism of sandstone during loading and fracture process 2023

Kewang Cao Furong Dong Yihe Yu Naseer Muhammad Khan Sajjad Hussain Saad.S. Alarifi

Theoretical and Applied Fracture Mechanics, Volume 126, Article Number 103974

Impact Factor: 5.3 | **Quartile:** 1 | **Citations:** 13

DOI: https://doi.org/10.1016/j.tafmec.2023.103974

Precursors of Cyclic Loading and Unloading Sandstone Failure Based on “Acoustic-Thermal” Loading–Unloading Response Ratio 2023

Hao Xu Liqiang Ma Kewang Cao Naseer Muhammad Khan Sajjad Hussain Dongdong Niu Saad.S. Alarifi Sher Bacha

Sustainablity , Volume 15, Issue 13, Article Number 10158

Impact Factor: 3.9 | **Quartile:** 2 | **Citations:** 8

DOI: 10.3390/su151310158

Research on the denoising method of infrared thermogram during rock fracture 2023

Qiangqiang Gao Liqiang Ma Wei Liu Naseer Muhammad Khan Guanghui Cao Yumiao Fang Hui Wang

Infrared Physics and Technology, Volume 131, Article Number 104651

Impact Factor: 2.999 | **Quartile:** 2 | **Citations:** 13

DOI: 10.1016/j.infrared.2023.104651

Appraisal of Different Artificial Intelligence Techniques for the Prediction of Marble Strength 2023

Muhammad Saqib Jan Sajjad Hussain Rida e Zahra Muhammad Zaka Emad Naseer Muhammad Khan Zahid Ur Rehman Kewang Cao Saad.S. Alarifi Salim Raza Saira Sherin Muhammad Salman

Sustainablity , Volume 15, Issue 11, Article Number 8835

Impact Factor: 3.9 | **Quartile:** 2 | **Citations:** 14

DOI: https://doi.org/10.3390/su15118835

Infrared Precursor Experiment to Predict Water Inrushes in Underground Spaces Using a Multiparameter Normalization 2023

Kewang Cao Furong Dong Liqiang Ma Naseer Muhammad Khan Tariq Feroze Saad.S. Alarifi Sajjad Hussain Muhammad Ali

Sustainablity , Volume 15, Issue 9, Article Number 7570

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DOI: doi.org/10.3390/su15097570

A comprehensive model for evaluating infrared radiation and acoustic emission characteristics of sandstone fracture 2023

Kewang Cao Yujun Xu Naseer Muhammad Khan Xinci Li Ruoyu Cui Sajjad Hussain Danial Jahed Armaghani Saad S. Alarifi

Engineering Fracture Mechanics , Volume 283, Article Number 109217

Impact Factor: 4.898 | **Quartile:** 1 | **Citations:** 21

DOI: https://doi.org/10.1016/j.engfracmech.2023.109217

Prediction of Coal Dilatancy Point Using Acoustic Emission Characteristics: Insight Experimental and Artificial Intelligence Approaches 2023

Muhammad Ali Naseer Muhammad Khan Qiangqiang Gao Kewang Cao Danial Jahed Armaghani Saad.S. Alarifi Hafeezur Rehman Izhar Mithal Jiskani

Mathematics , Volume 11(6), Article Number 1305

Impact Factor: 2.592 | **Quartile:** 1

DOI: https://qalam.nust.edu.pk/faculty/nrp/journal_paper/mgmt

Infrared radiation denoising model of “sub-region-Gaussian kernel function” in the process of sandstone loading and fracture 2023

Kewang Cao Furong Dong's Wei Liu's Naseer Muhammad Khan Ruoyu Cui Xinci Li Sajjad Hussain Saad S. Alarifi Dongdong Niu

Infrared Physics and Technology, Volume 129, Article Number 104583

Impact Factor: 2.997 | **Quartile:** 2 | **Citations:** 14

DOI: http://dx.doi.org/10.1016/j.infrared.2023.104583

Investigation of the acoustic emission and fractal characteristics of coal with varying water contents during uniaxial compression failure 2023

Muhammad Ali Enyuan Wang Zhonghui Li Naseer Muhammad Khan Mohanad Muayad Sabri Sabri Barkat Ullah

Scientific Reports , Volume 13, Issue 1, Article Number 2238

Impact Factor: 4.996 | **Quartile:** 2 | **Citations:** 20

DOI: https://doi.org/10.1038/s41598-023-29473-4

Precursory Analysis of Water-Bearing Rock Fracture Based on The Proportion of Dissipated Energy 2023

Lixiao Hou Kewang Cao Naseer Muhammad Khan Danial Jahed Armaghani Saad S. Alarifi Sajjad Hussain Muhammad Ali

Sustainability (Switzerland) , Volume 15, Issue 3, Article Number 1769

Impact Factor: 3.889 | **Quartile:** 2 | **Citations:** 4

DOI: http://dx.doi.org/10.3390/su15031769

Analytical Damage Model for Predicting Coal Failure Stresses by Utilizing Acoustic Emission 2023

Muhammad Ali Enyuan Wang Zhonghui Li Xiaoran Wang Naseer Muhammad Khan Zesheng Zang Saad S Alarifi Yewuhalashet Fissha

Sustainability (Switzerland) , Volume 15, Issue 2, Article Number1236

Impact Factor: 3.889 | **Quartile:** 2 | **Citations:** 15

DOI: http://dx.doi.org/10.3390/su15021236

Research on Leakage Detection at the Joints of Diaphragm Walls of Foundation Pits Based on Ground Penetrating Radar 2022

Yi Xu Naseer Muhammad Khan Hafeezur Rehman Sajjad Hussain Rana Muhammad Asad Khan Muhammad Zaka Emad Kewang Cao Mohd Hazizan Bin Mohd Hashim Saad.S. Alarifi Ruoyu Cui Xinci Li

Sustainability , Volume 15, Issue 1, Article Number 506

Impact Factor: 3.889 | **Quartile:** 2 | **Citations:** 4

DOI: 10.3390/su15010506

The Infrared Radiation Characteristics of Sandstone Fracture Seepage under Coupled Stress-Hydro Effect 2022

Ruoyu Cui Kewang Cao Xinci Li Rana Muhammad Asad Khan Naseer Muhammad Khan Wei Liu Qiangqiang Gao Fagang Wang Yuanzhong Yang Jiangbo Quan Saad S. Alarif

Sustainability , Volume 14, Issue 24, Article Number 16454

Impact Factor: 3.889 | **Quartile:** 2 | **Citations:** 8

DOI: doi.org/10.3390/su142416454

Appraisal of rock IR law and damage precursor: Insight infrared thermogram entropy 2022

Qiangqiang Gao Liqiang Ma Wei Liu Kewang Cao Zhiyang Zhao Naseer Muhammad Khan

Infrared Physics and Technology, Volume 127, Article Number 104443

Impact Factor: 2.997 | **Quartile:** 2 | **Citations:** 11

DOI: doi.org/10.1016/j.infrared.2022.104443

Prediction of Strength Parameters of Thermally Treated Egyptian Granodiorite Using Multivariate Statistics and Machine Learning Techniques 2022

Mohamed Elgharib Gomah Guichen Li Naseer Muhammad Khan Changlun Sun Jiahui Xu Ahmed A. Omar B. G. Mousa Marzouk Mohamed Aly Abdelhamid M. M. Zaki

Mathematics , Volume 10, Issue 23, Article Number 4523

Impact Factor: 2.4 | **Quartile:** 1 | **Citations:** 8

DOI: doi.org/10.3390/math10234523

Evaluating the thermal-cooling induced effects on the Ambela granite properties (from Pakistan) using experimental and image processing techniques 2022

Naseer Muhammad Khan Liqiang Ma Kewang Cao Sajjad Hussain Asghar Ali Wei Liu Saad.S. Alarifi Kausar Sultan Shah Sajid Khan Yang Xiaoxu Yujun Xu

Bulletin of Engineering Geology and the Environment, Volume 81, Issue 12, Article Number: 506

Impact Factor: 4.130 | **Quartile:** 2 | **Citations:** 7

DOI: doi.org/10.1007/s10064-022-03019-w

An Appropriate Model for the Prediction of Rock Mass Deformation Modulus among Various Artificial Intelligence Models 2022

Sajjad Hussain Naseer Muhammad Khan Muhammad Zaka Emad Abdul Muntaqim Naji Kewang Cao Qiangqiang Gao Zahid Ur Rehman Salim Raza Ruoyu Cui Muhammad Salman Saad.S. Alarifi

Sustainability , Volume 14, Issue 22, Article Number 15225

Impact Factor: 3.889 | **Quartile:** 2 | **Citations:** 8

DOI: https://doi.org/10.3390/su142215225

Early Violent Failure Precursor Prediction Based on Infrared Radiation Characteristics for Coal Specimens Under Different Loading Rates 2022

Naseer Muhammad Khan Liqiang Ma Kewang Cao A. J. S. Spearing W. Liu Y. Jie M. Yousaf

Rock Mechanics and Rock Engineering, Pages 1-8

Impact Factor: 6.518 | **Quartile:** 1 | **Citations:** 26

DOI: 10.1007/s00603-022-03021-4

Development of Predictive Models for Determination of the Extent of Damage in Granite Caused by Thermal Treatment and Cooling Conditions Using Artificial Intelligence 2022

Naseer Muhammad Khan Kewang Cao Muhammad Zaka Emad Sajjad Hussain Hafeezur Rehman Kausar Sultan Shah Faheem Ur Rehman Aamir Muhammad

Mathematics , Volume 10, Issue 16, Article Number 2883

Impact Factor: 2.4 | **Quartile:** 1 | **Citations:** 12

DOI: 10.3390/math10162883

Application of Machine Learning and Multivariate Statistics to Predict Uniaxial Compressive Strength and Static Young's Modulus Using Physical Properties under Different Thermal Conditions 2022

Naseer Muhammad Khan Kewang Cao Qiupeng Yuan Mohd Hazizan Bin Mohd Hashim Hafeezur Rehman Sajjad Hussain Muhammad Zaka Emad Kausar Sultan Shah Barkat Ullah Sajid Khan

Sustainablity , Volume 14(16), Article Number 9901

Impact Factor: 3.889 | **Quartile:** 2 | **Citations:** 32

DOI: 10.3390/su14169901