

Publications (W category as per HJRS)

2022

1. Elahi, F.; **Muhammad, K.**; Din, S.U.; Khan, M.F.A.; Bashir, S.; Hanif, M. Lithological Mapping of Kohat Basin in Pakistan Using Multispectral Remote Sensing Data: A Comparison of Support Vector Machine (SVM) and Artificial Neural Network (ANN). *Appl. Sci.* 2022, *12*, 12147. <https://doi.org/10.3390/app1223121472022>
2. Abid Ali Khan Danish, Asif Khan & **Khan Muhammad** (2022) A simulated annealing based stochastic long-term production scheduling of open-pit mines with stockpiling under grade uncertainty, *International Journal of Mining, Reclamation and Environment*, DOI: [10.1080/17480930.2022.2140543](https://doi.org/10.1080/17480930.2022.2140543)
3. Ahmed W, **Muhammad K**, Glass HJ, Chatterjee S, Khan A, Hussain A. Novel MLR-RF-Based Geospatial Techniques: A Comparison with OK. *ISPRS International Journal of Geo-Information*. 2022; 11(7):371. <https://doi.org/10.3390/ijgi11070371>
4. Khan, A.U.; Salman, S.; **Muhammad, K.**; Habib, M. Modelling Coal Dust Explosibility of Khyber Pakhtunkhwa Coal Using Random Forest Algorithm. *Energies* 2022, *15*, 3169. <https://doi.org/10.3390/en15093169>

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5. Din SU, **Muhammad K**, Khan MFA, Bashir S, Sajid M, Khan A. A Fusion of Feature-Oriented Principal Components of Multispectral Data to Map Granite Exposures of Pakistan. *Applied Sciences*. 2021; 11(23):11486. <https://doi.org/10.3390/app112311486>
6. AAK Danish, Khan A, **Muhammad K**, Ahmad W, and Salman S. A simulated annealing based approach for open pit mine production scheduling with stockpiling option, *Resources Policy*, Volume 71, 2021, 102016, ISSN 0301-4207, <https://doi.org/10.1016/j.resourpol.2021.102016>.
7. Salman S, **Muhammad K**, Khan A, Glass HJ. A Block Aggregation Method for Short-Term Planning of Open Pit Mining with Multiple Processing Destinations. *Minerals*. 2021; 11(3):288. <https://doi.org/10.3390/min11030288>
8. B. Khurshid, S. Maqsood, M. Omair, B. Sarkar, I. Ahmad and **K. Muhammad**, "An Improved Evolution Strategy Hybridization With Simulated Annealing for Permutation Flow

Shop Scheduling Problems," in *IEEE Access*, vol. 9, 2021, pp. 94505-94522.

<https://doi.org/10.1109/ACCESS.2021.3093336>

9. Rehman H, Naji AM, Nam K, Ahmad S, **Muhammad K**, Yoo H-K. Impact of Construction Method and Ground Composition on Headrace Tunnel Stability in the Neelum–Jhelum Hydroelectric Project: A Case Study Review from Pakistan. *Applied Sciences*. 2021; 11(4):1655.

<https://doi.org/10.3390/app11041655>

10. Khan MFA, **Muhammad K**, Bashir S, Ud Din S, Hanif M. Mapping Allochemical Limestone Formations in Hazara, Pakistan Using Google Cloud Architecture: Application of Machine-Learning Algorithms on Multispectral Data. *ISPRS International Journal of Geo-Information*.

2021; 10(2):58. <https://doi.org/10.3390/ijgi10020058>

2020 (Submitted in Nov 2019 and published in Sept 2020) IF:2.777 HJRS = X

11. Ahmed W, **Muhammad K**, Siddiqui, FI. Predicting Calorific Value of Thar Lignite Deposit: A Comparison between Back-propagation Neural Networks (BPNN), Gradient Boosting Trees (GBT), and Multiple Linear Regression (MLR), *Applied Artificial Intelligence*. 2020; 34:14, 1124-1136, <https://doi.org/10.1080/08839514.2020.1824091>

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12. **Muhammad K**, Shah, A. Minimizing Backbreak at Deewan Cement Limestone Quarry using artificial Neural Network. *Archives of Mining Sciences*. 2017; 62(4): 795-806.

<https://doi.org/10.1515/amsc-2017-0055>

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13. **Muhammad K**, Mohammad N, Rehman F. Modeling Shotcrete Mix Design using Artificial Neural Network. *Computers and Concrete*. 2015; 15(2):1-20.

<https://doi.org/10.12989/CAC.2015.15.2.167>

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14. **Muhammad K**, Glass HJ. Modelling Short-Scale Variability and Uncertainty During Mineral Resource Estimation Using a Novel Fuzzy Estimation Technique. *Geostandards and Geoanalytical Research*. 2011; 35: 369–385. <https://doi.org/10.1111/j.1751-908X.2010.00051.x>