

# Curriculum Vitae: Prof. Dr. Khan Alam



**Affiliation:** Department of Physics, University of Peshawar, Pakistan.

Phone: +92-91-9216727

Email: [khanalam@uop.edu.pk](mailto:khanalam@uop.edu.pk)

## Professional Career (More than 22 years of experience in related field):

2024- to date	Professor, Department of Physics, University of Peshawar, Pakistan
2022- to 2024	Associate Professor, Department of Physics, University of Peshawar, Pakistan
2012- to 2021	Assistant Professor, Department of Physics, University of Peshawar, Pakistan
2008- to 2012	Research Associate, University of Salzburg, Austria
2002- to 2008	Manager (Physics) in National Development Complex, Government of Pakistan

## Academics:

Ph.D. (Atmospheric Physics), University of Salzburg, Austria.

M.Phil. (Space and Planetary Astrophysics), University of Karachi, Pakistan.

M.Sc. (Physics), University of Peshawar.

B.Sc. (Physics and Math's-A, Math's-B), University of Peshawar.

## Research Interest:

Aerosol sampling, measurements & characterization; Aerosol optical & radiative properties; Radiative transfer modeling; Aerosol-Cloud micro/macro physics; Aerosol-cloud-precipitation interaction; Particulate matter characterization; Dust impacts on precipitation.

## Journal Publications:

1. Li, J., Wang, T., Li, C., Yan, H., **Alam, K.**, Cui, Y., ... & Huang, J. (2024). Can the aerosol pollution extreme events be revealed by global reanalysis products?. *Science of The Total Environment*, 171424. [I.F: 9.8]
2. Huang, Z., Yu, X., Liu, Q., Maki, T., **Alam, K.**, Wang, Y., ... & Huang, J. (2024). Bioaerosols in the atmosphere: A comprehensive review on detection methods, concentration and influencing factors. *Science of the Total Environment*, 912, 168818. [I.F: 9.8]
3. Bi, H., Chen, S., Zhang, D., Wang, Y., Kang, L., **Alam, K.**, Tang, M., Chen, Y., Zhang, Y., Wang, D. (2024). The Circum-global Transport of Massive African Dust and its Impacts on the Regional Circulation in Remote Atmosphere. *Bulletin of American Meteorological Society*. DOI: <https://doi.org/10.1175/BAMS-D-23-0072.1>. [I.F: 8.0]
4. Mohyuddin, S., **Alam, K.**, Zeb, B., Khokhar, M. F., Mir, K. A., Wexler, A. S., ... & Shahid, I. (2024). Characterization and Source Identification of PM2. 5 during Intense Haze Episodes in an Urban Environment of Lahore. *Atmospheric Environment: X*, 100276. [I.F: 3.8]
5. Zeb, B., **Alam, K.**, Khan, R., Ditta, A., Iqbal, R., Elsadek, M. F., ... & Elshikh, M. S. (2024). Characteristics and optical properties of atmospheric aerosols based on long-term AERONET investigations in an urban environment of Pakistan. *Scientific Reports*, 14(1), 8548. [I.F: 4.6]
6. Zeb, B., Ditta, A., **Alam, K.**, Sorooshian, A., Din, B. U., Iqbal, R., ... & Elshikh, M. S. (2024). Wintertime investigation of PM10 concentrations, sources, and relationship with different meteorological parameters. *Scientific Reports*, 14(1), 154. [I.F: 4.6].

7. Zeb, B., **Alam, K.**, Huang, Z., Öztürk, F., Wang, P., Mihaylova, L., ... & Munir, S. (2024). In-depth characterization of particulate matter in a highly polluted urban environment at the foothills of Himalaya–Karakorum Region. *Environmental Science and Pollution Research*, 31, 35705–35726. [I.F: 5.8]
8. Zeeshan, M., **Alam, K.** (2024). Investigations of aerosol types classification and PM2.5 concentrations: A case study of two major cities in Pakistan. *Air Quality, Atmosphere and Health*, <https://doi.org/10.1007/s11869-024-01616-0>. [I.F: 2.9].
9. Hamzeh, N. H., Abadi, A. R. S., Shukurov, K. A., Mhawish, A., **Alam, K.**, & Opp, C. (2024). Simulation and synoptic investigation of a severe dust storm originated from the Urmia Lake in the Middle East. *Atmósfera*, 38, 531-555. [I.F: 1.4].
10. Chen, Y., Chen, S., Zhou, J., Zhao, D., Bi, H., Zhang, Y., **Alam, K.**, Yu, H., Yang, Y. and Chen, J. (2023). A super dust storm enhanced by radiative feedback. *npj Climate and Atmospheric Science*, 6(1), 90. [I.F: 9.448].
11. Zhou, C., Liu, Y., Yang, X., Zhu, Q., **Alam, K.**, Yang, F., ... & He, Q. (2023). Positive feedback of dust direct radiative effect on dust emission in Taklimakan Desert. *Geophysical Research Letters*, 50(13), e2023GL103512. [I.F: 5.576].
12. Shah, S. S. A., Huang, Z., ul Haq, E., & **Alam, K.** (2023). Exploring the Spatiotemporal Variation in Light-Absorbing Aerosols and Its Relationship with Meteorology over the Hindu Kush–Himalaya–Karakoram Region. *Remote Sensing*, 15(10), 2527. [I.F: 5.0].
13. Zhang, S., Huang, Z., **Alam, K.**, Li, M., Dong, Q., Wang, Y., Shen, X., Bi, J., Zhang, J., Li, W. and Li, Z. (2023). Derived Profiles of CCN and INP Number Concentrations in the Taklimakan Desert via Combined Polarization Lidar, Sun-Photometer, and Radiosonde Observations. *Remote Sensing*, 15(5), 1216. [I.F: 5.0].
14. Sarwar, F., **Alam, K.**, Öztürk, F., Koçak, M., & Malik, R. N. (2023). Appraising the characteristics of particulate matter from leather tanning micro-environments, their respiratory risks, and dysfunctions amid exposed working cohorts. *Environmental Monitoring and Assessment*, 195(12), 1-16. [I.F: 3.0].
15. Neisi, A., Goudarzi, G., Mohammadi, M. J., Tahmasebi, Y., Rahim, F., Baboli, Z., **Alam, K.**, ... & Farhadi, M. (2023). Association of the corona virus (Covid-19) epidemic with environmental risk factors. *Environmental Science and Pollution Research*, 30(21), 60314-60325. [I.F: 5.8]
16. Ahmad, S., Zeb, B., Ditta, A., **Alam, K.**, Shahid, U., Shah, A. U., ... & Alqurashi, M. (2023). Morphological, mineralogical, and biochemical characteristics of particulate matter in three size fractions (PM10, PM2.5, and PM1) in the urban environment. *ACS omega*, 8(35), 31661-31674. [I.F: 4.1].
17. Huang, Z., Dong, Q., Chen, B., Wang, T., Bi, J., Zhou, T., **Alam, K.**, Shi, J. and Zhang, S. (2023). Method for retrieving range-resolved aerosol microphysical properties from polarization lidar measurements. *Optics Express*, 31(5), 7599-7616. [I.F: 3.833].
18. Haq, M., Iqbal, M. J., **Alam, K.**, Huang, Z., Blaschke, T., Qureshi, S., & Muhammad, S. (2023). Assessment of Runoff Components of River Flow in the Karakoram Mountains, Pakistan, during 1995–2010. *Remote Sensing*, 15(2), 399. [I.F: 5.349].
19. Lu, F., Chen, S., Hu, Z., Han, Z., **Alam, K.**, Luo, H., ... & Guo, X. (2023). Sensitivity and uncertainties assessment in radiative forcing due to aerosol optical properties in diverse locations in China. *Science of The Total Environment*, 860, 160447. [I.F: 9.8]
20. Luo, R., Liu, Y., Luo, M., Li, D., Tan, Z., Shao, T., **Alam, K.** (2023). Dust effects on mixed-phase clouds and precipitation during a super dust storm over northern China. *Atmospheric Environment*, 313, 120081. [I.F: 5.0].

21. ul Haq, E., **Alam, K.**, Bibi, S., & Roy, A. (2022). High concentration of black carbon in northern Pakistan: Characteristics, source apportionment and emission source regions. *Atmospheric Environment*, 293, 119475. [I.F: 5.0].
22. Mohyuddin, S., Ikram, M., **Alam, K.**, Bibi, S., Ahmad, M., & Haq, E. U. (2022). The influence and contribution of fine mode particles to aerosol optical properties during haze events at the foothills of Himalaya-Karakorum region. *Atmospheric Environment*, 290, 119388. [I.F: 5.0].
23. Anwar, K., **Alam, K.**, Liu, Y., Huang, Z., Huang, J., & Liu, Y. (2022). Analysis of aerosol cloud interactions with a consistent signal of meteorology and other influencing parameters. *Atmospheric Research*, 275, 106241. [I.F: 5.5].
24. Zeb, B., **Alam, K.**, Ditta, A., Ullah, S., Ali, H. M., Ibrahim, M., & Salem, M. Z. (2022). Variation in Coarse Particulate Matter (PM10) and Its Characterization at Multiple Locations in the Semiarid Region. *Frontiers in Environmental Science*, 10:843582. doi: 10.3389/fenvs.2022.843582 [I.F: 4.6].
25. Goudarzi, G., Sorooshian, A., **Alam, K.**, Weckwerth, T. M., Hamid, V., & Maleki, H. (2022). Diagnostic Alarm of Dew Point Temperature for the Occurrence of Middle Eastern Dust Storms. *Pure and Applied Geophysics*, 179, 4657–4670. [I.F: 2.1].
26. Usman, F., Zeb, B., **Alam, K.**, Huang, Z., Shah, A., Ahmad, I., & Ullah, S. (2022). In-Depth Analysis of Physicochemical Properties of Particulate Matter (PM10, PM2. 5 and PM1) and Its Characterization through FTIR, XRD and SEM-EDX Techniques in the Foothills of the Hindu Kush Region of Northern Pakistan. *Atmosphere*, 13, 124. [I.F: 2.9].
27. Gharibzadeh, M., Bidokhti, A.A., **Alam, K.** (2021). The interaction of ozone and aerosol in a semi-arid region in the Middle East: Ozone formation and radiative forcing implications. *Atmospheric Environment*, 245, 118015. [I.F: 5.0].
28. Sarwar, F., **Alam, K.**, Chow, C. W., Malik, R. N. (2021). Pulmonary Dysfunction Augmenting Bacterial Aerosols in Leather Tanneries of Punjab, Pakistan. *International Journal of Chronic Obstructive Pulmonary Disease*, 16, 2925–2937. [I.F: 3.355].
29. Wang, P., Mihaylova, L., Munir, S., Chakraborty, R., Wang, J., Mayfield, M., **Alam, K.**, Khokhar, M.F. and Coca, D. (2021). A computationally efficient symmetric diagonally dominant matrix projection-based Gaussian process approach. *Signal Processing*, 183, 108034. [I.F: 4.4].
30. Wang, P., Mihaylova, L., Chakraborty, R., Munir, S., Mayfield, M., **Alam, K.**, ... & Fang, H. (2021). A Gaussian Process Method with Uncertainty Quantification for Air Quality Monitoring. *Atmosphere*, 12(10), 1344. [I.F: 2.9].
31. Karami, S., Hamzeh, N. H., **Alam, K.**, Noori, F., & Abadi, A. R. S. (2021). Spatio-temporal and synoptic changes in dust at the three islands in the Persian Gulf region. *Journal of Atmospheric and Solar-Terrestrial Physics*, 214, 105539. [I.F: 1.9].
32. Karami, S., Hamzeh, N. H., Rashki, A., Kaskaoutis, D., **Alam, K.**, Ranjbar, A. (2021). Numerical simulations of dust storms originated from dried lakes in central and south Asia: the case of Areal Sea and Sistan basin. *Aeolian Research*, 50, 100679. [I.F: 3.3].
33. Rizvi, S. H., **Alam, K.**, Fatima, H., Iqbal, M. J. (2021). The Surface Urban Heat Island Intensity and Urban Expansion: A Comparative Analysis for the Coastal Areas of Pakistan. *Environment, Development and Sustainability*, 23, 5520-5537. [I.F: 4.7]
34. Ifthikhar, M., **Alam, K.**, Syed, W. A., Ahmad, M., Zeb, B., Liu, Y., Gulistan, N. (2021). Contrasting changes in cloud optical properties and the influence of aerosols, meteorology and radiation feedback in the Himalaya Karakoram region. *Atmospheric Research*, 248, 105210. [I.F: 5.5]

35. Yazdani, M., Baboli, Z., Maleki, H., Birgani, Y. T., Zahiri, M., Chaharmahal, S. S. H., **Alam, K.** ... & Goudarzi, G. (2021). Contrasting Iran's air quality improvement during COVID-19 with other global cities. *Journal of Environmental Health Science and Engineering*, 19(2), 1801-1806. [I.F: 2.130]
36. Ahmad, M., Tariq, S., **Alam, K.**, Anwar, S., Ikram, M. (2020). Long-term variation in aerosol optical properties and their climatic implications over major cities of Pakistan. *Journal of Atmospheric and Solar-Terrestrial Physics*, 210, 105419. [I.F: 1.9].
37. Ahmad, M., **Alam, K.**, Tariq, S. (2020). Contrasting changes in snow cover and its sensitivity to aerosol optical properties in Hindu Kush-Karakoram-Himalaya region. *Science of the Total Environment*, 699, 134356. [I.F: 9.8]
38. Zeb, B., **Alam, K.**, Nasir, J., Mansha, M., Ahmad, I., Bibi, S., Malak, S. M., Ali, M. (2020). Black Carbon Aerosol Characteristics and Radiative Forcing Over the High Altitude Glacier Region of Himalaya-Karakorum-Hindukush. *Atmospheric Environment*, 238, 117711. [I.F: 5.0]
39. Rizvi, S. H., Iqbal, M. J., Fatima, H., **Alam, K.** (2020). The Effect of Urbanization on the Intensification of SUHIs: Analysis by LULC on Karachi. *Journal of Atmospheric and Solar-Terrestrial Physics*, 207, 105374. [I.F: 1.9].
40. Luo, M., Liu, Y., Zhu, Q., Tang, Y., & **Alam, K.** (2020). Role and Mechanisms of Black Carbon Affecting Water Vapor Transport to Tibet. *Remote Sensing*, 12, 231. [I.F: 5.0]
41. Liu, Zhu, Q., Hua, S., **Alam, K.**, Dai, T., Cheng, Y. (2020). Tibetan Plateau driven impact of Taklimakan dust on northern rainfall. *Atmospheric Environment*, 234, 117583. [I.F: 5.0]
42. Zhang, X., Chen, S., Kang, L., Yuan, T., Luo, Y., **Alam, K.**, Li, J., He, Y., Bi, H., Zhao, D. (2020). Direct radiative forcing induced by light-absorbing aerosols in different climate regions over East Asia. *Journal of Geophysical Research: Atmospheres*, 125, e2019JD032228. DOI:10.1029/2019JD032228. [I.F: 5.576]
43. Khan, N., **Alam, K.**, Seema, H., Samreen, A., & Zeb, B. (2020). Fabrication of graphene oxide coated quartz filter paper for enhanced adsorption of particulate matter. *Applied Optics*, 59, 463-468. [I.F: 1.905]
44. Alvi, M. U., Kistler, M., Shahid, I., **Alam, K.**, Chishtie, F., Mahmud, T., & Kasper-Giebl, A. (2020). Composition and source apportionment of saccharides in aerosol particles from an agro-industrial zone in the Indo-Gangetic Plain. *Environmental Science and Pollution Research*, 27, 14124–14137. [I.F: 5.8]
45. Karami, S., Hamzeh, N. H., **Alam, K.**, Ranjbar, A. (2020). The study of a rare frontal dust storm with snow and rain fall: Model results and ground measurements. *Journal of Atmospheric and Solar-Terrestrial Physics*, 197, 105149. [I.F: 1.9].
46. Alvi, M. U., Mahmud, T., Kistler, M., Kasper-Giebl, A., Shahid, I., **Alam, K.**, Chishtie, F., Mitu, L. (2020). Elemental Composition of Particulate Matter in South-Asian Megacity (Faisalabad-Pakistan): Seasonal Behaviors, Source Apportionment and Health Risk Assessment. *Revista de Chimie*, 71, 288-301. [I.F: 1.755]
47. Ahmad, M., **Alam, K.**, Tariq, S. (2019). Estimating fine particulate concentration using a combined approach of linear regression and artificial neural network. *Atmospheric Environment*, 219, 117050. [I.F: 5.0]
48. Alvi, M. U., Kistler, M., Mahmud, T., Shahid, I., **Alam, K.**, Chishtie, F., ... & Kasper-Giebl, A. (2019). The Composition and Sources of Water Soluble Ions in PM10 at an Urban Site in the Indo-Gangetic Plain. *Journal of Atmospheric and Solar-Terrestrial Physics*, 196, 105142. [I.F: 1.9]

49. Shaheen, K., Shah, Z., Suo, H., Liu, M., Ma, L., **Alam, K.**, ... & Khan, S. A. (2019). Aerosol clustering in an urban environment of Beijing during (2005–2017). *Atmospheric Environment*, 213, 534-547. [I.F: 5.0]
50. Nasir, J., Zeb, B., Sorooshian, A., Mansha, M., **Alam, K.**, Ahmad, I., Haider, H., Shafique, M. (2019). Spatio-Temporal Variations of Absorbing Aerosols and their Relationship with Meteorology over Four High Altitude Sites in Glaciated Region of Pakistan. *Journal of Atmospheric and Solar-Terrestrial Physics*, 190, 84-95. [I.F: 1.9].
51. Rizvi, S. H., **Alam, K.**, & Iqbal, M. J. (2019). Spatio-temporal variations in urban heat island and its interaction with heat wave. *Journal of Atmospheric and Solar-Terrestrial Physics*, 185, 50-57. [I.F: 1.9].
52. Zeb, B., **Alam, K.**, Sorooshian, A., Chishtie, F., Ahmad, I., & Bibi, H. (2019). Temporal characteristics of aerosol optical properties over the glacier region of northern Pakistan. *Journal of Atmospheric and Solar-Terrestrial Physics*, 186, 35-46. [I.F: 1.9].
53. Gharibzadeh, M., **Alam, K.**, Abedini, Y., Biokhti, A. A., Masoumi, A., Bibi, H., Zeb, B. (2019). Climatological analysis of the optical properties of aerosols and their direct radiative forcing in the Middle East. *Journal of Atmosphere and Solar Terrestrial Physics*, 183, 86-98. [I.F: 1.9].
54. Riaz, R., Ali, U., Li, J., Zhang, G., **Alam, K.**, Sweetman, A. J., Jones, K. V., Malik, R. N. (2019). Assessing the level and sources of Polycyclic Aromatic Hydrocarbons (PAHs) in soil and sediments along Jhelum riverine system of lesser Himalayan region of Pakistan. *Chemosphere*, 216, 640-652. [I.F: 8.8]
55. **Alam, K.**, Khan, R., Sooroshian, A., Blaschke, T., Bibi, S., Bibi, H. (2018). Analysis of aerosol optical properties due to a haze episode in the Himalayan foothills: Implications for climate forcing. *Aerosol Air Quality Research*, 18, 1331-1350. [I.F: 4.53]
56. Sarwar, F., Malik, R. N., Chow, C. W., **Alam, K.** (2018). Occupational exposure and consequent health impairments due to potential incidental nanoparticles in leather tanneries: An evidential appraisal of south Asian developing countries. *Environment International*, 117, 164-174. [I.F: 11.8]
57. Gharibzadeh, M., **Alam, K.**, Abedini, Y., Biokhti, A. A., Masoumi, A., Bibi, H. (2018). Characterization of aerosol optical properties using multiple clustering techniques over Zanjan, Iran, during 2010-2013. *Applied Optics*, 57, 2881-2889. [I.F: 1.905]
58. Shahid, I., Alvi, M. U., Shahid, M. Z., **Alam, K.**, Chishtie, F. (2018). Source apportionment of PM at an Urban Site of a South Asian Mega City. *Aerosol Air Quality Research*, 18, 2498-2509. [I.F: 4.53]
59. Zeb, B., **Alam, K.**, Sooroshian, A., Blaschke, T., Ahmad, I., Shahid, I. (2018). On the Morphology and Composition of Particulate Matter in an Urban Environment. *Aerosol Air quality research*, 18, 1431-1447. [I.F: 4.53]
60. Ifthikhar, M., **Alam, K.**, Sorooshian, A., Syed, W. A., Bibi, S., Bibi, H. (2018). Contrasting aerosol optical and radiative properties between dust and urban haze episodes in megacities of Pakistan. *Atmospheric Environment*, 173, 157-172. [I.F: 5.0]
61. Bibi, S., **Alam, K.**, Chishistie, F., Bibi, H., Rahman, S. (2017). Observations of Black Carbon Aerosols characteristics over an urban environment: Radiative forcing and related implications. *Science of the Total Environment*, 603-604, 319-329. [I.F: 9.8]
62. Gharibzadeh, M., **Alam, K.**, Abedini, Y., Biokhti, A. A., Masoumi, A. (2017). Monthly and seasonal variations of aerosol optical properties and direct radiative forcing over Zanjan, Iran. *Journal of Atmosphere and Solar Terrestrial Physics*, 164, 268-275. [I.F: 1.9]

63. Bibi, H., **Alam, K.**, Bibi, S. (2017). Estimation of shortwave direct aerosol radiative forcing at four locations on the Indo-Gangetic Plains: Model results and ground measurement. *Atmospheric Environment*, 163, 166-181. [I.F: 5.0]
64. Bibi, S., **Alam, K.**, Chishtie, F., Bibi, S. (2017). Characterization of absorbing aerosol types using ground and satellites based observations over an urban environment. *Atmospheric Environment*, 150, 126-135. [I.F: 5.0]
65. Bibi, S., **Alam, K.**, Chishtie, F., Bibi, S., Rahman, S. (2017). *Temporal variation of Black Carbon concentration using Aethalometer observations and its relationship with meteorological variables in Karachi, Pakistan*. *Journal of Atmosphere and Solar Terrestrial Physics*, 157-158, 67-77. [I.F: 1.9]
66. Gharibzadeh, M., **Alam, K.**, Biokhti, A. A., Abedini, Y., Masoumi, A. (2017). Radiative effects and optical properties of aerosol during two dust events in 2013 over Zanjan, Iran. *Aerosol Air quality research*, 17, 888-898. [I.F: 4.53]
67. Bibi, H., **Alam, K.**, Bibi, S. (2016). In-depth discrimination of aerosol types using multiple clustering techniques over four locations in Indo-Gangetic plains. *Atmospheric Research*, 181, 106-114. [I.F: 5.5]
68. **Alam, K.**, Shaheen, K., Blaschke, T., Chishtie, F., Khan, H. U., Haq, B. S. (2016). Classification of aerosols in an urban environment on the basis of optical measurements. *Aerosol Air quality research*, 16, 2535-2549. [I.F: 4.53]
69. Bibi, H., **Alam, K.**, Bibi, S. Blaschke, T., Iqbal, M.J. (2016). Long-term (2007-2013) analysis of aerosol optical properties over four locations in the Indo-Gangetic plains, *Applied Optics*, 55, 6199-6211. [I.F: 1.905]
70. Haq, B. S., Khan, H., **Alam, K.**, Attaullah, S., Memoona, S. (2016). Weak two-photon absorption applied to rapid prototyping of cell scaffolds. *Applied Optics*, 55, 228-235. [I.F: 1.905].
71. Majid, H., W.-H, R., Madl, P., Hofmann, W., **Alam, K.** (2016). Effect of Oral Pathway on Charged Particles Deposition in the Human Bronchial Airways. *Journal of Aerosol Medicine and Pulmonary Drug Delivery*, 29, 24-29. [I.F:3.4]
72. Haq, B. S., Attaullah, S., Shakoor, A., Khan, H. U., **Alam, K.**, Shaheen, K. (2016). Characterization and efficacy of ultra-fast Laser pulses for biomedical applications. *Journal of Engineering and Applied Science*, 35, 67-76.
73. Haq, B. S., Attaullah, S., Shakoor, A., Khan, H. U., Shaheen, K., **Alam, K.** (2016). Two-Photon fluorescence excitation cross-section of photosensitizer thioxanthone to fabricate cell scaffold for biomedical applications. *Journal of Engineering and Applied Science*, 35, 63-67.
74. **Alam, K.**, Rahman, N., Khan, H. U., Bibi, S. (2015). Particulate matter and its source apportionment in Peshawar, Northern Pakistan. *Aerosol Air quality research*, 15, 634-647. [I.F: 4.53]
75. Sharif, F., **Alam, K.**, Afsar, S. (2015). Spatio-temporal distribution of aerosol and cloud properties over Sindh using MODIS satellite data and a HYSPLIT model. *Aerosol Air quality research*, 15, 657-672. [I.F: 4.53]
76. Bibi, H., **Alam, K.**, Chishtie, F., Bibi, S., Shahid, I., Blaschke, T. (2015). Intercomparison of MODIS, MISR, OMI, and CALIPSO aerosol optical depth retrievals for four locations on the

- Indo-Gangetic plains and validation against AERONET data. *Atmospheric Environment*, 111, 113-126. [I.F:5.0].
77. **Alam, K.**, Khan, R., Ali, S., Ajmal, M., Khan, G., Wazir, M., Azmat, M. (2015). Variability of aerosol optical depth over Swat in northern Pakistan based on satellite data. *Arabian Journal of Geosciences*, 8, 547-555. [I.F: 1.827]
78. Khan, H.U., **Alam, K.**, Mateenullah, M., Blaschke, T., Haq, B.S. (2015). Synthesis and characterization of solid solution  $\text{Ag}(\text{Nb}_x\text{Ta}_{1-x})\text{O}_3$  ( $x = 0, 0.25, 0.5, 0.75, 0.1$ ). *Journal of the European Ceramic Society*, 35, 2775-2789. [I.F:5.7].
79. Haq, B. S., Khan, H., **Alam, K.**, Ajmal, M., Attaullah, S., Zari, I. (2015). Determination of two-photon absorption cross sections of photosensitizers and its implications for two-photon polymerization. *Applied Optics*, 54, 132-140. [I.F: 1.905].
80. Haq, B. S., Khan, H., **Alam, K.**, Ajmal, M., Attaullah, S., Zari, I., Mateenullah, M. (2015). Study of the two-photon excitation of photoinitiator in various solvents, and the two-photon polymerization process. *Applied Optics*, 54, 7020-7026. [I.F: 1.905].
81. Haq, B. S., Khan, H., **Alam, K.**, Attaullah, M., Attaullah, S., Zari, I. (2015). Femtosecond pulsed laser ablation of polyimide at oblique angles for medical applications. *Applied Optics*, 54, 7413-7418. [I.F: 1.905].
82. Haq, B. S., Khan, H., Dou, Y., **Alam, K.**, Attaullah, S., Zari, I. (2015). Keratin film ablation for the fabrication of brick and mortar skin structure using femtosecond laser pulses. *Applied Physics A*, 120, 1415-1425. [I.F: 2.7].
83. Muhammad, W., Ullah, A., Hussain, A., Ali, N., Alam, K., Khan, G., Matiullah., Maeng, S., Lee, S. H. (2015). Some Folded Issues Related to Over-shielded and Unplanned Rooms for Medical Linear Accelerators - A Case Study. *Journal of the Korean Physical Society*, 67, 599-607. [I.F: 0.649].
84. **Alam, K.**, Mukhtar, A., Shahid, I., Blaschke, T., Majid, H., Rahman, S., Khan, R., Rahman, N. (2014). Source apportionment and characterization of Particulate Matter ( $\text{PM}_{10}$ ) in urban environment of Lahore. *Aerosol & Air Quality Research*, 14, 1851-8161. [I.F: 4.53]
85. **Alam, K.**, Sahar, N., Iqbal, Y., (2014). Aerosol Characteristics and Radiative Forcing during Pre-monsoon and Post-monsoon in an Urban Environment. *Aerosol & Air Quality Research*, 14, 99-107. [I.F: 4.53]
86. **Alam, K.**, Trautmann, T., Blaschke, T., Subhan, F. (2014). Changes in aerosol optical properties due to dust storm in the Middle East and Southwestern Asia. *Remote Sensing of the Environment*, 143, 216-227. [I.F: 13.5]
87. **Alam, K.**, Khan, R., Blaschke, T., Mukhtiar, A. (2014). Variability of Aerosol Optical Depth and their impact on cloud properties in Pakistan. *Journal of Atmosphere and Solar Terrestrial Physics*, 107, 104-112. [I.F: 1.9]
88. **Alam, K.**, Madl, P., Trautmann, T., Blaschke, T., Iqbal, M.J. (2014). Retrieval of aerosol properties from surface measurements in an urban environment. *Aerosol & Air Quality Research*, 14, 686-696. [I.F: 4.53]

89. Hussain, M., **Alam, K.**, Madl, P. (2013). Exposure assessment and associated lung deposition calculations for vehicular exhaust in four metropolitan cities of Pakistan. *Environmental monitoring and assessment*, 185, 5265-5276. [I.F: 2.513]
90. **Alam, K.**, Trautmann, T., Blaschke, T., Hussain, M. (2012). Aerosol optical and radiative properties during summer and winter seasons over Lahore and Karachi. *Atmospheric Environment*, 50, 234-245. [I.F: 5.0]
91. Hussain, M., Madl, P., Hofmann, W., **Alam, K.** (2012). Implementation of charged particles deposition in stochastic lung model and calculation of enhanced deposition. *Aerosol Science and Technology*, 46, 547-554. [I.F: 4.809]
92. Muhammad, W., Lee, S. H., **Alam, K.**, Maqbool, M., Khan, G. (2012). Dose non-linearity of the dosimetry system and possible monitor unit error on medical linear accelerator used in conventional and intensity-modulated radiation therapy. *Journal of Nuclear Technology & Radiation Protection*, 27, 368-373. [I.F: 1.057]
93. Hussain, M., Madl, P., **Alam, K.** (2012). Ambient air quality with emphasis on roadside junctions in metropolitan cities of Pakistan and its potential health effects. *The Health* 3(3), 79-85.
94. **Alam, K.**, Blaschke, T., Madl, P., Mukhtar, A., Hussain, M., Trautmann, T., Rehman, S. (2011). Aerosol size distribution and mass concentration measurements in various cities of Pakistan. *Journal of Environmental Monitoring*, 13, 1944-1952. [I.F: 3.0]
95. **Alam, K.**, Trautmann, T., Blaschke, T. (2011). Aerosol Optical Properties and radiative forcing over mega city Karachi. *Atmospheric Research*, 101, 773-782. [I.F: 5.5]
96. **Alam, K.**, Qurashi, S., and Blaschke, T. (2011). Monitoring spatio-temporal aerosol patterns over Pakistan based on MODIS, TOMS and MISR satellite data and a HYSPLIT model. *Atmospheric Environment*, 45, 4641-4651. [I.F: 5.0]
97. Hussain, M., Madl, P., **Alam, K.** (2011). Review: Lung deposition predictions of airborne particles and the emergence of contemporary diseases Part-1. *The Health* 2(2), 51-59.
98. **Alam, K.**, Iqbal, M. J., Blaschke, T., Qureshi, S., and Khan, G. (2010). Monitoring spatio-temporal variations in aerosols and aerosol-cloud interactions over Pakistan using MODIS data. *Advances in Space Research*, 46, 1162-1176. [I.F: 2.6].