Peer Reviewed Publications (* Corresponding Author)

1. Jha, G., Longman, J., Tsoupra, A., Shree, S., **Jha, D.K.,** Rudd, R., Anilkumar, D., Breitenbach, S., Barrocas-Dias, C.M., Achyuthan, H., Raj, R., Krishnan, K., Roberts, P. and Petraglia, M.D. **(2025).** Six Monsoon After Toba Super-Eruption: Novel Evidence of Short-Term Impact on South Asia 74,000 Years Ago. *PNAS nexus, 4(4), p.pgaf109.*

2. Vaishnav, H.K., ***Jha, D.K.,** Janardhana, B. **(2025).** Geoarchaeological and environmental perspectives on Mesolithic and Neolithic settlement patterns in the Ganga Valley, India. *Quaternary Environment & Humans, 3(1), p.100051.*

3. Vaishnav, H.K., Janardhana, B., ***Jha, D.K., (2025)**. Acheulean habitation in the Upper Son Valley, India: Insights into Early Settlement and Environment. *Antiquity, pp.1-9.*

4. Ramírez-Pedraza, I., Tornero, C., Aouraghe, H., Rivals, F., Patalano, R., Haddoumi, H., Expósito, I., Rodríguez-Hidalgo, A., Mischke, S., van der Made, J., Piñero, P., Blain, H.-A., Roberts, P., **Jha, D.K.,** Agustí, J., Sánchez-Bandera, C., Lemjidi, A., Benito-Calvo, A., Moreno-Ribas, E., Oujaa, A., Mhamdi, H., Souhir, M., Aissa, A.M., Chacón, M.G. and Sala-Ramos, R**. (2024).** Arid, mosaic environments during the Plio-Pleistocene transition and early hominin dispersals in northern Africa. *Nature Communication 15, 8393.*

5. ***Jha, D.K.,** Hirave, P., Ghosh, S., Dasgupta, B., and Sanyal, P. **(2024).** Does Leaf wax isotopic characterisation capture environmental gradients in Himalayas? *Organic Geochemistry. 187, 104720.*

6. Jha, G., Sinha, D.K., **Jha, D.K.,** Ajithprasad, P. **(2024).** Coasting into India? - Assessing lithostratigraphic context of Middle Palaeolithic occupation in Saurashtra Peninsula. *Quaternary Environment & Humans, p.100034.*

7. Roberts, P., Caetano-Andrade, V.L., Fisher, M., Hamilton, R., Rudd, R., Stokes, F., Amano, N., Dugmore, A., Findley, D.M., Furquim, L.P., Fletcher, M., Haberle, S., Hambrecht, G., Heddell-Stevens, P., Iminjili, V., **Jha, D.K.,** et al. **(2024).** Uncovering environmental legacies of past human societies on the Earth system at the global scale. *Annual Review of Environment and Resources, 45.*

8. Sanyal, P., Adhya, S.P., Roy, B., Dasgupta, B., Samantaray, S., Mandal, R., Sen, R., Sarangi, V., Kumar, A., **Jha, D.K.,** Ajay, A. **(2024).** Geologic History of Plants and Climate in India. *Annual Review of Earth and Planetary Sciences, 52.*

9. ***Jha, D.K.,** Patalano, R., Ilgner, J., Achyuthan, H., Alsharekh, A.M., Armitage, S., Blinkhorn, J., Boivin, N., Breeze, P.S., Devra, R., Drake, N., Groucutt, H.S., Guagnin, M., Roberts, P. and Petraglia, M.D., **(2024)**. Preservation of plant-wax biomarkers in Deserts: Implications for Quaternary environment and human evolutionary studies. *Journal of Quaternary Science, 39(3), pp.349-358.*

10. ECHOES., Freire, V.Z., Ziegler, M.J., Caetano-Andrade, V., Iminjili, V., Lellau, R., Rudd, R., Stokes, F., Heberle Viegas, D., Maezumi, S.Y., Jha, G., Antonosyan, M., **Jha, D.K.,** Winkelmann, R., Roberts, P., and Furquim, L. **(2024).** Addressing the Anthropocene from

the Global South: Integrating Paleoecology, Archaeology and Traditional Knowledge for COP Engagement. *Frontiers in Earth Science. Vol. 12.*

11. ***Jha, D.K.,** Vaishnav, H.K., and Roy, N. **(2024).** Late Quaternary human-environment relationship in the Ganga Plain, India. *Quaternary International, 680, 1-16.*

12. Kumar, A., Basu, S., Ajay, A., **Jha, D.K.** and Sanyal, P. **(2023).** Quantitative delineation of water sources in the river Ganga using stable water isotopes. *River Research and Applications, 1-14.*

13. Guagnin, M., Shipton, C., Stileman, F., Jibreen, F., AlSulaimi, M., Breeze, P.S., Stewart, M., Hatton, A., Drake, N., **Jha, D.K.,** Al-Tamimi, F., Al-Shamry, M., Al-Shammari, M., Kay, A., Groucutt, H.S., Alsharekh, A.M., and Petraglia, M.D., **(2023).** Before the Holocene humid period: Life-sized camel engravings and early occupations on the southern edge of the Nefud Desert. *Archaeological Research in Asia, 36, 100483.*

14. Huber, B., Hammann, S., Loeben, C. E**., Jha, D. K.,** Vassão, D. G., Larsen, T., Spengler, R. N., Fuller, D. Q., Roberts, P., Devièse, T., Boivin, N. **(2023).** Biomolecular characterization of 3500-year-old ancient Egyptian mummification balms from the Valley of the Kings. *Scientific Reports, 13(1), p.12477.*

15. Dhiman, H., Verma, V., Singh, L.R., Miglani, V., **Jha, D.K.,** Sanyal, P., Tandon, S.K. and Prasad, G.V. **(2023).** New Late Cretaceous titanosaur sauropod dinosaur egg clutches from Lower Narmada valley, India: Palaeobiology and taphonomy. *PloS One, 18(1), p.e0278242.*

16. Prieto A., Aldea-Moreira X., Arzarello M., Berruti GLF, Caracausi S., Daffara S., de la Peña P., Favreau J., García-Rojas M., Huysecom E., Janardhana B., **Jha, D.K.,** Lahiri, L., Molefyane, T.R., Pruvost, C., Rodríguez-Álvarez, X.P., Thomas, M., Vaishnav, H.K., Villeneuve, Q., Lombera-Hermida, A.j. **(2022).** How to deal with an elephant in the room? Understanding "Non-flint" raw materials: characterization and technological organization. *Revista ArkeoGazte, 12, pp. 73-98.*

17. ***Jha, D.K.,** Samrat, R., Sanyal, P. **(2021).** The first evidence of controlled use of fire by prehistoric humans during the Middle Paleolithic phase from the Indian subcontinent. *Palaeogeogr. Palaeoclimatol. Palaeoecol. 562, p.110151.*

18. Singh, A., Muhammad, R.F., Taib, I., **Jha, D.K.** and Srivastava, A.K. **(2021).** Surface texture, mineralogy and stable isotope studies of nodular calcretes preserved in the YTT ash of Padang Terap river basin and Lenggong valley, Peninsular Malaysia: implications in its origin and paleoclimatic reconstruction. *Rhizosphere, p.100380.*

19. ***Jha, D.K.,** Sanyal, P. and Philippe, A. **(2020).** Multi-proxy evidence of Late Quaternary climate and vegetational history of north-central India: Implication for the Paleolithic to Neolithic phases. *Quaternary Science Reviews, 229, p.106121.*

20. Pillai, A.A.S. Anoop, A. Sankaran, M. Sanyal, P. **Jha, D.K.** Ratnam, J. **(2017).** Mid-late Holocene vegetation response to climatic drivers and biotic disturbances in the Banni grasslands of western India. *Palaeogeogr. Palaeoclimatol. Palaeoecol. 485, 869-878.*

21. Yadav, A. Mishra, P.K. Kumar, P. **Jha, D.K.** Kumar, V.V. Ambili, V. Anoop, A. **(2017).** Molecular distribution and carbon isotope of n-alkanes from Ashtamudi Estuary, South India: Assessment of organic matter sources and paleoclimatic implications. *Marine Chemistry. 196, 62-70.*

Other Publications:

22. Kulkarni, C., Jara, I.A., Chevalier, M., Isa, A.A., Alinezhad, K., Brugger, S.O., Bunbury, M.M.E., Cordero-Oviedo, C., Courtney-Mustaphi, C., Echeverría-Galindo, P. and Ensafi Moghaddam, T., **Jha, D.K.,** et al. **(2023).** pSESYNTH project: Community mobilization for a multi-disciplinary paleo database of the Global South. *Past Global Changes Magazine 31(1), 30-31. (Non Peer-Reviewed)*

23. ***Jha, D.K. (2021).** Reconstruction of Late Quaternary climate, vegetation, fire and sediment provenance of Indo-Gangetic floodplains and its implication for the Paleolithic to Neolithic phases of the Indian subcontinent. Doctoral Thesis, *Indian Institute of Science Education and Research Kolkata. http://eprints.iiserkol.ac.in/1100/ (Peer Reviewed).*

International and National Conference Abstracts:

** Invited talk

1. ****Jha, D.K. (2025).** Understanding Human-Environment Interactions across time and space. UKRI Workshop, University of Gottingen, Germany.
2. ****Jha, D.K., (2025).** Quaternary human–environment interactions in South Asia. Invited talk presented at the Institute of Geology and Geophysics, Chinese Academy of Sciences, Beijing, China, 29-31 May.
3. ****Jha, D.K., (2025).** Plant wax biomarkers and their isotopes (δ^2H and $\delta^{13}C$): Understanding past human–environment interactions. Invited talk presented at Beijing Normal University, Zhuhai Campus, China, 25–28 May.
4. **Jha, D.K.,** Gupta, P., Quamar, M.F., Stokes, F. & Roberts, P. **(2025).** Environmental and ecological impacts of European colonialism in South Asia. PAGES YSM 2025, Shanghai, China.
5. **Jha, D.K.,** Miyash, N., Gupta, P., Rudd, R., Singh, S.P. & Roberts, P. **(2025).** Plant Biomarkers in Arid Ecosystems: Molecular and Isotopic Insights from the Thar Desert. EGU Copernicus Meetings, Vienna, Austria.
6. Rudd, R., Patalano, R., **Jha, D.K.,** Schalkwyk, J.V., Schwalkwyk, L.V., Mokhachane, R., Stewart, B.A. and Roberts, P., **(2025).** Plant Wax n-Alkanes Track C3-C4 Vegetation Transitions and Hydrological Responses Along Elevation Gradients in Lesotho, Southern Africa. EGU 2025, Viennna, Austria.

7. ****Jha, D.K. (2024).** STABLE ISOTOPES AND BIOMARKER ANALYSES: Understanding Human-Environment Interactions across time and space. Paleoschool by Paleoher Foundation, India.

8. ****Jha, D.K. (2024).** Understanding Human-Environment Interactions across time and space. Max Planck Institute of Geoanthropology, Germany.

9. **Jha, D.K.,** Blinkhorn, J., Schwab-Lavric, V., Freire, V.Z., Ilgner, J., Achyuthan, H., Boivin, N., Devra, R., Maezumi, S.Y., Gleixner, G. and Roberts, P. **(2024).** Plant-wax biomarkers and their isotopes reveal complex relationships between climate, vegetation and fire during collapse of Indus Valley Civilization (No. EGU24-20312). EGU Copernicus Meetings, Vienna, Austria.

10. ****Jha, D.K.** and Jha, G. **(2024).** Rethinking the Environmental Context of Hominin Evolution in India. Human Evolution Workshop at the ARCHE, Griffith University, Australia.

11. ****Jha, D.K., (2023).** Late Quaternary human-environment relationship in India: perspective from plant lipids and multi-isotope (^{2}H, ^{18}O, ^{13}C) analyses. Max Planck Institute of Geoanthropology. Germany.

12. ****Jha, D.K., (2023).** Late Quaternary human-environment relationship in India: Insights from plant biomarkers, compound-specific isotopes and macro-charcoal. University of Liverpool, UK.

13. ****Jha, D.K.,** Patalano, R., Roberts, P., and Petraglia, M. **(2023).** Plant-wax biomarkers in the Quaternary sediments of Deserts: Implications for human-environment reconstructions. XXI INQUA Congress 2023. Rome, Italy (Keynote Talk).

14. **Jha, G.,** Jha, D.K., Patalano, R., Roberts, P., Krishnan, K., Boivin, N., and Petraglia, M. **(2023).** One Toba, Different Tales: Assessing variability in environmental impact of ~74ka Toba super eruption on South Asian mosaic. XXI INQUA Congress 2023. Rome, Italy.

15. Pedraza, I. R., Patalano, R., Aouraghe, H., Rivals, F., Tornero, C., **Jha, D.K.,** Roberts, P., Haddoumi, H., Rodríguez-Hidalgo, A., Aissa, A. M., Chacón, G., and Sala-Ramos, R. **(2023).** Plant wax biomarker record from the Plio-Pleistocene site Guefaït-4.2 (Eastern Morocco). XXI INQUA Congress 2023. Rome, Italy.

16. Patalano, R. Miller, J. Carleton, W. C., Gayantha, K., Gleixner, G., **Jha, D.K.,** Ilgner, J., Lucas, M., Scott, E., Roberts, P., Ndiema, E. Boivin, N. and Petraglia, M., (2023). Isotopic Evidence for Human Microhabitat Use Within and Across an Ecological Refugium, Panga ya Saidi, Kenya. XXI INQUA Congress **2023**. Rome, Italy.

17. ****Jha, D.K., (2023).** Plant wax biomarkers and their isotopes ($d^{2}H$ and $d^{13}C$): Understanding past human-environment interactions. University of Cologne, Germany.

18. ****Jha, D.K. (2023).** Plant wax and PAH biomarkers: Tracing Anthropogenic Signature. PANTHROPOCENE Wokshop, University of the Philippines.

19. ****Jha, D.K.** and Roberts, P. **(2023).** Plant-wax biomarkers and their isotopes (d^2H and $d^{13}C$): Understanding past human-environment interactions. Marine Science Institute, University of the Philippines.
20. **Jha, D.K.** and Sanyal, P. **(2021).** Decoding the role of Late Quaternary climate and vegetation in the evolution of Indo-Gangetic plain, India. (Poster) at Goldschmidt2021, Lyon, France
21. ****Jha, D.K (2021).** Reconstruction of Late Quaternary climate, vegetation and fire events from archaeological sites of Belan valley, north-central India (Spotlight talk) at ROCEEH Working Group Meeting, University of Tübingen, Germany.
22. ****Jha, D.K (2020).** Role of Late Quaternary climate and vegetation composition in the evolution of prehistoric humans in India (Invited oral talk) at Paleopercs online seminar series.
23. ****Jha, D.K (2020).** Reconstruction of Late Quaternary climate, vegetation and fire events from archaeological sites of Belan valley, north-central India (oral talk) at IISER Mohali.
24. **Jha, D.K.** Samrat, R. Sanyal, P. **(2019).** Reconstructing human-induced fire from archaeological sites of Belan valley, north-central India. INQUA 2019, Dublin, Ireland.
25. **Jha, D.K.** Samrat, R. Sanyal, P. **(2019).** Late-Pleistocene climate and vegetation of north-central India: Clues from sedimentology, molecular distribution of n-alkane and stable isotopes. INQUA 2019, Dublin, Ireland.
26. **Samrat, R.** Jha, D.K. Sanyal, P. **(2019).** Evidence of early human induced paleofire events in Belan valley, north-central India. EGU General Assembly Conference Abstracts 2019. Vienna, Austria.
27. **Jha, D.K.** and Sanyal, P**. (2018).** Late Quaternary climate variability and civilisation history of Belan valley, India. EGU General Assembly Conference Abstracts 2018. Vienna, Austria.
28. **Jha, D.K.** Ghosh, S. Hirave. P. Sanyal, P. **(2017).** Isotopic response of angiosperm and gymnosperm species along a climate gradient: a case study from NW Himalaya. Advances in Modern Earth System Sciences-2017. IISER Kolkata, India.
29. Kumar, P. Ankit, Y. Mishra, P.K. **Jha, D.K.** Anoop, A**. (2017).** Characterisation of organic matter source and sediment distribution in Ashtamudi Estuary, southern India. EGU General Assembly Conference Abstracts 2017. Vienna, Austria.
30. **Jha, D.K.** and Sanyal, P. **(2016).** Paleohydrological and vegetational history of Quaternary Belan valley, north central India: Multi-proxy evidence from archaeological site. Annual General Meeting of The Geological Society of India 2016, IIT Kharagpur, India