

Publications June 2025

1. Archana, **Kumar A**, Solanki PR. (2025) Chitosan-Supported Molecularly Imprinted Polypyrrole@MoSe₂ Nanosheet-Based Bioinspired Electrochemical Sensor for Improved Quantification of Gut Microbiota-Derived Hippuric Acid. *ACS Appl Bio Mater*. 8(6):4961-4972.
2. Gulati P, Tripathi P, Sharma C, **Kumar A***. (2025) Screening of broad range aptamer and its implication in electrochemical aptasensor for *para*-cresol sulfate detection, a possible biomarker for chronic kidney disease. *Microchemical Jr*. <https://doi.org/10.1016/j.microc.2025.114070>
3. Kapoor A, Verma JK, Goyal D, Agarwal S, Gaur A, **Mukhopadhyay A***. (2025) ATP synthase epsilon subunit: An unconventional adaptor of clathrin-mediated endocytosis of hemoglobin in Leishmania. *J Cell Sci*. doi: 10.1242/jcs.263555.
4. Molla A, Sarkar D, Khan A, Ramachandran V, Kausar T, Gourinath S, **Sau AK.*** (2025) Structural and Functional Insights into the Regulation of *Helicobacter pylori* CPA Activity by an Evolutionarily Conserved Motif. *Biochemistry*. doi: 10.1021/acs.biochem.5c00045.
5. Rahman SS, Bhattacharjee S, Motwani S, Prakash G, Ujjainiya R, Chitkara S, Nair T, Keerthana RS, Sengupta S, **Mukhopadhyay A.*** (2025) Methionine cycle in C. elegans serotonergic neurons regulates diet-dependent behaviour and longevity through neuron-gut signaling. *Nat Commun*. 16(1):5118.
6. Sahoo AK, Mondal A, Jamal F, Das A, Chaudhary K, Jha A, Bansal TS, Mandal P, Dhara AK, Yang Y, **Singha S.***(2025) Defining the Critical Valency of Peptide-MHC on Nanoscale Artificial Antigen Presenting Cells for Expanding Endogenous Tumor-Specific T-cells *In Vivo*. *Nano Lett*. doi: 10.1021/acs.nanolett.5c02012.
7. Vijayan V, Siddique IA, Gupta S, Chopra EM, Raj N, Surolia A, **Gupta S***. (2025) Osteocalcin modulates Abeta42 aggregation to aid in amyloid reduction in mouse models of Alzheimer's disease. *Exp Neurol*. 391:115322. doi: 10.1016/j.expneurol.2025.115322.

Editorial

1. Sharma S, Dhar S, **Sengupta S***. (2025) Balancing genome integrity and carcinogenesis: Insights into DNA damage response, repair pathways, and cancer therapies. *Curr Opin Pharmacol.* 82:102522. doi: 10.1016/j.coph.2025.102522.

Provisionally accepted

1. Akhilesh Kumar Singh, Govind K Makharia, **Anil Kumar*** (2025) Bacterial Profiling of Colorectal Cancer Biopsies: A Culture-Based Study in Indian Patients. *Frontiers*. doi: 10.3389/fcimb.2025.1535477 (* Corresponding Author)