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PUBLISHED RESEARCH ARTICLES

1. Chanchal, **Banerjee P**, Jain D. ATP-Induced Structural Remodeling in the Antiactivator FleN Enables Formation of the Functional Dimeric Form. **Structure**. 2017 Feb 7;25(2):243-252 DOI: 10.1016/j.str.2016.11.022.
(Impact Factor: 5.87)
2. Naskar T, Faruq M, **Banerjee P**, Khan M, Midha R, Kumari R, Devasenapathy S, Prajapati B, Sengupta S, Jain D, Mukerji M, Singh NC, Sinha S. Ancestral Variations of the PCDHG Gene Cluster Predispose to Dyslexia in a Multiplex Family. **EBioMedicine**. 2018 Feb; 28:168-179. Epub 2018 Jan 9. DOI: 10.1016/j.ebiom.2017.12.031.
(Impact Factor: 11.2)
3. Chanchal#, **Banerjee P#**, Raghav S, Goswami HN, Jain D; The antiactivator FleN uses an allosteric mechanism to regulate σ^{54} -dependent expression of flagellar genes in *Pseudomonas aeruginosa*. **Science Advances**. 2021 Oct 22;7(43) eabj1792. DOI: 10.1126/sciadv.abj1792. (# - equal contribution). **(Impact Factor: 14.1)**.
4. **Banerjee P**, Chanchal, Jain D. Sensor I Regulated ATPase Activity of FleQ Is Essential for Motility to Biofilm Transition in *Pseudomonas aeruginosa*. **ACS Chem Biol**. 2019 Jul 19;14(7):1515-1527. DOI: 10.1021/acscchembio.9b00255. Epub 2019 Jul 3.
(Impact Factor: 5.1)
5. **Banerjee P**, Sahoo PK, Sheenu, Adhikary A, Ruhai R, Jain D; Molecular and Structural facets of c-di-GMP signalling associated with biofilm formation in *Pseudomonas aeruginosa*. **Mol Aspects Med**. 2021 Oct; 81:101001. DOI: 10.1016/j.mam.2021.101001.
(Impact Factor: 16.3)
6. Sharma G, Aminedi R, Saxena D, Gupta A, **Banerjee P**, Jain D, Chandran D. Effector mining from the *Erysiphe pisi* haustorial transcriptome identifies novel candidates involved in pea powdery mildew pathogenesis. **Mol Plant Pathol**. 2019 Nov;20(11):1506-1522. DOI: 10.1111/mpp.12862. Epub 2019 Oct 11. PMID: 31603276.
(Impact Factor: 5.6)
7. Garai, P#, **Banerjee P#**, Sharma, P# et al. Nitrate-Induced Toxicity and Potential Attenuation of Behavioural and Stress Biomarkers in *Tubifex tubifex*. **Int J Environ Res** 16, 63 (2022). DOI: 10.1007/s41742-022-00443-4. (# - equal contribution).
(Impact Factor: 3.22).
8. **Banerjee P**, Saha, I., Sarkar, D. et al. Contributions and Limitations of Mitochondria-Targeted and Non-Targeted Antioxidants in the Treatment of Parkinsonism: an Updated Review. **Neurotox Res**. 40, 847–873 (2022). DOI: 10.1007/s12640-022-00501-x.
(Impact Factor: 3.97).

9. Garai, P.#, **Banerjee, P.#**, Sharma, P. et al. Mechanistic insights to lactic and formic acid toxicity on benthic oligochaete worm *Tubifex tubifex*. **Environ Sci Pollut Res** (2022). DOI: 10.1007/s11356-022-21361-0. (# - equal contribution).
(Impact Factor: 5.2)
10. Saha, S., Saha, NC., Chatterjee. A., **Banerjee, P.**, Garai, P., Sharma, P., Patnaik, L., Nayak, S., Dhara, K., Chukwuka, AV., Faggio C. Integrated multi-biomarker responses in Mozambique tilapia, *Oreochromis mossambicus* under acute and chronic Diazinon® exposures. **Chemistry and Ecology**, 264, (2023) <https://doi.org/10.1080/02757540.2023.2178649>.
(Impact Factor: 2.38)
11. Sharma, P., Garai, P., **Banerjee, P.**, Saha, S., Chukwuka, AV., Chatterjee, S., Saha, NC., Faggio, C. Behavioral toxicity, histopathological alterations and oxidative stress in *Tubifex tubifex* exposed to aromatic carboxylic acids- acetic acid and benzoic acid: A comparative time-dependent toxicity assessment. **Science of The Total Environment**, 876, (2023). <https://doi.org/10.1016/j.scitotenv.2023.162739>
(Impact Factor: 10.752)
12. Garai P., **Banerjee P.**, Mondal P., Saha N.C. (2021). Effect of Heavy Metals on Fishes: Toxicity and Bioaccumulation. **Journal of Clinical Toxicology**. Vol. 11 Iss. S18 No: 001
13. **Banerjee P.**, Garai P., Saha N.C., Saha S., Sharma P., Maiti A.K. A critical review on the effect of nitrate pollution in aquatic invertebrates and fish. **Water Air Soil Pollution**. (2023) 234:333.
(Impact Factor: 2.98)
14. Saha S., **Banerjee P.**, Saha N.C., Chukwuka A.V. Triazophos-induced Respiratory and Behavioral Effects and Development of Adverse Outcome Pathway (AOP) for short-term Exposed Freshwater Snail, *Bellamyia Bengalensis*. **Bulletin of Environmental Contamination and Toxicology** (2023) 110:94. DOI: 10.1007/s00128-023-03734-4
(Impact Factor: 2.8)
15. Garai P., Sharma P, **Banerjee P**, Chatterjee A., Saha NC., 2022. Formic acid induced acute toxicity and its sublethal effects on growth, behavioral pattern and oxidative stress parameters of the freshwater snail *Bellamyia bengalensis*. **Sci. and Cult**. 2023, 89 (3–4) : 84-93
16. Chukwuka A.V., Saha S., Mukherjee D., **Banerjee P.**, Dhara K., Saha N.C. Deltamethrin-Induced Respiratory and Behavioral Effects and Adverse Outcome Pathways (AOP) in Short-Term Exposed Mozambique Tilapia, *Oreochromis mossambicus*. **Toxics**. 2022, 10(11), 701. DOI: 10.3390/toxics10110701
(Impact Factor: 4.47)
17. Ganai, I.; Saha, I.; **Banerjee, P.**; Laha, A.; Sultana, S.; Sultana, N.; Biswas, H.; Moitra, S.; Podder, S. In silico analysis of single nucleotide polymorphism (rs34377097) of TBXA2R gene and pollen induced bronchial asthma susceptibility in West Bengal population, India. **Frontiers in Immunology**, 2023, 14, 1089514. DOI: 10.3389/fimmu.2023.1089514
(Impact Factor: 7.8)
18. Majumdar N., Saha NC., **Banerjee P.**, Bhattacharya T., Saha S. Acute and sub-acute toxic effects of cadmium to freshwater tropical oligochaete *Tubifex tubifex* with special reference to

oxidative stress and behavioural biomarkers, **Chemistry and Ecology**, 2023, DOI: 10.1080/02757540.2023.2263439

(Impact Factor: 2.38)

19. Sultana S#, **Banerjee P#**, Ganai I, Laha A, Sultana N, Biswas H, Saha NC, Moitra S, Podder S. Polymorphism in ADAM33 gene associated with asthmatics in West Bengal, India - An investigation by in-silico analysis. **World Allergy Organ J.** 2023 Nov 8;16(11):100834. doi: 10.1016/j.waojou.2023.100834. (# - equal contribution).

(Impact Factor: 5.1)

20. Saha NC, **Banerjee P**, Chatterjee A, Bhattacharya R, Saha S, Pastorino P. Haematological, biochemical, enzymological changes and mitochondrial dysfunction of liver in freshwater climbing perch *Anabas testudineus* during their acute and chronic exposure to sodium fluoride. **Environmental Toxicology and Pharmacology.** Volume 106 March 2024, 104360. doi: <https://doi.org/10.1016/j.etap.2023.104360>

(Impact Factor: 4.3)

21. Ghosh S, Spoorthi BC, **Banerjee P**, Saha I, Dua TK, Sahu R, Maiti AK. 10-(6-Plastoquinonyl) decyltriphenylphosphonium imparts anti-colitogenic protection through recovery of mitochondrial dysfunction in ulcerated murine colon: Implications in ulcerative colitis. **Life Sciences.** Volume 348, 1 July 2024, 122700. doi: <https://doi.org/10.1016/j.lfs.2024.122700>

(Impact Factor: 5.2)

PDB DEPOSITION

6J7E - Crystal Structure of Central domain of FleQ in complex with ATP_gS and Mg⁺²

6JDI - Central domain of FleQ H287N mutant in complex with ATP_gS and Mg⁺²

6JDL - Central domain of FleQ H287A mutant in complex with ATP_gS and Mg⁺²

7EJW - Crystal structure of FleN in complex with FleQ AAA+ domain

5J1J - Structure of FleN-AMPPNP complex

5JVF - Crystal Structure of Apo-FleN