

Peer reviewed publications

1. Joshi AS, Bapat MV, Singh P, **Mijakovic I** (2024) *Viridibacillus* culture derived silver nanoparticles exert potent anticancer action in 2D and 3D models of lung cancer via mitochondrial depolarization-mediated apoptosis. *Materials Today Bio*, in press.
2. More PR, Shinde S, Cao Z, Zhang J, Pandit S, De Filippis A, **Mijakovic I**, Galdiero M (2023) Antibacterial applications of biologically synthesized *Pichia pastoris* silver nanoparticles. *Helyon*, in press.
3. Shi L, Derouiche A, Alazmi M, Ventroux M, Svetlicic E, Bonne K hler J, Noiro-Gros MF, Gao X, **Mijakovic I** (2024) Inhibition of PtkA by peptide deformylase DefA helps *Bacillus subtilis* cope with oxidative stress. *Proc Natl Acad Sci USA*, in press.
4. Balasubramanian S, Bonne K hler J, Jers C, Ruhdal Jensen P, **Mijakovic I** (2024) Exploring the secretome of *Corynebacterium glutamicum* ATCC 13032. *Front Bioeng Biotechnol*, in press.
5. **Mijakovic I**, Rahimi S (2024) Learning by teaching efficiently enhances learning outcomes in Molecular Biology of the Cell course. *Biochem Mol Biol Educ* 52: 15-24.
6. Zou G, Li T, **Mijakovic I**, Wei Y (2024) Synthetic biology enables mushrooms to meet emerging sustainable challenges. *Front Microbiol*, in press.
7. Lanai, V., Chen Y, Naumovska E, Pandit S, Schr der E, **Mijakovic I**, Rahimi S (2024) Differences in interaction of graphene/graphene oxide with bacterial and mammalian cell membranes. *Nanoscale* 16: 1156-1166.
8. Chen Y, Pandit S, Rahimi S, **Mijakovic I** (2024) Graphene nanospikes exert bactericidal effect through mechanical damage and oxidative stress. *Carbon* 218: 118740.
9. Zhang X, Miao Q, Tang B, Qu L, **Mijakovic I**, Wei Y (2023) Discovery of novel alkaline tolerant xylanases from fecal microbiota of dairy cows. *Biotechnol Biofuels* 16: 182.
10. Ruan H, Bek M, Pandit S, Aulova A, Zhang J, Bjellheim P, Lovmar M, **Mijakovic I**, K d r R (2023) Biomimetic antibacterial gelatin hydrogels with multifunctional properties for biomedical applications. *Appl Mater Interfaces* 15: 54249-54265.
11. Cao Z, Fu X, Li H, Pandit S, Amombo Noa F, Ohrstrom L, Zelezniak A, **Mijakovic I** (2023) Synthesis of metal-organic frameworks through enzymatically recycled polyethylene terephthalate. *ACS Sustain Chem Eng* 11: 43.
12. Balusamy SR, Joshi AS, **Mijakovic I**, Singh P (2023) Advancing sustainable agriculture: a critical review of smart and eco-friendly nanomaterial applications. *J Nanobiotechnology* 21: 372.
13. Liang J, Zhao X, Wan D, Dai J, Zhang J, Mai W, Tang J, Shi L, **Mijakovic I**, Wei Y (2023) Long-term microbiota and performance monitoring of a highly efficient propylene oxide co-production methyl tert-butyl ether production wastewater treatment plant. *J Water Process Eng* 56: 104376.
14. Aminian-Dehkordi J, Rahimi S, Golzar-Ahmadi M, Singh A, Lopez J, Ledesma-Amaro R, **Mijakovic I** (2023) Synthetic biology tools for environmental protection. *Biotech Adv* 68: 108239.
15. Joshi AS, Madhusudanan M, **Mijakovic I** (2023) 3D printed inserts for reproducible high throughput screening of cell migration. *Front Cell Dev Biol* 11: 1256250.
16. Ruan H, Aulova A, Ghai V, Pandit S, Lovmar M, **Mijakovic I**, K d r R (2023) Polysaccharide-based antibacterial coating technologies. *Acta Biomater* 168: 42-77.
17. Zhang J, Neupane N, Dahal PR, Rahimi S, Cao Z, Pandit S, **Mijakovic I** (2023) Antibiotic-loaded boron nitride nanoconjugate with strong performance against planktonic bacteria and biofilms. *ACS Appl Bio Mater* 6: 3131-3142.

18. Chen X, Pandit S, Shi L, Ravikumar V, Bonne K hler J, Svetlicic E, Garg A, Petranovic D, **Mijakovic I** (2023) Graphene oxide attenuates toxicity of amyloid- β aggregates in yeast by promoting disassembly and boosting cellular stress response (2023) *Adv Funct Mater* 33: 2370265.
19. Pandit S, Jacquemin L, Zhang J, Gao Z, Nishina Y, Meyer RL, **Mijakovic I**, Bianco A, Pang Kamp C (2023) Polymyxin B complexation enhances the antimicrobial potential of graphene oxide. *Front Cell Infect Microbiol* 13: 1209563.
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22. Zhang J, Singh P, Cao Z, Rahimi S, Pandit S, **Mijakovic I** (2023) Polydopamine/graphene oxide coatings loaded with tetracycline and green Ag nanoparticles for effective prevention of biofilms. *Appl Surf Sci* 626: 157221.
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38. Singh P, **Mijakovic I** (2022) Antibacterial effect of silver nanoparticles is stronger if the production host and the targeted pathogen are closely related. *Biomedicines* 10: 628.
39. Singh P, **Mijakovic I** (2022) Strong antimicrobial activity of silver nanoparticles obtained by green synthesis in *Viridibacillus* sp. extracts. *Front Microbiol* 13: 820048.
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Book chapters:

1. Chokkiah B, Eswaran M, Annamalai P, Ramalingam M, **Mijakovic I**, Sivakumar B, Ponnusamy KV, Ramakrishnan K (2023) Trace level detection of heavy metal ions using electrochemical sensors: mercury, lead, cadmium, and chromium. *Materials Technology for the Energy and Environmental Nexus, Volume 2*. IOP Publishing Ltd. 13/1-13/33.
2. Rahimi S, Mohanan P, Zhang D, Jung KH, Yang DC, **Mijakovic I**, Kim YJ (2021) Metabolic Dynamics and Ginsenoside Biosynthesis. *The Ginseng Genome*. Springer International Publishing. 121-141.

Patents:

1. Balasubramanian S, Ruhdal Jensen P, Jers C, Mobasseri G, **Mijakovic I**, Shi L. (2024) Method to produce phosphorylated milk proteins in microbes. US Patent App 18/390, 266. P6930US00-CLI. Patent Assignee: Technical University of Denmark.
2. Kádár R, **Mijakovic I**, Gaska K, Pandit S, Svensson M. (2022) Antibacterial article comprising a polymer matrix with aligned nanoscale flakes of platelets. US Patent App. 17/597, 290. Patent Assignee: DENTSPLY IH AB(DENX-C)
3. Kádár R, **Mijakovic I**, Gaska K, Pandit S, Svensson M. (2021) Method for producing antibacterial surface provided on surface of device/article e.g., coating, involves providing surface of processed mixture which is oriented essentially to longitudinal directions of nanoscale flakes. Patent Number: WO2021001149-A1; EP3760243-A1. Patent Assignee: DENTSPLY IH AB(DENX-C)