

## Peer reviewed publications

1. Jiang S, Tang J, Rahimi S, **Mijakovic I**, Wei Y (2022) Efficient treatment of industrial wastewater with microbiome and synthetic biology. *Front Microbiol*, in press.
2. 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.
3. Singh P, **Mijakovic I** (2022) Strong antimicrobial activity of silver nanoparticles obtained by green synthesis in *Viridibacillus* sp. extracts. *Front Microbiol* 13: 820048.
4. Balusamy SR, Rahimi S, Sukweenadhi J, Sunderraj S, Shanmugam R, Thangavelu, L, **Mijakovic I**, Perumalsamy H (2022) Chitosan, chitosan nanoparticles and modified chitosan biomaterials, a potential tool to combat salinity stress in plants. *Carbohydr Polym* 284: 119189.
5. Neissi A, Rafiee G, Rahimi S, Farahmand H, Pandit S, **Mijakovic I** (2022) Enriched microbial communities for ammonium and nitrite removal from recirculating aquaculture systems. *Chemosphere* 295: 133892.
6. Sun J, Rattanasawatesun T, Tang P, Bi Z, Pandit S, Lam L, Wasén C, Erlandsson M, Bokarewa M, Dong J, Ding F, Xiong F, **Mijakovic I** (2022) Insights into the mechanism for vertical graphene growth by plasma-enhanced chemical vapor deposition. *ACS Appl Mater Interfaces* 14: 7152-7160.
7. Singh P, **Mijakovic I** (2022) Rowan berries: a potential source for green synthesis of extremely monodisperse gold and silver nanoparticles. *Pharmaceutics* 14: 82.
8. Pandit S, Li M, Chen Y, Rahimi S, Mokkapati VRSS, Merlo A, Yurgens A, **Mijakovic I** (2021) Graphene-based sensor for detection of bacterial pathogens. *Sensors* 21: 8085.
9. Chen Y, Pandit S, Rahimi S, **Mijakovic I** (2021) Interactions between graphene-based materials and biological surfaces: a review of underlying molecular mechanisms. *Adv Mater Interfaces* 2101132.
10. Pandit S, Konzock O, Leistner K, Mokkapati VRSS, Merlo A, Sun J, **Mijakovic I** (2021) Graphene coated magnetic nanoparticles facilitate the release of biofuels and oleochemicals from yeast cell factories. *Sci Rep* 11: 20612.
11. Helalat SH, Jers C, Bebahani M, Mohabatkar H, **Mijakovic I** (2021) Metabolic engineering of *Deinococcus radiodurans* for pinene production from glycerol. *Microb Cell Fact* 20:187.
12. Singh P, Pandit S, Jers C, Joshi AS, **Mijakovic I** (2021) Silver nanoparticles produced from *Cedecea* sp. exhibit antibiofilm activity and remarkable stability. *Sci Rep* 11: 12619.
13. Singh P, **Mijakovic I** (2021) Advances in gold nanoparticle technology as a tool for diagnostics and treatment of cancer. *Exp Rev Mol Diagn* 3: 1-4.
14. Pandit S, Rahimi S, Derouiche A, Boulaoued A, **Mijakovic I** (2021) Sustained release of usnic acid from graphene coatings ensures long term antibiofilm protection. *Sci Rep* 11: 9956.
15. Sultan A, Jers C, Ganief TA, Shi L, Senissar M, K hler JB, Macek B, **Mijakovic I** (2021) Phosphoproteome study of *Escherichia coli* devoid of Ser/Thr kinase YeaG during the metabolic shift from glucose to malate. *Front Microbiol* 12: 771.
16. Futo M, Opasic L, Koska S, Corak N, Siroki T, Ravikumar V, Thorsell A, Kifer D, Domazet-Loso M, Vlahovick K, **Mijakovic I**, Domazet-Loso T (2021) Embryo-like features in developing *Bacillus subtilis* biofilms. *Mol Biol Evol* 38: 31-47.
17. Pandit S, Gaska K, K d r R, **Mijakovic I** (2021) Graphene based antimicrobial biomedical surfaces. *Chem Phys Chem* 22: 250-263.
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20. Motwalli O, Uludag M, **Mijakovic I**, Alazmi Meshari, Bajic V, Gojobori T, Gao Xin, Essack M (2020) PATHcre8: A tool that facilitates the searching for heterologous biosynthetic routes. ACS Synth Biol 9: 3217-3227.
21. Joshi AS, Singh P, **Mijakovic I** (2020) Interactions of gold and silver nanoparticles with bacterial biofilms: molecular interactions behind inhibition and resistance. Int J Mol Sci 21: 7658.
22. Pandit S, Fazilati M, Gaska K, Derouiche A, Nypelö T, **Mijakovic I**, Kádár R (2020) The exopolysaccharide component of extracellular matrix is essential for the viscoelastic properties of *Bacillus subtilis* biofilms. Int J Mol Sci 21: 6755.
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28. Rahimi S, Modin O, Roshanzamir F, Neissi A, Saheb Alam S, Seelbinder B, Pandit S, Shi L, **Mijakovic I** (2020) Co-culturing *Bacillus subtilis* and wastewater microbial community in a bio-electrochemical system enhances denitrification and butyrate formation. Chem Eng J 397: 125437.
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30. Shi L, Derouiche A, Pandit S, Rahimi S, Kalantari A, Mokkapati VRSS, Futo A, Ravikumar V, Jers C, Vlahoviček K, **Mijakovic I** (2020) Evolutionary analysis of the *Bacillus subtilis* genome reveals new genes involved in sporulation. Mol Biol Evol 37: 1667-1678.
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37. Rahimi S, Kim YJ, Kim J, **Mijakovic I**, Jung K (2019) Triterpenoid-biosynthetic UDP-glycosyltransferases from plants. *Biotechnol Adv* 7: 124.
38. Othoum G, Bougouffa S, Bokhari A, Lafi FF, Gojobori T, Hirt H, **Mijakovic I**, Bajic VB, Essack M (2019) Mining biosynthetic gene clusters in *Virgibacillus* genomes. *BMC Genomics* 20: 696.
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## Book chapters:



1. 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. 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. Kadar R, **Mijakovic I**, Gaska K, Pandit S, Svensson M. Patent Assignee: DENTSPLY IH AB(DENX-C)