

Peer reviewed publications

1. **Mijakovic I** (2021) Fantastic science and where to find it. *Period Biol*: in press.
2. Helalat SH, Jers C, Bebahani M, Mohabatkar H, **Mijakovic I** (2021) Metabolic engineering of *Deinococcus radiodurans* for pinene production from glycerol. *Microb Cell Fact*, in press.
3. Pandit S, Konzock O, Leistner K, Mokkaapati 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*, in press.
4. 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.
5. 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.
6. 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.
7. 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.
8. Futo M, Opasic L, Koska S, Corak N, Siroki T, Ravikumar V, Thorsell A, Kifer D, Domazet-Loso M, Vlahovicek K, **Mijakovic I**, Domazet-Loso T (2021) Embryo-like features in developing *Bacillus subtilis* biofilms. *Mol Biol Evol* 38: 31-47.
9. Pandit S, Gaska K, K d r R, **Mijakovic I** (2021) Graphene based antimicrobial biomedical surfaces. *Chem Phys Chem* 22: 250-263.
10. Neissi A, Rafiee G, Farahmand H, Rahimi S, **Mijakovic I** (2020) Improvement of waterborne using *Dyadobacter* sp. (No. 68) and *Janthinobacterium* sp. (No. 100) bacteria and comparing the hematological indices in a recirculating rainbow trout (*Oncorhynchus mykiss*) culture system. *J Anim Environ* 12: 353-358.
11. **Mijakovic I** (2020) Evolutionary age of genes can assist in genome mining. *Period Biol* 121-122: 3-6.
12. 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.
13. 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.
14. Pandit S, Fazilati M, Gaska K, Derouiche A, Nypel  T, **Mijakovic I**, K d r R (2020) The exopolysaccharide component of extracellular matrix is essential for the viscoelastic properties of *Bacillus subtilis* biofilms. *Int J Mol Sci* 21: 6755.
15. Abdel-Haleem AM, Ravikumar V, Ji B, Mineta K, Gao X, Nielsen J, Gojobori T, **Mijakovic I** (2020) Integrated metabolic modeling, culturing and transcriptomics explains enhanced virulence of *V. cholerae* during co-infection with ETEC. *mSystems* 5: e00491-20.
16. Neissi A, Rafiee G, Farahmand H, Rahimi S, **Mijakovic I** (2020) Cold-resistant heterotrophic ammonium and nitrite removing bacteria improve aquaculture conditions of rainbow trout (*Oncorhynchus mykiss*). *Microb Ecol*, 80: 266-277.
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18. Rahimi S, Modin O, **Mijakovic I** (2020) Technologies for biological removal and recovery of nitrogen from wastewater. *Biotechnol Adv* 43: 107570.

19. Singh P, Pandit S, Mokkaḡati VRSS, Garnæs J, Jers C, **Mijakovic I** (2020) A sustainable approach for the green synthesis of silver nanoparticles from *Solibacillus isronensis* sp. and their application in biofilm inhibition. *Molecules* 25: 2783.
20. 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.
21. Aminian-Dehkordi J, Mousavi SM, Marashi SA, Jafari A, **Mijakovic I** (2020) A systems-based approach for cyanide overproduction by *Bacillus megaterium* for gold bioleaching enhancement. *Front Bioeng Biotechnol*, 8: 528.
22. Shi L, Derouiche A, Pandit S, Rahimi S, Kalantari A, Mokkaḡati 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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28. Macek B, Forchhammer K, Hardouin J, Weber-Ban E, Grangeasse C, **Mijakovic I** (2019) Protein post-translational modifications in bacteria. *Nat Microbiol Rev* 17: 651-664.
29. Rahimi S, Kim YJ, Kim J, **Mijakovic I**, Jung K (2019) Triterpenoid-biosynthetic UDP-glycosyltransferases from plants. *Biotechnol Adv* 7: 124.
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35. Singh P, Garg A, Pandit S, Mokkapati VRSS, **Mijakovic I** (2018) Antimicrobial effects of biogenic nanoparticles. *Nanomaterials* 8: 1009.
36. Ravikumar V, Nalpas N, Anselm V, Krug K, Lenuzzi M, Šestak MS, Domazet-Lošo T, **Mijakovic I**, Macek B (2018) In-depth analysis of *Bacillus subtilis* proteome identifies new ORFs and traces the evolutionary history of modified proteins. *Sci Rep* 8: 17246.
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43. Singh P, Pandit S, Garnaes J, Tunjic S, Mokkapati VRSS, Thygesen A, Mateiu RV, Baun A, Daugaard AE, Sultan A, **Mijakovic I** (2018) Green synthesis of gold and silver nanoparticles from industrial hemp and their capacity for biofilm inhibition. *Int J Nanomed* 13: 3571-3591.
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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:

2. 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)