

## Peer reviewed publications

1. Chen X, Pandit S, Shi L, Ravikumar V, Bonne Køhler J, Svetlicic E, Garg A, Petranovic D, **Mijakovic I** (2023) Graphene oxide attenuates toxicity of amyloid- $\beta$  aggregates in yeast by promoting disassembly and boosting cellular stress response (2023) *Adv Funct Mater*, in press.
2. 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*, in press.
3. Ruan H, Aulova A, Ghai V, Pandit S, Lovmar M, **Mijakovic I**, Kádár R (2023) Recent advances and challenges in polysaccharide-based antibacterial coating technologies. *Acta Biomater*, in press.
4. Hintzen J, Abujubara H, Rahimi S, **Mijakovic I**, Tietze D, Tietze AA (2023) Substrate-derived sortase A inhibitors: targeting an essential virulence factor of Gram-positive pathogenic bacteria. *Chem Sci*, in press.
5. Rahimi S, Lovmar T, Aulova A, Pandit S, Lovmar M, Forsberg S, Svensson M, Kádár R, **Mijakovic I** (2023) Automated prediction of bacterial exclusion areas on SEM images of graphene-polymer composites. *Nanomaterials* 13: 1605.
6. 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.
7. Eswaran M, Rahimi S, Pandit S, Chokkiah B, **Mijakovic I** (2023) A flexible multifunctional electrode based on conducting PANI/Pd composite for non-enzymatic glucose sensor and direct alcohol fuel cell applications. *Fuel* 345: 128182.
8. Balusamy SR, Perumalsamy H, Huq A, Yoon TH, **Mijakovic I**, Thangavelu L, Rahimi S (2023) A comprehensive and systemic review of ginseng-based nanomaterials: synthesis, targeted delivery, and biomedical applications. *Med Res Rev*, in press.
9. Rahimi S, van Leeuwen D, Roshanzamir F, Pandit S, Shi L, Sasanian N, Nielsen J, Esbjörner EK, **Mijakovic I** (2023) Ginsenoside Rg3 reduces the toxicity of graphene oxide used for delivery of doxorubicin to liver and breast cancer cells. *Pharmaceutics* 15: 391.
10. More PR, Pandit S, De Filippis A, Franci G, **Mijakovic I**, Galdiero M (2023) Silver nanoparticles: applications in the field of biomedicine. *Microorganisms* 11: 369.
11. Garg A, Jers C, Hwang HJ, Kalantari A, Ventura I, **Mijakovic I** (2023) Engineering *Bacillus subtilis* for production of 3-hydroxypropanoic acid. *Front Bioeng Biotechnol*, 11: 1101232.
12. Acet Ö, Dikici E, Acet BÖ, Odabaşı M, **Mijakovic I**, Pandit S (2023) Inhibition of bacterial adhesion by epigallocatechin gallate attached polymeric membranes. *Colloids Surf B Biointerfaces* 221: 113024.
13. Svetlicic E, Jaén-Luchoro D, Sauerborn Klobucar R, Jers C, Kazazic S, Franjevic D, Klobucar G, Shelton BG, **Mijakovic I** (2022) Genomic characterization and assessment of pathogenic potential of *Legionella* spp. isolates from environmental monitoring. *Front Microbiol* 13: 5404.
14. Ravikumar V, **Mijakovic I**, Pandit S (2022) Antimicrobial activity of graphene oxide contributes to alteration of key stress-related and membrane bound proteins. *Int J Nanomedicine*, 17: 6707-6721.
15. Khan F, Jeong GJ, Singh P, Tabassum N, **Mijakovic I**, Kim YM (2022) Retrospective analysis of the key molecules involved in the green synthesis of nanoparticles. *Nanoscale* 14: 14824-14857.

16. Eswaran M, Chokkiah B, Pandit S, Rahimi S, Dhanusuraman R, Aleem M, **Mijakovic I** (2022) A road map towards field-effect transistor biosensor technology for early-stage cancer detection. *Small Methods* 6: 2200809.
17. Yang Y, Qu L, **Mijakovic I**, Wei Y (2022) Advances in the human skin microbiota and its roles in cutaneous diseases. *Microb Cell Fact* 21: 176.
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19. Rahimi S, Chen Y, Zareian M, Pandit S, **Mijakovic I** (2022) Cellular and subcellular interactions of graphene-based materials with cancerous and non-cancerous cells. *Adv Drug Deliv Rev* 189: 114467.
20. Singh P, **Mijakovic I** (2022) Green synthesis and antibacterial applications of gold and silver nanoparticles from *Ligustrum vulgare* berries. *Sci Rep* 12: 7902.
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22. 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.
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30. 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* 8: 2101132.
31. 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.
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38. Pandit S, Gaska K, Kádár R, **Mijakovic I** (2021) Graphene based antimicrobial biomedical surfaces. *Chem Phys Chem* 22: 250-263.
39. 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.
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41. 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.
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43. 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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46. Bonne Køhler J, Jers C, Senissar M, Shi, Derouiche A, **Mijakovic I** (2020) Importance of protein Ser/Thr/Tyr phosphorylation for bacterial pathogenesis. *FEBS Lett* 594: 2339-2369.
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54. Othoum G, Prigent S, Derouiche A, Shi L, Bokhari A, Alamoudi S, Bougouffa S, Gao X, Hoehndorf R, Arold S, Gojobori T, Hirt H, Lafi F, Nielsen J, Bajic V, **Mijakovic I**, Essack M (2019) Comparative genomics study reveals Red Sea *Bacillus* with characteristics associated with potential microbial cell factories (MCFs). *Sci Rep* 9: 19254.
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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. 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.
2. 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)