Curriculum vitae

Name: Ivan Mijakovic
Date of birth: 08-08-1975
Nationality: Croatian & Swedish
Residence: Frölundagatan 35C, 431 44 Mölndal, Sweden

Current positions

2013-present Professor, Chalmers University of Technology, Sweden
2017-present Professor, DTU-Biosustain, Technical University of Denmark, Denmark

Education and degrees

2008 Professor Habilitation, University Claude Bernard Lyon, France
2007 University Level Teaching Diploma (UdTU), Technical University of Denmark, Denmark
2003 PhD degree in Molecular Microbiology, University Paris XI, Orsay, France
1997 Engineering degree in Molecular Biology (MSc degree), University of Zagreb, Croatia

Previous positions

2013-2016 Professor with special responsibilities, Technical University of Denmark, Denmark
2013-2016 Consulting Professor, AgroParisTech, France
2008-2013 Professor of Systems Biology, AgroParisTech, France
2007-2008 Associate Professor, Technical University of Denmark, Denmark
2006-2007 Assistant Professor, Technical University of Denmark, Denmark
2004-2005 Postdoctoral fellow, Technical University of Denmark, Denmark
2000-2003 PhD student, INRA-CNRS, France
1998-2000 Research associate, Faculty of Science and Mathematics, University of Zagreb, Croatia

Brief career synopsis

In 1997 I obtained an Engineering degree in Molecular Biology from the University of Zagreb, Croatia. I graduated at the top of my class and was honored as the Best Student at the University of Zagreb (25 000 students) by the Rector. After spending a brief period as Research Associate at the University of Zagreb, I moved to Paris, France, for my PhD studies. After obtaining a PhD degree in Molecular Microbiology from the University Paris XI in 2003, I moved to the Technical University of Denmark (DTU) as a postdoctoral fellow. In 2006 I became Assistant and in 2007 Associate Professor at the DTU, starting my independent research group. In 2008, I accepted a Full Professor appointment at AgroParisTech and moved to Paris as Professor of Systems and Synthetic Biology. In 2013, I accepted an offer to move to the Chalmers University of Technology, as Full Professor of Bacterial Systems Biology. At the same time, I started a satellite group at the DTU, with a part-time affiliation, first as Professor with special responsibilities (2013-2016), and from January 2017 as Full Professor. Currently I lead a research group implanted at two sites, Chalmers and DTU, with over 30 members. The oldest research topic in my group is bacterial protein phosphorylation, its physiological role and means to use it to engineer bacterial cell factories or to fight bacterial pathogens. My group is among the world leaders in this field, with pioneering contributions in methods to study protein phosphorylation and seminal studies elucidating its physiological role. More recent topics in my group include metabolic engineering of bacterial cell factories for bio-sustainability applications and environmental protection/remediation, as well as various bio-applications of nanomaterials. We are increasingly using approaches of experimental evolution in our basic and applied science projects.

Distinctions and awards

2020 "Spiridion Brusina Medal", Croatian Society of Natural Sciences
2007 "Skou Award", Danish Natural Science Research Council (FNU)
2007 "Jorcks Pris" for excellence in teaching and research, award from Jorcks Foundation
2006 "Researcher of the Year 2006", BioCentrum, Technical University of Denmark
2005 "Teacher of the Year 2005", BioCentrum, Technical University of Denmark
2003 "Costa Award", Conference on Functional Genomics of Gram-positive Bacteria
1997 "Rector's Award" for the best student at the University of Zagreb

Academic appointments and commissions of trust

2021-present	Deputy Head of Department of Life Sciences, Chalmers, Sweden
2019-present	Head of Division of Systems and Synthetic Biology, Chalmers, Sweden
2018-present	Member of the Scientific Advisory Board of the Chalmers Graphene Centre, Sweden
2015-present	Associate Editor at *Periodicum Biologorum*
2014-present	Chairman of the Scientific Committee for the International Conference Series on Post-translational Modifications in Bacteria
2018-2019	Member of the Board of Directors of the Sahlgrenska Science Park, Sweden
2018-2019	Member of the Advisory Board of the Vestra Götaland Region Innovation Platform, Sweden
2018-2019	Member of the Advisory Board of the Gothia Forum, Sweden
2016-2019	Director of the Chalmers Area of Advance Life Science Engineering, Sweden
2015-2019	Associate Editor at *Frontiers in Microbiology*
2015-2018	Member of the Steering Committee of the BACELL Society
2013-2016	Chairman of the Section of Functional Genomics of the European Federation of Biotechnology
2012-2015	Member of the Steering Committee of the Centre of Excellence for Industrial Agrobiotechnology, France
2011-2013	Head of Division of Microbiology and Molecular Genetics, AgroParisTech, France
2003-present	Evaluator for funding calls from: DFF (Danish Free Research Council), ANR (Agence Nationale de la Recherche, France), ARC (Fondation pour la Recherche sur le Cancer, France), the Polish Natural Science Council, the Croatian Academy of Science, the Rumanian National Funding Agency, the Latvian Council of Science, and Umeå University.
2003-present	Evaluator in recruitment committees for faculty members at the University of Wageningen, Chalmers University of Technology, Technical University of Denmark, Lund University, and University Claude Bernard Lyon I.

Senior researchers & junior faculty members supervised

Dr. Shadi Rahimi (2023-present)
Dr. Santosh Pandit (2023-present)
Dr. Priyanka Singh (2023-present)
Dr. Martin Lovmar (2022-present)
Dr. Carsten Jers (2019-present)
Dr. Tao Chen (2016-2017)
Dr. Sandrine Poncet (2011-2013)
Dr. Yves Pagot (2011-2013)

Postdoctoral fellows supervised
Dr. Vikash Kumar (2025-present)
Dr. Olena Tkachova (2024-present)
Dr. Mostafa Salehirozveh (2024-present)
Dr. Colleen Manyumwa (2022-present)
Dr. Golnaz Mobasseri (2022-present)
Dr. Zhejian Cao (2021-present)
Dr. Jian Zhang (2021-present)
Dr. Lei Shi (2009-present)
Dr. Xin Chen (2021-2024)
Dr. Paula Martínez Pérez (2021-2023)
Dr. Julie Couillaud (2021-2023)
Dr. Caroline Wasén (2020-2023)
Dr. Yanyan Chen (2020-2023)
Dr. Santosh Pandit (2015-2023)
Dr. Shadi Rahimi (2018-2023)
Dr. Priyanka Singh (2016-2023)
Dr. Mutusankar Eswaran (2021-2023)
Dr. Abhayraj Joshi (2019-2023)
Dr. Julie Bonne Køhler (2019-2023)
Dr. Avlant Nilsson (2020-2022)
Dr. Vaishnavi Ravikumar (2015-2022)
Dr. Mohsen Zareian (2020-2022)
Dr. Abhroop Garg (2018-2021)
Dr. Mériem Senissar (2019-2021)
Dr. Abderahmane Derouiche (2014-2020)
Dr. Carsten Jers (2015-2019)
Dr. Abida Sultan (2015-2019)
Dr. Raghu Mokkapati (2015-2018)
Dr. HeeJin Hwang (2017-2018)
Dr. Valentina Cantatore (2016-2017)
Dr. Fen Yang (2015-2016)

PhD students supervised
Peter Gockel (2023-present)
Saranya Nallapareddy (2023-present)
Mohammed Ghalib (2022-present)
Anargyros Alexiou (2022-present)
Belay Tilahun Tadesse (2022-present)
Leonarda Acha Alarcon (2021-present)
Hengzi Ruan (2021-present)
Suvasini Balasubramanian (2021-2025)
Mukil Madhusudanan (2021-2024)
Ema Svetlicic (2021-2024)
Chenxhi Zhang (2021-2024)
Pedro Aragón Fernández (2021-2022)
Aida Kalantari (2012-2016)

Charlotte Cousin (2010-2014)
Abderrahmane Derouiche (2010-2013)
Ahasanul Kobir (2009-2012)
Boumediene Soufi (2007-2010)
Sujata Vijay Sohoni (2007-2010)
Carsten Jers (2007-2010)
Mette Erichsen Hansen (2006-2009)

Guest PhD students supervised
Kristian Nakic (2025-present)
Claudia Capella (2023-2024)
Pragati Rajendra More (2022-2023)
Amani Belaiba (2021-2021)
Samira Ebrahimi (2020-2021)
Hossein Helalat (2020-2021)
Alireza Neissi (2019-2020)

Master students supervised
A total of 28 Master students graduated from my lab.

Teaching experience
I have experience of teaching at three European universities: The Technical University of Denmark (Denmark, 2006-2008), AgroParisTech (France, 2008-2013) and Chalmers University of Technology (Sweden, 2013-2022). I have been appointed as course responsible for a number of courses at all three universities.

Course responsible

2013-2022	Chalmers University of Technology, Bachelor level advanced course in Cell and Molecular Biology II (KMG050), theoretical course (lectures), approx. 60 students per generation.
2016-2022	Chalmers University of Technology, Bachelor level basic course in Cell and Molecular Biology I (UCM010), theoretical course (lectures), approx. 110 students per generation.
2010-2013	AgroParisTech, Bachelor level course in Molecular Genetics, theoretical course (lectures), approx. 350 students per generation.
2010-2013	AgroParisTech, Master level course in Bioengineering, theoretical course (lectures), approx. 20 students per generation.
2012-2013	AgroParisTech, Master level course in Medical Systems Biology, theoretical course (lectures), approx. 80 students per generation.
2009-2013	AgroParisTech, Master level course in Functional Genomics, theoretical course (lectures), approx. 20 students per generation.
2006-2008	Technical University of Denmark, Master level course in Molecular and Cellular Biology, theoretical course (lectures), approx. 100 students per generation.
2006-2008	Technical University of Denmark, Master level course in Microbial Biotechnology, practical course (experimental), approx. 30 students per generation.

Leading functions in education

2017-2019	Responsible for joint education initiatives between Chalmers and the Sahlgrenska Academy/Sahlgrenska Hospital

2013-2017 Responsible for Chalmers bilateral Erasmus exchange agreements with AgroParisTech, France and University of Zagreb, Croatia.

2012-2013 Coordinator for educational activities in the partnership between AgroParisTech and the pre-industrial platform Metagenopolis.

2009-2013 Coordinator for Master programs: Mathematical Modeling at the Interface of Life Science and Economy (MMSESI) and Systems and Synthetic Biology (MSSB), AgroParisTech, France.

2009-2013 Responsible for the Erasmus Student exchange between AgroParisTech, France and University of Zagreb, Croatia.

2007-2008 Coordinator for foreign exchange students at the BioCentrum, Technical University of Denmark, Denmark.

Conference organization

- Chairman of the scientific committee of the "5th International meeting on post-translational modifications in bacteria" (May 2024) Rouen, France
- Main organizer and Chairman of the scientific committee of the "4th International meeting on post-translational modifications in bacteria" (May 2022) Copenhagen, Denmark
- Main organizer of the PEST-BIN Summer School (October 2021) Copenhagen, Denmark
- Chairman of the scientific committee of the "3rd International meeting on post-translational modifications in bacteria" (December 2018) Tübingen, Germany
- Main organizer of the "NanoMed North" conference (May 2017) Gothenburg, Sweden
- Chairman of the scientific committee of the "2nd International meeting on post-translational modifications in bacteria" (October 2016) Lyon, France
- Chairman of the scientific committee of the conference on "Metabolic engineering in bacteria" (April 2015) Amsterdam, The Netherlands
- Member of the organizing committee of the BACELL 2015 meeting (April 2015) Amsterdam, The Netherlands
- Chairman of the organizing committee of the "1st International meeting on post-translational modifications in bacteria" (September 2014) Göttingen, Germany
- Main organizer of the "Symposium on regulation and signalling in bacteria" (October 2013) Gothenburg, Sweden

Selected invited/keynote lectures

- 5th International meeting on post-translational modifications in bacteria (May 2024) Rouen, France
- CaRe Meeting (October 2021) Gothenburg, Sweden
- FEBS Meeting (July 2021) Ljubljana, Slovenia
- Spiridon Brusina Lecture (April 2021) Zagreb, Croatia
- Materials for Tomorrow (November 2016), Gothenburg, Sweden
- 2nd International meeting on post-translational modifications in bacteria (October 2016) Lyon, France
- NanoMedNorth (June 2016) Copenhagen, Denmark
- Big Data & Biotechnology (January 2016), Tuval, Saudi Arabia
- UCD Symposium (December 2015), Dublin, Ireland
- Conference on Functional Genomics of Gram-positive Bacteria (June 2015) Montecatini, Italy
- Novo Nordisk Prize Symposium (December 2014), Copenhagen, Denmark
- Annual Meeting of the Croatian Society for Biochemistry and Molecular Biology, (September 2014) Zadar, Croatia

- SFM Mikrobiologisk Vårmöte (April 2014) Trollhättan, Sweden
- iBIOK: Innovative Bioproduction Kobe (January 2014) Kobe, Japan
- Symposium on Proteomics of Microorganisms (December 2013) Tübingen, Germany
- VAAM Annual Meeting (March 2013), Bremen, Germany
- Annual conference of the Croatian Society of Biology (September 2012) Sibenik, Croatia
- Conference on Transmembrane Proteins (October 2010) Maratea, Italy
- FEBS Meeting (July 2010) Gothenburg, Sweden
- ASM General Meeting (May 2009) Philadelphia, USA
- Plasmidtagung Conference (October 2008) Götingen, Germany
- International conference on inhibitors of bacterial protein kinases (June 2007) Warsaw, Poland

Current research grants

Granting agency	Years	Amount
Nord Forsk	2021-2025	1.45 M€
DTU PhD grant (partial funding)	2022-2025	85 k€
Novo Nordisk Foundation Center grant	2021-2025	670 k€
Novo Nordisk Foundation Project grant	2022-2025	135 k€
Danish Research Council FTP grant	2022-2025	380 k€
WISE Postdoc project	2023-2025	200 k€
Vinnova SIO Grafen	2023-2025	300 k€
ÅForsk	2023-2025	100 k€
Danish Research Council Green transition grant	2024-2027	435 k€
Swedish Research Council FORMAS grant	2024-2026	300 k€
ÅForsk	2023-2025	150 k€
Novo Nordisk Foundation Pioneer Innovator	2024-2025	150 k€
Vinnova SIO Grafen	2024-2025	90 k€
Vinnova 2Dtech 2 Center grant	2025-2029	600 k€
Total Energies Incubator grant	2025-2026	400 k€
EU MSCA postdoc grant	2025-2027	250 k€
Novo Nordisk Foundation Casein Mission grant	2025-2029	800 k€
EU MSCA ITN BUG-ID	2026-2029	4.56 M€

Selection of most important previous research grants

Granting agency	Years	Amount
EU MSCA ITN Grant PEST-BIN	2021-2024	4.15 M€
Swedish Research Council VR	2021-2024	320 k€
Swedish Research Council VR	2021-2024	330 k€
VINNOVA 2DTech Center grant	2020-2024	325 k€
Lundbeckfonden	2019-2024	300 k€
Danish Research Council Green transition grant	2022-2024	380 k€
Vinnova MedTech grant	2021-2023	300 k€
Vinnova SIO Grafen grant	2020-2022	300 k€
Danish Research Council FNU grant	2019-2022	380 k€
Swedish Research Council FORMAS grant	2019-2021	300 k€
Villum Experiment grant	2019-2021	250 k€

Danish Research Council FTP grant	2018-2020	380 k€
Vinnova SIO Grafen grant	2017-2019	320 k€
Novo Nordisk Foundation Project grant	2017-2019	370 k€
Danish Research Council FNU grant	2015-2018	380 k€
Swedish Research Council VR	2015-2018	280 k€
Chalmers Areas of Advance grant	2015-2017	330 k€
KAUST project grant	2015-2017	600 k€
Vinnova SIO Grafen grant	2015-2017	300 k€
Chaire Agrobiotechnologie grant	2013-2015	150 k€
French Research council ANR grant	2010-2014	690 k€
INRA Project grant	2008-2012	400 k€
Danish Research Council Skou grant	2007-2009	450 k€
Danish Research Council FNU grant	2005-2008	150 k€

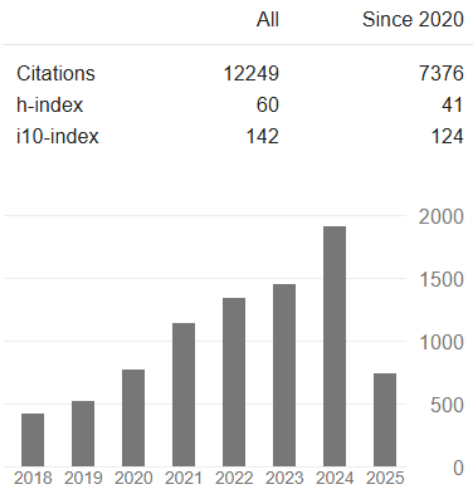
Career total of external funding raised for research as the main applicant: 28.4 M€
This total amount has been awarded to 72 individual projects carried out in my laboratory from 2004-present, in France (2008-2013), Denmark (2004-2008, 2014-present) and Sweden (2014-present).

Scientific collaboration with industrial partners

- Total Energies, France, 2025-present (CO_2 fixation)
- Mölnlycke Healthcare, Sweden, 2023-present (wound dressings)
- Nanoxis Consulting, Sweden, 2020-present (proteomics of bacterial pathogens, diagnostic chips)
- Wellspect Healthcare, Sweden, 2015-present (advanced antibacterial coating of catheters and other biomedical devices)
- Naicons, Italy, 2020-2024 (antimicrobial peptides)
- Clinical Microbiomics, Denmark, 2020-2024 (microbiomics and bacterial infections)
- AltraBio, France, 2020-2024 (big data and infection diagnostics)
- Danisco A/S, Denmark: 2007-2009 (engineering of Bacillus subtilis for production of nisin)
- Novozymes A/S, Denmark: 2007-2008 (transcriptomics characterization of Bacillus licheniformis under heat stress and iron limitation)
- Christian Hansen A/S, Denmark: 2007-2008 (improvement of protein secretion and folding for heterologous protein expression in *Bacillus subtilis*)

Bibliometric Data from Google Scholar, May 2025

Peer reviewed papers:	195
First authorships:	15
Last authorships:	103
Total citations:	12 249
H-index:	60
i10-index:	142
Book chapters:	2
Patents/filed applications:	4



Peer reviewed publications

1. Madhusudanan M, Pandit S, Zhang J, Jeong GJ, Singh P, Khan F, **Mijakovic I** (2025) Green synthesis of silver nanoparticles: A review of polymer and antimicrobial drug combinations for enhanced antimicrobial applications. Adv Nano Biomed Res, in press.
2. Balasubramanian S, Mobasseri G, Shi L, Jers C, Bonne Køhler J, Boire A, Berton-Carabin C, **Mijakovic I**, Ruhdal Jensen P (2025) Production of phosphorylated and functional αs1-casein in *E. coli.* Trends Biochem Sci, in press.
3. Tadesse BT, Zhao S, Gu L, Jers C, **Mijakovic I**, Solem C (2024) Genome analysis reveals a biased distribution of virulence and antibiotic resistance genes in the genus *Enterococcus* and an abundance of safe species. Appl Environ Microbiol e00415-25.
4. Hamidi M, Nagarajan S, Ravikumar V, Gueguen-Chaignon V, Laguri C, Freton C, **Mijakovic I**, Simorre JP, Ravaud S, Grangeasse C (2025) The juxtamembrane domain of StkP is phosphorylated and influences cell division in *Streptococcus pneumoniae.* mBio e03799-24.
5. Salehirozveh M, Bonne R, Kumar P, Abazar F, Dehghani P, **Mijakovic I**, Roy VAL (2025) Enhanced detection of brain-derived neurotrophic factor (BDNF) using a reduced graphene oxide field-effect transistor aptasensor. Nanoscale 17: 4543-4555.
6. Basak S, Singh P, Weller A, Kadumudi FB, Kempen PJ, **Mijakovic I**, Dolatshahi-Pirouz A, Almdal K (2025) Cost-effective and eco-friendly sprayable nanogels (ZC-CSNG) for multifunctional wound dressing applications. Chem Eng J 503: 158312.
7. Singh P, Pandit S, Balusamy SR, Madhusudanan M, Singh H, Haseef HMA, **Mijakovic I** (2025) Advanced nanomaterials for cancer therapy: gold, silver, and iron oxide nanoparticles in oncological applications. Adv Healthcare Mater 16: 2570023.
8. Che J, Fan Z, Bijl E, Thomsen JPS, **Mijakovic I**, Hetting K, Poulsen NA, Larsen LB (2025) Unravelling the dominant role of phosphorylation degree in governing the functionality of reassembled casein micelles: Implications for future dairy production through precision fermentation. Food Hydrocoll 159: 110615.
9. Balusamy SR, Mani B, Somasundaram S, Sohn D, **Mijakovic I**, Rahimi S, Perumalsamy H (2025) Apoptotic cell death of stomach cancer lines (AGS) induced by Co-NTB complex through cellular organelles and DNA damage. RSC Advances 15: 739-747.
10. Nashier P, Samp I, Adler M, Ebner F, Lê LT; Göppel M, Jers C, **Mijakovic I**, Schwarz S, Macek B (2024) Deep phosphoproteomics of Klebsiella pneumoniae reveals HipA-mediated tolerance to ciprofloxacin. PLoS Pathogens 20: e1012759.
11. Salehirozveh M, Dehghani P, **Mijakovic I** (2024) Synthesis, functionalization, and biomedical applications of iron oxide nanoparticles. J Funct Biomater 15: 340.
12. Manyumwa CV, Zhang C, Jers C, **Mijakovic I** (2024) Rational engineering of a highly active and resilient α-carbonic anhydrase from the hydrothermal vent species *Persephonella hydrogeniphila* (2024) FEBS J, in press, doi.org/10.1111/febs.17346.
13. Rahimi S, Balusamy SR, Perumalsamy H, Ståhlberg A, **Mijakovic I** (2024) CRISPR-Cas target recognition for sensing viral and cancer biomarkers. Nucleic Acids Res 52: 10040-10067.
14. Ribeiro S, Chaumet G, Alves K, Nourikyan J, Shi J, Lavergne J-P, **Mijakovic I**, de Bernard S, Buffat L (2024) BacSPaD: A robust bacterial strains' pathogenicity resource based on integrated and curated genomic metadata. Pathogens 13: 672.

15. Tadesse BT, Gu L, Solem C, **Mijakovic I**, Jers C (2024) The probiotic *Enterococcus lactis* SF68 as a potential food fermentation microorganism for safe food production. J Agric Food Chem 72: 18089-18099.
16. Zhang J, Pandit S, Rahimi S, Cao Z, **Mijakovic I** (2024) Vertical graphene nanoarray decorated with Ag nanoparticles exhibits enhanced antibacterial effects. J Colloid Interface Sci 676: 808-816.
17. Prabhu PP, Mohanty B, Lobo CL, Balusamy SR, Shetty A, Perumalsamy H, Mahadev M, **Mijakovic I**, Dubey A, Singh P (2024) Harnessing the nutriceutics in early-stage breast cancer: mechanisms, combinational therapy, and drug delivery. J Nanobiotechnology 22: 574.
18. Ruiz JMO, Gerner E, Rahimi S, Alarcón LA, **Mijakovic I** (2024) Biofilm formation and dispersal of *Staphylococcus aureus* wound isolates in microtiter plate-based 2-D wound model. Helyon 10: e33872.
19. Ghai V, Pandit S, Svensson M, Larsson R, Matic A, Ngaloy R, Dash SP, Terry A, Nygard K, **Mijakovic I**, Kádár R (2024) Achieving long-range arbitrary uniform alignment of nanostructures in magnetic fields. Adv Funct Mater 2024: 2406875.
20. Manyumwa CV, Zhang C, Jers C, **Mijakovic I** (2024) Alpha carbonic anhydrase from *Nitratiruptor tergarcus* engineered for increased activity and thermostability. Int J Mol Sci 25: 5853.
21. Shi L, Derouiche A, Alazmi M, Ventroux M, Svetlicic E, Bonne Køhler J, Noirot-Gros MF, Gao X, **Mijakovic I** (2024) Connection between protein-tyrosine kinase inhibition and coping with oxidative stress in *Bacillus subtilis*. Proc Natl Acad Sci USA 121: e2321890121.
22. Singh P, **Mijakovic I** (2024) Harnessing barley grains for green synthesis of gold and silver nanoparticles with antibacterial potential. Discover Nano 19: 101.
23. Zhang J, Li A, Yu X, **Mijakovic I**, Pandit S (2024) Polydopamine modified carbon nitride and PAMAM assembled electrochemical immunosensor for detection of indole-3-acetic acid. ChemElectroChem 11: e202400145.
24. Tadesse BT, Svetlicic E, Zhao S, Berhan N, Jers C, Solem C, **Mijakovic I** (2024) Bad to the bone? - Genomic analysis of *Enterococcus* isolates from diverse environments reveals that most are safe and display potential as food fermentation microorganisms. Microbiol Res 283: 127702.
25. 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 25: 100997.
26. More PR, Shinde S, Cao Z, Zhang J, Pandit S, De Filippis A, **Mijakovic I**, Galdiero M (2024) Antibacterial applications of biologically synthesized Pichia pastoris silver nanoparticles. Helyon 10: e25664.
27. Balasubramanian S, Bonne Køhler J, Jers C, Ruhdal Jensen P, **Mijakovic I** (2024) Exploring the secretome of *Corynebacterium glutamicum* ATCC 13032. Front Bioeng Biotechnol 12: 1348184.
28. **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.
29. Zou G, Li T, **Mijakovic I**, Wei Y (2024) Synthetic biology enables mushrooms to meet emerging sustainable challenges. Front Microbiol 15: 1337398.
30. Lanai, V., Chen Y, Naumovska E, Pandit S, Schröder E, **Mijakovic I**, Rahimi S (2024) Differences in interaction of graphene/graphene oxide with bacterial and mammalian cell membranes. Nanoscale 16: 1156-1166.
31. Chen Y, Pandit S, Rahimi S, **Mijakovic I** (2024) Graphene nanospikes exert bactericidal effect through mechanical damage and oxidative stress. Carbon 218: 118740.

32. 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.
33. Ruan H, Bek M, Pandit S, Aulova A, Zhang J, Bjellheim P, Lovmar M, **Mijakovic I**, Kádár R (2023) Biomimetic antibacterial gelatin hydrogels with multifunctional properties for biomedical applications. Appl Mater Interfaces 15: 54249-54265.
34. 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.
35. 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.
36. 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.
37. 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.
38. Joshi AS, Madhusudanan M, **Mijakovic I** (2023) 3D printed inserts for reproducible high throughput screening of cell migration. Front Cell Dev Biol 11: 1256250.
39. Ruan H, Aulova A, Ghai V, Pandit S, Lovmar M, **Mijakovic I**, Kádár R (2023) Polysaccharide-based antibacterial coating technologies. Acta Biomater 168: 42-77.
40. 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.
41. 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-β aggregates in yeast by promoting disassembly and boosting cellular stress response. Adv Funct Mater 33: 2370265.
42. 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.
43. 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 14: 6975-6985.
44. 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.
45. 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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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. **Mijakovic I**, Jers C, Zhang C, Manyumwa C (2024) Thermophilic bacterium comprising a surface displayed carbonic anhydrase. EU Patent App 24182851.6. Patent Assignee: Technical University of Denmark.
2. 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.
3. 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)
4. 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)