

# Johannes Gescher

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/451165/publications.pdf>

Version: 2024-02-01

57  
papers

2,558  
citations

257450

24  
h-index

206112

48  
g-index

59  
all docs

59  
docs citations

59  
times ranked

2868  
citing authors

#	ARTICLE	IF	CITATIONS
1	Bacterial transformation: distribution, shared mechanisms and divergent control. <i>Nature Reviews Microbiology</i> , 2014, 12, 181-196.	28.6	568
2	Dissimilatory Reduction of Extracellular Electron Acceptors in Anaerobic Respiration. <i>Applied and Environmental Microbiology</i> , 2012, 78, 913-921.	3.1	232
3	Periplasmic Electron Transfer via the <i>c</i> -Type Cytochromes MtrA and FccA of <i>Shewanella oneidensis</i> MR-1. <i>Applied and Environmental Microbiology</i> , 2009, 75, 7789-7796.	3.1	148
4	A dynamic periplasmic electron transfer network enables respiratory flexibility beyond a thermodynamic regulatory regime. <i>ISME Journal</i> , 2015, 9, 1802-1811.	9.8	134
5	Unbalanced fermentation of glycerol in <i>Escherichia coli</i> via heterologous production of an electron transport chain and electrode interaction in microbial electrochemical cells. <i>Bioresource Technology</i> , 2015, 186, 89-96.	9.6	96
6	Electron transfer process in microbial electrochemical technologies: The role of cell-surface exposed conductive proteins. <i>Bioresource Technology</i> , 2018, 255, 308-317.	9.6	85
7	Extracellular reduction of solid electron acceptors by <i>Shewanella oneidensis</i> . <i>Molecular Microbiology</i> , 2018, 109, 571-583.	2.5	83
8	Metabolic Engineering of <i>Escherichia coli</i> for Production of Mixed-Acid Fermentation End Products. <i>Frontiers in Bioengineering and Biotechnology</i> , 2014, 2, 16.	4.1	79
9	Characterization of microbial current production as a function of microbe-electrode-interaction. <i>Bioresource Technology</i> , 2014, 157, 284-292.	9.6	68
10	Acetoin production via unbalanced fermentation in <i>Shewanella oneidensis</i> . <i>Biotechnology and Bioengineering</i> , 2017, 114, 1283-1289.	3.3	66
11	Systematic screening of carbon-based anode materials for microbial fuel cells with <i>Shewanella oneidensis</i> MR-1. <i>Bioresource Technology</i> , 2013, 146, 386-392.	9.6	63
12	Investigation of the Electron Transport Chain to and the Catalytic Activity of the Diheme Cytochrome <i>c</i> Peroxidase CcpA of <i>Shewanella oneidensis</i> . <i>Applied and Environmental Microbiology</i> , 2011, 77, 6172-6180.	3.1	60
13	Electrode-assisted acetoin production in a metabolically engineered <i>Escherichia coli</i> strain. <i>Biotechnology for Biofuels</i> , 2017, 10, 65.	6.2	57
14	Characterisation of a stable laboratory co-culture of acidophilic nanoorganisms. <i>Scientific Reports</i> , 2017, 7, 3289.	3.3	57
15	Fine-tuning of choline metabolism is important for pneumococcal colonization. <i>Molecular Microbiology</i> , 2016, 100, 972-988.	2.5	44
16	Effects of wastewater constituents and operational conditions on the composition and dynamics of anodic microbial communities in bioelectrochemical systems. <i>Bioresource Technology</i> , 2018, 258, 376-389.	9.6	43
17	Resilience, Dynamics, and Interactions within a Model Multispecies Exoelectrogenic-Biofilm Community. <i>Applied and Environmental Microbiology</i> , 2017, 83, .	3.1	37
18	Efficient biochemical production of acetoin from carbon dioxide using <i>Cupriavidus necator</i> H16. <i>Biotechnology for Biofuels</i> , 2019, 12, 163.	6.2	37

#	ARTICLE	IF	CITATIONS
19	Involvement of the <i>Shewanella oneidensis</i> Decaheme Cytochrome MtrA in the Periplasmic Stability of the $\beta^2$ -Barrel Protein MtrB. <i>Applied and Environmental Microbiology</i> , 2011, 77, 1520-1523.	3.1	34
20	Investigation of different nitrogen reduction routes and their key microbial players in wood chip-driven denitrification beds. <i>Scientific Reports</i> , 2017, 7, 17028.	3.3	33
21	Improvement of the electron transfer rate in <i>Shewanella oneidensis</i> MR-1 using a tailored periplasmic protein composition. <i>Bioelectrochemistry</i> , 2019, 129, 18-25.	4.6	31
22	Chromate Resistance Mechanisms in <i>Leucobacter chromiirestans</i> . <i>Applied and Environmental Microbiology</i> , 2018, 84, .	3.1	29
23	From an extremophilic community to an electroautotrophic production strain: identifying a novel <i>Knallgas</i> bacterium as cathodic biofilm biocatalyst. <i>ISME Journal</i> , 2020, 14, 1125-1140.	9.8	28
24	<i>Kyrpidia spormannii</i> sp. nov., a thermophilic, hydrogen-oxidizing, facultative autotroph, isolated from hydrothermal systems at SÅo Miguel Island, and emended description of the genus <i>Kyrpidia</i> . <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2018, 68, 3735-3740.	1.7	28
25	Cultivation of Exoelectrogenic Bacteria in Conductive DNA Nanocomposite Hydrogels Yields a Programmable Biohybrid Materials System. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 14806-14813.	8.0	26
26	Perspectives on Potential Applications of Nanometal Derivatives in Gaseous Bioenergy Pathways: Mechanisms, Life Cycle, and Toxicity. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 9563-9589.	6.7	26
27	Extracellular riboflavin induces anaerobic biofilm formation in <i>Shewanella oneidensis</i> . <i>Biotechnology for Biofuels</i> , 2021, 14, 130.	6.2	25
28	Influence of the Potential Carbon Sources for Field Denitrification Beds on Their Microbial Diversity and the Fate of Carbon and Nitrate. <i>Frontiers in Microbiology</i> , 2018, 9, 1313.	3.5	24
29	Biofilm systems as tools in biotechnological production. <i>Applied Microbiology and Biotechnology</i> , 2019, 103, 5095-5103.	3.6	24
30	Propionic acid production from food waste in batch reactors: Effect of pH, types of inoculum, and thermal pre-treatment. <i>Bioresource Technology</i> , 2021, 319, 124166.	9.6	24
31	$\text{NO}_3^-$ removal efficiency in field denitrification beds: key controlling factors and main implications. <i>Environmental Microbiology Reports</i> , 2019, 11, 316-329.	2.4	23
32	Investigation on the anaerobic propionate degradation by <i>Escherichia coli</i> K12. <i>Molecular Microbiology</i> , 2017, 103, 55-66.	2.5	20
33	Fine-tuning cellular levels of DprA ensures transformant fitness in the human pathogen <i>Streptococcus pneumoniae</i> . <i>Molecular Microbiology</i> , 2018, 109, 663-675.	2.5	20
34	Extracellular Electron Transfer and Biosensors. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2017, 167, 15-38.	1.1	18
35	Addition of Riboflavin-Coupled Magnetic Beads Increases Current Production in Bioelectrochemical Systems via the Increased Formation of Anode-Biofilms. <i>Frontiers in Microbiology</i> , 2019, 10, 126.	3.5	15
36	Evaluation of productive biofilms for continuous lactic acid production. <i>Biotechnology and Bioengineering</i> , 2019, 116, 2687-2697.	3.3	15

#	ARTICLE	IF	CITATIONS
37	Exploring the Effects of <i>bolA</i> in Biofilm Formation and Current Generation by <i>Shewanella oneidensis</i> MR-1. <i>Frontiers in Microbiology</i> , 2020, 11, 815.	3.5	15
38	The performance of microbial anodes in municipal wastewater: Pre-grown multispecies biofilm vs. natural inocula. <i>Bioresource Technology</i> , 2016, 221, 165-171.	9.6	12
39	Development of a production chain from vegetable biowaste to platform chemicals. <i>Microbial Cell Factories</i> , 2018, 17, 90.	4.0	12
40	Assessing and modeling biocatalysis in field denitrification beds reveals key influencing factors for future constructions. <i>Water Research</i> , 2021, 188, 116467.	11.3	11
41	Genomic Barcode-Based Analysis of Exoelectrogens in Wastewater Biofilms Grown on Anode Surfaces. <i>Journal of Microbiology and Biotechnology</i> , 2016, 26, 511-520.	2.1	11
42	Using planktonic microorganisms to supply the unpurified multi-copper oxidases laccase and copper efflux oxidases at a biofuel cell cathode. <i>Bioresource Technology</i> , 2014, 158, 231-238.	9.6	10
43	Biological biogas upgrading in a membrane biofilm reactor with and without organic carbon source. <i>Bioresource Technology</i> , 2021, 335, 125287.	9.6	10
44	<i>Metallibacterium scheffleri</i> : Genomic data reveal a versatile metabolism. <i>FEMS Microbiology Ecology</i> , 2017, 93, fix011.	2.7	9
45	Improving the Cathodic Biofilm Growth Capabilities of <i>Kyrpidia spormannii</i> EA-1 by Undirected Mutagenesis. <i>Microorganisms</i> , 2021, 9, 77.	3.6	9
46	The alternative sigma factor $\sigma^X$ mediates competence shut-off at the cell pole in <i>Streptococcus pneumoniae</i> . <i>ELife</i> , 2020, 9, .	6.0	9
47	Production of acetoin from renewable resources under heterotrophic and mixotrophic conditions. <i>Bioresource Technology</i> , 2021, 329, 124866.	9.6	8
48	Genetic engineering for enhanced productivity in bioelectrochemical systems. <i>Advances in Applied Microbiology</i> , 2020, 111, 1-31.	2.4	7
49	Complete Genome Sequence of <i>Kyrpidia</i> sp. Strain EA-1, a Thermophilic Knallgas Bacterium, Isolated from the Azores. <i>Genome Announcements</i> , 2018, 6, .	0.8	6
50	Enhanced production of propionic acid through acidic hydrolysis by choice of inoculum. <i>Journal of Chemical Technology and Biotechnology</i> , 2021, 96, 207-216.	3.2	6
51	Efficient Bioelectrochemical Conversion of Industrial Wastewater by Specific Strain Isolation and Community Adaptation. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019, 7, 23.	4.1	4
52	Accelerated Electro-Fermentation of Acetoin in <i>Escherichia coli</i> by Identifying Physiological Limitations of the Electron Transfer Kinetics and the Central Metabolism. <i>Microorganisms</i> , 2020, 8, 1843.	3.6	4
53	Developing <i>Rhodobacter sphaeroides</i> for cathodic biopolymer production. <i>Bioresource Technology</i> , 2021, 336, 125340.	9.6	4
54	A Micrarchaeon Isolate Is Covered by a Proteinaceous S-Layer. <i>Applied and Environmental Microbiology</i> , 2022, 88, AEM0155321.	3.1	4

#	ARTICLE	IF	CITATIONS
55	Soluble versions of outer membrane cytochromes function as exporters for heterologously produced cargo proteins. <i>Microbial Cell Factories</i> , 2019, 18, 216.	4.0	2
56	Nanowired electrodes as outer membrane cytochrome-independent electronic conduit in <i>Shewanella oneidensis</i> . <i>IScience</i> , 2022, 25, 103853.	4.1	2
57	Biochemical Characterization of Recombinant Isocitrate Dehydrogenase and Its Putative Role in the Physiology of an Acidophilic Microarchaeon. <i>Microorganisms</i> , 2021, 9, 2318.	3.6	1