

# Morten O A Sommer

## List of Publications by Citations

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96  
papers

6,110  
citations

38  
h-index

77  
g-index

107  
ext. papers

7,868  
ext. citations

13.1  
avg, IF

6.29  
L-index

#	Paper	IF	Citations
96	The shared antibiotic resistome of soil bacteria and human pathogens. <i>Science</i> , <b>2012</b> , 337, 1107-11	33.3	980
95	Functional characterization of the antibiotic resistance reservoir in the human microflora. <i>Science</i> , <b>2009</b> , 325, 1128-1131	33.3	620
94	Bacteria subsisting on antibiotics. <i>Science</i> , <b>2008</b> , 320, 100-3	33.3	398
93	Evolutionary dynamics of bacteria in a human host environment. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 7481-6	11.5	260
92	Use of collateral sensitivity networks to design drug cycling protocols that avoid resistance development. <i>Science Translational Medicine</i> , <b>2013</b> , 5, 204ra132	17.5	253
91	NetSurfP-2.0: Improved prediction of protein structural features by integrated deep learning. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2019</b> , 87, 520-527	4.2	214
90	Systematic investigation of protein phase behavior with a microfluidic formulator. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 14431-6	11.5	148
89	Dissemination of antibiotic resistance genes from antibiotic producers to pathogens. <i>Nature Communications</i> , <b>2017</b> , 8, 15784	17.4	147
88	Prediction of antibiotic resistance: time for a new preclinical paradigm?. <i>Nature Reviews Microbiology</i> , <b>2017</b> , 15, 689-696	22.2	145
87	Limited dissemination of the wastewater treatment plant core resistome. <i>Nature Communications</i> , <b>2015</b> , 6, 8452	17.4	137
86	Survival and Evolution of a Large Multidrug Resistance Plasmid in New Clinical Bacterial Hosts. <i>Molecular Biology and Evolution</i> , <b>2016</b> , 33, 2860-2873	8.3	130
85	The human microbiome harbors a diverse reservoir of antibiotic resistance genes. <i>Virulence</i> , <b>2010</b> , 1, 299-303	4.7	128
84	Antibiotics and the resistant microbiome. <i>Current Opinion in Microbiology</i> , <b>2011</b> , 14, 556-63	7.9	115
83	Prediction of resistance development against drug combinations by collateral responses to component drugs. <i>Science Translational Medicine</i> , <b>2014</b> , 6, 262ra156	17.5	110
82	Improving biotech education through gamified laboratory simulations. <i>Nature Biotechnology</i> , <b>2014</b> , 32, 694-7	44.5	108
81	Evolution of <i>Escherichia coli</i> to 42 °C and subsequent genetic engineering reveals adaptive mechanisms and novel mutations. <i>Molecular Biology and Evolution</i> , <b>2014</b> , 31, 2647-62	8.3	105
80	Oral supplementation of healthy adults with 2VO-fucosyllactose and lacto-N-neotetraose is well tolerated and shifts the intestinal microbiota. <i>British Journal of Nutrition</i> , <b>2016</b> , 116, 1356-1368	3.6	97

79	Cultivation-based multiplex phenotyping of human gut microbiota allows targeted recovery of previously uncultured bacteria. <i>Nature Communications</i> , <b>2014</b> , 5, 4714	17.4	91
78	Predictable tuning of protein expression in bacteria. <i>Nature Methods</i> , <b>2016</b> , 13, 233-6	21.6	86
77	Diverse genetic error modes constrain large-scale bio-based production. <i>Nature Communications</i> , <b>2018</b> , 9, 787	17.4	82
76	Context matters - the complex interplay between resistome genotypes and resistance phenotypes. <i>Current Opinion in Microbiology</i> , <b>2012</b> , 15, 577-82	7.9	78
75	Drug-Driven Phenotypic Convergence Supports Rational Treatment Strategies of Chronic Infections. <i>Cell</i> , <b>2018</b> , 172, 121-134.e14	56.2	75
74	Synthetic addiction extends the productive life time of engineered populations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 2347-2352	11.5	73
73	Development of a Bacterial Biosensor for Rapid Screening of Yeast p-Coumaric Acid Production. <i>ACS Synthetic Biology</i> , <b>2017</b> , 6, 1860-1869	5.7	72
72	Overcoming genetic heterogeneity in industrial fermentations. <i>Nature Biotechnology</i> , <b>2019</b> , 37, 869-876	44.5	69
71	Collateral Resistance and Sensitivity Modulate Evolution of High-Level Resistance to Drug Combination Treatment in <i>Staphylococcus aureus</i> . <i>Molecular Biology and Evolution</i> , <b>2015</b> , 32, 1175-85	8.3	66
70	Spatial and temporal dynamics of SARS-CoV-2 in COVID-19 patients: A systematic review and meta-analysis. <i>EBioMedicine</i> , <b>2020</b> , 58, 102916	8.8	59
69	A functional metagenomic approach for expanding the synthetic biology toolbox for biomass conversion. <i>Molecular Systems Biology</i> , <b>2010</b> , 6, 360	12.2	54
68	Functional mining of transporters using synthetic selections. <i>Nature Chemical Biology</i> , <b>2016</b> , 12, 1015-1022	7	52
67	Rapid resistome mapping using nanopore sequencing. <i>Nucleic Acids Research</i> , <b>2017</b> , 45, e61	20.1	49
66	Direct mutagenesis of thousands of genomic targets using microarray-derived oligonucleotides. <i>ACS Synthetic Biology</i> , <b>2015</b> , 4, 17-22	5.7	46
65	Shared strategies for $\beta$ -lactam catabolism in the soil microbiome. <i>Nature Chemical Biology</i> , <b>2018</b> , 14, 556-564	11.7	44
64	Biochemical mechanisms determine the functional compatibility of heterologous genes. <i>Nature Communications</i> , <b>2018</b> , 9, 522	17.4	43
63	Relation between tetR and tetA expression in tetracycline resistant <i>Escherichia coli</i> . <i>BMC Microbiology</i> , <b>2016</b> , 16, 39	4.5	42
62	MODEST: a web-based design tool for oligonucleotide-mediated genome engineering and recombineering. <i>Nucleic Acids Research</i> , <b>2014</b> , 42, W408-15	20.1	42

61	Discovery and Characterization of Cas9 Inhibitors Disseminated across Seven Bacterial Phyla. <i>Cell Host and Microbe</i> , <b>2019</b> , 25, 233-241.e5	23.4	41
60	Adaptive Laboratory Evolution of Antibiotic Resistance Using Different Selection Regimes Lead to Similar Phenotypes and Genotypes. <i>Frontiers in Microbiology</i> , <b>2017</b> , 8, 816	5.7	41
59	Transfer and Persistence of a Multi-Drug Resistance Plasmid of the Infant Gut Microbiota in the Absence of Antibiotic Treatment. <i>Frontiers in Microbiology</i> , <b>2017</b> , 8, 1852	5.7	39
58	Transcriptional interactions suggest niche segregation among microorganisms in the human gut. <i>Nature Microbiology</i> , <b>2016</b> , 1, 16152	26.6	38
57	Advancing gut microbiome research using cultivation. <i>Current Opinion in Microbiology</i> , <b>2015</b> , 27, 127-32	7.9	36
56	Functional metagenomic investigations of the human intestinal microbiota. <i>Frontiers in Microbiology</i> , <b>2011</b> , 2, 188	5.7	34
55	Mining, analyzing, and integrating viral signals from metagenomic data. <i>Microbiome</i> , <b>2019</b> , 7, 42	16.6	33
54	The Environmental Exposures and Inner- and Intercity Traffic Flows of the Metro System May Contribute to the Skin Microbiome and Resistome. <i>Cell Reports</i> , <b>2018</b> , 24, 1190-1202.e5	10.6	32
53	Antibiotic Treatment Drives the Diversification of the Human Gut Resistome. <i>Genomics, Proteomics and Bioinformatics</i> , <b>2019</b> , 17, 39-51	6.5	31
52	Experimental approaches for defining functional roles of microbes in the human gut. <i>Annual Review of Microbiology</i> , <b>2013</b> , 67, 459-75	17.5	31
51	Transient overexpression of DNA adenine methylase enables efficient and mobile genome engineering with reduced off-target effects. <i>Nucleic Acids Research</i> , <b>2016</b> , 44, e36	20.1	30
50	Genome Dynamics of during Antibiotic Treatment: Transfer, Loss, and Persistence of Genetic Elements of the Infant Gut. <i>Frontiers in Cellular and Infection Microbiology</i> , <b>2017</b> , 7, 126	5.9	30
49	Software-supported USER cloning strategies for site-directed mutagenesis and DNA assembly. <i>ACS Synthetic Biology</i> , <b>2015</b> , 4, 342-9	5.7	29
48	The evolving interface between synthetic biology and functional metagenomics. <i>Nature Chemical Biology</i> , <b>2018</b> , 14, 752-759	11.7	29
47	Collateral sensitivity constrains resistance evolution of the CTX-M-15 $\beta$ lactamase. <i>Nature Communications</i> , <b>2019</b> , 10, 618	17.4	28
46	Metabolic and gut microbiome changes following GLP-1 or dual GLP-1/GLP-2 receptor agonist treatment in diet-induced obese mice. <i>Scientific Reports</i> , <b>2019</b> , 9, 15582	4.9	27
45	A synthetic medium to simulate sugarcane molasses. <i>Biotechnology for Biofuels</i> , <b>2018</b> , 11, 221	7.8	25
44	Forecasting the dissemination of antibiotic resistance genes across bacterial genomes. <i>Nature Communications</i> , <b>2021</b> , 12, 2435	17.4	22

43	CTX-M-1 $\beta$ -lactamase expression in <i>Escherichia coli</i> is dependent on cefotaxime concentration, growth phase and gene location. <i>Journal of Antimicrobial Chemotherapy</i> , <b>2015</b> , 70, 62-70	5.1	19
42	Assessing glycolytic flux alterations resulting from genetic perturbations in <i>E. coli</i> using a biosensor. <i>Metabolic Engineering</i> , <b>2017</b> , 42, 194-202	9.7	19
41	A sustainable route to produce the scytonemin precursor using <i>Escherichia coli</i> . <i>Green Chemistry</i> , <b>2014</b> , 16, 3255-3265	10	17
40	A randomized, double-blind, placebo-controlled phase 1 trial of inhaled and intranasal niclosamide: A broad spectrum antiviral candidate for treatment of COVID-19. <i>Lancet Regional Health - Europe, The</i> , <b>2021</b> , 4, 100084		17
39	Human intestinal cells modulate conjugational transfer of multidrug resistance plasmids between clinical <i>Escherichia coli</i> isolates. <i>PLoS ONE</i> , <b>2014</b> , 9, e100739	3.7	16
38	Genetic-Metabolic Coupling for Targeted Metabolic Engineering. <i>Cell Reports</i> , <b>2017</b> , 20, 1029-1037	10.6	15
37	Microbiology: Barriers to the spread of resistance. <i>Nature</i> , <b>2014</b> , 509, 567-8	50.4	13
36	Directed Evolution of Membrane Transport Using Synthetic Selections. <i>ACS Synthetic Biology</i> , <b>2018</b> , 7, 789-793	5.7	12
35	Crystallizing proteins on the basis of their precipitation diagram determined using a microfluidic formulator. <i>Journal of Synchrotron Radiation</i> , <b>2005</b> , 12, 779-85	2.4	12
34	Complex yeast-bacteria interactions affect the yield of industrial ethanol fermentation. <i>Nature Communications</i> , <b>2021</b> , 12, 1498	17.4	12
33	Enhanced Metabolite Productivity of Adapted to Glucose M9 Minimal Medium. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2018</b> , 6, 166	5.8	11
32	Regulatory control circuits for stabilizing long-term anabolic product formation in yeast. <i>Metabolic Engineering</i> , <b>2020</b> , 61, 369-380	9.7	10
31	Simulating Serial-Target Antibacterial Drug Synergies Using Flux Balance Analysis. <i>PLoS ONE</i> , <b>2016</b> , 11, e0147651	3.7	10
30	Dominant resistance and negative epistasis can limit the co-selection of de novo resistance mutations and antibiotic resistance genes. <i>Nature Communications</i> , <b>2020</b> , 11, 1199	17.4	9
29	Wiring cell growth to product formation. <i>Current Opinion in Biotechnology</i> , <b>2019</b> , 59, 85-92	11.4	8
28	Distinct composition and metabolic functions of human gut microbiota are associated with cachexia in lung cancer patients. <i>ISME Journal</i> , <b>2021</b> , 15, 3207-3220	11.9	8
27	Molecular Buffers Permit Sensitivity Tuning and Inversion of Riboswitch Signals. <i>ACS Synthetic Biology</i> , <b>2016</b> , 5, 632-8	5.7	8
26	Metabolic modeling predicts specific gut bacteria as key determinants for <i>Candida albicans</i> colonization levels. <i>ISME Journal</i> , <b>2021</b> , 15, 1257-1270	11.9	8

25	deFUME: Dynamic exploration of functional metagenomic sequencing data. <i>BMC Research Notes</i> , <b>2015</b> , 8, 328	2.3	7
24	Chromosomal barcoding as a tool for multiplexed phenotypic characterization of laboratory evolved lineages. <i>Scientific Reports</i> , <b>2018</b> , 8, 6961	4.9	7
23	Compatibility of Evolutionary Responses to Constituent Antibiotics Drive Resistance Evolution to Drug Pairs. <i>Molecular Biology and Evolution</i> , <b>2021</b> , 38, 2057-2069	8.3	7
22	Recombination-stable multimeric green fluorescent protein for characterization of weak promoter outputs in <i>Saccharomyces cerevisiae</i> . <i>FEMS Yeast Research</i> , <b>2015</b> , 15,	3.1	6
21	Improved biotin, thiamine, and lipoic acid biosynthesis by engineering the global regulator IscR. <i>Metabolic Engineering</i> , <b>2020</b> , 60, 97-109	9.7	6
20	Niclosamide shows strong antiviral activity in a human airway model of SARS-CoV-2 infection and a conserved potency against the Alpha (B.1.1.7), Beta (B.1.351) and Delta variant (B.1.617.2). <i>PLoS ONE</i> , <b>2021</b> , 16, e0260958	3.7	6
19	Adaptive responses to cefotaxime treatment in ESBL-producing <i>Escherichia coli</i> and the possible use of significantly regulated pathways as novel secondary targets. <i>Journal of Antimicrobial Chemotherapy</i> , <b>2016</b> , 71, 2449-59	5.1	5
18	Immersive virtual reality as a competitive training strategy for the biopharma industry. <i>Nature Biotechnology</i> , <b>2021</b> , 39, 116-119	44.5	5
17	The resistome of common human pathogens		4
16	Short and long-read ultra-deep sequencing profiles emerging heterogeneity across five platform <i>Escherichia coli</i> strains. <i>Metabolic Engineering</i> , <b>2021</b> , 65, 197-206	9.7	4
15	Expansion and persistence of antibiotic-specific resistance genes following antibiotic treatment. <i>Gut Microbes</i> , <b>2021</b> , 13, 1-19	8.8	4
14	Rapid diagnosis of lung infections. <i>Nature Biotechnology</i> , <b>2019</b> , 37, 725-726	44.5	3
13	Draft Genome Sequences of Three $\beta$ -Lactam-Catabolizing Soil. <i>Genome Announcements</i> , <b>2017</b> , 5,		3
12	Ecological and Clinical Consequences of Antibiotic Subsistence by Environmental Microbes <b>2011</b> , 29-41		3
11	RIBOSWITCHES. (Meta-)genome mining for new ribo-regulators. <i>Science</i> , <b>2016</b> , 352, 144-5	33.3	3
10	Characterization of local gut microbiome and intestinal transcriptome responses to rosiglitazone treatment in diabetic db/db mice. <i>Biomedicine and Pharmacotherapy</i> , <b>2021</b> , 133, 110966	7.5	3
9	Bacterial resistance to CRISPR-Cas antimicrobials. <i>Scientific Reports</i> , <b>2021</b> , 11, 17267	4.9	3
8	Global responses to oxytetracycline treatment in tetracycline-resistant <i>Escherichia coli</i> . <i>Scientific Reports</i> , <b>2020</b> , 10, 8438	4.9	2

7	The novel anti-CRISPR AcrIIA22 relieves DNA torsion in target plasmids and impairs SpyCas9 activity. <i>PLoS Biology</i> , <b>2021</b> , 19, e3001428	9.7	2
6	Topical niclosamide (ATx201) reduces <i>Staphylococcus aureus</i> colonization and increases Shannon diversity of the skin microbiome in atopic dermatitis patients in a randomized, double-blind, placebo-controlled Phase 2 trial.. <i>Clinical and Translational Medicine</i> , <b>2022</b> , 12, e790	5.7	2
5	Rapid resistome mapping using nanopore sequencing		1
4	Antibiotic Treatment Drives the Diversification of the Human Gut Resistome		1
3	Strain dynamics of specific contaminant bacteria modulate the performance of ethanol biorefineries		1
2	Comparison of non-invasive <i>Staphylococcus aureus</i> sampling methods on lesional skin in patients with atopic dermatitis. <i>European Journal of Clinical Microbiology and Infectious Diseases</i> , <b>2021</b> , 41, 245	5.3	0
1	Exploring Selective Pressure Trade-Offs for Synthetic Addiction to Extend Metabolite Productive Lifetimes in Yeast. <i>ACS Synthetic Biology</i> , <b>2021</b> , 10, 2842-2849	5.7	0