Ophelia S Venturelli

List of Publications by Year
in descending order

19 papers	1,498 citations	623574 14 h-index	839398 18 g-index
33 all docs	33 docs citations	33 times ranked	1694 citing authors

#	Article	IF	Citations
1	Deciphering microbial interactions in synthetic human gut microbiome communities. Molecular Systems Biology, 2018, 14, e8157.	3.2	361
2	Common principles and best practices for engineering microbiomes. Nature Reviews Microbiology, 2019, 17, 725-741.	13.6	324
3	Population Diversification in a Yeast Metabolic Program Promotes Anticipation of Environmental Shifts. PLoS Biology, 2015, 13, e1002042.	2.6	110
4	Microbial Interaction Network Inference in Microfluidic Droplets. Cell Systems, 2019, 9, 229-242.e4.	2.9	91
5	EcoFABs: advancing microbiome science through standardized fabricated ecosystems. Nature Methods, 2019, 16, 567-571.	9.0	90
6	Design of synthetic human gut microbiome assembly and butyrate production. Nature Communications, 2021, 12, 3254.	5.8	83
7	Synergistic dual positive feedback loops established by molecular sequestration generate robust bimodal response. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E3324-33.	3.3	76
8	Investigating the dynamics of microbial consortia in spatially structured environments. Nature Communications, 2020, 11, 2418.	5.8	60
9	Programming mRNA decay to modulate synthetic circuit resource allocation. Nature Communications, 2017, 8, 15128.	5.8	50
10	Polysaccharide utilization loci in Bacteroides determine population fitness and community-level interactions. Cell Host and Microbe, 2022, 30, 200-215.e12.	5.1	40
11	Towards Engineering Biological Systems in a Broader Context. Journal of Molecular Biology, 2016, 428, 928-944.	2.0	30
12	Negative interactions determine *Clostridioides difficile* growth in synthetic human gut communities. Molecular Systems Biology, 2021, 17, e10355.	3.2	27
13	Towards a deeper understanding of microbial communities: integrating experimental data with dynamic models. Current Opinion in Microbiology, 2021, 62, 84-92.	2.3	24
14	Understanding and Engineering Distributed Biochemical Pathways in Microbial Communities. Biochemistry, 2019, 58, 94-107.	1.2	23
15	Integrating Systems and Synthetic Biology to Understand and Engineer Microbiomes. Annual Review of Biomedical Engineering, 2021, 23, 169-201.	5.7	23
16	Recurrent neural networks enable design of multifunctional synthetic human gut microbiome dynamics. ELife, 0, 11, .	2.8	18
17	Scalable nonlinear programming framework for parameter estimation in dynamic biological system models. PLoS Computational Biology, 2019, 15, e1006828.	1.5	14
18	The Impact of Different Sources of Fluctuations on Mutual Information in Biochemical Networks. PLoS Computational Biology, 2015, 11, e1004462.	1.5	8

#	Article	IF	Citations
19	Under‐Oil Autonomously Regulated Oxygen Microenvironments: A Goldilocks Principle‐Based Approach for Microscale Cell Culture. Advanced Science, 2022, 9, e2104510.	5.6	8