Ophelia S Venturelli

List of Publications by Citations

23 papers	682 citations	11 h-index	26 g-index
33 ext. papers	1,159 ext. citations	12.1 avg, IF	4.26 L-index

#	Paper	IF	Citations
23	Deciphering microbial interactions in synthetic human gut microbiome communities. *Molecular Systems Biology*, **2018**, 14, e8157	12.2	185
22	Common principles and best practices for engineering microbiomes. *Nature Reviews Microbiology*, **2019**, 17, 725-741	22.2	144
21	Population diversification in a yeast metabolic program promotes anticipation of environmental shifts. *PLoS Biology*, **2015**, 13, e1002042	9.7	67
20	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	11.5	43
19	Microbial Interaction Network Inference in Microfluidic Droplets. *Cell Systems*, **2019**, 9, 229-242.e4	10.6	42
18	Programming mRNA decay to modulate synthetic circuit resource allocation. *Nature Communications*, **2017**, 8, 15128	17.4	39
17	EcoFABs: advancing microbiome science through standardized fabricated ecosystems. *Nature Methods*, **2019**, 16, 567-571	21.6	39
16	Investigating the dynamics of microbial consortia in spatially structured environments. *Nature Communications*, **2020**, 11, 2418	17.4	27
15	Towards Engineering Biological Systems in a Broader Context. *Journal of Molecular Biology*, **2016**, 428, 928-44	6.5	21
14	Design of synthetic human gut microbiome assembly and butyrate production. *Nature Communications*, **2021**, 12, 3254	17.4	18
13	Understanding and Engineering Distributed Biochemical Pathways in Microbial Communities. *Biochemistry*, **2019**, 58, 94-107	3.2	12
12	Integrating Systems and Synthetic Biology to Understand and Engineer Microbiomes. *Annual Review of Biomedical Engineering*, **2021**, 23, 169-201	12	9
11	Scalable nonlinear programming framework for parameter estimation in dynamic biological system models. *PLoS Computational Biology*, **2019**, 15, e1006828	5	8
10	The Impact of Different Sources of Fluctuations on Mutual Information in Biochemical Networks. *PLoS Computational Biology*, **2015**, 11, e1004462	5	6
9	Design of synthetic human gut microbiome assembly and function		4
8	Towards a deeper understanding of microbial communities: integrating experimental data with dynamic models. *Current Opinion in Microbiology*, **2021**, 62, 84-92	7.9	4
7	Under-Oil Autonomously Regulated Oxygen Microenvironments: A Goldilocks Principle-Based Approach for Microscale Cell Culture.. *Advanced Science*, **2022**, e2104510	13.6	2

List of Publications

6	Negative interactions determine Clostridioides difficile growth in synthetic human gut communities. *Molecular Systems Biology*, **2021**, 17, e10355	12.2	2
5	Deciphering microbial interactions in synthetic human gut microbiome communities		2
4	Rapid microbial interaction network inference in microfluidic droplets		2
3	Scalable Nonlinear Programming Framework for Parameter Estimation in Dynamic Biological System Models		1
2	Species richness determines C. difficile invasion outcome in synthetic human gut communities		1
1	Deep Learning Enables Design of Multifunctional Synthetic Human Gut Microbiome Dynamics		1