

Charlie Gilbert

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/589580/publications.pdf>

Version: 2024-02-01

26
papers

2,788
citations

394421

19
h-index

552781

26
g-index

31
all docs

31
docs citations

31
times ranked

2890
citing authors

#	ARTICLE	IF	CITATIONS
1	Diversity-based, model-guided construction of synthetic gene networks with predicted functions. <i>Nature Biotechnology</i> , 2009, 27, 465-471.	17.5	409
2	Quantifying cellular capacity identifies gene expression designs with reduced burden. <i>Nature Methods</i> , 2015, 12, 415-418.	19.0	398
3	Burden-driven feedback control of gene expression. <i>Nature Methods</i> , 2018, 15, 387-393.	19.0	281
4	Overloaded and stressed: whole-cell considerations for bacterial synthetic biology. <i>Current Opinion in Microbiology</i> , 2016, 33, 123-130.	5.1	203
5	Predicting Translation Initiation Rates for Designing Synthetic Biology. <i>Frontiers in Bioengineering and Biotechnology</i> , 2014, 2, 1.	4.1	184
6	Engineering control of bacterial cellulose production using a genetic toolkit and a new cellulose-producing strain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E3431-40.	7.1	173
7	Biological Engineered Living Materials: Growing Functional Materials with Genetically Programmable Properties. <i>ACS Synthetic Biology</i> , 2019, 8, 1-15.	3.8	163
8	Living materials with programmable functionalities grown from engineered microbial co-cultures. <i>Nature Materials</i> , 2021, 20, 691-700.	27.5	151
9	Engineering a Model Cell for Rational Tuning of GPCR Signaling. <i>Cell</i> , 2019, 177, 782-796.e27.	28.9	142
10	BASIC: A New Biopart Assembly Standard for Idempotent Cloning Provides Accurate, Single-Tier DNA Assembly for Synthetic Biology. <i>ACS Synthetic Biology</i> , 2015, 4, 781-787.	3.8	99
11	Cell-free prediction of protein expression costs for growing cells. <i>Nature Communications</i> , 2018, 9, 1457.	12.8	85
12	Host-aware synthetic biology. <i>Current Opinion in Systems Biology</i> , 2019, 14, 66-72.	2.6	83
13	Biosynthesis of the antibiotic nonribosomal peptide penicillin in baker's yeast. <i>Nature Communications</i> , 2017, 8, 15202.	12.8	81
14	R2oDNA Designer: Computational Design of Biologically Neutral Synthetic DNA Sequences. <i>ACS Synthetic Biology</i> , 2014, 3, 525-528.	3.8	63
15	Bacterial cellulose spheroids as building blocks for 3D and patterned living materials and for regeneration. <i>Nature Communications</i> , 2021, 12, 5027.	12.8	58
16	Extracellular Self-Assembly of Functional and Tunable Protein Conjugates from <i>Bacillus subtilis</i> . <i>ACS Synthetic Biology</i> , 2017, 6, 957-967.	3.8	38
17	Engineered cell-to-cell signalling within growing bacterial cellulose pellicles. <i>Microbial Biotechnology</i> , 2019, 12, 611-619.	4.2	31
18	Engineering Bacterial Cellulose by Synthetic Biology. <i>International Journal of Molecular Sciences</i> , 2020, 21, 9185.	4.1	30

#	ARTICLE	IF	CITATIONS
19	Ten future challenges for synthetic biology. <i>Engineering Biology</i> , 2021, 5, 51-59.	1.8	24
20	Off-Colony Screening of Biosynthetic Libraries by Rapid Laser-Enabled Mass Spectrometry. <i>ACS Synthetic Biology</i> , 2019, 8, 2566-2575.	3.8	17
21	Design of RNA hairpin modules that predictably tune translation in yeast. <i>Synthetic Biology</i> , 2018, 3, ysy019.	2.2	15
22	Synthetic gene regulation for independent external induction of the <i>Saccharomyces cerevisiae</i> pseudohyphal growth phenotype. <i>Communications Biology</i> , 2018, 1, 7.	4.4	13
23	Towards semi-synthetic microbial communities: enhancing soy sauce fermentation properties in <i>B. subtilis</i> co-cultures. <i>Microbial Cell Factories</i> , 2019, 18, 101.	4.0	12
24	<i>Komagataeibacter</i> Tool Kit (KTK): A Modular Cloning System for Multigene Constructs and Programmed Protein Secretion from Cellulose Producing Bacteria. <i>ACS Synthetic Biology</i> , 2021, 10, 3422-3434.	3.8	8
25	On the record with <i>E. coli</i> DNA. <i>Science</i> , 2016, 353, 444-445.	12.6	6
26	Self-healing through adhesion. <i>Nature Chemical Biology</i> , 2022, 18, 239-240.	8.0	2