Edward J O'brien

List of Publications by Year
in descending order

20 papers	2,643 citations	394421 19 h-index	752698 20 g-index
20 all docs	20 docs citations	20 times ranked	3261 citing authors

#	Article	IF	Citations
1	SER-109, an Investigational Microbiome Drug to Reduce Recurrence After <i>Clostridioides difficile</i> Infection: Lessons Learned From a Phase 2 Trial. Clinical Infectious Diseases, 2021, 72, 2132-2140.	5.8	96
2	A Phase 1b Safety Study of SER-287, a Spore-Based Microbiome Therapeutic, for Active Mild to Moderate Ulcerative Colitis. Gastroenterology, 2021, 160, 115-127.e30.	1.3	48
3	Laboratory evolution reveals a two-dimensional rate-yield tradeoff in microbial metabolism. PLoS Computational Biology, 2019, 15, e1007066.	3.2	33
4	The genetic basis for adaptation of model-designed syntrophic co-cultures. PLoS Computational Biology, 2019, 15, e1006213.	3.2	17
5	COBRAme: A computational framework for genome-scale models of metabolism and gene expression. PLoS Computational Biology, 2018, 14, e1006302.	3.2	123
6	Literature mining supports a next-generation modeling approach to predict cellular byproduct secretion. Metabolic Engineering, 2017, 39, 220-227.	7.0	34
7	Thermosensitivity of growth is determined by chaperone-mediated proteome reallocation. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11548-11553.	7.1	79
8	Quantification and Classification of E. coli Proteome Utilization and Unused Protein Costs across Environments. PLoS Computational Biology, 2016, 12, e1004998.	3.2	100
9	Characterizing Strain Variation in Engineered E.Âcoli Using a Multi-Omics-Based Workflow. Cell Systems, 2016, 2, 335-346.	6.2	73
10	Multi-omic data integration enables discovery of hidden biological regularities. Nature Communications, 2016, 7, 13091.	12.8	141
11	Systems biology of the structural proteome. BMC Systems Biology, 2016, 10, 26.	3.0	46
12	Global Rebalancing of Cellular Resources by Pleiotropic Point Mutations Illustrates a Multi-scale Mechanism of Adaptive Evolution. Cell Systems, 2016, 2, 260-271.	6.2	107
13	Using Genome-scale Models to Predict Biological Capabilities. Cell, 2015, 161, 971-987.	28.9	590
14	Computing the functional proteome: recent progress and future prospects for genome-scale models. Current Opinion in Biotechnology, 2015, 34, 125-134.	6.6	59
15	Systems biology definition of the core proteome of metabolism and expression is consistent with high-throughput data. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10810-10815.	7.1	42
16	Decoding genome-wide GadEWX-transcriptional regulatory networks reveals multifaceted cellular responses to acid stress in Escherichia coli. Nature Communications, 2015, 6, 7970.	12.8	87
17	Use of Adaptive Laboratory Evolution To Discover Key Mutations Enabling Rapid Growth of Escherichia coli K-12 MG1655 on Glucose Minimal Medium. Applied and Environmental Microbiology, 2015, 81, 17-30.	3.1	235
18	Reconstruction and modeling protein translocation and compartmentalization in Escherichia coli at the genome-scale. BMC Systems Biology, 2014, 8, 110.	3.0	81

#	ARTICLE	IF	CITATIONS
19	Deciphering Fur transcriptional regulatory network highlights its complex role beyond iron metabolism in Escherichia coli. Nature Communications, 2014, 5, 4910.	12.8	241
20	Genomeâ€scale models of metabolism and gene expression extend and refine growth phenotype prediction. Molecular Systems Biology, 2013, 9, 693.	7.2	411