

# Eduard J Kerkhoven

## List of Publications by Year in descending order

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Version: 2024-02-01

47  
papers

2,584  
citations

257357

24  
h-index

223716

46  
g-index

64  
all docs

64  
docs citations

64  
times ranked

2609  
citing authors

#	ARTICLE	IF	CITATIONS
1	Improving the phenotype predictions of a yeast genome-scale metabolic model by incorporating enzymatic constraints. <i>Molecular Systems Biology</i> , 2017, 13, 935.	3.2	367
2	RAVEN 2.0: A versatile toolbox for metabolic network reconstruction and a case study on <i>Streptomyces coelicolor</i> . <i>PLoS Computational Biology</i> , 2018, 14, e1006541.	1.5	228
3	An atlas of human metabolism. <i>Science Signaling</i> , 2020, 13, .	1.6	223
4	A consensus <i>S. cerevisiae</i> metabolic model Yeast8 and its ecosystem for comprehensively probing cellular metabolism. <i>Nature Communications</i> , 2019, 10, 3586.	5.8	217
5	Barriers and opportunities in bio-based production of hydrocarbons. <i>Nature Energy</i> , 2018, 3, 925-935.	19.8	146
6	Regulation of amino-acid metabolism controls flux to lipid accumulation in <i>Yarrowia lipolytica</i> . <i>Npj Systems Biology and Applications</i> , 2016, 2, 16005.	1.4	141
7	Probing the Metabolic Network in Bloodstream-Form <i>Trypanosoma brucei</i> Using Untargeted Metabolomics with Stable Isotope Labelled Glucose. <i>PLoS Pathogens</i> , 2015, 11, e1004689.	2.1	128
8	Deep learning-based kcat prediction enables improved enzyme-constrained model reconstruction. <i>Nature Catalysis</i> , 2022, 5, 662-672.	16.1	98
9	C/N ratio and carbon source-dependent lipid production profiling in <i>Rhodotorula toruloides</i> . <i>Applied Microbiology and Biotechnology</i> , 2020, 104, 2639-2649.	1.7	71
10	A molecular genetic toolbox for <i>Yarrowia lipolytica</i> . <i>Biotechnology for Biofuels</i> , 2017, 10, 2.	6.2	62
11	Proteome analysis of xylose metabolism in <i>Rhodotorula toruloides</i> during lipid production. <i>Biotechnology for Biofuels</i> , 2019, 12, 137.	6.2	61
12	Genome-scale model of <i>Rhodotorula toruloides</i> metabolism. <i>Biotechnology and Bioengineering</i> , 2019, 116, 3396-3408.	1.7	55
13	A domino effect in drug action: from metabolic assault towards parasite differentiation. <i>Molecular Microbiology</i> , 2011, 79, 94-108.	1.2	44
14	Genome-scale metabolic model of <i>Pichia pastoris</i> with native and humanized glycosylation of recombinant proteins. <i>Biotechnology and Bioengineering</i> , 2016, 113, 961-969.	1.7	43
15	Advancing metabolic engineering of <i>Yarrowia lipolytica</i> using the CRISPR/Cas system. <i>Applied Microbiology and Biotechnology</i> , 2018, 102, 9541-9548.	1.7	43
16	SLIMEr: probing flexibility of lipid metabolism in yeast with an improved constraint-based modeling framework. <i>BMC Systems Biology</i> , 2019, 13, 4.	3.0	43
17	Handling Uncertainty in Dynamic Models: The Pentose Phosphate Pathway in <i>Trypanosoma brucei</i> . <i>PLoS Computational Biology</i> , 2013, 9, e1003371.	1.5	40
18	Adaptations in metabolism and protein translation give rise to the Crabtree effect in yeast. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	40

#	ARTICLE	IF	CITATIONS
19	Reconstruction of a catalogue of genome-scale metabolic models with enzymatic constraints using GECKO 2.0. <i>Nature Communications</i> , 2022, 13, .	5.8	39
20	Leucine Biosynthesis Is Involved in Regulating High Lipid Accumulation in <i>Yarrowia lipolytica</i> . <i>MBio</i> , 2017, 8, .	1.8	38
21	Genome scale metabolic modeling of the riboflavin overproducer <i>Ashbya gossypii</i> . <i>Biotechnology and Bioengineering</i> , 2014, 111, 1191-1199.	1.7	35
22	TrypanoCyc: a community-led biochemical pathways database for <i>Trypanosoma brucei</i> . <i>Nucleic Acids Research</i> , 2015, 43, D637-D644.	6.5	35
23	Regulation of Yeast-to-Hyphae Transition in <i>Yarrowia lipolytica</i> . <i>MSphere</i> , 2018, 3, .	1.3	35
24	Enzyme-Constrained Models and Omics Analysis of <i>Streptomyces coelicolor</i> Reveal Metabolic Changes that Enhance Heterologous Production. <i>IScience</i> , 2020, 23, 101525.	1.9	30
25	Dynamic Modelling under Uncertainty: The Case of <i>Trypanosoma brucei</i> Energy Metabolism. <i>PLoS Computational Biology</i> , 2012, 8, e1002352.	1.5	28
26	Applications of computational modeling in metabolic engineering of yeast. <i>FEMS Yeast Research</i> , 2014, 15, n/a-n/a.	1.1	28
27	Crystal Structure of an Arginase-like Protein from <i>Trypanosoma brucei</i> That Evolved without a Binuclear Manganese Cluster. <i>Biochemistry</i> , 2015, 54, 458-471.	1.2	26
28	Multiscale models quantifying yeast physiology: towards a whole-cell model. <i>Trends in Biotechnology</i> , 2022, 40, 291-305.	4.9	20
29	Nitrogen as the major factor influencing gene expression in <i>Yarrowia lipolytica</i> . <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , 2020, 27, e00521.	2.1	18
30	Improving recombinant protein production by yeast through genome-scale modeling using proteome constraints. <i>Nature Communications</i> , 2022, 13, .	5.8	18
31	Mapping the metabolism of five amino acids in bloodstream form <i>Trypanosoma brucei</i> using U-13C-labelled substrates and LC-MS. <i>Bioscience Reports</i> , 2019, 39, .	1.1	17
32	Investigating the Influence of Glycerol on the Utilization of Glucose in <i>Yarrowia lipolytica</i> Using RNA-Seq-Based Transcriptomics. <i>G3: Genes, Genomes, Genetics</i> , 2019, 9, 4059-4071.	0.8	17
33	Yeast metabolic innovations emerged via expanded metabolic network and gene positive selection. <i>Molecular Systems Biology</i> , 2021, 17, e10427.	3.2	17
34	Reconstruction of a Genome-Scale Metabolic Model of <i>Streptomyces albus</i> J1074: Improved Engineering Strategies in Natural Product Synthesis. <i>Metabolites</i> , 2021, 11, 304.	1.3	12
35	Systems-level approaches for understanding and engineering of the oleaginous cell factory <i>Yarrowia lipolytica</i> . <i>Biotechnology and Bioengineering</i> , 2021, 118, 3640-3654.	1.7	11
36	<i>Trypanosoma brucei</i> : meet the system. <i>Current Opinion in Microbiology</i> , 2014, 20, 162-169.	2.3	10

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37	Advances in constraint-based models: methods for improved predictive power based on resource allocation constraints. <i>Current Opinion in Microbiology</i> , 2022, 68, 102168.	2.3	9
38	Genome-scale metabolic model of oleaginous yeast <i>Papiliotrema laurentii</i> . <i>Biochemical Engineering Journal</i> , 2022, 180, 108353.	1.8	8
39	Constraint-based modeling of yeast mitochondria reveals the dynamics of protein import and iron-sulfur cluster biogenesis. <i>IScience</i> , 2021, 24, 103294.	1.9	7
40	Extracting novel hypotheses and findings from RNA-seq data. <i>FEMS Yeast Research</i> , 2020, 20, .	1.1	6
41	Evaluating accessibility, usability and interoperability of genome-scale metabolic models for diverse yeasts species. <i>FEMS Yeast Research</i> , 2021, 21, .	1.1	6
42	The Silicon Trypanosome. <i>Advances in Microbial Physiology</i> , 2014, 64, 115-143.	1.0	5
43	Reconstruction of Genome-Scale Metabolic Model for <i>Hansenula polymorpha</i> Using RAVEN. <i>Methods in Molecular Biology</i> , 2022, , 271-290.	0.4	3
44	Modeling Lipid Metabolism in Yeast. , 2019, , 375-388.		2
45	The yeastGemMap: A process diagram to assist yeast systemsâ€™ metabolic studies. <i>Biotechnology and Bioengineering</i> , 2021, 118, 4800-4814.	1.7	1
46	Editorial: Multi-Omics Technologies for Optimizing Synthetic Biomanufacturing. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 818010.	2.0	1
47	Modeling Lipid Metabolism in Yeast. , 2016, , 1-14.		0