

# Sergey Malitsky

## List of Publications by Year in descending order

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57  
papers

5,195  
citations

126907

33  
h-index

144013

57  
g-index

63  
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63  
docs citations

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times ranked

8004  
citing authors

#	ARTICLE	IF	CITATIONS
1	Biosynthesis of Antinutritional Alkaloids in Solanaceous Crops Is Mediated by Clustered Genes. <i>Science</i> , 2013, 341, 175-179.	12.6	464
2	Persistent microbiome alterations modulate the rate of post-dieting weight regain. <i>Nature</i> , 2016, 540, 544-551.	27.8	371
3	Sugar Synthesis from CO <sub>2</sub> in <i>Escherichia coli</i> . <i>Cell</i> , 2016, 166, 115-125.	28.9	272
4	GAME9 regulates the biosynthesis of steroidal alkaloids and upstream isoprenoids in the plant mevalonate pathway. <i>Nature Communications</i> , 2016, 7, 10654.	12.8	239
5	Reconstruction of <i>Arabidopsis</i> metabolic network models accounting for subcellular compartmentalization and tissue-specificity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 339-344.	7.1	237
6	Live imaging of root-bacteria interactions in a microfluidics setup. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 4549-4554.	7.1	233
7	GLYCOALKALOID METABOLISM1 Is Required for Steroidal Alkaloid Glycosylation and Prevention of Phytotoxicity in Tomato. <i>Plant Cell</i> , 2011, 23, 4507-4525.	6.6	205
8	Plant cholesterol biosynthetic pathway overlaps with phytosterol metabolism. <i>Nature Plants</i> , 2017, 3, 16205.	9.3	201
9	SHINE Transcription Factors Act Redundantly to Pattern the Archetypal Surface of <i>Arabidopsis</i> Flower Organs. <i>PLoS Genetics</i> , 2011, 7, e1001388.	3.5	191
10	The Transcript and Metabolite Networks Affected by the Two Clades of <i>Arabidopsis</i> Glucosinolate Biosynthesis Regulators. <i>Plant Physiology</i> , 2008, 148, 2021-2049.	4.8	188
11	Urea Cycle Dysregulation Generates Clinically Relevant Genomic and Biochemical Signatures. <i>Cell</i> , 2018, 174, 1559-1570.e22.	28.9	183
12	Antiviral activity of bacterial TIR domains via immune signalling molecules. <i>Nature</i> , 2021, 600, 116-120.	27.8	159
13	The tomato <i>SHINE3</i> transcription factor regulates fruit cuticle formation and epidermal patterning. <i>New Phytologist</i> , 2013, 197, 468-480.	7.3	156
14	Mapping the diatom redox-sensitive proteome provides insight into response to nitrogen stress in the marine environment. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 2740-2745.	7.1	147
15	Rewiring Host Lipid Metabolism by Large Viruses Determines the Fate of <i>Emiliania huxleyi</i> , a Bloom-Forming Alga in the Ocean. <i>Plant Cell</i> , 2014, 26, 2689-2707.	6.6	132
16	High-resolution metabolic mapping of cell types in plant roots. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, E1232-41.	7.1	131
17	Sample Preparation for Mass Spectrometry Imaging of Plant Tissues: A Review. <i>Frontiers in Plant Science</i> , 2016, 7, 60.	3.6	125
18	A Metabolic Gene Cluster in the Wheat <i>W1</i> and the Barley <i>Cer-cqu</i> Loci Determines Î²-Diketone Biosynthesis and Glaucousness. <i>Plant Cell</i> , 2016, 28, 1440-1460.	6.6	123

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19	Expression of a bacterial feedback-insensitive 3-deoxy- <i>scpd</i> -arabinoheptulosonate 7-phosphate synthase of the shikimate pathway in <i>Arabidopsis</i> elucidates potential metabolic bottlenecks between primary and secondary metabolism. <i>New Phytologist</i> , 2012, 194, 430-439.	7.3	98
20	Orchestration of Thiamin Biosynthesis and Central Metabolism by Combined Action of the Thiamin Pyrophosphate Riboswitch and the Circadian Clock in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2013, 25, 288-307.	6.6	98
21	Viral infection of the marine alga <i>Emiliania huxleyi</i> triggers lipidome remodeling and induces the production of highly saturated triacylglycerol. <i>New Phytologist</i> , 2016, 210, 88-96.	7.3	98
22	The WEIZMASS spectral library for high-confidence metabolite identification. <i>Nature Communications</i> , 2016, 7, 12423.	12.8	95
23	Expression of a bacterial bifunctional chorismate mutase/prephenate dehydratase modulates primary and secondary metabolism associated with aromatic amino acids in <i>Arabidopsis</i> . <i>Plant Journal</i> , 2009, 60, 156-167.	5.7	80
24	Bacterial virulence against an oceanic bloom-forming phytoplankter is mediated by algal DMSP. <i>Science Advances</i> , 2018, 4, eaau5716.	10.3	78
25	Transcriptome and Metabolic Profiling Provides Insights into Betalain Biosynthesis and Evolution in <i>Mirabilis jalapa</i> . <i>Molecular Plant</i> , 2018, 11, 189-204.	8.3	76
26	Host succinate is an activation signal for <i>Salmonella</i> virulence during intracellular infection. <i>Science</i> , 2021, 371, 400-405.	12.6	68
27	Short-chain dehydrogenase/reductase governs steroidal specialized metabolites structural diversity and toxicity in the genus <i>Solanum</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E5419-E5428.	7.1	66
28	Viral serine palmitoyltransferase induces metabolic switch in sphingolipid biosynthesis and is required for infection of a marine alga. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, E1907-16.	7.1	58
29	Communication via extracellular vesicles enhances viral infection of a cosmopolitan alga. <i>Nature Microbiology</i> , 2017, 2, 1485-1492.	13.3	56
30	Asymmetric adaptation to indolic and aliphatic glucosinolates in the B and Q sibling species of <i>Bemisia tabaci</i> (Hemiptera: Aleyrodidae). <i>Molecular Ecology</i> , 2012, 21, 4533-4546.	3.9	50
31	Role of Chemistry versus Substrate Binding in Recruiting Promiscuous Enzyme Functions. <i>Biochemistry</i> , 2011, 50, 2683-2690.	2.5	48
32	Targeting purine synthesis in ASS1-expressing tumors enhances the response to immune checkpoint inhibitors. <i>Nature Cancer</i> , 2020, 1, 894-908.	13.2	43
33	Dual Labeling of Metabolites for Metabolome Analysis (DLEMMA): A New Approach for the Identification and Relative Quantification of Metabolites by Means of Dual Isotope Labeling and Liquid Chromatography-Mass Spectrometry. <i>Analytical Chemistry</i> , 2009, 81, 9257-9266.	6.5	41
34	Uncovering tomato quantitative trait loci and candidate genes for fruit cuticular lipid composition using the <i>Solanum pennellii</i> introgression line population. <i>Journal of Experimental Botany</i> , 2017, 68, 2703-2716.	4.8	41
35	Metabolomic foundation for differential responses of lipid metabolism to nitrogen and phosphorus deprivation in an arachidonic acid-producing green microalga. <i>Plant Science</i> , 2019, 283, 95-115.	3.6	35
36	Transcriptome analysis and metabolic profiling reveal the key role of $\omega$ -linolenic acid in dormancy regulation of European pear. <i>Journal of Experimental Botany</i> , 2019, 70, 1017-1031.	4.8	27

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37	Systemic Regulation of Host Energy and Oogenesis by Microbiome-Derived Mitochondrial Coenzymes. <i>Cell Reports</i> , 2021, 34, 108583.	6.4	27
38	<i>Arabidopsis thaliana</i> Plants with Different Levels of Aliphatic- and Indolyl-Glucosinolates Affect Host Selection and Performance of <i>Bemisia tabaci</i> . <i>Journal of Chemical Ecology</i> , 2013, 39, 1361-1372.	1.8	26
39	Lipidome Remodeling and Autophagic Respose in the Arachidonic-Acid-Rich Microalga <i>Lobosphaera incisa</i> Under Nitrogen and Phosphorous Deprivation. <i>Frontiers in Plant Science</i> , 2020, 11, 614846.	3.6	22
40	Clock proteins and training modify exercise capacity in a daytime-dependent manner. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	21
41	An efficient method for medium throughput screening of cuticular wax composition in different plant species. <i>Metabolomics</i> , 2016, 12, 1.	3.0	18
42	Resolving the conflict between antibiotic production and rapid growth by recognition of peptidoglycan of susceptible competitors. <i>Nature Communications</i> , 2022, 13, 431.	12.8	17
43	The mitochondrial carrier Citrin plays a role in regulating cellular energy during carcinogenesis. <i>Oncogene</i> , 2020, 39, 164-175.	5.9	16
44	Lipoxygenase functions in $1O_2$ production during root responses to osmotic stress. <i>Plant Physiology</i> , 2021, 185, 1638-1651.	4.8	15
45	Indole Derivatives Maintain the Status Quo Between Beneficial Biofilms and Their Plant Hosts. <i>Molecular Plant-Microbe Interactions</i> , 2019, 32, 1013-1025.	2.6	14
46	Weaponizing volatiles to inhibit competitor biofilms from a distance. <i>Npj Biofilms and Microbiomes</i> , 2021, 7, 2.	6.4	14
47	Immunoediting role for major vault protein in apoptotic signaling induced by bacterial <i>N</i> -acyl homoserine lactones. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	11
48	BCKDK regulates the TCA cycle through PDC in the absence of PDK family during embryonic development. <i>Developmental Cell</i> , 2021, 56, 1182-1194.e6.	7.0	10
49	Fatty acid transport protein 2 interacts with ceramide synthase 2 to promote ceramide synthesis. <i>Journal of Biological Chemistry</i> , 2022, 298, 101735.	3.4	9
50	Metabolomic Changes Are Predictive of Aging in Laying Hens. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2021, 76, 1757-1768.	3.6	6
51	Sugar-regulated susceptibility of tomato fruit to <i>Colletotrichum</i> and <i>Penicillium</i> requires differential mechanisms of pathogenicity and fruit responses. <i>Environmental Microbiology</i> , 2020, 22, 2870-2891.	3.8	5
52	Epilepsy as a pyridoxine-dependent condition: Quantified urinary biomarkers for status evaluation and monitoring antiepileptic treatment. <i>Medical Hypotheses</i> , 2012, 79, 157-164.	1.5	4
53	Fatty Acid Production and Direct Acyl Transfer through Polar Lipids Control TAG Biosynthesis during Nitrogen Deprivation in the Halotolerant Alga <i>Dunaliella tertiolecta</i> . <i>Marine Drugs</i> , 2021, 19, 368.	4.6	4
54	Imaging flow cytometry reveals a dual role for exopolysaccharides in biofilms: To promote self-adhesion while repelling non-self-community members. <i>Computational and Structural Biotechnology Journal</i> , 2022, 20, 15-25.	4.1	4

#	ARTICLE	IF	CITATIONS
55	Resilience to Freezing in the Vegetative Cells of the Microalga <i>Lobosphaera incisa</i> (Trebouxiophyceae,) Tj ETQq1 1 0.784314 ggBT /Overl 2,3	0.784314	2
56	Protocol for studying microbiome impact on host energy and reproduction in <i>Drosophila</i> . STAR Protocols, 2022, 3, 101253.	1.2	2
57	Obesity modulates Alzheimer's disease through accelerated immune ageing.. Alzheimer's and Dementia, 2021, 17 Suppl 3, e052670.	0.8	0