

# Doug K Allen

## List of Publications by Year in descending order

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Version: 2024-02-01

46  
papers

2,581  
citations

236925

25  
h-index

233421

45  
g-index

52  
all docs

52  
docs citations

52  
times ranked

3204  
citing authors

#	ARTICLE	IF	CITATIONS
1	Metabolic flux analysis of the non-transitory starch tradeoff for lipid production in mature tobacco leaves. <i>Metabolic Engineering</i> , 2022, 69, 231-248.	7.0	27
2	An efficient LC-MS method for isomer separation and detection of sugars, phosphorylated sugars, and organic acids. <i>Journal of Experimental Botany</i> , 2022, 73, 2938-2952.	4.8	12
3	Suppression of SDP1 Improves Soybean Seed Composition by Increasing Oil and Reducing Undigestible Oligosaccharides. <i>Frontiers in Plant Science</i> , 2022, 13, 863254.	3.6	13
4	Comparative Metabolic Analysis Reveals a Metabolic Switch in Mature, Hydrated, and Germinated Pollen in <i>Arabidopsis thaliana</i> . <i>Frontiers in Plant Science</i> , 2022, 13, .	3.6	10
5	Quantification of Acyl-Acyl Carrier Proteins for Fatty Acid Synthesis Using LC-MS/MS. <i>Methods in Molecular Biology</i> , 2021, 2295, 219-247.	0.9	5
6	Temporal changes in metabolism late in seed development affect biomass composition. <i>Plant Physiology</i> , 2021, 186, 874-890.	4.8	25
7	Analyzing Mass Spectrometry Imaging Data of <sup>13</sup> C-Labeled Phospholipids in <i>Camelina sativa</i> and <i>Thlaspi arvense</i> (Pennycress) Embryos. <i>Metabolites</i> , 2021, 11, 148.	2.9	14
8	On the Inverse Correlation of Protein and Oil: Examining the Effects of Altered Central Carbon Metabolism on Seed Composition Using Soybean Fast Neutron Mutants. <i>Metabolites</i> , 2020, 10, 18.	2.9	25
9	Tracing metabolic flux through time and space with isotope labeling experiments. <i>Current Opinion in Biotechnology</i> , 2020, 64, 92-100.	6.6	47
10	Sterile Spikelets Contribute to Yield in Sorghum and Related Grasses. <i>Plant Cell</i> , 2020, 32, 3500-3518.	6.6	19
11	Reorganization of Acyl Flux through the Lipid Metabolic Network in Oil-Accumulating Tobacco Leaves. <i>Plant Physiology</i> , 2020, 182, 739-755.	4.8	20
12	Application of Stable Isotope Tracing to Elucidate Metabolic Dynamics During <i>Yarrowia lipolytica</i> Î±-Ionone Fermentation. <i>IScience</i> , 2020, 23, 100854.	4.1	25
13	A General Method for Quantification and Discovery of Acyl Groups Attached to Acyl Carrier Proteins in Fatty Acid Metabolism Using LC-MS/MS. <i>Plant Cell</i> , 2020, 32, 820-832.	6.6	15
14	Accurate and efficient amino acid analysis for protein quantification using hydrophilic interaction chromatography coupled tandem mass spectrometry. <i>Plant Methods</i> , 2019, 15, 46.	4.3	67
15	The Interaction of the Soybean Seed High Oleic Acid Oil Trait With Other Fatty Acid Modifications. <i>JAOCS, Journal of the American Oil Chemists' Society</i> , 2018, 95, 39-49.	1.9	22
16	Rerouting of carbon flux in a glycogen mutant of cyanobacteria assessed via isotopically non-stationary <sup>13</sup> C metabolic flux analysis. <i>Biotechnology and Bioengineering</i> , 2017, 114, 2298-2308.	3.3	66
17	Phospholipase D1 Enhances Diacylglycerol Flux into Triacylglycerol. <i>Plant Physiology</i> , 2017, 174, 110-123.	4.8	52
18	Isotopically Nonstationary Metabolic Flux Analysis (INST-MFA) of Photosynthesis and Photorespiration in Plants. <i>Methods in Molecular Biology</i> , 2017, 1653, 167-194.	0.9	21

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19	Crops In Silico: Generating Virtual Crops Using an Integrative and Multi-scale Modeling Platform. <i>Frontiers in Plant Science</i> , 2017, 8, 786.	3.6	102
20	Deciphering cyanobacterial phenotypes for fast photoautotrophic growth via isotopically nonstationary metabolic flux analysis. <i>Biotechnology for Biofuels</i> , 2017, 10, 273.	6.2	92
21	Interactions of C <sup>4</sup> Subtype Metabolic Activities and Transport in Maize Are Revealed through the Characterization of <i>DCT2</i> Mutants. <i>Plant Cell</i> , 2016, 28, 466-484.	6.6	39
22	Perspectives for a better understanding of the metabolic integration of photorespiration within a complex plant primary metabolism network. <i>Journal of Experimental Botany</i> , 2016, 67, 3015-3026.	4.8	98
23	Synergism between Inositol Polyphosphates and TOR Kinase Signaling in Nutrient Sensing, Growth Control, and Lipid Metabolism in <i>Chlamydomonas</i> . <i>Plant Cell</i> , 2016, 28, 2026-2042.	6.6	85
24	Assessing compartmentalized flux in lipid metabolism with isotopes. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2016, 1861, 1226-1242.	2.4	30
25	Quantifying plant phenotypes with isotopic labeling & metabolic flux analysis. <i>Current Opinion in Biotechnology</i> , 2016, 37, 45-52.	6.6	42
26	Transcriptional response to petiole heat girdling in cassava. <i>Scientific Reports</i> , 2015, 5, 8414.	3.3	19
27	Tracking the metabolic pulse of plant lipid production with isotopic labeling and flux analyses: Past, present and future. <i>Progress in Lipid Research</i> , 2015, 58, 97-120.	11.6	88
28	Metabolic flux analysis using <sup>13</sup> C peptide label measurements. <i>Plant Journal</i> , 2014, 77, 476-486.	5.7	25
29	Isotopically nonstationary <sup>13</sup> C flux analysis of changes in <i>Arabidopsis thaliana</i> leaf metabolism due to high light acclimation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 16967-16972.	7.1	189
30	Cytosolic Phosphorylating Glyceraldehyde-3-Phosphate Dehydrogenases Affect <i>Arabidopsis</i> Cellular Metabolism and Promote Seed Oil Accumulation. <i>Plant Cell</i> , 2014, 26, 3023-3035.	6.6	80
31	Quantification of Peptide <i>m/z</i> Distributions from <sup>13</sup> C-Labeled Cultures with High-Resolution Mass Spectrometry. <i>Analytical Chemistry</i> , 2014, 86, 1894-1901.	6.5	16
32	Isotopically Nonstationary MFA (INST-MFA) of Autotrophic Metabolism. <i>Methods in Molecular Biology</i> , 2014, 1090, 181-210.	0.9	29
33	Analysis of Isotopic Labeling in Peptide Fragments by Tandem Mass Spectrometry. <i>PLoS ONE</i> , 2014, 9, e91537.	2.5	17
34	Carbon and Nitrogen Provisions Alter the Metabolic Flux in Developing Soybean Embryos. <i>Plant Physiology</i> , 2013, 161, 1458-1475.	4.8	87
35	Rapid Kinetic Labeling of <i>Arabidopsis</i> Cell Suspension Cultures: Implications for Models of Lipid Export from Plastids. <i>Plant Physiology</i> , 2012, 158, 601-611.	4.8	71
36	Isotope labelling of Rubisco subunits provides in vivo information on subcellular biosynthesis and exchange of amino acids between compartments. <i>Plant, Cell and Environment</i> , 2012, 35, 1232-1244.	5.7	41

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37	A community effort towards a knowledge-base and mathematical model of the human pathogen Salmonella Typhimurium LT2. BMC Systems Biology, 2011, 5, 8.	3.0	128
38	Synergy between <sup>13</sup> C-metabolic flux analysis and flux balance analysis for understanding metabolic adaption to anaerobiosis in E. coli. Metabolic Engineering, 2011, 13, 38-48.	7.0	143
39	Driving on Biomass. Science, 2009, 324, 1019-1020.	12.6	145
40	Metabolic flux analysis in plants: coping with complexity. Plant, Cell and Environment, 2009, 32, 1241-1257.	5.7	131
41	The role of light in soybean seed filling metabolism. Plant Journal, 2009, 58, 220-234.	5.7	198
42	Quantification of Isotope Label. , 2009, , 105-149.		13
43	Compartment-specific labeling information in <sup>13</sup> C metabolic flux analysis of plants. Phytochemistry, 2007, 68, 2197-2210.	2.9	98
44	Kinetic characterization of enhanced lipase activity on oil bodies. Bioprocess and Biosystems Engineering, 2007, 30, 271-279.	3.4	4
45	Synthesis and characterization of maltose fatty acid monoesters as biosurfactants. Journal of Surfactants and Detergents, 2002, 5, 245-255.	2.1	15
46	Carbohydrate-alkyl ester derivatives as biosurfactants. Journal of Surfactants and Detergents, 1999, 2, 383-390.	2.1	64