

# CÃ©line Masclaux-Daubresse

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7525414/publications.pdf>

Version: 2024-02-01

90  
papers

10,706  
citations

36303  
51  
h-index

37204  
96  
g-index

99  
all docs

99  
docs citations

99  
times ranked

10386  
citing authors

#	ARTICLE	IF	CITATIONS
1	Guidelines for the use and interpretation of assays for monitoring autophagy (4th) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50,742 1,430	9.1	1,430
2	Nitrogen uptake, assimilation and remobilization in plants: challenges for sustainable and productive agriculture. Annals of Botany, 2010, 105, 1141-1157.	2.9	1,292
3	Source and sink mechanisms of nitrogen transport and use. New Phytologist, 2018, 217, 35-53.	7.3	485
4	Characterization of the sink/source transition in tobacco ( Nicotiana tabacum L.) shoots in relation to nitrogen management and leaf senescence. Planta, 2000, 211, 510-518.	3.2	432
5	Glutamine Synthetase-Glutamate Synthase Pathway and Glutamate Dehydrogenase Play Distinct Roles in the Sink-Source Nitrogen Cycle in Tobacco. Plant Physiology, 2006, 140, 444-456.	4.8	339
6	Autophagy, plant senescence, and nutrient recycling. Journal of Experimental Botany, 2014, 65, 3799-3811.	4.8	283
7	Leaf nitrogen remobilisation for plant development and grain filling. Plant Biology, 2008, 10, 23-36.	3.8	248
8	Autophagy machinery controls nitrogen remobilization at the whole plant level under both limiting and ample nitrate conditions in Arabidopsis. New Phytologist, 2012, 194, 732-740.	7.3	243
9	Cadmium Toxicity Induced Changes in Nitrogen Management in Lycopersicon esculentum Leading to a Metabolic Safeguard Through an Amino Acid Storage Strategy. Plant and Cell Physiology, 2004, 45, 1681-1693.	3.1	237
10	Nitrogen Recycling and Remobilization Are Differentially Controlled by Leaf Senescence and Development Stage in Arabidopsis under Low Nitrogen Nutrition. Plant Physiology, 2008, 147, 1437-1449.	4.8	237
11	Nitrogen remobilisation during leaf senescence: lessons from Arabidopsis to crops. Journal of Experimental Botany, 2017, 68, erw365.	4.8	229
12	Leaf Yellowing and Anthocyanin Accumulation are Two Genetically Independent Strategies in Response to Nitrogen Limitation in Arabidopsis thaliana. Plant and Cell Physiology, 2006, 47, 74-83.	3.1	194
13	Characterization of Markers to Determine the Extent and Variability of Leaf Senescence in Arabidopsis. A Metabolic Profiling Approach. Plant Physiology, 2005, 138, 898-908.	4.8	192
14	Nitrogen metabolism meets phytopathology. Journal of Experimental Botany, 2014, 65, 5643-5656.	4.8	185
15	The challenge of remobilisation in plant nitrogen economy. A survey of physio-agronomic and molecular approaches. Annals of Applied Biology, 2001, 138, 69-81.	2.5	180
16	Senescence and death of plant organs: Nutrient recycling and developmental regulation. Comptes Rendus - Biologies, 2010, 333, 382-391.	0.2	171
17	The two senescence-related markers, GS1 (cytosolic glutamine synthetase) and GDH (glutamate) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50,742 1,430 attack and by stress hormones and reactive oxygen species in Nicotiana tabacum L. leaves. Journal of Experimental Botany, 2006, 57, 547-557.	4.8	169
18	Enzymatic and Metabolic Diagnostic of Nitrogen Deficiency in Arabidopsis thaliana Wassileskija Accession. Plant and Cell Physiology, 2008, 49, 1056-1065.	3.1	152

#	ARTICLE	IF	CITATIONS
19	Physiological and metabolic consequences of autophagy deficiency for the management of nitrogen and protein resources in Arabidopsis leaves depending on nitrate availability. <i>New Phytologist</i> , 2013, 199, 683-694.	7.3	143
20	Exploring nitrogen remobilization for seed filling using natural variation in Arabidopsis thaliana. <i>Journal of Experimental Botany</i> , 2011, 62, 2131-2142.	4.8	136
21	Stitching together the Multiple Dimensions of Autophagy Using Metabolomics and Transcriptomics Reveals Impacts on Metabolism, Development, and Plant Responses to the Environment in Arabidopsis. <i>Plant Cell</i> , 2014, 26, 1857-1877.	6.6	134
22	Regulation of nutrient recycling via autophagy. <i>Current Opinion in Plant Biology</i> , 2017, 39, 8-17.	7.1	134
23	Natural variation of nitrate uptake and nitrogen use efficiency in Arabidopsis thaliana cultivated with limiting and ample nitrogen supply. <i>Journal of Experimental Botany</i> , 2010, 61, 2293-2302.	4.8	125
24	The cytosolic glutamine synthetase GLN1;2 plays a role in the control of plant growth and ammonium homeostasis in Arabidopsis rosettes when nitrate supply is not limiting. <i>Journal of Experimental Botany</i> , 2011, 62, 1375-1390.	4.8	118
25	Diurnal changes in the expression of glutamate dehydrogenase and nitrate reductase are involved in the C/N balance of tobacco source leaves. <i>Plant, Cell and Environment</i> , 2002, 25, 1451-1462.	5.7	115
26	Amino acid pattern and glutamate metabolism during dehydration stress in the 'resurrection' plant <i>Sporobolus stapfianus</i> : a comparison between desiccation-sensitive and desiccation-tolerant leaves. <i>Journal of Experimental Botany</i> , 2007, 58, 3037-3046.	4.8	113
27	Sugars, senescence, and ageing in plants and heterotrophic organisms. <i>Journal of Experimental Botany</i> , 2009, 60, 1063-1066.	4.8	113
28	Characterization of the pelL gene encoding a novel pectate lyase of <i>Erwinia chrysanthemi</i> 3937. <i>Molecular Microbiology</i> , 1995, 16, 1183-1195.	2.5	103
29	The plant nitrogen mobilization promoted by <i>Colletotrichum lindemuthianum</i> in <i>Phaseolus</i> leaves depends on fungus pathogenicity. <i>Journal of Experimental Botany</i> , 2007, 58, 3351-3360.	4.8	99
30	Exploring NUE in crops and in Arabidopsis ideotypes to improve yield and seed quality. <i>Journal of Experimental Botany</i> , 2012, 63, 3401-3412.	4.8	99
31	Autophagy-related approaches for improving nutrient use efficiency and crop yield protection. <i>Journal of Experimental Botany</i> , 2018, 69, 1335-1353.	4.8	97
32	Immunolocalization of glutamine synthetase in senescing tobacco ( <i>Nicotiana tabacum</i> L.) leaves suggests that ammonia assimilation is progressively shifted to the mesophyll cytosol. <i>Planta</i> , 2000, 211, 519-527.	3.2	85
33	The role of iron in plant host-pathogen interactions. <i>Trends in Microbiology</i> , 1996, 4, 232-237.	7.7	84
34	A regulatory role of autophagy for resetting the memory of heat stress in plants. <i>Plant, Cell and Environment</i> , 2019, 42, 1054-1064.	5.7	80
35	Simultaneous Expression of NAD-Dependent Isocitrate Dehydrogenase and Other Krebs Cycle Genes after Nitrate Resupply to Short-Term Nitrogen-Starved Tobacco. <i>Plant Physiology</i> , 1999, 120, 717-726.	4.8	79
36	The two nitrogen mobilisation- and senescence-associated GS1 and GDH genes are controlled by C and N metabolites. <i>Planta</i> , 2005, 221, 580-588.	3.2	78

#	ARTICLE	IF	CITATIONS
37	The identification of new cytosolic glutamine synthetase and asparagine synthetase genes in barley ( <i>Hordeum vulgare</i> L.), and their expression during leaf senescence. <i>Journal of Experimental Botany</i> , 2015, 66, 2013-2026.	4.8	78
38	Plant senescence: how plants know when and how to die. <i>Journal of Experimental Botany</i> , 2018, 69, 715-718.	4.8	78
39	Concurrent activation of <i>OsAMT1;2</i> and <i>OsGOGAT1</i> in rice leads to enhanced nitrogen use efficiency under nitrogen limitation. <i>Plant Journal</i> , 2020, 103, 7-20.	5.7	76
40	Transcriptional Regulation of Ribosome Components Are Determined by Stress According to Cellular Compartments in <i>Arabidopsis thaliana</i> . <i>PLoS ONE</i> , 2011, 6, e28070.	2.5	75
41	<i>Arabidopsis thaliana</i> <i>ASN2</i> encoding asparagine synthetase is involved in the control of nitrogen assimilation and export during vegetative growth. <i>Plant, Cell and Environment</i> , 2013, 36, 328-342.	5.7	72
42	Differential expression of two siderophore-dependent iron-acquisition pathways in <i>Erwinia chrysanthemi</i> 3937: characterization of a novel ferrisiderophore permease of the ABC transporter family. <i>Molecular Microbiology</i> , 1995, 18, 33-43.	2.5	70
43	The contrasting N management of two oilseed rape genotypes reveals the mechanisms of proteolysis associated with leaf N remobilization and the respective contributions of leaves and stems to N storage and remobilization during seed filling. <i>BMC Plant Biology</i> , 2015, 15, 59.	3.6	68
44	Selective autophagy regulates heat stress memory in <i>Arabidopsis</i> by NBR1-mediated targeting of HSP90.1 and ROF1. <i>Autophagy</i> , 2021, 17, 2184-2199.	9.1	68
45	Assessment and Optimization of Autophagy Monitoring Methods in <i>Arabidopsis</i> Roots Indicate Direct Fusion of Autophagosomes with Vacuoles. <i>Plant and Cell Physiology</i> , 2014, 55, 715-726.	3.1	67
46	SAG12, a Major Cysteine Protease Involved in Nitrogen Allocation during Senescence for Seed Production in <i>Arabidopsis thaliana</i> . <i>Plant and Cell Physiology</i> , 2018, 59, 2052-2063.	3.1	66
47	Autophagy controls resource allocation and protein storage accumulation in <i>Arabidopsis</i> seeds. <i>Journal of Experimental Botany</i> , 2018, 69, 1403-1414.	4.8	64
48	Genetic Variation Suggests Interaction between Cold Acclimation and Metabolic Regulation of Leaf Senescence. <i>Plant Physiology</i> , 2007, 143, 434-446.	4.8	62
49	Autophagy as a possible mechanism for micronutrient remobilization from leaves to seeds. <i>Frontiers in Plant Science</i> , 2014, 5, 11.	3.6	62
50	Overexpression of <i>ATG8</i> in <i>Arabidopsis</i> Stimulates Autophagic Activity and Increases Nitrogen Remobilization Efficiency and Grain Filling. <i>Plant and Cell Physiology</i> , 2019, 60, 343-352.	3.1	58
51	Increases in activity of proteasome and papain-like cysteine protease in <i>Arabidopsis</i> autophagy mutants: back-up compensatory effect or cell-death promoting effect?. <i>Journal of Experimental Botany</i> , 2018, 69, 1369-1385.	4.8	55
52	Proteomic and lipidomic analyses of the <i>Arabidopsis atg5</i> autophagy mutant reveal major changes in endoplasmic reticulum and peroxisome metabolisms and in lipid composition. <i>New Phytologist</i> , 2019, 223, 1461-1477.	7.3	54
53	Glutamine and $\alpha$ -ketoglutarate are metabolite signals involved in nitrate reductase gene transcription in untransformed and transformed tobacco plants deficient in ferredoxin-glutamine- $\alpha$ -ketoglutarate aminotransferase. <i>Planta</i> , 2001, 213, 265-271.	3.2	53
54	Three cytosolic glutamine synthetase isoforms localized in different-order veins act together for N remobilization and seed filling in <i>Arabidopsis</i> . <i>Journal of Experimental Botany</i> , 2018, 69, 4379-4393.	4.8	51

#	ARTICLE	IF	CITATIONS
55	Autophagy and Nutrients Management in Plants. <i>Cells</i> , 2019, 8, 1426.	4.1	50
56	QTL analysis for sugarâ€regulated leaf senescence supports floweringâ€dependent and â€independent senescence pathways. <i>New Phytologist</i> , 2010, 185, 420-433.	7.3	49
57	<i>ASN1</i> â€encoded asparagine synthetase in floral organs contributes to nitrogen filling in <i>Arabidopsis</i> seeds. <i>Plant Journal</i> , 2017, 91, 371-393.	5.7	47
58	Signalling potential of iron in plant-microbe interactions: the pathogenic switch of iron transport in <i>Erwinia chrysanthemi</i> . <i>Plant Journal</i> , 1995, 7, 121-128.	5.7	46
59	Autophagy controls carbon, nitrogen, and redox homeostasis in plants. <i>Autophagy</i> , 2016, 12, 896-897.	9.1	45
60	Morphological and physiological responses to contrasting nitrogen regimes in <i>Populus cathayana</i> is linked to resources allocation and carbon/nitrogen partition. <i>Environmental and Experimental Botany</i> , 2019, 162, 247-255.	4.2	45
61	Sixteen cytosolic glutamine synthetase genes identified in the <i>Brassica napus</i> L. genome are differentially regulated depending on nitrogen regimes and leaf senescence. <i>Journal of Experimental Botany</i> , 2014, 65, 3927-3947.	4.8	43
62	Current Understanding of Leaf Senescence in Rice. <i>International Journal of Molecular Sciences</i> , 2021, 22, 4515.	4.1	43
63	QTL meta-analysis in <i>Arabidopsis</i> reveals an interaction between leaf senescence and resource allocation to seeds. <i>Journal of Experimental Botany</i> , 2014, 65, 3949-3962.	4.8	42
64	Autophagy Increases Zinc Bioavailability to Avoid Light-Mediated Reactive Oxygen Species Production under Zinc Deficiency. <i>Plant Physiology</i> , 2020, 182, 1284-1296.	4.8	41
65	Metabolomics of laminae and midvein during leaf senescence and sourceâ€sink metabolite management in <i>Brassica napus</i> L. leaves. <i>Journal of Experimental Botany</i> , 2018, 69, 891-903.	4.8	40
66	<i>OsASN1</i> Overexpression in Rice Increases Grain Protein Content and Yield under Nitrogen-Limiting Conditions. <i>Plant and Cell Physiology</i> , 2020, 61, 1309-1320.	3.1	39
67	Iron Is a Triggering Factor for Differential Expression of <i>Erwinia chrysanthemi</i> Strain 3937 Pectate Lyases in Pathogenesis of African Violets. <i>Molecular Plant-Microbe Interactions</i> , 1996, 9, 198.	2.6	37
68	Autophagy is essential for optimal translocation of iron to seeds in <i>Arabidopsis</i> . <i>Journal of Experimental Botany</i> , 2019, 70, 859-869.	4.8	32
69	Identification of Barley ( <i>Hordeum vulgare</i> L.) Autophagy Genes and Their Expression Levels during Leaf Senescence, Chronic Nitrogen Limitation and in Response to Dark Exposure. <i>Agronomy</i> , 2016, 6, 15.	3.0	24
70	Reserve lipids and plant autophagy. <i>Journal of Experimental Botany</i> , 2020, 71, 2854-2861.	4.8	22
71	Autophagy Controls Sulphur Metabolism in the Rosette Leaves of <i>Arabidopsis</i> and Facilitates S Remobilization to the Seeds. <i>Cells</i> , 2020, 9, 332.	4.1	22
72	A New Role for SAG12 Cysteine Protease in Roots of <i>Arabidopsis thaliana</i> . <i>Frontiers in Plant Science</i> , 2019, 9, 1998.	3.6	20

#	ARTICLE	IF	CITATIONS
73	Expression of a ferredoxin-dependent glutamate synthase gene in mesophyll and vascular cells and functions of the enzyme in ammonium assimilation in <i>Nicotiana tabacum</i> (L.). <i>Planta</i> , 2005, 222, 667-677.	3.2	19
74	Evidence for the presence of photorespiration in desiccation-sensitive leaves of the C4 'resurrection' plant <i>Sporobolus stapfianus</i> during dehydration stress. <i>Journal of Experimental Botany</i> , 2007, 58, 3929-3939.	4.8	18
75	Integrating multiple omics to identify common and specific molecular changes occurring in <i>Arabidopsis</i> under chronic nitrate and sulfate limitations. <i>Journal of Experimental Botany</i> , 2020, 71, 6471-6490.	4.8	18
76	A physiological and molecular study of the effects of nickel deficiency and phenylphosphorodiamidate (PPD) application on urea metabolism in oilseed rape ( <i>Brassica napus</i> L.). <i>Plant and Soil</i> , 2013, 362, 79-92.	3.7	17
77	Post-flowering biotic and abiotic stresses impact nitrogen use efficiency and seed filling in <i>Arabidopsis thaliana</i> . <i>Journal of Experimental Botany</i> , 2020, 71, 4578-4590.	4.8	16
78	Metabolite Profiling for Leaf Senescence in Barley Reveals Decreases in Amino Acids and Glycolysis Intermediates. <i>Agronomy</i> , 2017, 7, 15.	3.0	14
79	Ammonium stress increases microautophagic activity while impairing macroautophagic flux in <i>Arabidopsis</i> roots. <i>Plant Journal</i> , 2021, 105, 1083-1097.	5.7	13
80	Genotypic Variation of Nitrogen Use Efficiency and Amino Acid Metabolism in Barley. <i>Frontiers in Plant Science</i> , 2021, 12, 807798.	3.6	13
81	Transcriptional Plasticity of Autophagy-Related Genes Correlates with the Genetic Response to Nitrate Starvation in <i>Arabidopsis thaliana</i> . <i>Cells</i> , 2020, 9, 1021.	4.1	10
82	Quantitative Methods to Assess Differential Susceptibility of <i>Arabidopsis thaliana</i> Natural Accessions to <i>Dickeya dadantii</i> . <i>Frontiers in Plant Science</i> , 2017, 8, 394.	3.6	9
83	Editorial: Sugars and Autophagy in Plants. <i>Frontiers in Plant Science</i> , 2019, 10, 1190.	3.6	8
84	Impact of the Geneticâ€œEnvironment Interaction on the Dynamic of Nitrogen Pools in <i>Arabidopsis</i> . <i>Agriculture (Switzerland)</i> , 2018, 8, 28.	3.1	7
85	Salicylic acid is a key player of <i>Arabidopsis</i> autophagy mutant susceptibility to the necrotrophic bacterium <i>Dickeya dadantii</i> . <i>Scientific Reports</i> , 2021, 11, 3624.	3.3	7
86	How Lipids Contribute to Autophagosome Biogenesis, a Critical Process in Plant Responses to Stresses. <i>Cells</i> , 2021, 10, 1272.	4.1	6
87	A proposed role for endomembrane trafficking processes in regulating tonoplast content and vacuole dynamics under ammonium stress conditions in <i>Arabidopsis</i> root cells. <i>Plant Signaling and Behavior</i> , 2021, 16, 1924977.	2.4	4
88	Absorption et assimilation du nitrate et recyclage de lâ€™azote organique chez les plantes : intÃ©rÃ©t pour le colza. <i>Oleagineux Corps Gras Lipides</i> , 2006, 13, 393-402.	0.2	1
89	Advances in Plant Autophagy. <i>Cells</i> , 2021, 10, 194.	4.1	1
90	Differential expression of <i>Erwinia chrysanthemi</i> strain 3937 pectate lyases in pathogenesis of African violets: importance of low iron environmental conditions. <i>Progress in Biotechnology</i> , 1996, 14, 875-880.	0.2	0