

# Devrim Coskun

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2202142/publications.pdf>

Version: 2024-02-01

25  
papers

2,450  
citations

394421

19  
h-index

580821

25  
g-index

26  
all docs

26  
docs citations

26  
times ranked

3005  
citing authors

#	ARTICLE	IF	CITATIONS
1	The controversies of silicon's role in plant biology. <i>New Phytologist</i> , 2019, 221, 67-85.	7.3	439
2	Nitrogen transformations in modern agriculture and the role of biological nitrification inhibition. <i>Nature Plants</i> , 2017, 3, 17074.	9.3	376
3	How Plant Root Exudates Shape the Nitrogen Cycle. <i>Trends in Plant Science</i> , 2017, 22, 661-673.	8.8	322
4	Sodium as nutrient and toxicant. <i>Plant and Soil</i> , 2013, 369, 1-23.	3.7	289
5	The Role of Silicon in Higher Plants under Salinity and Drought Stress. <i>Frontiers in Plant Science</i> , 2016, 7, 1072.	3.6	259
6	Membrane fluxes, bypass flows, and sodium stress in rice: the influence of silicon. <i>Journal of Experimental Botany</i> , 2018, 69, 1679-1692.	4.8	102
7	The nitrogen-potassium intersection: membranes, metabolism, and mechanism. <i>Plant, Cell and Environment</i> , 2017, 40, 2029-2041.	5.7	99
8	Rapid Ammonia Gas Transport Accounts for Futile Transmembrane Cycling under NH <sub>3</sub> /NH <sub>4</sub> <sup>+</sup> Toxicity in Plant Roots. <i>Plant Physiology</i> , 2013, 163, 1859-1867.	4.8	95
9	Capacity and Plasticity of Potassium Channels and High-Affinity Transporters in Roots of Barley and Arabidopsis. <i>Plant Physiology</i> , 2013, 162, 496-511.	4.8	59
10	<sup>42</sup> K analysis of sodium-induced potassium efflux in barley: mechanism and relevance to salt tolerance. <i>New Phytologist</i> , 2010, 186, 373-384.	7.3	56
11	K <sup>+</sup> Efflux and Retention in Response to NaCl Stress Do Not Predict Salt Tolerance in Contrasting Genotypes of Rice ( <i>Oryza sativa</i> L.). <i>PLoS ONE</i> , 2013, 8, e57767.	2.5	46
12	Regulation and mechanism of potassium release from barley roots: an <i>in planta</i> <sup>42</sup> K <sup>+</sup> analysis. <i>New Phytologist</i> , 2010, 188, 1028-1038.	7.3	41
13	Silver ions disrupt K <sup>+</sup> homeostasis and cellular integrity in intact barley ( <i>Hordeum vulgare</i> L.) roots. <i>Journal of Experimental Botany</i> , 2012, 63, 151-162.	4.8	40
14	Nutrient constraints on terrestrial carbon fixation: The role of nitrogen. <i>Journal of Plant Physiology</i> , 2016, 203, 95-109.	3.5	38
15	Root-Apex Proton Fluxes at the Centre of Soil-Stress Acclimation. <i>Trends in Plant Science</i> , 2020, 25, 794-804.	8.8	35
16	The physiology of channel-mediated K <sup>+</sup> acquisition in roots of higher plants. <i>Physiologia Plantarum</i> , 2014, 151, 305-312.	5.2	24
17	Lsi2: A black box in plant silicon transport. <i>Plant and Soil</i> , 2021, 466, 1-20.	3.7	22
18	How high do ion fluxes go? A re-evaluation of the two-mechanism model of K <sup>+</sup> transport in plant roots. <i>Plant Science</i> , 2016, 243, 96-104.	3.6	21

#	ARTICLE	IF	CITATIONS
19	Potassium physiology from Archean to Holocene: A higher-plant perspective. <i>Journal of Plant Physiology</i> , 2021, 262, 153432.	3.5	21
20	Potassium and nitrogen poisoning: Physiological changes and biomass gains in rice and barley. <i>Canadian Journal of Plant Science</i> , 2014, 94, 1085-1089.	0.9	19
21	Si permeability of a deficient Lsi1 aquaporin in tobacco can be enhanced through a conserved residue substitution. <i>Plant Direct</i> , 2019, 3, e00163.	1.9	16
22	Plasma-membrane electrical responses to salt and osmotic gradients contradict radiotracer kinetics, and reveal Na <sup>+</sup> -transport dynamics in rice ( <i>Oryza sativa</i> L.). <i>Planta</i> , 2019, 249, 1037-1051.	3.2	10
23	In defence of the selective transport and role of silicon in plants. <i>New Phytologist</i> , 2019, 223, 514-516.	7.3	9
24	Complexity of potassium acquisition: How much flows through channels?. <i>Plant Signaling and Behavior</i> , 2013, 8, e24799.	2.4	6
25	Measuring Fluxes of Mineral Nutrients and Toxicants in Plants with Radioactive Tracers. <i>Journal of Visualized Experiments</i> , 2014, , .	0.3	4