

# Vladimir S Sukhov

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/6564903/vladimir-s-sukhov-publications-by-year.pdf>

**Version:** 2024-04-18

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

71  
papers

1,310  
citations

24  
h-index

33  
g-index

78  
ext. papers

1,593  
ext. citations

3.2  
avg, IF

5.39  
L-index

#	Paper	IF	Citations
71	Effect of extremely low-frequency magnetic fields on light-induced electric reactions in wheat.. <i>Plant Signaling and Behavior</i> , <b>2022</b> , 2021664	2.5	1
70	New Normalized Difference Reflectance Indices for Estimation of Soil Drought Influence on Pea and Wheat. <i>Remote Sensing</i> , <b>2022</b> , 14, 1731	5	1
69	Modified Photochemical Reflectance Indices as New Tool for Revealing Influence of Drought and Heat on Pea and Wheat Plants. <i>Plants</i> , <b>2022</b> , 11, 1308	4.5	0
68	Change in H Transport across Thylakoid Membrane as Potential Mechanism of 14.3 Hz Magnetic Field Impact on Photosynthetic Light Reactions in Seedlings of Wheat ( L.). <i>Plants</i> , <b>2021</b> , 10,	4.5	2
67	Complex Analysis of the Efficiency of Difference Reflectance Indices on the Basis of 400-700 nm Wavelengths for Revealing the Influences of Water Shortage and Heating on Plant Seedlings. <i>Remote Sensing</i> , <b>2021</b> , 13, 962	5	6
66	Mechanisms of specific systemic response in wheat plants under different locally acting heat stimuli. <i>Journal of Plant Physiology</i> , <b>2021</b> , 258-259, 153377	3.6	2
65	Influence of Local Burning on Difference Reflectance Indices Based on 400-700 nm Wavelengths in Leaves of Pea Seedlings. <i>Plants</i> , <b>2021</b> , 10,	4.5	3
64	Effect of chronic $\gamma$ radiation on long-distance electrical signals in wheat and their role in adaptation to heat stress. <i>Environmental and Experimental Botany</i> , <b>2021</b> , 184, 104378	5.9	6
63	Regulation of plasmodesmata in Arabidopsis leaves: ATP, NADPH and chlorophyll b levels matter. <i>Journal of Experimental Botany</i> , <b>2021</b> , 72, 5534-5552	7	4
62	Proximal Imaging of Changes in Photochemical Reflectance Index in Leaves Based on Using Pulses of Green-Yellow Light. <i>Remote Sensing</i> , <b>2021</b> , 13, 1762	5	4
61	Mathematical Modeling of Photosynthesis and Analysis of Plant Productivity. <i>Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology</i> , <b>2021</b> , 15, 52-72	0.7	2
60	Participation of calcium ions in induction of respiratory response caused by variation potential in pea seedlings. <i>Plant Signaling and Behavior</i> , <b>2021</b> , 16, 1869415	2.5	3
59	A Theoretical Analysis of Relations between Pressure Changes along Xylem Vessels and Propagation of Variation Potential in Higher Plants. <i>Plants</i> , <b>2021</b> , 10,	4.5	3
58	Electrical Signals, Plant Tolerance to Actions of Stressors, and Programmed Cell Death: Is Interaction Possible?. <i>Plants</i> , <b>2021</b> , 10,	4.5	7
57	Influence of Magnetic Field with Schumann Resonance Frequencies on Photosynthetic Light Reactions in Wheat and Pea. <i>Cells</i> , <b>2021</b> , 10,	7.9	6
56	Application of Reflectance Indices for Remote Sensing of Plants and Revealing Actions of Stressors. <i>Photonics</i> , <b>2021</b> , 8, 582	2.2	5
55	Exogenous Abscisic Acid Can Influence Photosynthetic Processes in Peas through a Decrease in Activity of H-ATP-ase in the Plasma Membrane. <i>Biology</i> , <b>2020</b> , 9,	4.9	8

54	Spatial and Temporal Dynamics of Electrical and Photosynthetic Activity and the Content of Phytohormones Induced by Local Stimulation of Pea Plants. <i>Plants</i> , <b>2020</b> , 9,	4.5	7
53	Relation of Photochemical Reflectance Indices Based on Different Wavelengths to the Parameters of Light Reactions in Photosystems I and II in Pea Plants. <i>Remote Sensing</i> , <b>2020</b> , 12, 1312	5	10
52	Burning-induced electrical signals influence broadband reflectance indices and water index in pea leaves. <i>Plant Signaling and Behavior</i> , <b>2020</b> , 15, 1737786	2.5	9
51	A light-induced decrease in the photochemical reflectance index (PRI) can be used to estimate the energy-dependent component of non-photochemical quenching under heat stress and soil drought in pea, wheat, and pumpkin. <i>Photosynthesis Research</i> , <b>2020</b> , 146, 175-187	3.7	18
50	Automatic Determination of the Parameters of Electrical Signals and Functional Responses of Plants Using the Wavelet Transformation Method. <i>Agriculture (Switzerland)</i> , <b>2020</b> , 10, 7	3	3
49	Simulation of a nonphotochemical quenching in plant leaf under different light intensities. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , <b>2020</b> , 1861, 148138	4.6	12
48	Inactivation of H-ATPase Participates in the Influence of Variation Potential on Photosynthesis and Respiration in Peas. <i>Plants</i> , <b>2020</b> , 9,	4.5	7
47	Theoretical Analysis of the Influence of Fluctuations in the Activity of the Plasma Membrane H <sup>+</sup> -ATPase on Low-Temperature-Induced Electrical Responses in a Plant Cell. <i>Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology</i> , <b>2020</b> , 14, 298-309	0.7	0
46	Analysis of Changes in Photochemical Reflectance Index (PRI) in Relation to the Acidification of the Lumen of the Chloroplasts of Pea and Geranium Leaves under a Short-Term Illumination. <i>Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology</i> , <b>2019</b> , 13, 243-252	0.7	6
45	Analysis of Correlations between the Indexes of Light-Dependent Reactions of Photosynthesis and the Photochemical Reflectance Index (PRI) in Pea Leaves under Short-Term Illumination. <i>Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology</i> , <b>2019</b> , 13, 67-77	0.7	4
44	Analysis of Light-Induced Changes in the Photochemical Reflectance Index (PRI) in Leaves of Pea, Wheat, and Pumpkin Using Pulses of Green-Yellow Measuring Light. <i>Remote Sensing</i> , <b>2019</b> , 11, 810	5	16
43	Influence of electrical signals on pea leaf reflectance in the 400-800-nm range. <i>Plant Signaling and Behavior</i> , <b>2019</b> , 14, 1610301	2.5	11
42	Effect of ionizing radiation on physiological and molecular processes in plants. <i>Journal of Environmental Radioactivity</i> , <b>2019</b> , 202, 8-24	2.4	53
41	Impact of Local Damage on Transpiration of Pea Leaves at Various Air Humidity. <i>Russian Journal of Plant Physiology</i> , <b>2019</b> , 66, 87-94	1.6	3
40	The electrical signal-induced systemic photosynthetic response is accompanied by changes in the photochemical reflectance index in pea. <i>Functional Plant Biology</i> , <b>2019</b> , 46, 328-338	2.7	19
39	Long-distance electrical signals as a link between the local action of stressors and the systemic physiological responses in higher plants. <i>Progress in Biophysics and Molecular Biology</i> , <b>2019</b> , 146, 63-84	4.7	50
38	Parameters of electrical signals and photosynthetic responses induced by them in pea seedlings depend on the nature of stimulus. <i>Functional Plant Biology</i> , <b>2018</b> , 45, 160-170	2.7	27
37	Cyclosis-mediated long distance communications of chloroplasts in giant cells of Characeae. <i>Functional Plant Biology</i> , <b>2018</b> , 45, 236-246	2.7	7

36	Connection of the Photochemical Reflectance Index (PRI) with the Photosystem II Quantum Yield and Nonphotochemical Quenching Can Be Dependent on Variations of Photosynthetic Parameters among Investigated Plants: A Meta-Analysis. <i>Remote Sensing</i> , <b>2018</b> , 10, 771	5	33
35	Dependence of the CO <sub>2</sub> Uptake in a Plant Cell on the Plasma Membrane H <sup>+</sup> -ATPase Activity: Theoretical Analysis. <i>Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology</i> , <b>2018</b> , 12, 146-159	0.7	5
34	Influence of the variation potential on photosynthetic flows of light energy and electrons in pea. <i>Photosynthesis Research</i> , <b>2018</b> , 136, 215-228	3.7	36
33	Pharmacokinetics of Chlorin e6Cobalt Bis(Dicarbollide) Conjugate in Balb/c Mice with Engrafted Carcinoma. <i>International Journal of Molecular Sciences</i> , <b>2017</b> , 18,	6.3	7
32	Decrease of mesophyll conductance to CO <sub>2</sub> is a possible mechanism of abscisic acid influence on photosynthesis in seedlings of pea and wheat. <i>Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology</i> , <b>2017</b> , 11, 237-247	0.7	10
31	Mathematical Models of Electrical Activity in Plants. <i>Journal of Membrane Biology</i> , <b>2017</b> , 250, 407-423	2.3	40
30	Mathematical model of action potential in higher plants with account for the involvement of vacuole in the electrical signal generation. <i>Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology</i> , <b>2017</b> , 11, 151-167	0.7	11
29	High-Temperature Tolerance of Photosynthesis Can Be Linked to Local Electrical Responses in Leaves of Pea. <i>Frontiers in Physiology</i> , <b>2017</b> , 8, 763	4.6	33
28	Variation potential propagation decreases heat-related damage of pea photosystem I by 2 different pathways. <i>Plant Signaling and Behavior</i> , <b>2016</b> , 11, e1145334	2.5	28
27	Changes in H <sup>(+)</sup> -ATP Synthase Activity, Proton Electrochemical Gradient, and pH in Pea Chloroplast Can Be Connected with Variation Potential. <i>Frontiers in Plant Science</i> , <b>2016</b> , 7, 1092	6.2	34
26	Application of a mathematical model of variation potential for analysis of its influence on photosynthesis in higher plants. <i>Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology</i> , <b>2016</b> , 10, 269-277	0.7	13
25	Age-dependent changes of photosynthetic responses induced by electrical signals in wheat seedlings. <i>Russian Journal of Plant Physiology</i> , <b>2016</b> , 63, 861-868	1.6	7
24	The role of the intra- and extracellular protons in the photosynthetic response induced by the variation potential in pea seedlings. <i>Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology</i> , <b>2016</b> , 10, 60-67	0.7	12
23	Electrical signals as mechanism of photosynthesis regulation in plants. <i>Photosynthesis Research</i> , <b>2016</b> , 130, 373-387	3.7	80
22	Electrical signals in higher plants: Mechanisms of generation and propagation. <i>Biophysics (Russian Federation)</i> , <b>2016</b> , 61, 505-512	0.7	20
21	Variation potential-induced photosynthetic and respiratory changes increase ATP content in pea leaves. <i>Journal of Plant Physiology</i> , <b>2016</b> , 202, 57-64	3.6	38
20	Participation of intracellular and extracellular pH changes in photosynthetic response development induced by variation potential in pumpkin seedlings. <i>Biochemistry (Moscow)</i> , <b>2015</b> , 80, 776-84	2.9	30
19	Evaluation of the open time of calcium channels at variation potential generation in wheat leaf cells. <i>Plant Signaling and Behavior</i> , <b>2015</b> , 10, e993231	2.5	9

18	Variation potential induces decreased PSI damage and increased PSII damage under high external temperatures in pea. <i>Functional Plant Biology</i> , <b>2015</b> , 42, 727-736	2.7	41
17	Variation potential in higher plants: Mechanisms of generation and propagation. <i>Plant Signaling and Behavior</i> , <b>2015</b> , 10, e1057365	2.5	63
16	Variation potential influence on photosynthetic cyclic electron flow in pea. <i>Frontiers in Plant Science</i> , <b>2014</b> , 5, 766	6.2	39
15	Influence of variation potential on resistance of the photosynthetic machinery to heating in pea. <i>Physiologia Plantarum</i> , <b>2014</b> , 152, 773-83	4.6	40
14	Ionic nature of burn-induced variation potential in wheat leaves. <i>Plant and Cell Physiology</i> , <b>2014</b> , 55, 1511-9	4.9	35
13	Proton cellular influx as a probable mechanism of variation potential influence on photosynthesis in pea. <i>Plant, Cell and Environment</i> , <b>2014</b> , 37, 2532-41	8.4	50
12	Simulation of variation potential in higher plant cells. <i>Journal of Membrane Biology</i> , <b>2013</b> , 246, 287-96	2.3	38
11	Mathematical simulation of H <sup>+</sup> -sucrose symporter of plasma membrane in higher plants. <i>Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology</i> , <b>2013</b> , 7, 163-169	0.7	1
10	Influence of a variation potential on photosynthesis in pumpkin seedlings ( <i>Cucurbita pepo</i> L.). <i>Biophysics (Russian Federation)</i> , <b>2013</b> , 58, 361-365	0.7	6
9	The mechanism of propagation of variation potentials in wheat leaves. <i>Journal of Plant Physiology</i> , <b>2012</b> , 169, 949-54	3.6	33
8	Analysis of the photosynthetic response induced by variation potential in geranium. <i>Planta</i> , <b>2012</b> , 235, 703-12	4.7	38
7	Simulation of action potential propagation in plants. <i>Journal of Theoretical Biology</i> , <b>2011</b> , 291, 47-55	2.3	51
6	The role of Ca <sup>2+</sup> , H <sup>+</sup> , and Cl <sup>-</sup> ions in generation of variation potential in pumpkin plants. <i>Russian Journal of Plant Physiology</i> , <b>2011</b> , 58, 974-981	1.6	30
5	Biphasic dependence of some ecomorphological and biochemical parameters of the birch leaf plate on the level of motor traffic pollution. <i>Biology Bulletin</i> , <b>2011</b> , 38, 962-966	0.5	8
4	Recording changes in extracellular pH via confocal microscopy during generation of excitation potentials in higher plants. <i>Cell and Tissue Biology</i> , <b>2010</b> , 4, 471-475	0.4	1
3	A mathematical model of action potential in cells of vascular plants. <i>Journal of Membrane Biology</i> , <b>2009</b> , 232, 59-67	2.3	56
2	Influence of propagating electrical signals on delayed luminescence in pelargonium leaves: Experimental analysis. <i>Biophysics (Russian Federation)</i> , <b>2008</b> , 53, 223-225	0.7	2
1	Influence of propagating electrical signals on delayed luminescence in pelargonium leaves: Theoretical analysis. <i>Biophysics (Russian Federation)</i> , <b>2008</b> , 53, 308-312	0.7	4

