Udo Blum

List of Publications by Year
in descending order

79 papers	3,146 citations	101543 36 h-index	168389 53 g-index
79 all docs	79 docs citations	79 times ranked	1263 citing authors

#	Article	IF	Citations
1	Microbial populations and phenolic acids in soil. Soil Biology and Biochemistry, 1988, 20, 793-800.	8.8	193
2	Title is missing!. Journal of Chemical Ecology, 1998, 24, 685-708.	1.8	174
3	Evidence for Inhibitory Allelopathic Interactions Involving Phenolic Acids in Field Soils: Concepts vs. an Experimental Model. Critical Reviews in Plant Sciences, 1999, 18, 673-693.	5.7	171
4	Allelopathic Potential of Legume Debris and Aqueous Extracts. Weed Science, 1989, 37, 674-679.	1.5	151
5	Evidence for Inhibitory Allelopathic Interactions Involving Phenolic Acids in Field Soils: Concepts vs. an Experimental Model. Critical Reviews in Plant Sciences, 1999, 18, 673-693.	5.7	144
6	Title is missing!. Journal of Chemical Ecology, 2000, 26, 2059-2078.	1.8	103
7	Short-term Effects of Ferulic Acid on Ion Uptake and Water Relations in Cucumber Seedlings. Journal of Experimental Botany, 1992, 43, 649-655.	4.8	80
8	Effects of ferulic acid, an allelopathic compound, on net P, K, and water uptake by cucumber seedlings in a split-root system. Journal of Chemical Ecology, 1990, 16, 2429-2439.	1.8	78
9	Modification of allelopathic effects ofp-coumaric acid on morning-glory seedling biomass by glucose, methionine, and nitrate. Journal of Chemical Ecology, 1993, 19, 2791-2811.	1.8	74
10	Allelopathic substances in ecosystems. Journal of Chemical Ecology, 1983, 9, 1185-1201.	1.8	73
11	Relationships between Phenolic Acid Concentrations, Transpiration, Water Utilization, Leaf Area Expansion, and Uptake of Phenolic Acids: Nutrient Culture Studies. Journal of Chemical Ecology, 2005, 31, 1907-1932.	1.8	72
12	Effects of various mixtures of ferulic acid and some of its microbial metabolic products on cucumber leaf expansion and dry matter in nutrient culture. Journal of Chemical Ecology, 1985, 11, 619-641.	1.8	69
13	Effects of exogenously applied ferulic acid, a potential allelopathic compound, on leaf growth, water utilization, and endogenous abscisic acid levels of tomato, cucumber, and bean. Journal of Chemical Ecology, 1991, 17, 865-886.	1.8	69
14	Inhibition and recovery of cucumber roots given multiple treatments of ferulic acid in nutrient culture. Journal of Chemical Ecology, 1989, 15, 917-928.	1.8	67
15	Differential Sorption of Exogenously Applied Ferulic, pâ€Coumaric, pâ€Hydroxybenzoic, and Vanillic Acids in Soil. Soil Science Society of America Journal, 1989, 53, 757-762.	2.2	66
16	Effects of ferulic acid, an allelopathic compound, on leaf expansion of cucumber seedlings grown in nutrient culture. Journal of Chemical Ecology, 1985, 11, 279-301.	1.8	65
17	Effects of mixtures of four phenolic acids on leaf area expansion of cucumber seedlings grown in Portsmouth B1 soil materials. Journal of Chemical Ecology, 1991, 17, 29-40.	1.8	64
18	Plant Phenolic Acids in Soils: A Comparison of Extraction Procedures. Soil Science Society of America Journal, 1987, 51, 1515-1521.	2.2	62

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19	Effects of mixtures of phenolic acids on phosphorus uptake by cucumber seedlings. Journal of Chemical Ecology, 1990, 16, 2559-2567.	1.8	62
20	Influence of Phenolic acids on microbial populations in the rhizosphere of cucumber. Journal of Chemical Ecology, 1991, 17, 369-389.	1.8	62
21	Effects of ferulic acid and some of its microbial metabolic products on radicle growth of cucumber. Journal of Chemical Ecology, 1984, 10, 1169-1191.	1.8	60
22	Effects of ferulic andp-coumaric acids in nutrient culture of cucumber leaf expansion as influenced by pH. Journal of Chemical Ecology, 1985, 11, 1567-1582.	1.8	60
23	Differential Inhibition by Ferulic Acid of Nitrate and Ammonium Uptake in Zea mays L.. Plant Physiology, 1992, 98, 639-645.	4.8	60
24	Evaluation of Ferulic Acid Uptake as a Measurement of Allelochemical Dose: Effective Concentration. Journal of Chemical Ecology, 1999, 25, 2585-2600.	1.8	57
25	Allelopathic activity in wheat-conventional and wheat-no-till soils: Development of soil extract bioassays. Journal of Chemical Ecology, 1992, 18, 2191-2221.	1.8	56
26	Inhibition of Symbiotic Nitrogen-Fixation by Gallic and Tannic Acid, and Possible Roles in Old-Field Succession. Bulletin of the Torrey Botanical Club, 1969, 96, 531.	0.6	55
27	The uptake of ferulic and p-hydroxybenzoic acids by Cucumis sativus. Phytochemistry, 1987, 26, 2959-2964.	2.9	55
28	Influence of various soil factors on the effects of ferulic acid on leaf expansion of cucumber seedlings. Plant and Soil, 1987, 98, 111-130.	3.7	52
29	Effects of clover and small grain cover crops and tillage techniques on seedling emergence of some dicotyledonous weed species. Renewable Agriculture and Food Systems, 1997, 12, 146-161.	0.5	49
30	Effects of Ozone on Soybean Nodules. Journal of Environmental Quality, 1973, 2, 341-342.	2.0	45
31	STRESS MODIFICATION OF ALLELOPATHY OF HELIANTHUS ANNUUS L. DEBRIS ON SEED GERMINATION. American Journal of Botany, 1982, 69, 776-783.	1.7	45
32	Benefits of Citrate Over EDTA for Extracting Phenolic Acids from Soils and Plant Debris. Journal of Chemical Ecology, 1997, 23, 347-362.	1.8	45
33	Effects of mixtures of phenolic acids on leaf area expansion of cucumber seedlings grown in different pH portsmouth A1 soil materials. Journal of Chemical Ecology, 1989, 15, 2413-2423.	1.8	44
34	Stress modification of allelopathy ofHelianthus annuus L. debris on seedling biomass production ofAmaranthus retroflexus L.. Journal of Chemical Ecology, 1983, 9, 1213-1222.	1.8	42
35	Simultaneous effects of ferulic andp-coumaric acids on cucumber leaf expansion in split-root experiments. Journal of Chemical Ecology, 1994, 20, 1773-1782.	1.8	41
36	Inhibition of cucumber leaf expansion by ferulic acid in split-root experiments. Journal of Chemical Ecology, 1990, 16, 455-463.	1.8	39

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37	Interrelationships between p-Coumaric Acid, Evapotranspiration, Soil Water Content, and Leaf Expansion. Journal of Chemical Ecology, 2006, 32, 1817-1834.	1.8	36
38	Plant-Plant Allelopathic Interactions. , 2011, , .		36
39	The utilization of exogenously supplied ferulic acid in lignin biosynthesis. Phytochemistry, 1987, 26, 2977-2982.	2.9	34
40	Can simultaneous inhibition of seedling growth and stimulation of rhizosphere bacterial populations provide evidence for phytotoxin transfer from plant residues in the bulk soil to the rhizosphere of sensitive species?. Journal of Chemical Ecology, 2001, 27, 807-829.	1.8	34
41	SEX RATIO OF<i>RUMEX HASTATULUS:</i>THE EFFECT OF ENVIRONMENTAL FACTORS AND CERTATION. Evolution; International Journal of Organic Evolution, 1981, 35, 1108-1116.	2.3	33
42	Stress Modification of Allelopathy of Helianthus annuus L. Debris on Seed Germination. American Journal of Botany, 1982, 69, 776.	1.7	31
43	Effects of O₃and (or) fescue on ladino clover: interactions. Canadian Journal of Botany, 1980, 58, 241-249.	1.1	27
44	Statistical analysis of the joint inhibitory action of similar compounds. Journal of Chemical Ecology, 1989, 15, 2403-2412.	1.8	26
45	Effects of soil nitrogen level on ferulic acid inhibition of cucumber leaf expansion. Journal of Chemical Ecology, 1990, 16, 1371-1383.	1.8	24
46	The Value of Model Plantâ€"Microbeâ€"Soil Systems for Understanding Processes Associated with Allelopathic Interaction. ACS Symposium Series, 1994, , 127-131.	0.5	21
47	Title is missing!. Journal of Chemical Ecology, 1999, 25, 1517-1529.	1.8	21
48	Photosynthesis and Respiration of Spartina and Juncus Salt Marshes in North Carolina: Some Models. Estuaries and Coasts, 1978, 1, 228.	1.7	20
49	Plant-Plant Allelopathic Interactions II. , 2014, , .		18
50	The effects of ozone and nitrogen fertilizer on tall fescue, ladino clover, and a fescueâ€“clover mixture. I. Growth, regrowth, and forage production. Canadian Journal of Botany, 1982, 60, 2745-2752.	1.1	15
51	RESPONSE TO PHOTOPERIOD AND TEMPERATURE BY SPARTINA ALTERNIFLORA (POACEAE) FROM NORTH CAROLINA AND SPARTINA FOLIOSA FROM CALIFORNIA. American Journal of Botany, 1984, 71, 91-99.	1.7	15
52	Modification of an inhibition curve to account for effects of a second compound. Journal of Chemical Ecology, 1993, 19, 2783-2790.	1.8	14
53	EFFECTS OF SINGLE AND MULTIPLE EXPOSURES OF FERULIC ACID ON THE VEGETATIVE AND REPRODUCTIVE GROWTH OF PHASEOLUS VULGARIS BBLâ€290. American Journal of Botany, 1987, 74, 1635-1645.	1.7	12
54	Plantâ€“Plant Allelopathic Interaction. Phase II: Field/Laboratory Experiments. , 2011, , 85-149.		5

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55	Response to Photoperiod and Temperature by Spartina alterniflora (Poaceae) from North Carolina and Spartina folisa from California. American Journal of Botany, 1984, 71, 91.	1.7	3
56	Simple Phenolic Acids in Solution Culture II: Log P, Log D and Molecular Structure. , 2019, , 115-153.		2
57	Background for Designing Laboratory Bioassays. , 2014, , 1-29.		2
58	Some Issues and Challenges When Designing Laboratory Bioassays. , 2014, , 77-129.		2
59	Hypothetical Cause and Effect Bioassays. , 2014, , 237-272.		2
60	Characterization of Vacuolar Bodies in Spartina alterniflora: I. Formation, Development, Morphology, and Ultrastructure. American Journal of Botany, 1977, 64, 635.	1.7	1
61	Plantâ€"Plant Allelopathic Interactions. Phase I: The Laboratory. , 2011, , 9-84.		1
62	Effects, Modifiers, and Modes of Action of Allelopathic Compounds Using Phenolic Acids as Model Compounds. , 2014, , 185-235.		1
63	Simple Phenolic Acids in Solution Culture I: pH and pKa. , 2019, , 71-113.		1
64	Hypothetical Solution-Culture System Sub-Models. , 2019, , 239-280.		1
65	Simple Phenolic Acids in Soil Culture I: Sorption, Kd and Koc. , 2019, , 155-196.		1
66	Quantitative Hypothetical System Models for Cecil Soil-Sand Systems. , 2019, , 345-405.		1
67	Quantitative Hypothetical System Model for a Portsmouth B Horizon Soil-Sand System. , 2019, , 407-449.		1
68	Simple Phenolic Acids in Soil Culture II: Biological Processes in Soil. , 2019, , 197-238.		1
69	CHARACTERIZATION OF VACUOLAR BODIES IN SPARTINA ALTERNIFLORA: I. FORMATION, DEVELOPMENT, MORPHOLOGY, AND ULTRASTRUCTURE. American Journal of Botany, 1977, 64, 635-640.	1.7	0
70	CHARACTERIZATION OF VACUOLAR BODIES IN SPARTINA ALTERNIFLORA: II. SOME PHYSICAL AND CHEMICAL PROPERTIES. American Journal of Botany, 1977, 64, 641-648.	1.7	0
71	Hypothetical Standard Screening Bioassays. , 2014, , 131-184.		0
72	General Background for Plant-Plant Allelopathic Interactions. , 2019, , 27-48.		0

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73	Reflections Regarding Plant-Plant Interactions, Communications and Allelopathic Interactions with an Emphasis on Allelopathic Interactions. , 2019, , 1-26.		0
74	Phase III: Summing Up. , 2011, , 151-190.		0
75	Introduction to the Fundamentals of Laboratory Bioassays. , 2014, , 31-76.		0
76	Laboratory Model Systems and Field Systems: Some Final Thoughts. , 2014, , 273-300.		0
77	Conceptual Models for the Input and Partitioning of Organic Compounds in Seedling-Microbe-Soil Systems and Physicochemical Properties of Organic Compounds with an Emphasis on Phenolic Acids. , 2019, , 49-70.		0
78	Epilog: Assumptions, Models, Hypotheses and Conclusions. , 2019, , 451-485.		0
79	Hypothetical Soil-Culture System Sub-Models. , 2019, , 281-343.		0