

Joel G Burken

List of Publications by Year in descending order

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Version: 2024-02-01

91
papers

4,130
citations

109137

35
h-index

118652

62
g-index

92
all docs

92
docs citations

92
times ranked

3821
citing authors

#	ARTICLE	IF	CITATIONS
1	Predictive Relationships for Uptake of Organic Contaminants by Hybrid Poplar Trees. <i>Environmental Science & Technology</i> , 1998, 32, 3379-3385.	4.6	493
2	Uptake and Metabolism of Atrazine by Poplar Trees. <i>Environmental Science & Technology</i> , 1997, 31, 1399-1406.	4.6	317
3	The Water Footprint of Biofuels: A Drink or Drive Issue?. <i>Environmental Science & Technology</i> , 2009, 43, 3005-3010.	4.6	316
4	Unmanned Aerial System (UAS)-based phenotyping of soybean using multi-sensor data fusion and extreme learning machine. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , 2017, 134, 43-58.	4.9	233
5	Phytoremediation: Plant Uptake of Atrazine and Role of Root Exudates. <i>Journal of Environmental Engineering, ASCE</i> , 1996, 122, 958-963.	0.7	192
6	Phytovolatilization of Organic Contaminants. <i>Environmental Science & Technology</i> , 2016, 50, 6632-6643.	4.6	191
7	Machine Learning: New Ideas and Tools in Environmental Science and Engineering. <i>Environmental Science & Technology</i> , 2021, 55, 12741-12754.	4.6	140
8	TCE Diffusion to the Atmosphere in Phytoremediation Applications. <i>Environmental Science & Technology</i> , 2003, 37, 2534-2539.	4.6	123
9	Engineered Struvite Precipitation: Impacts of Component-Ion Molar Ratios and pH. <i>Journal of Environmental Engineering, ASCE</i> , 2005, 131, 1433-1440.	0.7	120
10	Distribution and Volatilization of Organic Compounds Following Uptake by Hybrid Poplar Trees. <i>International Journal of Phytoremediation</i> , 1999, 1, 139-151.	1.7	81
11	Nine-month evaluation of runoff quality and quantity from an experiential green roof in Missouri, USA. <i>Ecological Engineering</i> , 2015, 78, 127-133.	1.6	80
12	Enhanced Degradation of TCE on a Superfund Site Using Endophyte-Assisted Poplar Tree Phytoremediation. <i>Environmental Science & Technology</i> , 2017, 51, 10050-10058.	4.6	73
13	VOCs Fate and Partitioning in Vegetation: Use of Tree Cores in Groundwater Analysis. <i>Environmental Science & Technology</i> , 2002, 36, 4663-4668.	4.6	69
14	Fate and transport of per- and polyfluoroalkyl substances (PFASs) in the vadose zone. <i>Science of the Total Environment</i> , 2021, 771, 145427.	3.9	69
15	Phytoforensics, Dendrochemistry, and Phytoscreening: New Green Tools for Delineating Contaminants from Past and Present. <i>Environmental Science & Technology</i> , 2011, 45, 6218-6226.	4.6	68
16	Plant Translocation of Organic Compounds: Molecular and Physicochemical Predictors. <i>Environmental Science and Technology Letters</i> , 2014, 1, 156-161.	3.9	66
17	Rhizosphere Competitiveness of Trichloroethylene-Degrading, Poplar-Colonizing Recombinant Bacteria. <i>Applied and Environmental Microbiology</i> , 2000, 66, 4673-4678.	1.4	64
18	Uptake and transformation of trichloroethylene by edible garden plants. <i>Water Research</i> , 1997, 31, 816-824.	5.3	61

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19	Effect of Seeding Materials and Mixing Strength on Struvite Precipitation. <i>Water Environment Research</i> , 2006, 78, 125-132.	1.3	58
20	Adsorption of arsenic(V) onto fly ash: A speciation-based approach. <i>Chemosphere</i> , 2008, 72, 381-388.	4.2	58
21	Fast Separation and Quantification Method for Nitroguanidine and 2,4-Dinitroanisole by Ultrafast Liquid Chromatography-Tandem Mass Spectrometry. <i>Analytical Chemistry</i> , 2012, 84, 3427-3432.	3.2	58
22	Using Tree Core Samples to Monitor Natural Attenuation and Plume Distribution After a PCE Spill. <i>Environmental Science & Technology</i> , 2008, 42, 1711-1717.	4.6	57
23	Using artificial neural network to investigate physiological changes and cerium oxide nanoparticles and cadmium uptake by <i>Brassica napus</i> plants. <i>Environmental Pollution</i> , 2019, 246, 381-389.	3.7	52
24	Reducing arsenic accumulation in rice grain through iron oxide amendment. <i>Ecotoxicology and Environmental Safety</i> , 2015, 118, 55-61.	2.9	50
25	Filtration performances of non-medical materials as candidates for manufacturing facemasks and respirators. <i>International Journal of Hygiene and Environmental Health</i> , 2020, 229, 113582.	2.1	50
26	Mineralization and Uptake of Triazine Pesticide in Soil-Plant Systems. <i>Journal of Environmental Engineering, ASCE</i> , 1993, 119, 842-854.	0.7	49
27	Vapor-Phase Exchange of Perchloroethene between Soil and Plants. <i>Environmental Science & Technology</i> , 2005, 39, 1563-1568.	4.6	48
28	Phytotechnologies - Preventing Exposures, Improving Public Health. <i>International Journal of Phytoremediation</i> , 2013, 15, 889-899.	1.7	46
29	Lead and Zinc Removal by Laboratory-Scale Constructed Wetlands. <i>Water Environment Research</i> , 2001, 73, 37-44.	1.3	45
30	Phytoremediation of MTBE with Hybrid Poplar Trees. <i>International Journal of Phytoremediation</i> , 2004, 6, 157-167.	1.7	45
31	Determining Chemical Activity of (Semi)volatile Compounds by Headspace Solid-Phase Microextraction. <i>Analytical Chemistry</i> , 2007, 79, 2869-2876.	3.2	44
32	Phytoscreening for Chlorinated Solvents Using Rapid in Vitro SPME Sampling: Application to Urban Plume in Verl, Germany. <i>Environmental Science & Technology</i> , 2011, 45, 8276-8282.	4.6	41
33	Direct Measurement of VOC Diffusivities in Tree Tissues: Impacts on Tree-Based Phytoremediation and Plant Contamination. <i>Environmental Science & Technology</i> , 2008, 42, 1268-1275.	4.6	39
34	A deeper look at plant uptake of environmental contaminants using intelligent approaches. <i>Science of the Total Environment</i> , 2019, 651, 561-569.	3.9	38
35	Modeling of TCE Diffusion to the Atmosphere and Distribution in Plant Stems. <i>Environmental Science & Technology</i> , 2004, 38, 4580-4586.	4.6	36
36	Examining plant uptake and translocation of emerging contaminants using machine learning: Implications to food security. <i>Science of the Total Environment</i> , 2020, 698, 133999.	3.9	36

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37	Biotransformation of Various Substituted Aromatic Compounds to Chiral Dihydrodihydroxy Derivatives. <i>Applied and Environmental Microbiology</i> , 2001, 67, 3333-3339.	1.4	33
38	PHYTOREMEDIATION OF BTEX HYDROCARBONS: POTENTIAL IMPACTS OF DIURNAL GROUNDWATER FLUCTUATION ON MICROBIAL DEGRADATION. <i>International Journal of Phytoremediation</i> , 2009, 11, 509-523.	1.7	27
39	Phytomonitoring of Chlorinated Ethenes in Trees: A Four-Year Study of Seasonal Chemodynamics <i>in Planta</i> . <i>Environmental Science & Technology</i> , 2014, 48, 10634-10640.	4.6	26
40	Dendrochemical patterns of calcium, zinc, and potassium related to internal factors detected by energy dispersive X-ray fluorescence (EDXRF). <i>Chemosphere</i> , 2014, 95, 58-62.	4.2	26
41	Biological fixed-film systems. <i>Water Environment Research</i> , 1998, 70, 495-518.	1.3	22
42	Dendrochemistry of Multiple Releases of Chlorinated Solvents at a Former Industrial Site. <i>Environmental Science & Technology</i> , 2012, 46, 9541-9547.	4.6	22
43	Time-Weighted Average SPME Analysis for <i>in Planta</i> Determination of cVOCs. <i>Environmental Science & Technology</i> , 2012, 46, 3319-3325.	4.6	21
44	Investigating plant uptake of organic contaminants through transpiration stream concentration factor and neural network models. <i>Science of the Total Environment</i> , 2021, 751, 141418.	3.9	21
45	Simultaneous detection of perchlorate and bromate using rapid high-performance ion exchange chromatography-tandem mass spectrometry and perchlorate removal in drinking water. <i>Environmental Science and Pollution Research</i> , 2015, 22, 8594-8602.	2.7	20
46	Directional Phytoscreening: Contaminant Gradients in Trees for Plume Delineation. <i>Environmental Science & Technology</i> , 2013, 47, 9069-9076.	4.6	17
47	Transport and survival of GFP-tagged root-colonizing microbes: Implications for rhizodegradation. <i>European Journal of Soil Biology</i> , 2007, 43, 224-232.	1.4	16
48	Remote Sensing of Explosives-Induced Stress in Plants: Hyperspectral Imaging Analysis for Remote Detection of Unexploded Threats. <i>Remote Sensing</i> , 2019, 11, 1827.	1.8	14
49	Amendment-assisted revegetation of mine tailings: improvement of tailings quality and biomass production. <i>International Journal of Phytoremediation</i> , 2019, 21, 425-434.	1.7	13
50	Lignin and Lipid Impact on Sorption and Diffusion of Trichloroethylene in Tree Branches for Determining Contaminant Fate during Plant Sampling and Phytoremediation. <i>Environmental Science & Technology</i> , 2009, 43, 5732-5738.	4.6	11
51	Plants as Bio-Indicators of Subsurface Conditions: Impact of Groundwater Level on BTEX Concentrations in Trees. <i>International Journal of Phytoremediation</i> , 2013, 15, 257-267.	1.7	11
52	In planta passive sampling devices for assessing subsurface chlorinated solvents. <i>Chemosphere</i> , 2014, 104, 149-154.	4.2	11
53	Phytoremediation removal rates of benzene, toluene, and chlorobenzene. <i>International Journal of Phytoremediation</i> , 2018, 20, 666-674.	1.7	11
54	Quantification of toluene phytoextraction rates and microbial biodegradation functional profiles at a fractured bedrock phytoremediation site. <i>Science of the Total Environment</i> , 2020, 707, 135890.	3.9	10

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55	Phytoscreening with SPME: Variability Analysis. International Journal of Phytoremediation, 2015, 17, 1115-1122.	1.7	8
56	Tree Sampling as a Method to Assess Vapor Intrusion Potential at a Site Characterized by VOC-Contaminated Groundwater and Soil. Environmental Science & Technology, 2017, 51, 10369-10378.	4.6	8
57	Establishment of Regional Phytoremediation Buffer Systems for Ecological Restoration in the Great Lakes Basin, USA. II. New Clones Show Exceptional Promise. Forests, 2021, 12, 474.	0.9	8
58	Plants as Bio-Indicators of Subsurface Conditions: Impact of Groundwater Level on Btex Concentrations in Trees. International Journal of Phytoremediation, 2013, 15, 900-910.	1.7	7
59	Phytoscreening: A Comparison of In Planta Portable <sc>GC–MS</sc> and In Vitro Analyses. Ground Water Monitoring and Remediation, 2014, 34, 49-56.	0.6	7
60	Determining the effectiveness of soil treatment on plant stress using smart-phone cameras. , 2016, , .		7
61	Establishment of Regional Phytoremediation Buffer Systems for Ecological Restoration in the Great Lakes Basin, USA. I. Genotype – Environment Interactions. Forests, 2021, 12, 430.	0.9	7
62	Natural treatment and on-site processes. Water Environment Research, 1998, 70, 540-550.	1.3	6
63	Benzene Toxicity and Removal in Laboratory Phytoremediation Studies. Practice Periodical of Hazardous, Toxic and Radioactive Waste Management, 2001, 5, 161-171.	0.4	6
64	Phytoremediation of Volatile Organic Compounds. , 2006, , 199-216.		6
65	Waterjet injection of powdered activated carbon for sediment remediation. Journal of Soils and Sediments, 2011, 11, 1115-1124.	1.5	6
66	Special issue on the 6th International Phytotechnologies Conference, St. Louis, Missouri, 2009: Conference Review. International Journal of Phytoremediation, 2011, 13, 1-3.	1.7	6
67	Plant tissue analysis for explosive compounds in phytoremediation and phytoforensics. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2012, 47, 2219-2229.	0.9	6
68	Using in situ solid phase microextraction (SPME) for depth profiling in sediments treated with activated carbon. Journal of Soils and Sediments, 2014, 14, 1013-1020.	1.5	6
69	Green Analysis: High Throughput Analysis of Emerging Pollutants in Plant Sap by Freeze–Thaw–Centrifugal Membrane Filtration Sample Preparation–HPLC-MS/MS Analysis. Journal of Agricultural and Food Chemistry, 2019, 67, 12927-12935.	2.4	6
70	Dendrochemical forensics as material evidence in courts: <i>How could trees lie?</i>. Environmental Forensics, 2023, 24, 21-27.	1.3	6
71	High throughput screening of native species for tailings eco-restoration using novel computer visualization for plant phenotyping. Science of the Total Environment, 2021, 780, 146490.	3.9	6
72	Natural Treatment and On-Site Processes. Water Environment Research, 1999, 71, 676-685.	1.3	5

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73	Phytoscreening for perchlorate: rapid analysis of tree sap. Environmental Science: Water Research and Technology, 2015, 1, 138-145.	1.2	5
74	Green Analysis: Rapid-Throughput Analysis of Volatile Contaminants in Plants by Freeze-Thaw Equilibration Sample Preparation and SPME-GC-MS Analysis. Journal of Agricultural and Food Chemistry, 2021, 69, 5428-5434.	2.4	5
75	Phytomanagement of Pb/Zn/Cu tailings using biosolids-biochar or -humus combinations: Enhancement of bioenergy crop production, substrate functionality, and ecosystem services. Science of the Total Environment, 2022, 836, 155676.	3.9	5
76	Taproot technology: Tree coring for fast, noninvasive plume delineations. Remediation, 2009, 19, 49-62.	1.1	4
77	Phytoforensics: Trees as bioindicators of potential indoor exposure via vapor intrusion. PLoS ONE, 2018, 13, e0193247.	1.1	4
78	Letter: Clarifying phytoremediation data. Environmental Science & Technology, 2003, 37, 310A-310A.	4.6	3
79	Contaminant Gradients in Trees: Directional Tree Coring Reveals Boundaries of Soil and Soil-Gas Contamination with Potential Applications in Vapor Intrusion Assessment. Environmental Science & Technology, 2017, 51, 14055-14064.	4.6	3
80	Phytoremediation and Plant Metabolism of Explosives and Nitroaromatic Compounds. , 2000, , .		3
81	Today's Phytoremediation: Success Had Led to Growth. International Journal of Phytoremediation, 1999, 1, 111-113.	1.7	2
82	Development of a waterjet system for direct delivery of granular iron and activated carbon to remediate contaminated aqueous sediments. Remediation, 2011, 21, 103-119.	1.1	2
83	Distribution and Accumulation of Trichloroethylene and Trichloroacetic Acid in Hybrid Poplars. Journal of Environmental Engineering, ASCE, 2013, 139, 1162-1167.	0.7	2
84	Persistence and Microbial Source Tracking of <i>Escherichia coli</i> at a Swimming Beach at Lake of the Ozarks State Park, Missouri. Journal of the American Water Resources Association, 2016, 52, 508-522.	1.0	2
85	Natural Treatment and On-Site Processes. Water Environment Research, 2001, 73, 596-626.	1.3	1
86	Volatile organic compound fate in phytoremediation applications: natural and engineered systems. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2005, 60, 208-15.	0.6	1
87	Degradation and Uptake of Benzene in Laboratory Phytoremediation Studies. , 2000, , 476.		0
88	Use of In-Planta Solid Phase Sampling Devices to Delineate VOC Plumes. , 2009, , .		0
89	CONFERENCE REVIEW 4TH INTERNATIONAL PHYTOTECNOLOGIES CONFERENCE, DENVER, CO, SEPTEMBER 24-26, 2007. International Journal of Phytoremediation, 2009, 11, 413-415.	1.7	0
90	Special Section on Natural Treatment Systems: More Than Just a Solution to Pollution. Journal of Environmental Engineering, ASCE, 2013, 139, 461-461.	0.7	0

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91	Resid Conversion. , 2005, , 2655-2662.		0