Joel G Burken

List of Publications by Year
in descending order

91	4,130	109137	118652
papers	citations	35 h-index	62 g-index

92	92	92	3821
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Dendrochemical forensics as material evidence in courts: How could trees lie?. Environmental Forensics, 2023, 24, 21-27.	1.3	6
2	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
3	Investigating plant uptake of organic contaminants through transpiration stream concentration factor and neural network models. Science of the Total Environment, 2021, 751, 141418.	3.9	21
4	Establishment of Regional Phytoremediation Buffer Systems for Ecological Restoration in the Great Lakes Basin, USA. I. Genotype Ã— Environment Interactions. Forests, 2021, 12, 430.	0.9	7
5	Green Analysis: Rapid-Throughput Analysis of Volatile Contaminants in Plants by Freezeâ€“Thawâ€“Equilibration Sample Preparation and SPMEâ€“GC-MS Analysis. Journal of Agricultural and Food Chemistry, 2021, 69, 5428-5434.	2.4	5
6	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
7	Fate and transport of per- and polyfluoroalkyl substances (PFASs) in the vadose zone. Science of the Total Environment, 2021, 771, 145427.	3.9	69
8	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
9	Machine Learning: New Ideas and Tools in Environmental Science and Engineering. Environmental Science & Technology, 2021, 55, 12741-12754.	4.6	140
10	Examining plant uptake and translocation of emerging contaminants using machine learning: Implications to food security. Science of the Total Environment, 2020, 698, 133999.	3.9	36
11	Quantification of toluene phytoextraction rates and microbial biodegradation functional profiles at a fractured bedrock phytoremediation site. Science of the Total Environment, 2020, 707, 135890.	3.9	10
12	Filtration performances of non-medical materials as candidates for manufacturing facemasks and respirators. International Journal of Hygiene and Environmental Health, 2020, 229, 113582.	2.1	50
13	Remote Sensing of Explosives-Induced Stress in Plants: Hyperspectral Imaging Analysis for Remote Detection of Unexploded Threats. Remote Sensing, 2019, 11, 1827.	1.8	14
14	Green Analysis: High Throughput Analysis of Emerging Pollutants in Plant Sap by Freezeâ€“Thawâ€“Centrifugal Membrane Filtration Sample Preparationâ€”HPLC-MS/MS Analysis. Journal of Agricultural and Food Chemistry, 2019, 67, 12927-12935.	2.4	6
15	Amendment-assisted revegetation of mine tailings: improvement of tailings quality and biomass production. International Journal of Phytoremediation, 2019, 21, 425-434.	1.7	13
16	Using artificial neural network to investigate physiological changes and cerium oxide nanoparticles and cadmium uptake by Brassica napus plants. Environmental Pollution, 2019, 246, 381-389.	3.7	52
17	A deeper look at plant uptake of environmental contaminants using intelligent approaches. Science of the Total Environment, 2019, 651, 561-569.	3.9	38
18	Phytoremediation removal rates of benzene, toluene, and chlorobenzene. International Journal of Phytoremediation, 2018, 20, 666-674.	1.7	11

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19	Phytoforensics: Trees as bioindicators of potential indoor exposure via vapor intrusion. PLoS ONE, 2018, 13, e0193247.	1.1	4
20	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
21	Enhanced Degradation of TCE on a Superfund Site Using Endophyte-Assisted Poplar Tree Phytoremediation. Environmental Science & Technology, 2017, 51, 10050-10058.	4.6	73
22	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
23	Unmanned Aerial System (UAS)-based phenotyping of soybean using multi-sensor data fusion and extreme learning machine. ISPRS Journal of Photogrammetry and Remote Sensing, 2017, 134, 43-58.	4.9	233
24	Determining the effectiveness of soil treatment on plant stress using smart-phone cameras. , 2016, , .		7
25	Persistence and Microbial Source Tracking of Escherichia coli 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
26	Phytovolatilization of Organic Contaminants. Environmental Science & Technology, 2016, 50, 6632-6643.	4.6	191
27	Simultaneous detection of perchlorate and bromate using rapid high-performance ion exchange chromatographyâ€“tandem mass spectrometry and perchlorate removal in drinking water. Environmental Science and Pollution Research, 2015, 22, 8594-8602.	2.7	20
28	Reducing arsenic accumulation in rice grain through iron oxide amendment. Ecotoxicology and Environmental Safety, 2015, 118, 55-61.	2.9	50
29	Phytoscreening with SPME: Variability Analysis. International Journal of Phytoremediation, 2015, 17, 1115-1122.	1.7	8
30	Phytoscreening for perchlorate: rapid analysis of tree sap. Environmental Science: Water Research and Technology, 2015, 1, 138-145.	1.2	5
31	Nine-month evaluation of runoff quality and quantity from an experiential green roof in Missouri, USA. Ecological Engineering, 2015, 78, 127-133.	1.6	80
32	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
33	Phytoscreening: A Comparison of In Planta Portable <scp>GCâ€MS</scp> and In Vitro Analyses. Ground Water Monitoring and Remediation, 2014, 34, 49-56.	0.6	7
34	Phytomonitoring of Chlorinated Ethenes in Trees: A Four-Year Study of Seasonal Chemodynamics in Planta. Environmental Science & Technology, 2014, 48, 10634-10640.	4.6	26
35	Plant Translocation of Organic Compounds: Molecular and Physicochemical Predictors. Environmental Science and Technology Letters, 2014, 1, 156-161.	3.9	66
36	Dendrochemical patterns of calcium, zinc, and potassium related to internal factors detected by energy dispersive X-ray fluorescence (EDXRF). Chemosphere, 2014, 95, 58-62.	4.2	26

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37	In planta passive sampling devices for assessing subsurface chlorinated solvents. Chemosphere, 2014, 104, 149-154.	4.2	11
38	Directional Phytoscreening: Contaminant Gradients in Trees for Plume Delineation. Environmental Science & Technology, 2013, 47, 9069-9076.	4.6	17
39	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
40	Phytotechnologies â€“ Preventing Exposures, Improving Public Health. International Journal of Phytoremediation, 2013, 15, 889-899.	1.7	46
41	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
42	Distribution and Accumulation of Trichloroethylene and Trichloroacetic Acid in Hybrid Poplars. Journal of Environmental Engineering, ASCE, 2013, 139, 1162-1167.	0.7	2
43	Plants as Bio-Indicators of Subsurface Conditions: Impact of Groundwater Level on BTEX Concentrations in Trees. International Journal of Phytoremediation, 2013, 15, 257-267.	1.7	11
44	Dendrochemistry of Multiple Releases of Chlorinated Solvents at a Former Industrial Site. Environmental Science & Technology, 2012, 46, 9541-9547.	4.6	22
45	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
46	Time-Weighted Average SPME Analysis for in Planta Determination of cVOCs. Environmental Science & Technology, 2012, 46, 3319-3325.	4.6	21
47	Fast Separation and Quantification Method for Nitroguanidine and 2,4-Dinitroanisole by Ultrafast Liquid Chromatographyâ€“Tandem Mass Spectrometry. Analytical Chemistry, 2012, 84, 3427-3432.	3.2	58
48	Phytoforensics, Dendrochemistry, and Phytoscreening: New Green Tools for Delineating Contaminants from Past and Present. Environmental Science & Technology, 2011, 45, 6218-6226.	4.6	68
49	Phytoscreening for Chlorinated Solvents Using Rapid in Vitro SPME Sampling: Application to Urban Plume in Verl, Germany. Environmental Science & Technology, 2011, 45, 8276-8282.	4.6	41
50	Waterjet injection of powdered activated carbon for sediment remediation. Journal of Soils and Sediments, 2011, 11, 1115-1124.	1.5	6
51	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
52	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
53	Use of In-Planta Solid Phase Sampling Devices to Delineate VOC Plumes. , 2009, , .		0
54	CONFERENCE REVIEWâ€”4TH INTERNATIONAL PHYTOTECHNOLOGIES CONFERENCE, DENVER, CO, SEPTEMBER 24â€“26, 2007. International Journal of Phytoremediation, 2009, 11, 413-415.	1.7	0

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55	Taprootâ„¢ technology: Tree coring for fast, noninvasive plume delineations. Remediation, 2009, 19, 49-62.	1.1	4
56	PHYTOREMEDIATION OF BTEX HYDROCARBONS: POTENTIAL IMPACTS OF DIURNAL GROUNDWATER FLUCTUATION ON MICROBIAL DEGRADATION. International Journal of Phytoremediation, 2009, 11, 509-523.	1.7	27
57	Lignin and Lipid Impact on Sorption and Diffusion of Trichloroethylene in Tree Branches for Determining Contaminant Fate during Plant Sampling and Phytoremediation. Environmental Science & Technology, 2009, 43, 5732-5738.	4.6	11
58	The Water Footprint of Biofuels: A Drink or Drive Issue?. Environmental Science & Technology, 2009, 43, 3005-3010.	4.6	316
59	Adsorption of arsenic(V) onto fly ash: A speciation-based approach. Chemosphere, 2008, 72, 381-388.	4.2	58
60	Using Tree Core Samples to Monitor Natural Attenuation and Plume Distribution After a PCE Spill. Environmental Science & Technology, 2008, 42, 1711-1717.	4.6	57
61	Direct Measurement of VOC Diffusivities in Tree Tissues: Impacts on Tree-Based Phytoremediation and Plant Contamination. Environmental Science & Technology, 2008, 42, 1268-1275.	4.6	39
62	Transport and survival of GFP-tagged root-colonizing microbes: Implications for rhizodegradation. European Journal of Soil Biology, 2007, 43, 224-232.	1.4	16
63	Determining Chemical Activity of (Semi)volatile Compounds by Headspace Solid-Phase Microextraction. Analytical Chemistry, 2007, 79, 2869-2876.	3.2	44
64	Phytoremediation of Volatile Organic Compounds. , 2006, , 199-216.		6
65	Effect of Seeding Materials and Mixing Strength on Struvite Precipitation. Water Environment Research, 2006, 78, 125-132.	1.3	58
66	Engineered Struvite Precipitation: Impacts of Component-Ion Molar Ratios and pH. Journal of Environmental Engineering, ASCE, 2005, 131, 1433-1440.	0.7	120
67	Vapor-Phase Exchange of Perchloroethene between Soil and Plants. Environmental Science & Technology, 2005, 39, 1563-1568.	4.6	48
68	Resid Conversion. , 2005, , 2655-2662.		0
69	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
70	Phytoremediation of MTBE with Hybrid Poplar Trees. International Journal of Phytoremediation, 2004, 6, 157-167.	1.7	45
71	Modeling of TCE Diffusion to the Atmosphere and Distribution in Plant Stems. Environmental Science & Technology, 2004, 38, 4580-4586.	4.6	36
72	Letter: Clarifying phytoremediation data. Environmental Science & Technology, 2003, 37, 310A-310A.	4.6	3

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73	TCE Diffusion to the Atmosphere in Phytoremediation Applications. Environmental Science & Technology, 2003, 37, 2534-2539.	4.6	123
74	VOCs Fate and Partitioning in Vegetation:Â Use of Tree Cores in Groundwater Analysis. Environmental Science & Technology, 2002, 36, 4663-4668.	4.6	69
75	Lead and Zinc Removal by Laboratory-Scale Constructed Wetlands. Water Environment Research, 2001, 73, 37-44.	1.3	45
76	Benzene Toxicity and Removal in Laboratory Phytoremediation Studies. Practice Periodical of Hazardous, Toxic and Radioactive Waste Management, 2001, 5, 161-171.	0.4	6
77	Biotransformation of Various Substituted Aromatic Compounds to Chiral Dihydrodihydroxy Derivatives. Applied and Environmental Microbiology, 2001, 67, 3333-3339.	1.4	33
78	Natural Treatment and On-Site Processes. Water Environment Research, 2001, 73, 596-626.	1.3	1
79	Degradation and Uptake of Benzene in Laboratory Phytoremediation Studies. , 2000, , 476.		0
80	Rhizosphere Competitiveness of Trichloroethylene-Degrading, Poplar-Colonizing Recombinant Bacteria. Applied and Environmental Microbiology, 2000, 66, 4673-4678.	1.4	64
81	Phytoremediation and Plant Metabolism of Explosives and Nitroaromatic Compounds. , 2000, , .		3
82	Distribution and Volatilization of Organic Compounds Following Uptake by Hybrid Poplar Trees. International Journal of Phytoremediation, 1999, 1, 139-151.	1.7	81
83	Today's Phytoremediation: Success Had Led to Growth. International Journal of Phytoremediation, 1999, 1, 111-113.	1.7	2
84	Natural Treatment and On-Site Processes. Water Environment Research, 1999, 71, 676-685.	1.3	5
85	Predictive Relationships for Uptake of Organic Contaminants by Hybrid Poplar Trees. Environmental Science & Technology, 1998, 32, 3379-3385.	4.6	493
86	Natural treatment and on-site processes. Water Environment Research, 1998, 70, 540-550.	1.3	6
87	Biological fixed-film systems. Water Environment Research, 1998, 70, 495-518.	1.3	22
88	Uptake and Metabolism of Atrazine by Poplar Trees. Environmental Science & Technology, 1997, 31, 1399-1406.	4.6	317
89	Uptake and transformation of trichloroethylene by edible garden plants. Water Research, 1997, 31, 816-824.	5.3	61
90	Phytoremediation: Plant Uptake of Atrazine and Role of Root Exudates. Journal of Environmental Engineering, ASCE, 1996, 122, 958-963.	0.7	192

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91	Mineralization and Uptake of Triazine Pesticide in Soilâ€Plant Systems. Journal of Environmental Engineering, ASCE, 1993, 119, 842-854.	0.7	49