

# Kerry N Mcphedran

## List of Publications by Year in descending order

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Version: 2024-02-01

55  
papers

1,356  
citations

304368

22  
h-index

360668

35  
g-index

58  
all docs

58  
docs citations

58  
times ranked

1301  
citing authors

#	ARTICLE	IF	CITATIONS
1	Assessment of a wastewater stabilization pond system for removal of arsenic, iron, and ammonia from reverse osmosis water treatment plant residual wastewater. Canadian Journal of Civil Engineering, 2022, 49, 1026-1039.	0.7	1
2	Selenium removal from water using adsorbents: A critical review. Journal of Hazardous Materials, 2022, 424, 127603.	6.5	25
3	Sustainably closed loop recycling of hierarchically porous polymer microbeads for efficient removal of cationic dyes. Environmental Science: Water Research and Technology, 2022, 8, 575-585.	1.2	6
4	Traffic-derived contaminant loading in snow storage facilities during spring melt. Environmental Science and Pollution Research, 2022, 29, 27875-27893.	2.7	5
5	Urban stormwater runoff pollutant loadings: GIS land use classification vs. sample-based predictions. Environmental Science and Pollution Research, 2022, 29, 45349-45363.	2.7	5
6	RNA in Municipal Wastewater Reveals Magnitudes of COVID-19 Outbreaks across Four Waves Driven by SARS-CoV-2 Variants of Concern. ACS ES&T Water, 2022, 2, 1852-1862.	2.3	22
7	Assessment of stormwater discharge contamination and toxicity for a cold-climate urban landscape. Environmental Sciences Europe, 2022, 34, 43.	2.6	4
8	A novel method for fabrication of a binary oxide biochar composite for oxidative adsorption of arsenite: Characterization, adsorption mechanism and mass transfer modeling. Journal of Cleaner Production, 2022, 356, 131832.	4.6	17
9	A binary oxide-biochar composite for adsorption of arsenic from aqueous solutions: Combined microwave pyrolysis and electrochemical modification. Chemical Engineering Journal, 2022, 446, 137024.	6.6	21
10	Optimization and assessment of an electrochemical advanced oxidation system for synthetic stormwater treatment. Environmental Science and Pollution Research, 2022, 29, 81505-81519.	2.7	1
11	Enhanced arsenate removal by Fe-impregnated canola straw: assessment of XANES solid-phase speciation, impacts of solution properties, sorption mechanisms, and evolutionary polynomial regression (EPR) models. Environmental Science and Pollution Research, 2021, 28, 12659-12676.	2.7	17
12	Estimation of greenhouse gas and odour emissions from a cold region municipal biological nutrient removal wastewater treatment plant. Journal of Environmental Management, 2021, 281, 111864.	3.8	22
13	Biogas maximization using data-driven modelling with uncertainty analysis and genetic algorithm for municipal wastewater anaerobic digestion. Journal of Environmental Management, 2021, 293, 112875.	3.8	21
14	<i>Operando</i> Studies of Iodine Species in an Advanced Oxidative Water Treatment Reactor. ACS ES&T Water, 2021, 1, 2293-2304.	2.3	5
15	Electrochemically modified adsorbents for treatment of aqueous arsenic: Pore diffusion in modified biomass vs. biochar. Chemical Engineering Journal, 2021, 423, 130061.	6.6	34
16	Greenhouse gas emission estimation from municipal wastewater using a hybrid approach of generative adversarial network and data-driven modelling. Science of the Total Environment, 2021, 800, 149508.	3.9	9
17	Biogas production estimation using data-driven approaches for cold region municipal wastewater anaerobic digestion. Journal of Environmental Management, 2020, 253, 109708.	3.8	40
18	Treatment of aqueous arsenic – A review of biosorbent preparation methods. Journal of Environmental Management, 2020, 273, 111126.	3.8	35

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19	Treatment of aqueous arsenic – A review of biochar modification methods. <i>Science of the Total Environment</i> , 2020, 739, 139750.	3.9	81
20	Characterizing polychlorinated biphenyl exposure pathways from sediment and water in aquatic life using a food web bioaccumulation model. <i>Integrated Environmental Assessment and Management</i> , 2019, 15, 398-411.	1.6	2
21	Polybrominated Diphenyl Ethers (PBDEs) in Sediments of the Huron–Erie Corridor. <i>Bulletin of Environmental Contamination and Toxicology</i> , 2019, 102, 450-456.	1.3	2
22	Applications of biological sulfate reduction for remediation of arsenic – A review. <i>Chemosphere</i> , 2019, 222, 932-944.	4.2	77
23	Isotherm and kinetic studies on adsorption of oil sands process-affected water organic compounds using granular activated carbon. <i>Chemosphere</i> , 2018, 202, 716-725.	4.2	53
24	Assessment of hazard metrics for predicting field benthic invertebrate toxicity in the Detroit River, Ontario, Canada. <i>Integrated Environmental Assessment and Management</i> , 2017, 13, 410-422.	1.6	5
25	Understanding the similarities and differences between ozone and peroxone in the degradation of naphthenic acids: Comparative performance for potential treatment. <i>Chemosphere</i> , 2017, 180, 149-159.	4.2	27
26	Dynamics of microbial community structure and nutrient removal from an innovative side-stream enhanced biological phosphorus removal process. <i>Journal of Environmental Management</i> , 2017, 198, 300-307.	3.8	22
27	Impact of environmental conditions on bacterial photoreactivation in wastewater effluents. <i>Environmental Sciences: Processes and Impacts</i> , 2017, 19, 31-37.	1.7	13
28	Pilot-scale UV/H <sub>2</sub> O <sub>2</sub> advanced oxidation process for municipal reuse water: Assessing micropollutant degradation and estrogenic impacts on goldfish ( <i>Carassius auratus</i> L.). <i>Water Research</i> , 2016, 101, 157-166.	5.3	36
29	Wastewater Colloidal Organic Carbon: Characterization of Filtration Fractions Using <sup>13</sup> C NMR. <i>Water Environment Research</i> , 2016, 88, 308-317.	1.3	0
30	Characterization and distribution of metal and nonmetal elements in the Alberta oil sands region of Canada. <i>Chemosphere</i> , 2016, 147, 218-229.	4.2	25
31	Investigation of the impact of organic solvent type and solution pH on the extraction efficiency of naphthenic acids from oil sands process-affected water. <i>Chemosphere</i> , 2016, 146, 472-477.	4.2	55
32	Mechanistic investigation of industrial wastewater naphthenic acids removal using granular activated carbon (GAC) biofilm based processes. <i>Science of the Total Environment</i> , 2016, 541, 238-246.	3.9	30
33	Ultra Performance Liquid Chromatography Ion Mobility Time-of-Flight Mass Spectrometry Characterization of Naphthenic Acids Species from Oil Sands Process-Affected Water. <i>Environmental Science &amp; Technology</i> , 2015, 49, 11737-11745.	4.6	30
34	Composite polyvinylidene fluoride (PVDF) membrane impregnated with Fe <sub>2</sub> O <sub>3</sub> nanoparticles and multiwalled carbon nanotubes for catalytic degradation of organic contaminants. <i>Journal of Membrane Science</i> , 2015, 490, 227-235.	4.1	89
35	An omic approach for the identification of oil sands process-affected water compounds using multivariate statistical analysis of ultrahigh resolution mass spectrometry datasets. <i>Science of the Total Environment</i> , 2015, 511, 230-237.	3.9	14
36	Granular activated carbon for simultaneous adsorption and biodegradation of toxic oil sands process-affected water organic compounds. <i>Journal of Environmental Management</i> , 2015, 152, 49-57.	3.8	48

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37	Coagulation/flocculation process with polyaluminum chloride for the remediation of oil sands process-affected water: Performance and mechanism study. <i>Journal of Environmental Management</i> , 2015, 160, 254-262.	3.8	59
38	Effect of Media on Biofilter Performance Following Ozonation of Secondary Treated Municipal Wastewater Effluent: Sand vs. GAC. <i>Ozone: Science and Engineering</i> , 2015, 37, 143-153.	1.4	19
39	Fractionation of oil sands-process affected water using pH-dependent extractions: A study of dissociation constants for naphthenic acids species. <i>Chemosphere</i> , 2015, 127, 291-296.	4.2	44
40	Probing the Adsorption of Weak Acids on Graphite Using Amplitude Modulationâ€“Frequency Modulation Atomic Force Microscopy. <i>Langmuir</i> , 2015, 31, 3069-3075.	1.6	6
41	Next-Generation Pyrosequencing Analysis of Microbial Biofilm Communities on Granular Activated Carbon in Treatment of Oil Sands Process-Affected Water. <i>Applied and Environmental Microbiology</i> , 2015, 81, 4037-4048.	1.4	34
42	Pseudomonads biodegradation of aromatic compounds in oil sands process-affected water. <i>Science of the Total Environment</i> , 2015, 521-522, 59-67.	3.9	14
43	Effect of ozonation on the naphthenic acids' speciation and toxicity of pH-dependent organic extracts of oil sands process-affected water. <i>Science of the Total Environment</i> , 2015, 506-507, 66-75.	3.9	47
44	Investigation of Mono/Competitive Adsorption of Environmentally Relevant Ionized Weak Acids on Graphite: Impact of Molecular Properties and Thermodynamics. <i>Environmental Science &amp; Technology</i> , 2014, 48, 14472-14480.	4.6	21
45	Impact of ozonation pre-treatment of oil sands process-affected water on the operational performance of a GAC-fluidized bed biofilm reactor. <i>Biodegradation</i> , 2014, 25, 811-823.	1.5	26
46	Advanced Analytical Mass Spectrometric Techniques and Bioassays to Characterize Untreated and Ozonated Oil Sands Process-Affected Water. <i>Environmental Science &amp; Technology</i> , 2014, 48, 11090-11099.	4.6	55
47	Hydrophobic organic compound (HOC) partitioning behaviour to municipal wastewater colloidal organic carbon. <i>Water Research</i> , 2013, 47, 2222-2230.	5.3	10
48	Investigation of Hydrophobic Organic Carbon (HOC) Partitioning to 1 kDa Fractionated Municipal Wastewater Colloids. <i>Environmental Science &amp; Technology</i> , 2013, 47, 2548-2553.	4.6	10
49	Evaluation of the gas stripping technique for calculation of Henryâ€™s law constants using the initial slope method for 1,2,4,5-tetrachlorobenzene, pentachlorobenzene, and hexachlorobenzene. <i>Chemosphere</i> , 2013, 91, 1648-1652.	4.2	8
50	Fate and mass balances of triclosan (TCS), tetrabromobisphenol A (TBBPA) and tribromobisphenol A (tri-BBPA) during the municipal wastewater treatment process. <i>Water Quality Research Journal of Canada</i> , 2013, 48, 255-265.	1.2	6
51	Occurrence and predictive correlations of <i>Escherichia coli</i> and Enterococci at Sandpoint beach (Lake Tj ETQq1 1 0.784314 rgBT /Ove Research Journal of Canada, 2013, 48, 99-110.	1.2	5
52	Investigation of Effects of the Cosolvent Methanol on the Apparent Solubility of a Suite of Chlorobenzenes Using Headspace Solid-Phase Microextraction (HS-SPME). <i>Journal of Chemical &amp; Engineering Data</i> , 2012, 57, 2373-2378.	1.0	3
53	Evaluation of the STP model: Comparison of modelled and experimental results for ten polycyclic aromatic hydrocarbons (PAHs). <i>Chemosphere</i> , 2007, 69, 1802-1806.	4.2	7
54	Effects of the non-indigenous cladoceran <i>Cercopagis pengoi</i> on the lower food web of Lake Ontario. <i>Freshwater Biology</i> , 2003, 48, 2094-2106.	1.2	82

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55	Assessment of Sediment Arsenic and Iron Occurrence and Leaching Potential in a Potable Water Treatment Wastewater Stabilization Pond System. Canadian Journal of Civil Engineering, 0, , .	0.7	0