

# John R Lawrence

## List of Publications by Citations

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163  
papers

8,870  
citations

53  
h-index

89  
g-index

166  
ext. papers

9,698  
ext. citations

4.5  
avg, IF

5.73  
L-index

#	Paper	IF	Citations
163	Optical sectioning of microbial biofilms. <i>Journal of Bacteriology</i> , <b>1991</b> , 173, 6558-67	3.5	616
162	Human Health Risk Assessment (HHRA) for environmental development and transfer of antibiotic resistance. <i>Environmental Health Perspectives</i> , <b>2013</b> , 121, 993-1001	8.4	390
161	Scanning transmission X-ray, laser scanning, and transmission electron microscopy mapping of the exopolymeric matrix of microbial biofilms. <i>Applied and Environmental Microbiology</i> , <b>2003</b> , 69, 5543-54	4.8	289
160	Soft X-ray microscopy and spectroscopy at the molecular environmental science beamline at the Advanced Light Source. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , <b>2006</b> , 150, 86-104	1.7	272
159	Assessment of lectin-binding analysis for in situ detection of glycoconjugates in biofilm systems. <i>Microbiology (United Kingdom)</i> , <b>2001</b> , 147, 299-313	2.9	215
158	In Situ Localization of <i>Azospirillum brasilense</i> in the Rhizosphere of Wheat with Fluorescently Labeled, rRNA-Targeted Oligonucleotide Probes and Scanning Confocal Laser Microscopy. <i>Applied and Environmental Microbiology</i> , <b>1995</b> , 61, 1013-9	4.8	203
157	Precipitation of amorphous CaCO <sub>3</sub> (aragonite-like) by cyanobacteria: A STXM study of the influence of EPS on the nucleation process. <i>Geochimica Et Cosmochimica Acta</i> , <b>2009</b> , 73, 4180-4198	5.5	200
156	Selective degradation of ibuprofen and clofibrac acid in two model river biofilm systems. <i>Water Research</i> , <b>2001</b> , 35, 3197-205	12.5	172
155	Next-generation sequencing of microbial communities in the Athabasca River and its tributaries in relation to oil sands mining activities. <i>Applied and Environmental Microbiology</i> , <b>2012</b> , 78, 7626-37	4.8	170
154	Advanced imaging techniques for assessment of structure, composition and function in biofilm systems. <i>FEMS Microbiology Ecology</i> , <b>2010</b> , 72, 1-21	4.3	160
153	Development and structure of microbial biofilms in river water studied by confocal laser scanning microscopy. <i>FEMS Microbiology Ecology</i> , <b>2006</b> , 24, 11-25	4.3	150
152	Behavior of <i>Pseudomonas fluorescens</i> within the hydrodynamic boundary layers of surface microenvironments. <i>Microbial Ecology</i> , <b>1987</b> , 14, 1-14	4.4	147
151	Phylogenetic Composition, Spatial Structure, and Dynamics of Lotic Bacterial Biofilms Investigated by Fluorescent in Situ Hybridization and Confocal Laser Scanning Microscopy. <i>Microbial Ecology</i> , <b>1999</b> , 37, 225-237	4.4	146
150	Ecotoxicological assessment of antibiotics: A call for improved consideration of microorganisms. <i>Environment International</i> , <b>2015</b> , 85, 189-205	12.9	145
149	Determination of diffusion coefficients in biofilms by confocal laser microscopy. <i>Applied and Environmental Microbiology</i> , <b>1994</b> , 60, 1166-73	4.8	144
148	Physiological adaptations involved in alkane assimilation at a low temperature by <i>Rhodococcus</i> sp. strain Q15. <i>Applied and Environmental Microbiology</i> , <b>1999</b> , 65, 2961-8	4.8	143
147	Confocal Laser Microscopy and Digital Image Analysis in Microbial Ecology. <i>Advances in Microbial Ecology</i> , <b>1992</b> , 1-67		131

146	Bacterial extracellular DNA forming a defined network-like structure. <i>FEMS Microbiology Letters</i> , <b>2006</b> , 262, 31-8	2.9	126
145	Speciation and quantitative mapping of metal species in microbial biofilms using scanning transmission X-ray microscopy. <i>Environmental Science &amp; Technology</i> , <b>2006</b> , 40, 1556-65	10.3	121
144	Microscale and molecular assessment of impacts of nickel, nutrients, and oxygen level on structure and function of river biofilm communities. <i>Applied and Environmental Microbiology</i> , <b>2004</b> , 70, 4326-39	4.8	117
143	Effect of laminar flow velocity on the kinetics of surface recolonization by Mot(+) and Mot (-) <i>Pseudomonas fluorescens</i> . <i>Microbial Ecology</i> , <b>1989</b> , 18, 1-19	4.4	115
142	Application of multiple parameter imaging for the quantification of algal, bacterial and exopolymer components of microbial biofilms. <i>Journal of Microbiological Methods</i> , <b>1998</b> , 32, 253-261	2.8	112
141	Effects of selected pharmaceuticals on riverine biofilm communities. <i>Canadian Journal of Microbiology</i> , <b>2005</b> , 51, 655-69	3.2	108
140	Imaging of bacterial cells by fluorescence exclusion using scanning confocal laser microscopy. <i>Journal of Microbiological Methods</i> , <b>1992</b> , 15, 249-261	2.8	107
139	Differentiation of methanosaeta concilii and methanosarcina barkeri in anaerobic mesophilic granular sludge by fluorescent In situ hybridization and confocal scanning laser microscopy. <i>Applied and Environmental Microbiology</i> , <b>1999</b> , 65, 2222-9	4.8	99
138	Microarray and real-time PCR analyses of the responses of high-arctic soil bacteria to hydrocarbon pollution and bioremediation treatments. <i>Applied and Environmental Microbiology</i> , <b>2009</b> , 75, 6258-67	4.8	98
137	Confocal laser scanning microscopy for analysis of microbial biofilms. <i>Methods in Enzymology</i> , <b>1999</b> , 310, 131-44	1.7	96
136	The role of interactions, sessile growth and nutrient amendments on the degradative efficiency of a microbial consortium. <i>Canadian Journal of Microbiology</i> , <b>1994</b> , 40, 331-40	3.2	95
135	Growth kinetics of <i>Pseudomonas fluorescens</i> microcolonies within the hydrodynamic boundary layers of surface microenvironments. <i>Microbial Ecology</i> , <b>1986</b> , 12, 299-312	4.4	90
134	In situ evidence for microdomains in the polymer matrix of bacterial microcolonies. <i>Canadian Journal of Microbiology</i> , <b>2007</b> , 53, 450-8	3.2	85
133	Lectin-binding analysis in biofilm systems. <i>Methods in Enzymology</i> , <b>1999</b> , 310, 145-52	1.7	84
132	Effects of Velocity on the Transport of Two Bacteria Through Saturated Sand. <i>Ground Water</i> , <b>1999</b> , 37, 103-112	2.4	81
131	Impact of seasonal variations and nutrient inputs on nitrogen cycling and degradation of hexadecane by replicated river biofilms. <i>Applied and Environmental Microbiology</i> , <b>2003</b> , 69, 5170-7	4.8	80
130	In situ Characterization of Biofilm Exopolymers Involved in the Accumulation of Chlorinated Organics. <i>Microbial Ecology</i> , <b>1998</b> , 35, 213-23	4.4	78
129	Microscale evaluation of the effects of grazing by invertebrates with contrasting feeding modes on river biofilm architecture and composition. <i>Microbial Ecology</i> , <b>2002</b> , 44, 199-207	4.4	76

128	Soft X-ray spectromicroscopy of nickel sorption in a natural river biofilm. <i>Geobiology</i> , <b>2009</b> , 7, 432-53	4.3	75
127	Three-dimensional differentiation of photo-autotrophic biofilm constituents by multi-channel laser scanning microscopy (single-photon and two-photon excitation). <i>Journal of Microbiological Methods</i> , <b>2004</b> , 56, 161-72	2.8	75
126	Detachment of <i>Pseudomonas fluorescens</i> from biofilms on glass surfaces in response to nutrient stress. <i>Microbial Ecology</i> , <b>1989</b> , 18, 199-210	4.4	75
125	Analysis of spatial variability within mot+ and mot <sup>-</sup> <i>Pseudomonas fluorescens</i> biofilms using representative elements. <i>Biofouling</i> , <b>1993</b> , 7, 339-358	3.3	74
124	Effect of Motility on Surface Colonization and Reproductive Success of <i>Pseudomonas fluorescens</i> in Dual-Dilution Continuous Culture and Batch Culture Systems. <i>Applied and Environmental Microbiology</i> , <b>1994</b> , 60, 1421-9	4.8	73
123	Assessment of fluorochromes for two-photon laser scanning microscopy of biofilms. <i>Applied and Environmental Microbiology</i> , <b>2002</b> , 68, 901-9	4.8	72
122	Microbial exopolymers provide a mechanism for bioaccumulation of contaminants. <i>Microbial Ecology</i> , <b>1994</b> , 27, 279-91	4.4	71
121	Sorption and metabolism of selected herbicides in river biofilm communities. <i>Canadian Journal of Microbiology</i> , <b>2001</b> , 47, 634-41	3.2	70
120	Innovative techniques, sensors, and approaches for imaging biofilms at different scales. <i>Trends in Microbiology</i> , <b>2015</b> , 23, 233-42	12.4	69
119	Quantitative mapping of chlorhexidine in natural river biofilms. <i>Science of the Total Environment</i> , <b>2006</b> , 369, 369-83	10.2	68
118	A simple rotating annular reactor for replicated biofilm studies. <i>Journal of Microbiological Methods</i> , <b>2000</b> , 42, 215-24	2.8	66
117	Soft X-ray spectromicroscopy of biological and synthetic polymer systems. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , <b>2005</b> , 144-147, 259-269	1.7	62
116	Bacteria associated with cysts of the soybean cyst nematode ( <i>Heterodera glycines</i> ). <i>Applied and Environmental Microbiology</i> , <b>2003</b> , 69, 607-15	4.8	61
115	Behavior of bacterial stream populations within the hydrodynamic boundary layers of surface microenvironments. <i>Microbial Ecology</i> , <b>1987</b> , 14, 15-27	4.4	60
114	Function of EPS <b>1999</b> , 171-200		59
113	Comparative microscale analysis of the effects of triclosan and triclocarban on the structure and function of river biofilm communities. <i>Science of the Total Environment</i> , <b>2009</b> , 407, 3307-16	10.2	58
112	Characterizing magnetism of individual magnetosomes by X-ray magnetic circular dichroism in a scanning transmission X-ray microscope. <i>Chemical Geology</i> , <b>2010</b> , 270, 110-116	4.2	57
111	Relationship Between Microbial Biomass and Elemental Sulfur Oxidation in Agricultural Soils. <i>Soil Science Society of America Journal</i> , <b>1988</b> , 52, 672-677	2.5	55

110	The Role of Sorption in the Transport of <i>Klebsiella oxytoca</i> Through Saturated Silica Sand. <i>Ground Water</i> , <b>1997</b> , 35, 574-584	2.4	50
109	Molecular and microscopic assessment of the effects of caffeine, acetaminophen, diclofenac, and their mixtures on river biofilm communities. <i>Environmental Toxicology and Chemistry</i> , <b>2012</b> , 31, 508-17	3.8	48
108	<i>Proteus mirabilis</i> biofilm protection against struvite crystal dissolution and its implications in struvite urolithiasis. <i>Journal of Urology</i> , <b>1991</b> , 146, 1138-42	2.5	48
107	Do Bacterial Communities Transcend Darwinism?. <i>Advances in Microbial Ecology</i> , <b>1997</b> , 105-191		48
106	An evaluation of techniques for measuring periphyton metabolism in chambers. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , <b>1997</b> , 54, 715-725	2.4	46
105	Differentiation of genes extracted from non-viable versus viable micro-organisms in environmental samples using ethidium monoazide bromide. <i>Journal of Microbiological Methods</i> , <b>2007</b> , 71, 312-8	2.8	46
104	Metatranscriptomic analysis of the response of river biofilms to pharmaceutical products, using anonymous DNA microarrays. <i>Applied and Environmental Microbiology</i> , <b>2010</b> , 76, 5432-9	4.8	43
103	Microbial communities in low permeability, high pH uranium mine tailings: characterization and potential effects. <i>Journal of Applied Microbiology</i> , <b>2013</b> , 114, 1671-86	4.7	42
102	Phosphorus Limitation of Heterotrophic Biofilms from the Fraser River, British Columbia, and the Effect of Pulp Mill Effluent. <i>Microbial Ecology</i> , <b>1998</b> , 36, 121-30	4.4	42
101	Structural and functional responses of river biofilm communities to the nonsteroidal anti-inflammatory diclofenac. <i>Environmental Toxicology and Chemistry</i> , <b>2007</b> , 26, 573-82	3.8	42
100	Humic acid enhanced remediation of an emplaced diesel source in groundwater. 1. Laboratory-based pilot scale test. <i>Journal of Contaminant Hydrology</i> , <b>2002</b> , 54, 249-76	3.9	42
99	Quantification of transient CO <sub>2</sub> production in a sandy unsaturated zone. <i>Water Resources Research</i> , <b>1999</b> , 35, 2189-2198	5.4	41
98	IMPACT OF ELEMENTAL SULFUR FERTILIZATION ON AGRICULTURAL SOILS. I. EFFECTS ON MICROBIAL BIOMASS AND ENZYME ACTIVITIES. <i>Canadian Journal of Soil Science</i> , <b>1988</b> , 68, 463-473	1.4	41
97	Transport of bacteria through geologic media. <i>Canadian Journal of Microbiology</i> , <b>1996</b> , 42, 410-422	3.2	40
96	ZnO nanoparticles impose a panmetabolic toxic effect along with strong necrosis, inducing activation of the envelope stress response in <i>Salmonella enterica</i> serovar Enteritidis. <i>Antimicrobial Agents and Chemotherapy</i> , <b>2015</b> , 59, 3317-28	5.9	39
95	Natural attenuation of aqueous metal contamination by an algal mat. <i>Canadian Journal of Microbiology</i> , <b>1998</b> , 44, 825-832	3.2	39
94	Sub-inhibitory concentrations of different pharmaceutical products affect the meta-transcriptome of river biofilm communities cultivated in rotating annular reactors. <i>Environmental Microbiology Reports</i> , <b>2012</b> , 4, 350-9	3.7	38
93	Morphological and biochemical changes in <i>Pseudomonas fluorescens</i> biofilms induced by sub-inhibitory exposure to antimicrobial agents. <i>Canadian Journal of Microbiology</i> , <b>2009</b> , 55, 163-78	3.2	37

92	Behavioral Strategies of Surface-Colonizing Bacteria. <i>Advances in Microbial Ecology</i> , <b>1995</b> , 1-75		37
91	Computer-enhanced darkfield microscopy for the quantitative analysis of bacterial growth and behavior on surfaces. <i>Journal of Microbiological Methods</i> , <b>1989</b> , 10, 123-138	2.8	36
90	Novel sulfur-oxidizing streamers thriving in perennial cold saline springs of the Canadian high Arctic. <i>Environmental Microbiology</i> , <b>2009</b> , 11, 616-29	5.2	34
89	Microbial production of CO <sub>2</sub> in unsaturated geologic media in a mesoscale model. <i>Water Resources Research</i> , <b>1993</b> , 29, 973-984	5.4	34
88	Monitoring the fate of copper nanoparticles in river biofilms using scanning transmission X-ray microscopy (STXM). <i>Chemical Geology</i> , <b>2012</b> , 329, 18-25	4.2	33
87	Colonization and weathering of natural sulfide mineral assemblages by <i>Thiobacillus ferrooxidans</i> . <i>Canadian Journal of Microbiology</i> , <b>1997</b> , 43, 178-188	3.2	33
86	Architectural adaptation and protein expression patterns of <i>Salmonella enterica</i> serovar Enteritidis biofilms under laminar flow conditions. <i>International Journal of Food Microbiology</i> , <b>2008</b> , 123, 109-20	5.8	33
85	Community-level assessment of the effects of the broad-spectrum antimicrobial chlorhexidine on the outcome of river microbial biofilm development. <i>Applied and Environmental Microbiology</i> , <b>2008</b> , 74, 3541-50	4.8	33
84	Growth of Microorganisms on Surfaces <b>1995</b> , 15-45		33
83	Effect of gravity on bacterial deposition and orientation in laminar flow environments. <i>Biofouling</i> , <b>1990</b> , 2, 335-350	3.3	32
82	Stable <i>Bacillus thuringiensis</i> (Bt) toxin content in interspecific F1 and backcross populations of wild <i>Brassica rapa</i> after Bt gene transfer. <i>Molecular Ecology</i> , <b>2004</b> , 13, 237-41	5.7	31
81	Quantifying CO <sub>2</sub> fluxes from soil surfaces to the atmosphere. <i>Journal of Hydrology</i> , <b>2002</b> , 260, 1-14	6	31
80	Galvanic sulphide oxidation as a metal-leaching mechanism and its environmental implications. <i>Geochemistry: Exploration, Environment, Analysis</i> , <b>2003</b> , 3, 337-343	1.8	30
79	Effects of fullerene (C <sub>60</sub> ), multi-wall carbon nanotubes (MWCNT), single wall carbon nanotubes (SWCNT) and hydroxyl and carboxyl modified single wall carbon nanotubes on riverine microbial communities. <i>Environmental Science and Pollution Research</i> , <b>2016</b> , 23, 10090-102	5.1	29
78	Distribution and Biogeochemical Importance of Bacterial Populations in a Thick Clay-Rich Aquitard System. <i>Microbial Ecology</i> , <b>2000</b> , 40, 273-291	4.4	29
77	Complex organic corona formation on carbon nanotubes reduces microbial toxicity by suppressing reactive oxygen species production. <i>Environmental Science: Nano</i> , <b>2016</b> , 3, 181-189	7.1	28
76	Biotransformation of selenium and arsenic in multi-species biofilm. <i>Environmental Chemistry</i> , <b>2011</b> , 8, 543	3.2	27
75	Behavioral analysis of <i>Vibrio parahaemolyticus</i> variants in high- and low-viscosity microenvironments by use of digital image processing. <i>Journal of Bacteriology</i> , <b>1992</b> , 174, 5732-9	3.5	27

74	Investigation of microbial biofilm structure by laser scanning microscopy. <i>Advances in Biochemical Engineering/Biotechnology</i> , <b>2014</b> , 146, 1-51	1.7	26
73	Effect of CNP on composition and structure of lotic biofilms as detected with lectin-specific glycoconjugates. <i>Aquatic Microbial Ecology</i> , <b>2005</b> , 38, 283-294	1.1	25
72	Analysis of biofilm formation using 2D vs 3D digital imaging. <i>Journal of Applied Bacteriology</i> , <b>1993</b> , 74, 52S-66S		24
71	Microscopic characterization of the bacterial cell envelope of <i>Planococcus halocryophilus</i> Or1 during subzero growth at $-15^{\circ}\text{C}$ . <i>Polar Biology</i> , <b>2016</b> , 39, 701-712	2	23
70	Feeding behaviour and grazing impacts of a <i>Euplotes</i> sp. on attached bacteria. <i>Canadian Journal of Microbiology</i> , <b>1998</b> , 44, 623-629	3.2	23
69	Advanced techniques for in situ analysis of the biofilm matrix (structure, composition, dynamics) by means of laser scanning microscopy. <i>Methods in Molecular Biology</i> , <b>2014</b> , 1147, 43-64	1.4	23
68	Assessment of the effects of oil sands naphthenic acids on the growth and morphology of <i>Chlamydomonas reinhardtii</i> using microscopic and spectromicroscopic techniques. <i>Science of the Total Environment</i> , <b>2013</b> , 442, 116-22	10.2	22
67	Aerobic biofilms grown from Athabasca watershed sediments are inhibited by increasing concentrations of bituminous compounds. <i>Applied and Environmental Microbiology</i> , <b>2013</b> , 79, 7398-412	4.8	22
66	Transport and bacterial interactions of three bacterial strains in saturated column experiments. <i>Environmental Science &amp; Technology</i> , <b>2011</b> , 45, 2116-23	10.3	22
65	In Situ Characterization of Extracellular Polymeric Substances (EPS) in Biofilm Systems <b>1999</b> , 21-47		22
64	Cell Wall Biomolecular Composition Plays a Potential Role in the Host Type II Resistance to Fusarium Head Blight in Wheat. <i>Frontiers in Microbiology</i> , <b>2016</b> , 7, 910	5.7	22
63	Resilience and recovery: the effect of triclosan exposure timing during development, on the structure and function of river biofilm communities. <i>Aquatic Toxicology</i> , <b>2015</b> , 161, 253-66	5.1	21
62	Multispecies Biofilms Transform Selenium Oxyanions into Elemental Selenium Particles: Studies Using Combined Synchrotron X-ray Fluorescence Imaging and Scanning Transmission X-ray Microscopy. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 10343-10350	10.3	21
61	Genomics technologies for environmental science. <i>Environmental Science &amp; Technology</i> , <b>2001</b> , 35, 364 A-370 A	10.3	21
60	Enumeration of sulfur-oxidizing populations in Saskatchewan agricultural soils. <i>Canadian Journal of Soil Science</i> , <b>1991</b> , 71, 127-136	1.4	21
59	Effects of glyphosate and two herbicide mixtures on microbial communities in prairie wetland ecosystems: a mesocosm approach. <i>Journal of Environmental Quality</i> , <b>2012</b> , 41, 732-43	3.4	20
58	Influence of nutrient inputs, hexadecane, and temporal variations on denitrification and community composition of river biofilms. <i>Applied and Environmental Microbiology</i> , <b>2006</b> , 72, 575-84	4.8	20
57	Construction and Testing of a Durable Platinum Wire Eh Electrode for In Situ Redox Measurements in the Subsurface. <i>Ground Water Monitoring and Remediation</i> , <b>1999</b> , 19, 132-136	1.4	19

56	One-photon versus Two-photon Laser Scanning Microscopy and Digital Image Analysis of Microbial Biofilms. <i>Methods in Microbiology</i> , <b>2004</b> , 34, 89-136	2.8	18
55	An assessment of a mesocosm approach to the study of microbial respiration in a sandy unsaturated zone. <i>Ground Water</i> , <b>2001</b> , 39, 391-400	2.4	18
54	Molecular analysis and development of 16S rRNA oligonucleotide probes to characterize a diclofop-methyl-degrading biofilm consortium. <i>Canadian Journal of Microbiology</i> , <b>2000</b> , 46, 133-42	3.2	18
53	Design and Evaluation of a Mesoscale Model Vadose Zone and Ground-Water System. <i>Ground Water</i> , <b>1993</b> , 31, 446-455	2.4	18
52	IMPACT OF ELEMENTAL SULFUR FERTILIZATION ON AGRICULTURAL SOILS. II. EFFECTS ON SULFUR-OXIDIZING POPULATIONS AND OXIDATION RATES. <i>Canadian Journal of Soil Science</i> , <b>1988</b> , 68, 475-483	1.4	18
51	Microscale Analyses of the Formation and Nature of Microbial Biofilm Communities in River Systems. <i>Reviews in Environmental Science and Biotechnology</i> , <b>2003</b> , 2, 85-97	13.9	17
50	Microbial interactions with naturally occurring hydrophobic sediments: Influence on sediment and associated contaminant mobility. <i>Water Research</i> , <b>2016</b> , 92, 121-30	12.5	16
49	SOFT X-RAY MICROSCOPY OF SOFT MATTER [HARD INFORMATION FROM TWO SOFTS. <i>Surface Review and Letters</i> , <b>2002</b> , 09, 193-201	1.1	16
48	Soft X-ray spectromicroscopy for speciation, quantitation and nano-eco-toxicology of nanomaterials. <i>Journal of Microscopy</i> , <b>2016</b> , 261, 130-47	1.9	15
47	Relationship between water quality parameters and bacterial indicators in a large prairie reservoir: Lake Diefenbaker, Saskatchewan, Canada. <i>Canadian Journal of Microbiology</i> , <b>2014</b> , 60, 243-9	3.2	15
46	Spatial variation in microbial community structure, richness, and diversity in an alluvial aquifer. <i>Canadian Journal of Microbiology</i> , <b>2012</b> , 58, 1135-51	3.2	15
45	Biogeochemical activity of microbial biofilms in the water column overlying uranium mine tailings. <i>Journal of Applied Microbiology</i> , <b>2014</b> , 117, 1079-94	4.7	14
44	Accumulation of short-chain fatty acids in an aquitard linked to anaerobic biodegradation of petroleum hydrocarbons. <i>Applied Geochemistry</i> , <b>2009</b> , 24, 77-85	3.5	14
43	Most-probable-number procedure to enumerate So-oxidizing, thiosulfate producing heterotrophs in soil. <i>Soil Biology and Biochemistry</i> , <b>1988</b> , 20, 577-578	7.5	14
42	In situ evidence for metabolic and chemical microdomains in the structured polymer matrix of bacterial microcolonies. <i>FEMS Microbiology Ecology</i> , <b>2016</b> , 92,	4.3	13
41	Effects of erythromycin, trimethoprim and clindamycin on attached microbial communities from an effluent dominated prairie stream. <i>Ecotoxicology and Environmental Safety</i> , <b>2016</b> , 132, 31-9	7	13
40	Microscopic and spectroscopic analyses of chlorhexidine tolerance in Delftia acidovorans biofilms. <i>Antimicrobial Agents and Chemotherapy</i> , <b>2014</b> , 58, 5673-86	5.9	13
39	Effect of pumping on the spatio-temporal distribution of microbial communities in a water well field. <i>Water Research</i> , <b>2012</b> , 46, 1286-300	12.5	13



38	Extracellular polymeric substances in microbial biofilms <b>2010</b> , 733-758		12
37	Two-Photon Imaging for Studying the Microbial Ecology of Biofilm Systems. <i>Microbes and Environments</i> , <b>2004</b> , 19, 1-6	2.6	12
36	Tandem mass spectrometric identification of transformation products in degradative biofilms.. <i>Analytical Chemistry</i> , <b>1995</b> , 67, 1831-1837	7.8	12
35	The Ecobiomics project: Advancing metagenomics assessment of soil health and freshwater quality in Canada. <i>Science of the Total Environment</i> , <b>2020</b> , 710, 135906	10.2	11
34	Bacterial diversity and composition of an alkaline uranium mine tailings-water interface. <i>Journal of Microbiology</i> , <b>2013</b> , 51, 558-69	3	10
33	Inheritance of GFP-Bt transgenes from Brassica napus in backcrosses with three wild B. rapa accessions. <i>Environmental Biosafety Research</i> , <b>2004</b> , 3, 45-54		10
32	Chemically Sensitive Tomography at 50 nm Spatial Resolution using a Soft X-ray Scanning Transmission X-Ray Microscope. <i>Microscopy and Microanalysis</i> , <b>2006</b> , 12, 1412-1413	0.5	9
31	Study of Attached Cells in Continuous-Flow Slide Culture <b>2019</b> , 117-138		8
30	Transient response of microbial communities in a water well field to application of an impressed current. <i>Water Research</i> , <b>2013</b> , 47, 672-82	12.5	7
29	Rates of microbial elemental sulfur oxidation and 18O and 34S isotopic fractionation under varied nutrient and temperature regimes. <i>Applied Geochemistry</i> , <b>2012</b> , 27, 186-196	3.5	7
28	Laser Scanning Microscopy for Microbial Floccs and Particles 469-505		7
27	Importance of the RpoE Regulon in Maintaining the Lipid Bilayer during Antimicrobial Treatment with the Polycationic Agent, Chlorhexidine. <i>Proteomics</i> , <b>2018</b> , 18, 1700285	4.8	6
26	Proteomic Analyses of Chlorhexidine Tolerance Mechanisms in Delftia acidovorans Biofilms. <i>MSphere</i> , <b>2016</b> , 1,	5	6
25	Controls and rates of acid production in commercial-scale sulfur blocks. <i>Journal of Environmental Quality</i> , <b>2010</b> , 39, 834-44	3.4	6
24	Transport and fate of the herbicide diclofop-methyl in a large-scale physical model. <i>Journal of Contaminant Hydrology</i> , <b>1995</b> , 19, 69-83	3.9	6
23	Comparative responses of river biofilms at the community level to common organic solvent and herbicide exposure. <i>Environmental Science and Pollution Research</i> , <b>2016</b> , 23, 4282-93	5.1	5
22	Aquatic Biofilms: Development, Cultivation, Analyses, and Applications <b>2015</b> , 4.2.3-1-4.2.3-33		5
21	Fate of the Herbicide Alachlor Exposed to Different Microbial Consortia in Aquatic Systems. <i>Water, Air, and Soil Pollution</i> , <b>2015</b> , 226, 1	2.6	5

20	Influence of nutrients, hexadecane, and temporal variations on nitrification and exopolysaccharide composition of river biofilms. <i>Canadian Journal of Microbiology</i> , <b>2006</b> , 52, 786-97	3.2	5
19	Environmental Biofilms as Reservoirs for Antimicrobial Resistance.. <i>Frontiers in Microbiology</i> , <b>2021</b> , 12, 766242	5.7	5
18	N,N-Diethyl-m-Toluamide Exposure at an Environmentally Relevant Concentration Influences River Microbial Community Development. <i>Environmental Toxicology and Chemistry</i> , <b>2019</b> , 38, 2414-2425	3.8	4
17	Chemically sensitive 3D imaging at sub 100 nm spatial resolution using tomography in a scanning transmission x-ray microscope <b>2006</b> ,		4
16	Microscale and molecular analyses of river biofilm communities treated with microgram levels of cerium oxide nanoparticles indicate limited but significant effects. <i>Environmental Pollution</i> , <b>2020</b> , 256, 113515	9.3	4
15	Biogeochemical Importance of the Bacterial Community in Uranium Waste Deposited at Key Lake, Northern Saskatchewan. <i>Geomicrobiology Journal</i> , <b>2016</b> , 33, 807-821	2.5	4
14	Metatranscriptomic Insights Into the Response of River Biofilm Communities to Ionic and Nano-Zinc Oxide Exposures. <i>Frontiers in Microbiology</i> , <b>2020</b> , 11, 267	5.7	3
13	Synchrotron-Based X-Ray and FTIR Absorption Spectromicroscopies of Organic Contaminants in the Environment <b>2011</b> , 341-368		3
12	Cells in shearable and nonshearable regions of Salmonella enterica serovar Enteritidis biofilms are morphologically and physiologically distinct. <i>Canadian Journal of Microbiology</i> , <b>2009</b> , 55, 955-66	3.2	3
11	Visualization of the Sorption of Nickel within Exopolymer Microdomains of Bacterial Microcolonies Using Confocal and Scanning Electron Microscopy. <i>Microbes and Environments</i> , <b>2019</b> , 34, 76-82	2.6	2
10	Impact of coal combustion waste on the microbiology of a model aquifer. <i>Water, Air, and Soil Pollution</i> , <b>1994</b> , 74, 103-120	2.6	2
9	Naturally occurring phenanthrene degrading bacteria associated with seeds of various plant species. <i>International Journal of Phytoremediation</i> , <b>2016</b> , 18, 423-5	3.9	2
8	Multi-Parameter Laser Imaging Reveals Complex Microscale Biofilm Matrix in a Thick (4,000 h) Aerobic Methanol Oxidizing Community. <i>Frontiers in Microbiology</i> , <b>2018</b> , 9, 2186	5.7	2
7	Water flow and storage in fractured, unsaturated sulphur blocks. <i>Canadian Geotechnical Journal</i> , <b>2011</b> , 48, 810-825	3.2	1
6	The role of rpoS on the survival of a p-nitrophenol degrading Pseudomonas putida strain in planktonic and biofilm phases. <i>Canadian Journal of Microbiology</i> , <b>2009</b> , 55, 1176-86	3.2	1
5	Mapping Biopolymer Distributions In Microbial Communities <b>2004</b> , 121-142		1
4	Laser Scanning Microscopy in Combination with Fluorescence Techniques for Biofilm Study		1
3	Impact of sample collection on prokaryotic and eukaryotic diversity of niche environments of the oil-sand mining impacted Athabasca River. <i>Canadian Journal of Microbiology</i> , <b>2021</b> , 67, 813-826	3.2	1

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| 2 | Spatially Resolved Soft X-ray Spectroscopy in Scanning X-ray Microscopes. <i>Microscopy and Microanalysis</i> , <b>2019</b> , 25, 254-255 | 0.5 |
| 1 | Protocol for Laser Scanning Microscopy of Microorganisms on Hydrocarbons. <i>Springer Protocols</i> , <b>2014</b> , 29-47                 | 0.3 |