Darren R Korber

List of Publications by Year
in descending order

72	2,603	172457 29	206112 48
papers	citations	h-index	g-index

73	73	73	3071
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Next-Generation Sequencing of Microbial Communities in the Athabasca River and Its Tributaries in Relation to Oil Sands Mining Activities. Applied and Environmental Microbiology, 2012, 78, 7626-7637.	3.1	193
2	Behavior ofPseudomonas fluorescens within the hydrodynamic boundary layers of surface microenvironments. Microbial Ecology, 1987, 14, 1-14.	2.8	167
3	Effect of laminar flow velocity on the kinetics of surface recolonization by Mot+ and Motâ^' Pseudomonas fluorescens. Microbial Ecology, 1989, 18, 1-19.	2.8	136
4	Probiotic-based strategies for therapeutic and prophylactic use against multiple gastrointestinal diseases. Frontiers in Microbiology, 2015, 6, 685.	3.5	133
5	Effect of Fermentation on the Protein Digestibility and Levels of Non-Nutritive Compounds of Pea Protein Concentrate. Food Technology and Biotechnology, 2018, 56, 257-264.	2.1	92
6	Adaptive Resistance and Differential Protein Expression of Salmonella enterica Serovar Enteritidis Biofilms Exposed to Benzalkonium Chloride. Antimicrobial Agents and Chemotherapy, 2006, 50, 3588-3596.	3.2	88
7	Effect of Motility on Surface Colonization and Reproductive Success of Pseudomonas fluorescens in Dual-Dilution Continuous Culture and Batch Culture Systems. Applied and Environmental Microbiology, 1994, 60, 1421-1429.	3.1	86
8	Quantitative mapping of chlorhexidine in natural river biofilms. Science of the Total Environment, 2006, 369, 369-383.	8.0	74
9	High pH during Trisodium Phosphate Treatment Causes Membrane Damage and Destruction of Salmonella enterica Serovar Enteritidis. Applied and Environmental Microbiology, 2003, 69, 122-129.	3.1	66
10	Pea protein-based capsules for probiotic and prebiotic delivery. International Journal of Food Science and Technology, 2011, 46, 2248-2256.	2.7	58
11	Effect of soil composition, temperature, indigenous microflora, and environmental conditions on the survival ofEscherichia coliO157:H7. Canadian Journal of Microbiology, 2007, 53, 822-829.	1.7	56
12	Differential Adaptive Response and Survival of Salmonella enterica Serovar Enteritidis Planktonic and Biofilm Cells Exposed to Benzalkonium Chloride. Antimicrobial Agents and Chemotherapy, 2008, 52, 3669-3680.	3.2	56
13	Molecular and microscopic assessment of the effects of caffeine, acetaminophen, diclofenac, and their mixtures on river biofilm communities. Environmental Toxicology and Chemistry, 2012, 31, 508-517.	4.3	56
14	Treatment of Salmonella enterica Serovar Enteritidis with a Sublethal Concentration of Trisodium Phosphate or Alkaline pH Induces Thermotolerance. Applied and Environmental Microbiology, 2004, 70, 4613-4620.	3.1	55
15	ZnO Nanoparticles Impose a Panmetabolic Toxic Effect Along with Strong Necrosis, Inducing Activation of the Envelope Stress Response in Salmonella enterica Serovar Enteritidis. Antimicrobial Agents and Chemotherapy, 2015, 59, 3317-3328.	3.2	55
16	Metatranscriptomic Analysis of the Response of River Biofilms to Pharmaceutical Products, Using Anonymous DNA Microarrays. Applied and Environmental Microbiology, 2010, 76, 5432-5439.	3.1	50
17	Colonization and bioherbicidal activity on green foxtail byPseudomonas fluorescensBRG100 in a pesta formulation. Canadian Journal of Microbiology, 2012, 58, 1-9.	1.7	50
18	Development of extrusion-based legume protein isolateâ€“alginate capsules for the protection and delivery of the acid sensitive probiotic, Bifidobacterium adolescentis. Food Research International, 2013, 54, 730-737.	6.2	49

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19	Morphological and biochemical changes inPseudomonas fluorescensbiofilms induced by sub-inhibitory exposure to antimicrobial agents. Canadian Journal of Microbiology, 2009, 55, 163-178.	1.7	47
20	Prevalence of Escherichia coli O157 in Saskatchewan Cattle: Characterization of Isolates by Using Random Amplified Polymorphic DNA PCR, Antibiotic Resistance Profiles, and Pathogenicity Determinants. Applied and Environmental Microbiology, 2006, 72, 4347-4355.	3.1	40
21	Prolonged cold stress response of Escherichia coli O157 and the role of rpoS. International Journal of Food Microbiology, 2011, 146, 163-169.	4.7	40
22	Germ Theory Vs. Community Theory in Understanding and Controlling the Proliferation of Biofilms. Advances in Dental Research, 1997, 11, 4-13.	3.6	39
23	Effect of gravity on bacterial deposition and orientation in laminar flow environments. Biofouling, 1990, 2, 335-350.	2.2	38
24	Architectural adaptation and protein expression patterns of Salmonella enterica serovar Enteritidis biofilms under laminar flow conditions. International Journal of Food Microbiology, 2008, 123, 109-120.	4.7	37
25	Monitoring the fate of copper nanoparticles in river biofilms using scanning transmission X-ray microscopy (STXM). Chemical Geology, 2012, 329, 18-25.	3.3	37
26	Isolation and characterization of novel 1,3-propanediol-producing Lactobacillus panis PM1 from bioethanol thin stillage. Applied Microbiology and Biotechnology, 2013, 97, 417-428.	3.6	37
27	Antimicrobial Biodegradable Food Packaging Based on Chitosan and Metal/Metal-Oxide Bio-Nanocomposites: A Review. Polymers, 2021, 13, 2790.	4.5	37
28	Entrapment, survival and release of Bifidobacterium adolescentis within chickpea protein-based microcapsules. Food Research International, 2014, 55, 20-27.	6.2	36
29	Environmental Biofilms as Reservoirs for Antimicrobial Resistance. Frontiers in Microbiology, 2021, 12, 766242.	3.5	31
30	Escherichia coli O157: Insights into the adaptive stress physiology and the influence of stressors on epidemiology and ecology of this human pathogen. Critical Reviews in Microbiology, 2016, 42, 83-93.	6.1	30
31	Scientific Prospects for Cannabis-Microbiome Research to Ensure Quality and Safety of Products. Microorganisms, 2020, 8, 290.	3.6	30
32	Multilayer photonic films based on interlocked chiral-nematic cellulose nanocrystals in starch/chitosan. Carbohydrate Polymers, 2022, 275, 118709.	10.2	30
33	Evaluation of pea proteinâ€“polysaccharide matrices for encapsulation of acid-sensitive bacteria. Food Research International, 2015, 70, 118-124.	6.2	29
34	Contributions of citrate in redox potential maintenance and ATP production: metabolic pathways and their regulation in Lactobacillus panis PM1. Applied Microbiology and Biotechnology, 2013, 97, 8693-8703.	3.6	27
35	Effect of Lactobacillus plantarum Fermentation on the Surface and Functional Properties of Pea Protein-Enriched Flour. Food Technology and Biotechnology, 2018, 56, 411-420.	2.1	27
36	Effect of fermentation time on the nutritional properties of pea proteinâ€enriched flour fermented by Aspergillus oryzae and Aspergillus niger. Cereal Chemistry, 2020, 97, 104-113.	2.2	27

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37	Aerobic Biofilms Grown from Athabasca Watershed Sediments Are Inhibited by Increasing Concentrations of Bituminous Compounds. Applied and Environmental Microbiology, 2013, 79, 7398-7412.	3.1	26
38	Measuring microbial metabolism in atypical environments: Bentonite in used nuclear fuel storage. Journal of Microbiological Methods, 2016, 120, 79-90.	1.6	26
39	Physicochemical properties of enzymatically modified pea proteinâ€enriched flour treated by different enzymes to varying levels of hydrolysis. Cereal Chemistry, 2020, 97, 326-338.	2.2	26
40	Microbes at Surface-Air Interfaces: The Metabolic Harnessing of Relative Humidity, Surface Hygroscopicity, and Oligotrophy for Resilience. Frontiers in Microbiology, 2016, 7, 1563.	3.5	25
41	Bacterial diversity and production of sulfide in microcosms containing uncompacted bentonites. Heliyon, 2018, 4, e00722.	3.2	24
42	Regulation of Dual Glycolytic Pathways for Fructose Metabolism in Heterofermentative Lactobacillus panis PM1. Applied and Environmental Microbiology, 2013, 79, 7818-7826.	3.1	23
43	Survival of probiotics in pea protein-alginate microcapsules with or without chitosan coating during storage and in a simulated gastrointestinal environment. Food Science and Biotechnology, 2017, 26, 189-194.	2.6	23
44	Effect of fermentation time on the physicochemical and functional properties of pea proteinâ€enriched flour fermented by Aspergillus oryzae and Aspergillus niger. Cereal Chemistry, 2020, 97, 416-428.	2.2	21
45	Metabolic Engineering of a Glycerol-Oxidative Pathway in Lactobacillus panis PM1 for Utilization of Bioethanol Thin Stillage: Potential To Produce Platform Chemicals from Glycerol. Applied and Environmental Microbiology, 2014, 80, 7631-7639.	3.1	20
46	Microscopic and Spectroscopic Analyses of Chlorhexidine Tolerance in Delftia acidovorans Biofilms. Antimicrobial Agents and Chemotherapy, 2014, 58, 5673-5686.	3.2	20
47	Encapsulation of Bifidobacterium adolescentis cells with legume proteins and survival under stimulated gastric conditions and during storage in commercial fruit juices. Food Science and Biotechnology, 2015, 24, 383-391.	2.6	20
48	Bioconversion of glycerol to 1,3-propanediol in thin stillage-based media by engineered Lactobacillus panis PM1. Journal of Industrial Microbiology and Biotechnology, 2014, 41, 629-635.	3.0	19
49	Heat acclimation and the role of RpoS in prolonged heat shock of Escherichia coli O157. Food Microbiology, 2012, 30, 457-464.	4.2	18
50	Effect of glycerol on the physicochemical properties of films based on legume protein concentrates: A comparative study. Journal of Texture Studies, 2019, 50, 539-546.	2.5	17
51	Culturability and diversity of microorganisms recovered from an eight-year old highly-compacted, saturated MX-80 Wyoming bentonite plug. Applied Clay Science, 2016, 126, 245-250.	5.2	16
52	[1] Reporter systems for microscopic analysis of microbial biofilms. Methods in Enzymology, 1999, 310, 3-20.	1.0	14
53	Bacterial diversity and composition of an alkaline uranium mine tailings-water interface. Journal of Microbiology, 2013, 51, 558-569.	2.8	14
54	Molecular and Antimicrobial Susceptibility Analyses Distinguish Clinical from Bovine Escherichia coli O157 Strains. Journal of Clinical Microbiology, 2013, 51, 2082-2088.	3.9	13

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55	Nutritional properties of pea proteinâ€enriched flour treated with different proteases to varying degrees of hydrolysis. Cereal Chemistry, 2020, 97, 429-440.	2.2	12
56	Importance of the RpoE Regulon in Maintaining the Lipid Bilayer during Antimicrobial Treatment with the Polycationic Agent, Chlorhexidine. Proteomics, 2018, 18, 1700285.	2.2	10
57	Production of glycerol by Lactobacillus plantarum NRRL B-4496 and formation of hexamine during fermentation of pea protein enriched flour. Journal of Biotechnology, 2020, 323, 331-340.	3.8	9
58	Adaptation of bacterial communities to environmental transitions from labile to refractory substrates. International Microbiology, 2001, 4, 73-80.	2.4	8
59	A health metadata-based management approach for comparative analysis of high-throughput genetic sequences for quantifying antimicrobial resistance reduction in Canadian hog barns. Computational and Structural Biotechnology Journal, 2020, 18, 2629-2638.	4.1	8
60	Metatranscriptomic Insights Into the Response of River Biofilm Communities to Ionic and Nano-Zinc Oxide Exposures. Frontiers in Microbiology, 2020, 11, 267.	3.5	8
61	Sensitivity of two techniques to detect Escherichia coli O157 in naturally infected bovine fecal samples. Food Microbiology, 2007, 24, 633-639.	4.2	7
62	N,Nâ€Diethylâ€mâ€Toluamide Exposure at an Environmentally Relevant Concentration Influences River Microbial Community Development. Environmental Toxicology and Chemistry, 2019, 38, 2414-2425.	4.3	7
63	Pea-protein alginate encapsulation adversely affects development of clinical signs of Citrobacter rodentium-induced colitis in mice treated with probiotics. Canadian Journal of Microbiology, 2018, 64, 744-760.	1.7	5
64	Transcriptomics reveal core activities of the plant growth-promoting bacterium Delftia acidovorans RAY209 during interaction with canola and soybean roots. Microbial Genomics, 2020, 6, .	2.0	5
65	Biogeochemical Importance of the Bacterial Community in Uranium Waste Deposited at Key Lake, Northern Saskatchewan. Geomicrobiology Journal, 2016, 33, 807-821.	2.0	4
66	Piglet Gut and in-Barn Manure from Farms on a Raised without Antibiotics Program Display Reduced Antimicrobial Resistance but an Increased Prevalence of Pathogens. Antibiotics, 2021, 10, 1152.	3.7	4
67	Prediction of bacterial functional diversity in clay microcosms. Heliyon, 2021, 7, e08131.	3.2	4
68	Cells in shearable and nonshearable regions of Salmonella enterica serovar Enteritidis biofilms are morphologically and physiologically distinct. Canadian Journal of Microbiology, 2009, 55, 955-966.	1.7	3
69	Huddling together to survive: Population density as a survival strategy of non-spore forming bacteria under nutrient starvation and desiccation at solid-air interfaces. Microbiological Research, 2022, 258, 126997.	5.3	2
70	Impact of sample collection on prokaryotic and eukaryotic diversity of niche environments of the oil-sand mining impacted Athabasca River.. Canadian Journal of Microbiology, 2021, 67, 813-826.	1.7	1
71	Effect of Lactobacillus plantarum Fermentation on the Surface and Functional Properties of Pea Protein-Enriched Flour. Food Technology and Biotechnology, 2018, 56, .	2.1	1
72	Draft Genome Sequence of Polaromonas eurypsychrophila AER18D-145, Isolated from a Uranium Tailings Management Facility in Northern Saskatchewan, Canada. Microbiology Resource Announcements, 2022, 11, e0001322.	0.6	1