Byron J. Adams

List of Publications by Year
in descending order

117 papers	6,743 citations	71061 41 h-index	66879 78 g-index
118 all docs	118 docs citations	118 times ranked	8303 citing authors

#	Article	IF	Citations
1	Response of Antarctic soil fauna to climateâ€driven changes since the Last Glacial Maximum. Global Change Biology, 2022, 28, 644-653.	4.2	5
2	Antarctic Water Tracks: Microbial Community Responses to Variation in Soil Moisture, pH, and Salinity. Frontiers in Microbiology, 2021, 12, 616730.	1.5	11
3	Geochemical zones and environmental gradients for soils from the central Transantarctic Mountains, Antarctica. Biogeosciences, 2021, 18, 1629-1644.	1.3	8
4	Connectivity: insights from the U.S. Long Term Ecological Research Network. Ecosphere, 2021, 12, e03432.	1.0	4
5	Exploring the Boundaries of Microbial Habitability in Soil. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2020JG006052.	1.3	18
6	Phagotrophic Protists and Their Associates: Evidence for Preferential Grazing in an Abiotically Driven Soil Ecosystem. Microorganisms, 2021, 9, 1555.	1.6	6
7	Antarctic ecosystems in transition â€“ life between stresses and opportunities. Biological Reviews, 2021, 96, 798-821.	4.7	53
8	Stable Isotopes of Nitrate, Sulfate, and Carbonate in Soils From the Transantarctic Mountains, Antarctica: A Record of Atmospheric Deposition and Chemical Weathering. Frontiers in Earth Science, 2020, 8, .	0.8	13
9	Shotgun metagenomics reveal a diverse assemblage of protists in a model Antarctic soil ecosystem. Environmental Microbiology, 2020, 22, 4620-4632.	1.8	13
10	Genetic diversity of soil invertebrates corroborates timing estimates for past collapses of the West Antarctic Ice Sheet. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 22293-22302.	3.3	29
11	A global database of soil nematode abundance and functional group composition. Scientific Data, 2020, 7, 103.	2.4	46
12	Geochemistry of aeolian material from the McMurdo Dry Valleys, Antarctica: Insights into Southern Hemisphere dust sources. Earth and Planetary Science Letters, 2020, 547, 116460.	1.8	10
13	First record of native entomopathogenic nematodes from Montana agroecosystems. Journal of Nematology, 2020, 52, 1-11.	0.4	1
14	Three new species of Longior Travassos & Kloss, 1958 (Nematoda: Thelastomatoidea:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2 Mexico and Colombia. Zootaxa, 2020, 4877, zootaxa.4877.1.5.	0.2	1
15	Soil nematode abundance and functional group composition at a global scale. Nature, 2019, 572, 194-198.	13.7	635
16	Development of an Evolutionary Tree Concept Inventory. Journal of Microbiology and Biology Education, 2019, 20, .	0.5	5
17	Provisional checklist of terrestrial heterotrophic protists from Antarctica. Antarctic Science, 2019, 31, 287-303.	0.5	9
18	Nematodes in a polar desert reveal the relative role of biotic interactions in the coexistence of soil animals. Communications Biology, 2019, 2, 63.	2.0	34

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19	Biotic interactions are an unexpected yet critical control on the complexity of an abiotically driven polar ecosystem. Communications Biology, 2019, 2, 62.	2.0	42
20	The Hydroecology of an Ephemeral Wetland in the McMurdo Dry Valleys, Antarctica. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 3814-3830.	1.3	7
21	Soil biological responses to C, N and P fertilization in a polar desert of Antarctica. Soil Biology and Biochemistry, 2018, 122, 7-18.	4.2	23
22	Stable C and N isotope ratios reveal soil food web structure and identify the nematode Eudorylaimus antarcticus as an omnivoreâ€“predator inÂTaylor Valley, Antarctica. Polar Biology, 2018, 41, 1013-1018.	0.5	37
23	Observed trends of soil fauna in the Antarctic Dry Valleys: early signs of shifts predicted under climate change. Ecology, 2018, 99, 312-321.	1.5	46
24	Soil Moisture Controls the Thermal Habitat of Active Layer Soils in the McMurdo Dry Valleys, Antarctica. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 46-59.	1.3	22
25	Aeolian Material Transport and Its Role in Landscape Connectivity in the McMurdo Dry Valleys, Antarctica. Journal of Geophysical Research F: Earth Surface, 2018, 123, 3323-3337.	1.0	25
26	Morphological and molecular characterization of Coynema poeyi (Coy, GarcÃa & Ãlvarez, 1993) (Oxyuridomorpha: Hystrignathidae) from Antillanax pertyi (Kaup, 1869) (Coleoptera: Passalidae) from Cuba and new locality records for the species. Zootaxa, 2018, 4497, 29.	0.2	0
27	Morphological examination and phylogenetic analysis clarify the taxonomic status of Cuban Longior Travassos & Kloss, 1958 (Nematoda: Thelastomatoidea: Hystrignathidae)Â. Zootaxa, 2018, 4399, 521.	0.2	2
28	When the cure killsâ€”CBD limits biodiversity research. Science, 2018, 360, 1405-1406.	6.0	99
29	Spatial and temporal patterns of microbial mats and associated invertebrates along an Antarctic stream. Polar Biology, 2018, 41, 1911-1921.	0.5	12
30	Stoichiometric Shifts in Soil C:N:P Promote Bacterial Taxa Dominance, Maintain Biodiversity, and Deconstruct Community Assemblages. Frontiers in Microbiology, 2018, 9, 1401.	1.5	56
31	Decadal ecosystem response to an anomalous melt season in a polar desert in Antarctica. Nature Ecology and Evolution, 2017, 1, 1334-1338.	3.4	79
32	Decoupled responses of soil bacteria and their invertebrate consumer to warming, but not freezeâ€“thaw cycles, in the Antarctic Dry Valleys. Ecology Letters, 2017, 20, 1242-1249.	3.0	18
33	Promoting the Multidimensional Character of Scientific Reasoning. Journal of Microbiology and Biology Education, 2017, 18, .	0.5	1
34	Aerobiology Over Antarctica â€“ A New Initiative for Atmospheric Ecology. Frontiers in Microbiology, 2016, 7, 16.	1.5	65
35	High levels of intraspecific genetic divergences revealed for Antarctic springtails: evidence for small-scale isolation during Pleistocene glaciation. Biological Journal of the Linnean Society, 2016, 119, 166-178.	0.7	22
36	The Soil Geochemistry in the Beardmore Glacier Region, Antarctica: Implications for Terrestrial Ecosystem History. Scientific Reports, 2016, 6, 26189.	1.6	21

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37	Biological control and nutrition: Food for thought. Biological Control, 2016, 97, 131-138.	1.4	16
38	Virulence modulation in Photorhabdus spp.. Nematology, 2016, 18, 711-717.	0.2	1
39	Natural Selection in Virulence Genes of Francisella tularensis. Journal of Molecular Evolution, 2016, 82, 264-278.	0.8	4
40	Impact of diurnal freezeâ€“thaw cycles on the soil nematode Scottnema lindsayae in Taylor Valley, Antarctica. Polar Biology, 2016, 39, 583-592.	0.5	16
41	Genetic diversity among populations of Antarctic springtails (Collembola) within the Mackay Glacier ecotone. Genome, 2016, 59, 762-770.	0.9	13
42	The Impact of a Large-Scale Climate Event on Antarctic Ecosystem Processes. BioScience, 2016, 66, 848-863.	2.2	51
43	Evolution of virulence in Photorhabdus spp., entomopathogenic nematode symbionts. Systematic and Applied Microbiology, 2016, 39, 173-179.	1.2	17
44	Environmental drivers of trait changes in Photorhabdus luminescens. Biological Control, 2016, 92, 145-152.	1.4	3
45	First record of the land planarian Bipalium kewense Moseley, 1878 (Tricladida: Geoplanidae: Bipaliinae) from Cuba. BioInvasions Records, 2016, 5, 127-132.	0.4	5
46	Comparative genomics of Steinernema reveals deeply conserved gene regulatory networks. Genome Biology, 2015, 16, 200.	3.8	77
47	Mitochondrial DNA analyses reveal widespread tardigrade diversity in Antarctica. Invertebrate Systematics, 2015, 29, 578.	0.5	33
48	Nucleation and propagation of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mrow><mml:mo stretchy="false">{</mml:mo><mml:mn>1</mml:mn><mml:mspace width="0.12em" /><mml:mn>0</mml:mn><mml:mspace width="0.12em" /><mml:mover accent="true"><mml:mrow><mml:mn>1</mml:mn></mml:mrow><mml:mrow><mml:mo>Â¯</mml:mo></mml:mrow></mml:mover><m width="0.12em" /><mml:mn>2</mml:mn><mml:mo stretchy="false">}</mml:mo></mml:mrow></mml:mat	3.8	178
49	Ecological Biogeography of the Terrestrial NematodesÂof Victoria Land, Antarctica. ZooKeys, 2014, 419, 29-71.	0.5	44
50	Tardigrades of North America: Records for Five Marine Species from the Pacific Coast. Transactions of the Kansas Academy of Science, 2014, 117, 281-286.	0.0	7
51	Understanding Terrestrial Ecosystem Response to Antarctic Climate Change. Eos, 2013, 94, 33-33.	0.1	2
52	Tardigrades of Alaska: distribution patterns, diversity and species richness. Polar Research, 2013, 32, 18793.	1.6	19
53	A Lover and a Fighter: The Genome Sequence of an Entomopathogenic Nematode Heterorhabditis bacteriophora. PLoS ONE, 2013, 8, e69618.	1.1	89
54	An Entomopathogenic Nematode by Any Other Name. PLoS Pathogens, 2012, 8, e1002527.	2.1	189

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55	The ecology of pulse events: insights from an extreme climatic event in a polar desert ecosystem. Ecosphere, 2012, 3, 1-15.	1.0	69
56	Cross-biome metagenomic analyses of soil microbial communities and their functional attributes. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 21390-21395.	3.3	1,260
57	Thawing permafrost alters nematode populations and soil habitat characteristics in an Antarctic polar desert ecosystem. Pedobiologia, 2012, 55, 75-81.	0.5	14
58	Antarctic Tardigrada: a first step in understanding molecular operational taxonomic units (MOTUs) and biogeography of cryptic meiofauna. Invertebrate Systematics, 2012, 26, 526.	0.5	38
59	Nematode communities of Byers Peninsula, Livingston Island, maritime Antarctica. Antarctic Science, 2011, 23, 349-357.	0.5	32
60	Phylogenetic and cophylogenetic relationships of entomopathogenic nematodes (Heterorhabditis:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5 Phylogenetics and Evolution, 2011, 59, 271-280.	1.2	46
61	Outcrossing and crossbreeding recovers deteriorated traits in laboratory cultured Steinernema carpocapsae nematodes. International Journal for Parasitology, 2011, 41, 801-809.	1.3	22
62	Antarctic nematode communities: observed and predicted responses to climate change. Polar Biology, 2011, 34, 1701-1711.	0.5	46
63	Latitudinal distribution and mitochondrial DNA (COI) variability of Stereotydeus spp. (Acari:) Tj ETQq1 1 0.784314 rgBT /Overl 749-756.	0.5	16
64	The Antarctic Nematode Plectus murrayi: An Emerging Model to Study Multiple Stress Survival. Cold Spring Harbor Protocols, 2010, 2010, pdb.emo142-pdb.emo142.	0.2	4
65	Experimentally increased snow accumulation alters soil moisture and animal community structure in a polar desert. Polar Biology, 2010, 33, 897-907.	0.5	39
66	A robust phylogenetic framework for the bacterial genus Photorhabdus and its use in studying the evolution and maintenance of bioluminescence: A case for 16S, gyrB, and glnA. Molecular Phylogenetics and Evolution, 2010, 57, 728-740.	1.2	23
67	Culturing the Antarctic Nematode Plectus murrayi. Cold Spring Harbor Protocols, 2010, 2010, pdb.prot5522-pdb.prot5522.	0.2	8
68	Effect of slow desiccation and freezing on gene transcription and stress survival of an Antarctic nematode. Journal of Experimental Biology, 2010, 213, 1803-1812.	0.8	45
69	Antarctic climate change and the environment. Antarctic Science, 2009, 21, 541-563.	0.5	195
70	Long-term experimental warming reduces soil nematode populations in the McMurdo Dry Valleys, Antarctica. Soil Biology and Biochemistry, 2009, 41, 2052-2060.	4.2	90
71	Transcriptomic analysis of the entomopathogenic nematode Heterorhabditis bacteriophora TTO1. BMC Genomics, 2009, 10, 205.	1.2	20
72	Transcriptional profiling of trait deterioration in the insect pathogenic nematode Heterorhabditis bacteriophora. BMC Genomics, 2009, 10, 609.	1.2	23

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73	Desiccation survival in an Antarctic nematode: molecular analysis using expressed sequenced tags. BMC Genomics, 2009, 10, 69.	1.2	76
74	Characterization of biocontrol traits in the entomopathogenic nematode Heterorhabditis georgiana (Kesha strain), and phylogenetic analysis of the nematodeâ€™s symbiotic bacteria. Biological Control, 2009, 51, 377-387.	1.4	33
75	Evolution Education in Utah: A State Office of Educationâ€“University Partnership Focuses on Why Evolution Matters. Evolution: Education and Outreach, 2009, 2, 349-358.	0.3	4
76	Terrestrial mesofauna in above- and below-ground habitats: Taylor Valley, Antarctica. Polar Biology, 2009, 32, 1549-1558.	0.5	18
77	Environmental DNA sequencing primers for eutardigrades and bdelloid rotifers. BMC Ecology, 2009, 9, 25.	3.0	25
78	Where's the ecology in molecular ecology?. Oikos, 2009, 118, 1601-1609.	1.2	20
79	Phylogenetics and population genetics of entomopathogenic and insect-parasitic nematodes.. , 2009, , 166-192.		2
80	Effects of Human Trampling on Populations of Soil Fauna in the McMurdo Dry Valleys, Antarctica. Conservation Biology, 2008, 22, 1544-1551.	2.4	37
81	Decline in a dominant invertebrate species contributes to altered carbon cycling in a lowâ€diversity soil ecosystem. Global Change Biology, 2008, 14, 1734-1744.	4.2	60
82	Comparative phylogeography of codistributed species of ChileanLiolaemus(Squamata:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382	2.0	69
83	EXPRESSED SEQUENCE TAG ANALYSIS OF GENE REPRESENTATION IN INSECT PARASITIC NEMATODE HETERORHABDITIS BACTERIOPHORA. Journal of Parasitology, 2007, 93, 1343-1349.	0.3	17
84	The southernmost worm, Scottnema lindsayae (Nematoda): diversity, dispersal and ecological stability. Polar Biology, 2007, 30, 809-815.	0.5	46
85	Identification of Pratylenchus thornei, the cereal and legume root-lesion nematode, based on SCAR-PCR and satellite DNA. European Journal of Plant Pathology, 2007, 118, 115-125.	0.8	33
86	Unique Similarity of Faunal Communities across Aquaticâ€“Terrestrial Interfaces in a Polar Desert Ecosystem. Ecosystems, 2007, 10, 523-535.	1.6	29
87	Reprint of â€œBiodiversity and systematics of nematodeâ€“bacterium entomopathogensâ€•[Biol. Control 37 (2006) 32â€“49]. Biological Control, 2006, 38, 4-21.	1.4	54
88	Biodiversity and systematics of nematodeâ€“bacterium entomopathogens. Biological Control, 2006, 37, 32-49.	1.4	113
89	Phylogeny of Cephalobina (Nematoda): Molecular evidence for recurrent evolution of probolae and incongruence with traditional classifications. Molecular Phylogenetics and Evolution, 2006, 40, 696-711.	1.2	84
90	Wind dispersal of soil invertebrates in the McMurdo Dry Valleys, Antarctica. Polar Biology, 2006, 29, 346-352.	0.5	134

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91	A synthesis of soil biodiversity and ecosystem functioning in Victoria Land, Antarctica. Soil Biology and Biochemistry, 2006, 38, 3001-3002.	4.2	8
92	Biotic interactions in Antarctic terrestrial ecosystems: Are they a factor?. Soil Biology and Biochemistry, 2006, 38, 3035-3040.	4.2	167
93	Diversity and distribution of Victoria Land biota. Soil Biology and Biochemistry, 2006, 38, 3003-3018.	4.2	286
94	Source of trait deterioration in entomopathogenic nematodes Heterorhabditis bacteriophora and Steinernema carpocapsae during in vivo culture. Nematology, 2006, 8, 397-409.	0.2	47
95	Molecular and morphological consilience in the characterisation and delimitation of five nematode species from Florida belonging to the Xiphinema americanum-group. Nematology, 2006, 8, 521-532.	0.2	30
96	Comparing Phylogenetic Codivergence between Polyomaviruses and Their Hosts. Journal of Virology, 2006, 80, 5663-5669.	1.5	71
97	Co-variation in soil biodiversity and biogeochemistry in northern and southern Victoria Land, Antarctica. Antarctic Science, 2006, 18, 535-548.	0.5	127
98	Phylogeny of Meloidogyne spp. based on 18S rDNA and the intergenic region of mitochondrial DNA sequences. Nematology, 2005, 7, 851-862.	0.2	73
99	Steinernema yirgalemense n. sp. (Rhabditida: Steinernematidae) from Ethiopia. Nematology, 2004, 6, 839-856.	0.2	39
100	Heterorhabditis mexicana n. sp. (Rhabditida: Heterorhabditidae) from Tamaulipas, Mexico, and morphological studies of the bursa of Heterorhabditis spp.. Nematology, 2004, 6, 231-244.	0.2	46
101	EVOLUTION OF PLANT PARASITISM AMONG NEMATODES. Annual Review of Phytopathology, 2004, 42, 83-105.	3.5	85
102	Mitochondrial DNA and RAPD polymorphisms in the haploid mite Brevipalpus phoenicis (Acari:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 30	0.7	27
103	Molecular phylogenetics and diagnosis of soil and clinical isolates of Halicephalobus gingivalis (Nematoda: Cephalobina: Panagrolaimoidea), an opportunistic pathogen of horses. International Journal for Parasitology, 2003, 33, 1115-1125.	1.3	63
104	A Protein Kinase from Colletotrichum trifolii Is Induced by Plant Cutin and Is Required for Appressorium Formation. Molecular Plant-Microbe Interactions, 2003, 16, 411-421.	1.4	59
105	Comparison of plastid 16S rRNA (rrn16) genes from Helicosporidium spp.: evidence supporting the reclassification of Helicosporidia as green algae (Chlorophyta). International Journal of Systematic and Evolutionary Microbiology, 2003, 53, 1719-1723.	0.8	34
106	Survey of Entomopathogenic Nematodes and Fungi Endemic to Pecan Orchards of the Southeastern United States and Their Virulence to the Pecan Weevil (Coleoptera: Curculionidae). Environmental Entomology, 2003, 32, 187-195.	0.7	78
107	Speciation in the Acugutturidae (Nematoda: Aphelenchida). Nematology, 2002, 4, 489-504.	0.2	1
108	Ornithine Decarboxylase Encoded by Chlorella Virus PBCV-1. Virology, 2002, 301, 165-175.	1.1	26

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109	Intron Conservation in the DNA Polymerase Gene Encoded by Chlorella Viruses. Virology, 2001, 285, 313-321.	1.1	22
110	Utility of the Mitochondrial Cytochrome Oxidase II Gene for Resolving Relationships among Black Flies (Diptera: Simuliidae). Molecular Phylogenetics and Evolution, 2000, 16, 286-295.	1.2	26
111	Characterization of a Î²-1,3-Glucanase Encoded by Chlorella Virus PBCV-1. Virology, 2000, 276, 27-36.	1.1	60
112	Intron Conservation in a UV-Specific DNA Repair Gene Encoded by Chlorella Viruses. Journal of Molecular Evolution, 2000, 50, 82-92.	0.8	21
113	MOLECULAR AND MORPHOMETRIC EVIDENCE FOR SEPARATE SPECIES OFUNCINARIA(NEMATODA:) Tj ETQq1 1 0.784314 rgBT /Over SUPPLANTS VERIFICATION. Journal of Parasitology, 2000, 86, 1099-1106.	0.3	75
114	Characterization of Two Chitinase Genes and One Chitosanase Gene Encoded by Chlorella Virus PBCV-1. Virology, 1999, 263, 376-387.	1.1	71
115	Novel application of PhastSystem polyacrylamide gel electrophoresis using restriction fragment length polymorphism â€" internal transcribed spacer patterns of individuals for molecular identification of entomopathogenic nematodes. Electrophoresis, 1999, 20, 1266-1273.	1.3	9
116	Molecular Cloning, Sequencing, and Phylogenetic Relationships of a New Potyvirus: Sugarcane Streak Mosaic Virus, and a Reevaluation of the Classification of the Potyviridae. Molecular Phylogenetics and Evolution, 1998, 10, 323-332.	1.2	79
117	Susceptibility of House Fly (Diptera: Muscidae) Larvae to Entomopathogenic Nematodes (Rhabditida:) Tj ETQq1 1 0.784314 rgBT /Over	0.7	21