Gregory A Sword

List of Publications by Year
in descending order

116 papers	5,598 citations	87888 38 h-index	88630 70 g-index
119 all docs	119 docs citations	119 times ranked	4945 citing authors

#	Article	IF	Citations
1	Polyphenism in Insects. Current Biology, 2011, 21, R738-R749.	3.9	320
2	Evaluation of potential reference genes for reverse transcription-qPCR studies of physiological responses in Drosophila melanogaster. Journal of Insect Physiology, 2011, 57, 840-850.	2.0	276
3	Cannibal crickets on a forced march for protein and salt. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 4152-4156.	7.1	273
4	Collective Motion and Cannibalism in Locust Migratory Bands. Current Biology, 2008, 18, 735-739.	3.9	255
5	Colonization of crop plants by fungal entomopathogens and their effects on two insect pests when in planta. Biological Control, 2010, 55, 34-41.	3.0	216
6	The endophytic fungal entomopathogens Beauveria bassiana and Purpureocillium lilacinum enhance the growth of cultivated cotton (Gossypium hirsutum) and negatively affect survival of the cotton bollworm (Helicoverpa zea). Biological Control, 2015, 89, 53-60.	3.0	178
7	The Entomopathogenic Fungal Endophytes Purpureocillium lilacinum (Formerly Paecilomyces) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T Greenhouse and Field Conditions. PLoS ONE, 2014, 9, e103891.	2.5	176
8	Mitochondrial genomes reveal the global phylogeography and dispersal routes of the migratory locust. Molecular Ecology, 2012, 21, 4344-4358.	3.9	171
9	Do outbreaks affect genetic population structure? A worldwide survey in<i>Locusta migratoria</i>, a pest plagued by microsatellite null alleles. Molecular Ecology, 2008, 17, 3640-3653.	3.9	152
10	Density-dependent warning coloration. Nature, 1999, 397, 217-217.	27.8	145
11	Densityâ€"dependent aposematism in the desert locust. Proceedings of the Royal Society B: Biological Sciences, 2000, 267, 63-68.	2.6	140
12	Sustainable Management of Insect Herbivores in Grassland Ecosystems: New Perspectives in Grasshopper Control. BioScience, 2006, 56, 743.	4.9	115
13	From Molecules to Management: Mechanisms and Consequences of Locust Phase Polyphenism. Advances in Insect Physiology, 2017, 53, 167-285.	2.7	101
14	Endophytic Lecanicillium lecanii and Beauveria bassiana reduce the survival and fecundity of Aphis gossypii following contact with conidia and secondary metabolites. Crop Protection, 2011, 30, 349-353.	2.1	97
15	Locusts. Current Biology, 2008, 18, R364-R366.	3.9	95
16	Phase polyphenism and preventative locust management. Journal of Insect Physiology, 2010, 56, 949-957.	2.0	94
17	Nutritional ecology beyond the individual: a conceptual framework for integrating nutrition and social interactions. Ecology Letters, 2015, 18, 273-286.	6.4	92
18	Nutritional state and collective motion: from individuals to mass migration. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 356-363.	2.6	91

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19	A role for phenotypic plasticity in the evolution of aposematism. Proceedings of the Royal Society B: Biological Sciences, 2002, 269, 1639-1644.	2.6	87
20	Migratory bands give crickets protection. Nature, 2005, 433, 703-703.	27.8	80
21	Tasty on the outside, but toxic in the middle: grasshopper regurgitation and host plant-mediated toxicity to a vertebrate predator. Oecologia, 2001, 128, 416-421.	2.0	73
22	Spatial and Temporal Variation in Fungal Endophyte Communities Isolated from Cultivated Cotton (Gossypium hirsutum). PLoS ONE, 2013, 8, e66049.	2.5	69
23	Immediate protein dietary effects on movement and the generalised immunocompetence of migrating Mormon crickets <i>Anabrus simplex</i> (Orthoptera: Tettigoniidae). Ecological Entomology, 2009, 34, 663-668.	2.2	64
24	Assessment and validation of a suite of reverse transcription-quantitative PCR reference genes for analyses of density-dependent behavioural plasticity in the Australian plague locust. BMC Molecular Biology, 2011, 12, 7.	3.0	63
25	Rapid behavioural gregarization in the desert locust, Schistocerca gregaria entails synchronous changes in both activity and attraction to conspecifics. Journal of Insect Physiology, 2014, 65, 9-26.	2.0	61
26	Cannibalism can drive the evolution of behavioural phase polyphenism in locusts. Ecology Letters, 2012, 15, 1158-1166.	6.4	60
27	Use of cuticular lipids in grasshopper taxonomy: A study of variation in Schistocerca shoshone (Thomas). Biochemical Systematics and Ecology, 1995, 23, 383-398.	1.3	57
28	Behavioural phase change in the Australian plague locust, Chortoicetes terminifera, is triggered by tactile stimulation of the antennae. Journal of Insect Physiology, 2010, 56, 937-942.	2.0	57
29	Radiotelemetry reveals differences in individual movement patterns between outbreak and non-outbreak Mormon cricket populations. Ecological Entomology, 2005, 30, 548-555.	2.2	56
30	Developmental specialization and geographic structure of host plant use in a polyphagous grasshopper, Schistocerca emarginata (= lineata) (Orthoptera: Acrididae). Oecologia, 1999, 120, 437-445.	2.0	55
31	Modeling spatiotemporal dynamics of outbreaking species: influence of environment and migration in a locust. Ecology, 2015, 96, 737-748.	3.2	55
32	Ancient trans-Atlantic flight explains locust biogeography: molecular phylogenetics of Schistocerca. Proceedings of the Royal Society B: Biological Sciences, 2006, 273, 767-774.	2.6	51
33	Host plant-associated genetic differentiation in the snakeweed grasshopper, Hesperotettix viridis (Orthoptera: Acrididae). Molecular Ecology, 2005, 14, 2197-2205.	3.9	50
34	Group structure in locust migratory bands. Behavioral Ecology and Sociobiology, 2011, 65, 265-273.	1.4	48
35	Behavioural phase polyphenism in the Australian plague locust (<i>Chortoicetes terminifera</i>). Biology Letters, 2009, 5, 306-309.	2.3	47
36	To be or not to be a locust? A comparative analysis of behavioral phase change in nymphs of Schistocerca americana and S. gregaria. Journal of Insect Physiology, 2003, 49, 709-717.	2.0	43

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37	Bio-effects of near-zero magnetic fields on the growth, development and reproduction of small brown planthopper, Laodelphax striatellus and brown planthopper, Nilaparvata lugens. Journal of Insect Physiology, 2014, 68, 7-15.	2.0	43
38	Locusts and Grasshoppers: Behavior, Ecology, and Biogeography. Psyche: Journal of Entomology, 2011, 2011, 1-4.	0.9	42
39	Modelling nutrition across organizational levels: From individuals to superorganisms. Journal of Insect Physiology, 2014, 69, 2-11.	2.0	42
40	THE IMPORTANCE OF THE ONTOGENETIC NICHE IN RESOURCE-ASSOCIATED DIVERGENCE: EVIDENCE FROM A GENERALIST GRASSHOPPER. Evolution; International Journal of Organic Evolution, 2002, 56, 731-740.	2.3	40
41	Foraging by generalist grasshoppers: two different strategies. Animal Behaviour, 1996, 52, 155-165.	1.9	38
42	Using field data to test locust migratory band collective movement models. Interface Focus, 2012, 2, 757-763.	3.0	38
43	The fungal endophyte<i>Chaetomium globosum</i>negatively affects both above- and belowground herbivores in cotton. FEMS Microbiology Ecology, 2016, 92, fiw158.	2.7	38
44	Cannibalism in the lifeboat â€” collective movement in Australian plague locusts. Behavioral Ecology and Sociobiology, 2011, 65, 1715-1720.	1.4	37
45	Whole genome comparisons reveal panmixia among fall armyworm (Spodoptera frugiperda) from diverse locations. BMC Genomics, 2021, 22, 179.	2.8	37
46	Predator Percolation, Insect Outbreaks, and Phase Polyphenism. Current Biology, 2009, 19, 20-24.	3.9	36
47	Linking Locust Gregarization to Local Resource Distribution Patterns Across a Large Spatial Scale. Environmental Entomology, 2004, 33, 1577-1583.	1.4	35
48	Advances, controversies and consensus in locust phase polyphenism research. Journal of Orthoptera Research, 2005, 14, 213-222.	1.0	35
49	Revisiting macronutrient regulation in the polyphagous herbivore Helicoverpa zea (Lepidoptera:) Tj ETQq1 1 0.784314 rgBT /Overlock	2.0	35
50	Evidence for Widespread Genomic Methylation in the Migratory Locust, Locusta migratoria (Orthoptera: Acrididae). PLoS ONE, 2011, 6, e28167.	2.5	34
51	First draft genome assembly of the desert locust, Schistocerca gregaria. F1000Research, 2020, 9, 775.	1.6	34
52	The importance of palpation in food selection by a polyphagous grasshopper (Orthoptera: Acrididae). Journal of Insect Behavior, 1993, 6, 79-91.	0.7	33
53	Local population density and the activation of movement in migratory band-forming Mormon crickets. Animal Behaviour, 2005, 69, 437-444.	1.9	33
54	Endophytic fungi alter sucking bug responses to cotton reproductive structures. Insect Science, 2017, 24, 1003-1014.	3.0	33

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55	Challenges to assessing connectivity between massive populations of the Australian plague locust. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 3152-3160.	2.6	32
56	Rice stripe virus counters reduced fecundity in its insect vector by modifying insect physiology, primary endosymbionts and feeding behavior. Scientific Reports, 2015, 5, 12527.	3.3	32
57	Grasshopper Herbivory Affects Native Plant Diversity and Abundance in a Grassland Dominated by the Exotic Grass <i>Agropyron cristatum</i>. Restoration Ecology, 2009, 17, 89-96.	2.9	30
58	Nuclear insertions and heteroplasmy of mitochondrial DNA as two sources of intraâ€individual genomic variation in grasshoppers. Systematic Entomology, 2011, 36, 285-299.	3.9	30
59	The Social Context of Cannibalism in Migratory Bands of the Mormon Cricket. PLoS ONE, 2010, 5, e15118.	2.5	30
60	Biological Foundations of Swarm Intelligence. Natural Computing Series, 2008, , 3-41.	2.2	29
61	Spatio-Temporal, Genotypic, and Environmental Effects on Plant Soluble Protein and Digestible Carbohydrate Content: Implications for Insect Herbivores with Cotton as an Exemplar. Journal of Chemical Ecology, 2016, 42, 1151-1163.	1.8	29
62	A fungal endophyte defensive symbiosis affects plant-nematode interactions in cotton. Plant and Soil, 2018, 422, 251-266.	3.7	29
63	Double trouble for grasshopper molecular systematics: intra-individual heterogeneity of both mitochondrial 12S-valine-16S and nuclear internal transcribed spacer ribosomal DNA sequences in Hesperotettix viridis (Orthoptera: Acrididae). Systematic Entomology, 2007, 32, 420-428.	3.9	28
64	Optimizing multivariate behavioural syndrome models in locusts using automated video tracking. Animal Behaviour, 2012, 84, 771-784.	1.9	28
65	Integrated modelling of the life cycle and aeroecology of wind-borne pests in temporally-variable spatially-heterogeneous environment. Ecological Modelling, 2019, 399, 23-38.	2.5	28
66	Epigenetics and developmental plasticity in orthopteroid insects. Current Opinion in Insect Science, 2018, 25, 25-34.	4.4	26
67	The Role of Spatial Aggregation in Forensic Entomology: Table 1.. Journal of Medical Entomology, 2014, 51, 1-9.	1.8	25
68	Taxa-specific heat shock proteins are over-expressed with crowding in the Australian plague locust. Journal of Insect Physiology, 2011, 57, 1562-1567.	2.0	24
69	First draft genome assembly of the desert locust, Schistocerca gregaria. F1000Research, 2020, 9, 775.	1.6	24
70	Is there an intraspecific role for density-dependent colour change in the desert locust?. Animal Behaviour, 2000, 59, 861-870.	1.9	23
71	Laboratory Populations as a Resource for Understanding the Relationship Between Genotypes and Phenotypes. Advances in Insect Physiology, 2010, , 1-37.	2.7	23
72	Hostâ€associated differentiation in a highly polyphagous, sexually reproducing insect herbivore. Ecology and Evolution, 2015, 5, 2533-2543.	1.9	23

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73	An Advanced Numerical Trajectory Model Tracks a Corn Earworm Moth Migration Event in Texas, USA. Insects, 2018, 9, 115.	2.2	22
74	Cryptochromes and Hormone Signal Transduction under Near-Zero Magnetic Fields: New Clues to Magnetic Field Effects in a Rice Planthopper. PLoS ONE, 2015, 10, e0132966.	2.5	21
75	An Experimental Analysis of Grasshopper Community Responses to Fire and Livestock Grazing in a Northern Mixed-Grass Prairie. Environmental Entomology, 2010, 39, 1441-1446.	1.4	20
76	Variation in the surface lipids of the grasshopper, Schistocerca americana (Drury). Biochemical Systematics and Ecology, 1994, 22, 563-575.	1.3	19
77	Adsorbent-SERS Technique for Determination of Plant VOCs from Live Cotton Plants and Dried Teas. ACS Omega, 2020, 5, 2779-2790.	3.5	19
78	Phase Polyphenism in Locusts. , 2009, , .		18
79	Eight polymorphic microsatellite loci for the Australian plague locust, <i>Chortoicetes terminifera</i>. Molecular Ecology Resources, 2008, 8, 1414-1416.	4.8	17
80	Quantifying Plant Soluble Protein and Digestible Carbohydrate Content, Using Corn (<em>Zea) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.3	17
81	In Vitro and In Planta Compatibility of Insecticides and the Endophytic Entomopathogen, Lecanicillium lecanii. Mycopathologia, 2011, 172, 161-168.	3.1	16
82	Reduced geomagnetic field may affect positive phototaxis andÂflightÂcapacity of a migratory rice planthopper. Animal Behaviour, 2016, 121, 107-116.	1.9	16
83	Tapping Into the Cotton Fungal Phytobiome for Novel Nematode Biological Control Tools. Phytobiomes Journal, 2020, 4, 19-26.	2.7	13
84	Behavioral evidence for a magnetic sense in the oriental armyworm,<i>Mythimna separata</i>. Biology Open, 2017, 6, 340-347.	1.2	12
85	Multiscale analyses on a massive immigration process of Sogatella furcifera (HorvÃ¡th) in south-central China: influences of synoptic-scale meteorological conditions and topography. International Journal of Biometeorology, 2018, 62, 1389-1406.	3.0	12
86	Foraging on Individual Leaves by an Intracellular Feeding Insect Is Not Associated with Leaf Biomechanical Properties or Leaf Orientation. PLoS ONE, 2013, 8, e80911.	2.5	11
87	Population structures of three Calliptamus spp. (Orthoptera: Acrididae) across the Western Mediterranean Basin. European Journal of Entomology, 2012, 109, 445-455.	1.2	11
88	A comparative analysis of fine-scale genetic structure in three closely related syntopic species of the grasshopper genus<i>Calliptamus</i>. Canadian Journal of Zoology, 2012, 90, 31-41.	1.0	10
89	Long microsatellites and unusually high levels of genetic diversity in the Orthoptera. Insect Molecular Biology, 2012, 21, 181-186.	2.0	10
90	Geomagnetic field absence reduces adult body weight of a migratory insect by disrupting feeding behavior and appetite regulation. Insect Science, 2021, 28, 251-260.	3.0	10

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91	Population genomics and phylogeography of the boll weevil, <i>Anthonomus grandis</i> Boheman (Coleoptera: Curculionidae), in the United States, northern Mexico, and Argentina. Evolutionary Applications, 2021, 14, 1778-1793.	3.1	10
92	Protein-carbohydrate regulation in Helicoverpa amigera and H. punctigera and how diet protein-carbohydrate content affects insect susceptibility to Bt toxins. Journal of Insect Physiology, 2018, 106, 88-95.	2.0	9
93	Novel real-time PCR based assays for differentiating fall armyworm strains using four single nucleotide polymorphisms. PeerJ, 2021, 9, e12195.	2.0	9
94	Patterns of genomic and allochronic strain divergence in the fall armyworm, <i>Spodoptera frugiperda</i> (J.E. Smith). Ecology and Evolution, 2022, 12, e8706.	1.9	9
95	Molecular characterization, spatialâ€temporal expression and magnetic response patterns of ironâ€sulfur cluster assembly1 (IscA1) in the rice planthopper, <i>Nilaparvata lugens</i>. Insect Science, 2019, 26, 413-423.	3.0	8
96	Plant Response and Economic Injury Levels for a Boll-Feeding Sucking Bug Complex on Cotton. Journal of Economic Entomology, 2019, 112, 1227-1236.	1.8	7
97	Physiological and transcriptional immune responses of a non-model arthropod to infection with different entomopathogenic groups. PLoS ONE, 2022, 17, e0263620.	2.5	7
98	First evidence of protein-carbohydrate regulation in a plant bug (Lygus hesperus). Journal of Insect Physiology, 2019, 116, 118-124.	2.0	6
99	Change in geomagnetic field intensity alters migration-associated traits in a migratory insect. Biology Letters, 2020, 16, 20190940.	2.3	6
100	Fungal Endophytes in Knock OutÂ® Rose and Performance Effects of Entomopathogens on Marigold and Zinnia. Hortscience: A Publication of the American Society for Hortcultural Science, 2018, 53, 1791-1798.	1.0	5
101	Radiotelemetric Analysis of the Effects of Prevailing Wind Direction on Mormon Cricket Migratory Band Movement. Environmental Entomology, 2008, 37, 889-896.	1.4	5
102	THE IMPORTANCE OF THE ONTOGENETIC NICHE IN RESOURCE-ASSOCIATED DIVERGENCE: EVIDENCE FROM A GENERALIST GRASSHOPPER. Evolution; International Journal of Organic Evolution, 2002, 56, 731.	2.3	4
103	Polyphenism in Insects. Current Biology, 2012, 22, 352.	3.9	4
104	Characterization of transgenic cotton (Gossypium hirsutum L.) over-expressing Arabidopsis thaliana Related to ABA-insensitive3(ABI3)/Vivparous1 (AtRAV1) and AtABI5 transcription factors: improved water use efficiency through altered guard cell physiology. Plant Biotechnology Reports, 2017, 11, 339-353.	1.5	4
105	Evolving migration. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 16753-16754.	7.1	2
106	Foliar herbivory increases sucrose concentration in bracteal extrafloral nectar of cotton. PLoS ONE, 2021, 16, e0258836.	2.5	2
107	A Beneficial Plant-Associated Fungus Shifts the Balance toward Plant Growth over Resistance, Increasing Cucumber Tolerance to Root Herbivory. Plants, 2022, 11, 282.	3.5	2
108	Evolution: Radiotracking Sexual Selection. Current Biology, 2008, 18, R955-R956.	3.9	1

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109	Photoperiod-Specific Within-Plant Distribution of the Green Stink Bug (Hemiptera: Pentatomidae) on Cotton. Environmental Entomology, 2019, 48, 1234-1240.	1.4	1
110	Proteinâ€"carbohydrate regulation and nutritionally mediated responses to Bt are affected by caterpillar population history. Pest Management Science, 2021, 77, 335-342.	3.4	1
111	Olfactometer Responses of Convergent Lady Beetles Hippodamia convergens (Coleoptera:) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5 Insects, 2022, 13, 157.	2.2	1
112	Gene Transfer. , 2008, , 1599-1599.		0
113	Sampling Volatile Organic Compounds from Individual Cotton Leaves to Test Effects of Fungal Endophyte Treatments. Southwestern Entomologist, 2021, 46, .	0.2	0
114	Resin cast impressions as a tool for microscopic observations of fungal epiphytes on leaves. Journal of Microbiological Methods, 2021, 186, 106237.	1.6	0
115	Plantâ€associated fungi affects aboveâ€and below ground pest responses to soybean plants. Journal of Applied Microbiology, 2022, , .	3.1	0
116	Analysis of Inducible Terpenoids in Cotton Leaves to Test for Indirect Plantâ€"Endophyte-Herbivore Interactions. Journal of Entomological Science, 2022, 57, 114-118.	0.3	0