Juan Carlos Villarreal Aguilar

List of Publications by Year
in descending order

70 papers	5,811 citations	201674 27 h-index	110387 64 g-index
73 all docs	73 docs citations	73 times ranked	5974 citing authors

#	Article	IF	Citations
1	One thousand plant transcriptomes and theÂphylogenomics of green plants. Nature, 2019, 574, 679-685.	27.8	1,162
2	Phylotranscriptomic analysis of the origin and early diversification of land plants. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E4859-68.	7.1	1,123
3	Data access for the 1,000 Plants (1KP) project. GigaScience, 2014, 3, 17.	6.4	582
4	World checklist of hornworts and liverworts. PhytoKeys, 2016, 59, 1-828.	1.0	478
5	Anthoceros genomes illuminate the origin of land plants and the unique biology of hornworts. Nature Plants, 2020, 6, 259-272.	9.3	225
6	Evaluating Methods for Isolating Total RNA and Predicting the Success of Sequencing Phylogenetically Diverse Plant Transcriptomes. PLoS ONE, 2012, 7, e50226.	2.5	172
7	Extant diversity of bryophytes emerged from successive post-Mesozoic diversification bursts. Nature Communications, 2014, 5, 5134.	12.8	154
8	Horizontal transfer of an adaptive chimeric photoreceptor from bryophytes to ferns. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 6672-6677.	7.1	146
9	Phytochrome diversity in green plants and the origin of canonical plant phytochromes. Nature Communications, 2015, 6, 7852.	12.8	139
10	Hornwort pyrenoids, carbon-concentrating structures, evolved and were lost at least five times during the last 100 million years. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 18873-18878.	7.1	103
11	Divergence times and the evolution of morphological complexity in an early land plant lineage (Marchantiopsida) with a slow molecular rate. New Phytologist, 2016, 209, 1734-1746.	7.3	89
12	Fungal symbioses in hornworts: a chequered history. Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20130207.	2.6	87
13	Progress and challenges toward developing a phylogeny and classification of the hornworts. Bryologist, 2007, 110, 214-243.	0.6	81
14	A synthesis of hornwort diversity: Patterns, causes and future work. Phytotaxa, 2010, 9, 150.	0.3	80
15	The hornworts: morphology, evolution and development. New Phytologist, 2021, 229, 735-754.	7.3	72
16	A review of molecular-clock calibrations and substitution rates in liverworts, mosses, and hornworts, and a timeframe for a taxonomically cleaned-up genus Nothoceros. Molecular Phylogenetics and Evolution, 2014, 78, 25-35.	2.7	68
17	The origin and evolution of phototropins. Frontiers in Plant Science, 2015, 6, 637.	3.6	68
18	Correlates of monoicy and dioicy in hornworts, the apparent sister group to vascular plants. BMC Evolutionary Biology, 2013, 13, 239.	3.2	60

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19	Structure and development of Nostoc strands in Leiosporoceros dussii (Anthocerotophyta): a novel symbiosis in land plants. American Journal of Botany, 2006, 93, 693-705.	1.7	54
20	Hornwort Stomata: Architecture and Fate Shared with 400-Million-Year-Old Fossil Plants without Leaves. Plant Physiology, 2017, 174, 788-797.	4.8	54
21	Complete Genomes of Symbiotic Cyanobacteria Clarify the Evolution of Vanadium-Nitrogenase. Genome Biology and Evolution, 2019, 11, 1959-1964.	2.5	45
22	Recent origin, active speciation and dispersal for the lichen genus Nephroma (Peltigerales) in Macaronesia. Journal of Biogeography, 2011, 38, 1138-1151.	3.0	44
23	A target enrichment probe set for resolving the flagellate land plant tree of life. Applications in Plant Sciences, 2021, 9, e11406.	2.1	42
24	Organellomic data sets confirm a cryptic consensus on (unrooted) landâ€plant relationships and provide new insights into bryophyte molecular evolution. American Journal of Botany, 2020, 107, 91-115.	1.7	38
25	The hornworts: important advancements in early land plant evolution. Journal of Bryology, 2015, 37, 157-170.	1.2	32
26	Morphology supports Âthe setaphyte hypothesis: mosses plus liverworts form a natural group. Bryophyte Diversity and Evolution, 2018, 40, 11.	1.1	31
27	Spores of relictual bryophytes: Diverse adaptations to life on land. Review of Palaeobotany and Palynology, 2015, 216, 1-17.	1.5	30
28	A novel thylakoid-less isolate fills a billion-year gap in the evolution of Cyanobacteria. Current Biology, 2021, 31, 2857-2867.e4.	3.9	30
29	Genome size increases in recently diverged hornwort clades. Genome, 2013, 56, 431-435.	2.0	26
30	Hornworts: An Overlooked Window into Carbon-Concentrating Mechanisms. Trends in Plant Science, 2017, 22, 275-277.	8.8	25
31	Phylogenetic delineation of Nothoceros and Megaceros (Dendrocerotaceae). Bryologist, 2010, 113, 106-113.	0.6	24
32	Biogeography and diversification rates in hornworts: The limitations of diversification modeling. Taxon, 2015, 64, 229-238.	0.7	24
33	Taxonomic changes in Marchantiaceae, Corsiniaceae and Cleveaceae (Marchantiidae,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 18	0.3	24
34	Genome-wide organellar analyses from the hornwort Leiosporoceros dussii show low frequency of RNA editing. PLoS ONE, 2018, 13, e0200491.	2.5	24
35	Contrasting bacteriome of the hornwort Leiosporoceros dussii in two nearby sites with emphasis on the hornwort-cyanobacterial symbiosis. Symbiosis, 2020, 81, 39-52.	2.3	24
36	Generic concepts within hornworts: historical review, contemporary insights and future directions. Australian Systematic Botany, 2005, 18, 7.	0.9	23

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37	Sporophyte Structure in the Neotropical Hornwort Phaeomegaceros fimbriatus: Implications for Phylogeny, Taxonomy, and Character Evolution. International Journal of Plant Sciences, 2006, 167, 413-427.	1.3	23
38	Parallel Evolution of Endospory within Hornworts: <I>Nothoceros renzagliensis</I> (Dendrocerotaceae), sp. nov.. Systematic Botany, 2012, 37, 31-37.	0.5	23
39	Specialized bacteriome uncovered in the coralloid roots of the epiphytic gymnosperm, Zamia pseudoparasitica. Environmental DNA, 2020, 2, 418-428.	5.8	22
40	Diffusion Limitation and CO2 Concentrating Mechanisms in Bryophytes. Advances in Photosynthesis and Respiration, 2014, , 95-111.	1.0	22
41	New insights into morphology, anatomy, and systematics of hornworts. , 0, , 139-172.		20
42	Future directions and priorities for Arctic bryophyte research. Arctic Science, 2017, 3, 475-497.	2.3	20
43	The plastid genome of the hornwort Nothoceros aenigmaticus (Dendrocerotaceae): Phylogenetic signal in inverted repeat expansion, pseudogenization, and intron gain. American Journal of Botany, 2013, 100, 467-477.	1.7	19
44	The HornwortsDendrocerosNees andMegacerosCampb. in SÃ£o TomÃ© e PrÃncipe (Africa, Gulf of Guinea) with the Description ofDendroceros paivaesp. nov.. Cryptogamie, Bryologie, 2012, 33, 3-21.	0.2	18
45	Extremely low genetic diversity of Stigonema associated with Stereocaulon in eastern Canada. Bryologist, 2020, 123, 188.	0.6	12
46	Unveiling the nature of a miniature world: a horizon scan of fundamental questions in bryology. Journal of Bryology, 2022, 44, 1-34.	1.2	12
47	Phaeomegaceros squamuliger subspecies hasselii (Dendrocerotaceae, Anthocerotophyta), a new taxon from the Southern Hemisphere. Nova Hedwigia, 2010, 91, 349-360.	0.4	11
48	Genomic Diversity Evaluation of Populus trichocarpa Germplasm for Rare Variant Genetic Association Studies. Frontiers in Genetics, 2020, 10, 1384.	2.3	11
49	Nothoceros superbus (Dendrocerotaceae), a new hornwort from Costa Rica. Bryologist, 2007, 110, 279-285.	0.6	10
50	Phylogenetic affinities and conservation status ofTelaranea murphyaePaton in Britain. Journal of Bryology, 2014, 36, 191-199.	1.2	10
51	Notes on Early Land Plants Today. 70. Nomenclatural notes in hornworts(Anthocerotophyta). Phytotaxa, 2015, 208, 92.	0.3	9
52	Morphology, ultrastructure and phylogenetic affinities of the single-island endemic Anthoceros cristatus Steph. (Ascension Island). Journal of Bryology, 2017, 39, 226-234.	1.2	9
53	Chloroplast, mitochondrial, and nuclear microsatellites from the southern Appalachian hornwort, Nothoceros aenigmaticus (Dendrocerotaceae). American Journal of Botany, 2012, 99, e88-e90.	1.7	8
54	Population genomics of a reindeer lichen species from North American lichen woodlands. American Journal of Botany, 2021, 108, 159-171.	1.7	8

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55	Population Genomics and Phylogeography of a Clonal Bryophyte With Spatially Separated Sexes and Extreme Sex Ratios. Frontiers in Plant Science, 2020, 11, 495.	3.6	7
56	On Monocarpus (Monocarpaceae, Marchantiopsida), an isolated salt-pan complex thalloid liverwort. Australian Systematic Botany, 2015, 28, 137.	0.9	6
57	Stigonema associated with boreal Stereocaulon possesses the alternative vanadium nitrogenase. Lichenologist, 2021, 53, 215-220.	0.8	6
58	The genus Aitchisoniella Kashyap (Marchantiopsida, Cleveaceae) new to China, and its taxonomic placement. Journal of Bryology, 2016, 38, 308-311.	1.2	5
59	Bacterial community of reindeer lichens differs between northern and southern lichen woodlands. Canadian Journal of Forest Research, 0, , .	1.7	5
60	Morphometric tools for sexing loggerhead shrikes in California. Southwestern Naturalist, 2014, 59, 562-569.	0.1	4
61	Phylogenetic and morphological infrageneric classification of the genus Dendroceros (Dendrocerotaceae; Anthocerotophyta), with the addition of two new subgenera. Systematics and Biodiversity, 2019, 17, 712-727.	1.2	4
62	Two New Records of Sri Lankan Hornworts,Notothylas javanica(Notothyladaceae) andMegaceros flagellaris(Dendrocerotaceae). Cryptogamie, Bryologie, 2016, 37, 435-444.	0.2	4
63	Chemical Profiling of Volatile Components of the Gametophyte and Sporophyte Stages of the Hornwort Leiosporoceros dussii (Leiosporocerotaceae) From Panama by HS-SPME-GC-MS. Natural Product Communications, 2019, 14, 1934578X1986887.	0.5	3
64	Cryptic speciation shapes the biogeographic history of a northern distributed moss. Botanical Journal of the Linnean Society, 2023, 201, 114-134.	1.6	2
65	Co-dispersal of symbionts in the lichen Cladonia stellaris inferred from genomic data. Fungal Ecology, 2022, 60, 101165.	1.6	2
66	Taxonomic notes on Phaeoceros himalayensis, with lectotypification of Anthoceros himalayensis. Phytotaxa, 2015, 231, 193.	0.3	1
67	Extremely low genetic diversity in the European clade of the model bryophyte Anthoceros agrestis. Plant Systematics and Evolution, 2020, 306, 1.	0.9	1
68	Student Project. Evansia, 2010, 27, 115-115.	0.1	0
69	Divergence time analyses suggest a Miocene origin of the narrow Amazonian endemic rheophytic Ceratolejeunea temnantha (Spruce) Reiner-Drehwald (Porellales, Lejeuneaceae). Bryophyte Diversity and Evolution, 2018, 40, 55.	1.1	0
70	DESCRIPCIÃ“N MORFOMÃ‰TRICA DE DOS POBLACIONES DE Leiosporoceros dussii (STEPHANI) HÃ„SSEL (LEIOSPOROCEROTACEAE) DE PANAMÃ• TECNOCIENCIA (PanamÃ¡), 2020, 23, 61-81.	0.1	0