David Bilton

List of Publications by Year
in descending order

130 papers	5,897 citations	101543 36 h-index	79698 73 g-index
131 all docs	131 docs citations	131 times ranked	6841 citing authors

#	Article	IF	Citations
1	Dispersal in Freshwater Invertebrates. Annual Review of Ecology, Evolution, and Systematics, 2001, 32, 159-181.	6.7	716
2	The Effect of Geographical Scale of Sampling on DNA Barcoding. Systematic Biology, 2012, 61, 851-869.	5.6	386
3	Macrophysiology: A Conceptual Reunification. American Naturalist, 2009, 174, 595-612.	2.1	298
4	Thermal tolerance, acclimatory capacity and vulnerability to global climate change. Biology Letters, 2008, 4, 99-102.	2.3	292
5	What determines a speciesâ€™ geographical range? Thermal biology and latitudinal range size relationships in European diving beetles (Coleoptera: Dytiscidae). Journal of Animal Ecology, 2010, 79, 194-204.	2.8	280
6	Mediterranean Europe as an area of endemism for small mammals rather than a source for northwards postglacial colonization. Proceedings of the Royal Society B: Biological Sciences, 1998, 265, 1219-1226.	2.6	278
7	Oxygen supply in aquatic ectotherms: Partial pressure and solubility together explain biodiversity and size patterns. Ecology, 2011, 92, 1565-1572.	3.2	254
8	Dispersal, Genetic Differentiation and Speciation in Estuarine Organisms. Estuarine, Coastal and Shelf Science, 2002, 55, 937-952.	2.1	198
9	Does macrophyte fractal complexity drive invertebrate diversity, biomass and body size distributions?. Oikos, 2005, 111, 279-290.	2.7	159
10	Development and evaluation of a DNA-barcoding approach for the rapid identification of nematodes. Marine Ecology - Progress Series, 2006, 320, 1-9.	1.9	138
11	How wide to cast the net? Cross-taxon congruence of species richness, community similarity and indicator taxa in ponds. Freshwater Biology, 2006, 51, 578-590.	2.4	129
12	Respiratory control in aquatic insects dictates their vulnerability to global warming. Biology Letters, 2013, 9, 20130473.	2.3	111
13	Unravelling nestedness and spatial pattern in pond assemblages. Journal of Animal Ecology, 2005, 74, 41-49.	2.8	98
14	Classification of water beetle assemblages in arable fenland and ranking of sites in relation to conservation value. Freshwater Biology, 1989, 22, 343-354.	2.4	94
15	Dispersal ability rather than ecological tolerance drives differences in range size between lentic and lotic water beetles (Coleoptera: Hydrophilidae). Journal of Biogeography, 2012, 39, 984-994.	3.0	94
16	Are distribution patterns linked to dispersal mechanism? An investigation using pond invertebrate assemblages. Freshwater Biology, 2002, 47, 1571-1581.	2.4	93
17	Can Oxygen Set Thermal Limits in an Insect and Drive Gigantism?. PLoS ONE, 2011, 6, e22610.	2.5	90
18	Evaluation of combined morphological and molecular techniques for marine nematode (Terschellingia spp.) identification. Marine Biology, 2008, 154, 509-518.	1.5	82

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19	Are the endemic water beetles of the Iberian Peninsula and the Balearic Islands effectively protected?. Biological Conservation, 2008, 141, 1612-1627.	4.1	75
20	Can taxonomic distinctness assess anthropogenic impacts in inland waters? A case study from a Mediterranean river basin. Freshwater Biology, 2006, 51, 1744-1756.	2.4	67
21	Evaluating drivers of vulnerability to climate change: a guide for insect conservation strategies. Global Change Biology, 2012, 18, 2135-2146.	9.5	63
22	Range size in North American Enallagma damselflies correlates with wing size. Freshwater Biology, 2007, 52, 471-477.	2.4	60
23	The net result: evaluating species richness extrapolation techniques for littoral pond invertebrates. Freshwater Biology, 2003, 48, 1756-1764.	2.4	58
24	A classification and evaluation of Irish water beetle assemblages. Aquatic Conservation: Marine and Freshwater Ecosystems, 1992, 2, 185-208.	2.0	55
25	The consequences of doing nothing: The effects of seawater flooding on coastal zones. Coastal Engineering, 2014, 87, 169-182.	4.0	55
26	Mitochondrial DNA phylogeography and population history of Meladema diving beetles on the Atlantic Islands and in the Mediterranean basin (Coleoptera, Dytiscidae). Molecular Ecology, 2002, 12, 153-167.	3.9	52
27	PHYLOGENETIC RELATEDNESS AND ECOLOGICAL INTERACTIONS DETERMINE ANTIPREDATOR BEHAVIOR. Ecology, 2007, 88, 2462-2467.	3.2	47
28	Population genetic structure and longâ€distance dispersal among seabird populations: Implications for colony persistence. Molecular Ecology, 2012, 21, 2863-2876.	3.9	46
29	Global and regional patterns in lotic meiofauna. Freshwater Biology, 2000, 44, 123-134.	2.4	43
30	Do developmental mode and dispersal shape abundance?occupancy relationships in marine macroinvertebrates?. Journal of Animal Ecology, 2007, 76, 695-702.	2.8	43
31	Spatio-temporal nested patterns in macroinvertebrate assemblages across a pond network with a wide hydroperiod range. Oecologia, 2011, 166, 469-483.	2.0	42
32	Oxygen limited thermal tolerance is seen in a plastron breathing insect, and can be induced in a bimodal gas exchanger. Journal of Experimental Biology, 2015, 218, 2083-8.	1.7	41
33	Deeper knowledge of shallow waters: reviewing the invertebrate fauna of southern African temporary wetlands. Hydrobiologia, 2019, 827, 89-121.	2.0	41
34	Size, permanence and the proportion of predators in ponds. Fundamental and Applied Limnology, 2001, 151, 451-458.	0.7	40
35	Thermal tolerance and geographical range size in the Agabus brunneus group of European diving beetles (Coleoptera: Dytiscidae). Journal of Biogeography, 2008, 35, 295-305.	3.0	39
36	Water Beetles as Models in Ecology and Evolution. Annual Review of Entomology, 2019, 64, 359-377.	11.8	39

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37	Population structure and dispersal in the Canary Island caddisfly Mesophylax aspersus (Trichoptera,) Tj ETQq1 1 0.784314 rgBT /Over	2.6	36
38	Phylogenomics of the superfamily Dytiscoidea (Coleoptera: Adephaga) with an evaluation of phylogenetic conflict and systematic error. Molecular Phylogenetics and Evolution, 2019, 135, 270-285.	2.7	36
39	By wind, wings or water: body size, dispersal and range size in aquatic invertebrates. , 2007, , 186-209.		35
40	Assessing the Congruence of Thermal Niche Estimations Derived from Distribution and Physiological Data. A Test Using Diving Beetles. PLoS ONE, 2012, 7, e48163.	2.5	33
41	The Comparative Osmoregulatory Ability of Two Water Beetle Genera Whose Species Span the Fresh-Hypersaline Gradient in Inland Waters (Coleoptera: Dytiscidae, Hydrophilidae). PLoS ONE, 2015, 10, e0124299.	2.5	33
42	Ecology and conservation status of temporary and fluctuating ponds in two areas of southern England. Aquatic Conservation: Marine and Freshwater Ecosystems, 2009, 19, 134-146.	2.0	32
43	The impact of encroachment and bankside development on the habitat complexity and supralittoral invertebrate communities of the Thames Estuary foreshore. Aquatic Conservation: Marine and Freshwater Ecosystems, 1999, 9, 237-247.	2.0	31
44	Larval Morphology of Aspidytidae (Coleoptera: Adephaga) and Its Phylogenetic Implications. Annals of the Entomological Society of America, 2005, 98, 417-430.	2.5	29
45	How well do protected area networks support taxonomic and functional diversity in non-target taxa? The case of Iberian freshwaters. Biological Conservation, 2015, 187, 134-144.	4.1	29
46	Reduced salinities compromise the thermal tolerance of hypersaline specialist diving beetles. Physiological Entomology, 2010, 35, 265-273.	1.5	28
47	Evolution, mitochondrial DNA phylogeny and systematic position of the Macaronesian endemic Hydrotarsus FalkenstrÃ¶m (Coleoptera: Dytiscidae). Systematic Entomology, 2003, 28, 493-508.	3.9	27
48	A heuristic approach to predicting water beetle diversity in temporary and fluctuating waters. Ecological Modelling, 2010, 221, 1451-1462.	2.5	27
49	Thermal niche evolution and geographical range expansion in a species complex of western Mediterranean diving beetles. BMC Evolutionary Biology, 2014, 14, 187.	3.2	27
50	Genetic population structure and dispersal in Atlantic Island caddisflies. Freshwater Biology, 2002, 47, 1642-1650.	2.4	26
51	Effects of formalin preservation on stable carbon and nitrogen isotope signatures in Calanoid copepods: implications for the use of Continuous Plankton Recorder Survey samples in stable isotope analyses. Rapid Communications in Mass Spectrometry, 2011, 25, 1794-1800.	1.5	25
52	Intercolony movement of preâ€breeding seabirds over oceanic scales: implications of cryptic ageâ€classes for conservation and metapopulation dynamics. Diversity and Distributions, 2014, 20, 160-168.	4.1	25
53	Loss of heat acclimation capacity could leave subterranean specialists highly sensitive to climate change. Animal Conservation, 2021, 24, 482-490.	2.9	25
54	Genetic population structure of the Postglacial relict diving beetle Hydroporus glabriusculus AubÃ© (Coleoptera: Dytiscidae). Heredity, 1992, 69, 503-511.	2.6	24

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55	Water beetle biodiversity in Mediterranean standing waters: assemblage composition, environmental drivers and nestedness patterns. Insect Conservation and Diversity, 2012, 5, 146-158.	3.0	24
56	Does plasticity in thermal tolerance trade off with inherent tolerance? The influence of setal tracheal gills on thermal tolerance and its plasticity in a group of European diving beetles. Journal of Insect Physiology, 2018, 106, 163-171.	2.0	24
57	Dispersal in Dytiscidae. , 2014, , 387-407.		24
58	The diving response of a diving beetle: effects of temperature and acidification. Journal of Zoology, 2007, 273, 289-297.	1.7	23
59	Reconstructing ancient Mediterranean crossroads in Deronectes diving beetles. Journal of Biogeography, 2016, 43, 1533-1545.	3.0	23
60	Exploitation of archived marine nematodes ? a hot lysis DNA extraction protocol for molecular studies. Zoologica Scripta, 2007, 36, 93-98.	1.7	22
61	Aquatic insects dealing with dehydration: do desiccation resistance traits differ in species with contrasting habitat preferences?. PeerJ, 2016, 4, e2382.	2.0	22
62	Does Ecophysiology Determine Invasion Success? A Comparison between the Invasive Boatman Trichocorixa verticalis verticalis and the Native Sigara lateralis (Hemiptera, Corixidae) in South-West Spain. PLoS ONE, 2013, 8, e63105.	2.5	20
63	Molecular phylogeny of the highly disjunct cliff water beetles from South Africa and China (Coleoptera: Aspidytidae). Zoological Journal of the Linnean Society, 2016, 176, 537-546.	2.3	19
64	The Conservation of Predaceous Diving Beetles: Knowns, Unknowns and Anecdotes. , 2014, , 437-462.		19
65	Life-history and thermal tolerance traits display different thermal plasticities and relationships with temperature in the marine polychaete Ophryotrocha labronica La Greca and Bacci (Dorvilleidae). Journal of Experimental Marine Biology and Ecology, 2012, 438, 109-117.	1.5	18
66	Pleistocene range shifts, refugia and the origin of widespread species in western Palaearctic water beetles. Molecular Phylogenetics and Evolution, 2017, 114, 122-136.	2.7	18
67	The chicken or the egg? Adaptation to desiccation and salinity tolerance in a lineage of water beetles. Molecular Ecology, 2017, 26, 5614-5628.	3.9	18
68	Universal metabolic constraints shape the evolutionary ecology of diving in animals. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20200488.	2.6	18
69	Inter- and intrasexual dimorphism in the diving beetle Hydroporus memnonius Nicolai (Coleoptera:) Tj ETQq1 1 0.784314 rgBT /Overlock	1.6	17
70	Metabolic and reproductive plasticity of core and marginal populations of the eurythermic saline water bug Sigara selecta (Hemiptera: Corixidae) in a climate change context. Journal of Insect Physiology, 2017, 98, 59-66.	2.0	16
71	Whatâ€™s in a name? What have taxonomy and systematics ever done for us?. Journal of Biological Education, 2014, 48, 116-118.	1.5	15
72	Capelatus prykei gen. et sp.n. (Coleoptera: Dytiscidae: Copelatinae) â€“ a phylogenetically isolated diving beetle from the Western Cape of South Africa. Systematic Entomology, 2015, 40, 520-531.	3.9	15

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73	Home advantage? Decomposition across the freshwater-estuarine transition zone varies with litter origin and local salinity. Marine Environmental Research, 2015, 110, 1-7.	2.5	14
74	Detection of fungal 18S rRNA sequences in conjunction with marine nematode 18S rRNA amplicons. Aquatic Biology, 2009, 5, 149-155.	1.4	14
75	Predaceous water beetles (Coleoptera, Hydradephaga) of the Lake St Lucia system, South Africa: biodiversity, community ecology and conservation implications. ZooKeys, 2016, 595, 85-135.	1.1	13
76	The comparative biology of diving in two genera of European Dytiscidae (Coleoptera). Journal of Evolutionary Biology, 2012, 25, 329-341.	1.7	12
77	Micro-habitat distribution drives patch quality for sub-tropical rocky plateau amphibians in the northern Western Ghats, India. PLoS ONE, 2018, 13, e0194810.	2.5	12
78	Phylogeography and recent historical biogeography of Hydroporus glabriusculus AubÃ© (Coleoptera:) Tj ETQq0 0 0 rgBT /Overlock 10 T 293-307.	1.6	11
79	A North Africanâ€“European transition fauna: water beetles (Coleoptera) from the Ebro delta and other Mediterranean coastal wetlands in the Iberian peninsula. Aquatic Conservation: Marine and Freshwater Ecosystems, 1996, 6, 121-140.	2.0	11
80	Physiological niche and geographical range in European diving beetles (Coleoptera: Dytiscidae). Biology Letters, 2016, 12, 20160130.	2.3	11
81	Riding the storm: the response of Plantago lanceolata to simulated tidal flooding. Journal of Coastal Conservation, 2013, 17, 799-803.	1.6	10
82	New species and new records of Pterosthetops: eumadicolous water beetles of the South African Cape (Coleoptera, Hydraenidae). Zootaxa, 2014, 3811, 438.	0.5	10
83	Two new water beetles from the Hantamsberg, an inselberg in the Northern Cape of South Africa (Coleoptera, Hydraenidae). Zootaxa, 2014, 3887, 471-80.	0.5	9
84	Sexual dimorphism and sexual conflict in the diving beetleAgabus uliginosus(L.) (Coleoptera:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302	1.6	9
85	Combined morphological and molecular analysis of individual nematodes through short-term preservation in formalin. Molecular Ecology Notes, 2005, 5, 965-968.	1.7	8
86	Crenitis bicolor sp. n. from the Kamiesberg of South Africa (Coleoptera: Hydrophilidae). Zootaxa, 2013, 3626, 589-592.	0.5	8
87	Observed shifts in the contact zone between two forms of the diving beetleHydroporus memnoniusare consistent with predictions from sexual conflict. PeerJ, 2016, 4, e2089.	2.0	8
88	Genetic differentiation and natural hybridization between two morphological forms of the common woodlouse, Oniscus asellus Linnaeus 1758. Heredity, 1999, 82, 462-469.	2.6	7
89	Two new water beetles from the South African Cape (Coleoptera, Hydraenidae). Zootaxa, 2016, 4137, 585-91.	0.5	7
90	Larval Morhology ofHydrotarsusFalkenstrÃ¶m: Generic Characteristics, Description ofH. Compunctus(Wollaston), and Analysis of Relationships with Other Members of the Tribe Hydroporini (Coleoptera: Dytiscidae, Hydroporinae). The Coleopterists Bulletin, 2001, 55, 341-349.	0.2	6

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91	Prosthetops wolfbergensis sp. nov.â€"a giant amongst the â€˜minute moss beetlesâ€™, with new data on other members of the genus (Coleoptera, Hydraenidae). Zootaxa, 2013, 3666, 345.	0.5	6
92	Ecological Approaches to Coastal Risk Mitigation. , 2015, , 171-236.		6
93	Stable isotopes and mtDNA reveal niche segregation but no evidence of intergradation along a habitat gradient in the Lesser Whitethroat complex (Sylvia curruca; Passeriformes; Aves). Journal of Ornithology, 2016, 157, 1017-1027.	1.1	6
94	Water beetles from the Bokkeveld Plateau: a semi-arid hotspot of freshwater biodiversity in the Northern Cape of South Africa. Zootaxa, 2017, 4268, 191.	0.5	6
95	Do differences in developmental mode shape the potential for local adaptation?. Ecology, 2020, 101, e02942.	3.2	6
96	Diversity and distribution of polyphagan water beetles (Coleoptera) in the Lake St Lucia system, South Africa. ZooKeys, 2017, 656, 51-84.	1.1	6
97	Sex chromosome systems of European noterid beetles (Coleoptera, Adephaga: Noteridae). Insect Systematics and Evolution, 1992, 23, 115-119.	0.7	5
98	<p class="HeadingRunIn"><strong>A taxonomic revision of South African Sharphydrus, with the description of two new species (Coleoptera: Dytiscidae:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.5	5
99	Laccobius leopardus sp. nov. from the Western Cape of South Africa (Coleoptera: Hydrophilidae) . Zootaxa, 2014, 3835, 397.	0.5	5
100	A review of the Canthyporus exilis group, with the description of two new species (Coleoptera:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 38	0.5	5
101	New species and new records of Mesoceration Janssens, 1967 from South Africa (Coleoptera,) Tj ETQq1 1 0.784314 rgBT /Overlock 10	0.5	5
102	Two New Species of Madicolous Water Beetle from South Africa (Coleoptera: Hydraenidae). African Invertebrates, 2015, 56, 181-190.	0.5	5
103	Plasticity of thermal performance curves in a narrow range endemic water beetle. Journal of Thermal Biology, 2021, 102, 103113.	2.5	5
104	Cryptic lineages, cryptic barriers: historical seascapes and oceanic fronts drive genetic diversity in supralittoral rockpool beetles (Coleoptera: Hydraenidae). Zoological Journal of the Linnean Society, 2022, 196, 740-756.	2.3	5
105	Intraspecific variation in the terrestrial isopod Oniscus asellus Linnaeus, 1758 (Crustacea: Isopoda:) Tj ETQq1 1 0.784314 rgBT /Overlock	2.3	4
106	Consistency of fuzzy rules in an ecological context. Ecological Modelling, 2013, 251, 187-198.	2.5	4
107	<i>Hydraena lotti</i> sp. nov., a new member of the â€œ<i>Haenydra</i>â€•lineage from the Peloponnese (Greece), with additional records of <i>Hydraena</i> species in the region (Coleoptera, Hydraenidae). Zootaxa, 2013, 3637, 29-38.	0.5	4
108	What should we call the Levant mole? Unravelling the systematics and demography of Talpa levantis Thomas, 1906 sensu lato (Mammalia: Talpidae). Mammalian Biology, 2020, 100, 1-18.	1.5	4

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109	Riberazantaena, a new hydraenid genus from the Eastern Arc Mountains of Tanzania (Coleoptera,) Tj ETQq1 1 0.784314 rgBT /Overlo	0.5	4
110	A revision of Meladema diving beetles (Coleoptera, Dytiscidae), with the description of a new species from the central Mediterranean based on molecules and morphology. ZooKeys, 2017, 702, 45-112.	1.1	4
111	A new species of Oniscus Linnaeus, 1758 (Crustacea: Isopoda: Oniscidea) from northern Spain, with a revised key to members of the genus. Zoological Journal of the Linnean Society, 1992, 104, 117-125.	2.3	3
112	Description of the male of Sebasthetops omaliniformis JÃch, 1998 â€"a phylogenetically isolated water beetle from South Africa, with notes on its ecology (Coleoptera,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6		3
113	A revision of the South African riffle beetle genus Leielmis DelÃ¨ve, 1964 (Coleoptera: Elmidae). Zootaxa, 2017, 4254, 255.	0.5	3
114	Differentiation of South African coastal rock pool Ochthebius is associated with major ocean currents (Coleoptera: Hydraenidae). Acta Entomologica Musei Nationalis Pragae, 0, , 253-260.	0.5	3
115	The structure of tardigrade communities at fine spatial scales in an AndeanPolylepisforest. Neotropical Biodiversity, 2021, 7, 443-454.	0.5	3
116	A new species of Protozantaena Perkins, 1997 from the Great Escarpment of South Africa (Coleoptera,) Tj ETQq0 0 0 rgBT /Overlock 10	0.5	3
117	Characterisation and predicted genome locations of Leachâ€™s storm-petrel (Oceanodroma leucorhoa) microsatellite loci (Procellariidae, Aves). Conservation Genetics Resources, 2011, 3, 711-716.	0.8	2
118	Stictonectes rebeccae sp. n. from the Iberian Peninsula, with notes on its phylogenetic position (Coleoptera, Dytiscidae). Zootaxa, 2012, 3188, 42.	0.5	2
119	Two new species of Parhydraenini from South Africa (Coleoptera: Hydraenidae). Zootaxa, 2012, 3342, 51.	0.5	2
120	A new species of Yola Gozis, 1886 from the Western Cape of South Africa (Coleoptera: Dytiscidae:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.5	2
121	Three new species of Crenitis Bedel, 1881 from South Africa, with a revised key to African species (Coleoptera: Hydrophilidae). Aquatic Insects, 2017, 38, 101-113.	0.9	2
122	Two new Mesoceration Janssens, 1967 from the Piketberg, South Africa (Coleoptera, Hydraenidae). Zootaxa, 2019, 4555, 268.	0.5	2
123	The call of the squeak beetle: bioacoustics ofHygrobia hermanni(Fabricius, 1775) revisited (Coleoptera: Hygrobiidae). Aquatic Insects, 2020, 41, 131-144.	0.9	2
124	Frequent discordance between morphology and mitochondrial DNA in a species group of European water beetles (Coleoptera: Dytiscidae). PeerJ, 2017, 5, e3076.	2.0	2
125	A new species of Anacaena Thomson, 1859 from South Africa (Coleoptera: Hydrophilidae). Zootaxa, 2016, 4139, 593.	0.5	1
126	A new humicolous Parhydraena dâ€™Orchymont, 1937 from South Africa (Coleoptera, Hydraenidae). Zootaxa, 2018, 4378, 284-288.	0.5	1

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127	A new species of Leielmis DelÃ¨ve, 1964, with a revised key to members of the genus (Coleoptera:) Tj ETQq1 1 0.784314 rgBT /Overlo	0.5	1
128	Taxonomic revision of the Afrotropical Agabus raffrayi species group with the description of four new species (Coleoptera, Dytiscidae). ZooKeys, 2020, 963, 45-79.	1.1	1
129	Questioning attitudes in freshwater ecology?. Global Ecology and Biogeography, 2005, 14, 295-296.	5.8	0
130	The Larva ofHydroporus zimmermanniJ. MÃ¼ller, 1926 (Coleoptera: Dytiscidae: Hydroporinae), with Notes on Its Ecology and a Review of Described Larvae ofHydroporusClairville. The Coleopterists Bulletin, 2012, 66, 81-91.	0.2	0