Martin Burd

List of Publications by Year
in descending order

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114 papers	6,471 citations	117571 34 h-index	69214 77 g-index
119 all docs	119 docs citations	119 times ranked	4438 citing authors

#	Article	IF	Citations
1	POLLEN LIMITATION OF PLANT REPRODUCTION: ECOLOGICAL AND EVOLUTIONARY CAUSES AND CONSEQUENCES. Ecology, 2004, 85, 2408-2421.	1.5	1,004
2	Pollen Limitation of Plant Reproduction: Pattern and Process. Annual Review of Ecology, Evolution, and Systematics, 2005, 36, 467-497.	3.8	888
3	Batemanâ€™s principle and plant reproduction: The role of pollen limitation in fruit and seed set. Botanical Review, The, 1994, 60, 83-139.	1.7	855
4	Pollination decays in biodiversity hotspots. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 956-961.	3.3	259
5	The scope of Baker's law. New Phytologist, 2015, 208, 656-667.	3.5	178
6	Shades of red: birdâ€pollinated flowers target the specific colour discrimination abilities of avian vision. New Phytologist, 2013, 198, 301-310.	3.5	152
7	Animal dynamics based approach for modeling pedestrian crowd egress under panic conditions. Transportation Research Part B: Methodological, 2011, 45, 1433-1449.	2.8	103
8	Traffic Dynamics of the Leafâ€Cutting Ant,Atta cephalotes. American Naturalist, 2002, 159, 283-293.	1.0	101
9	Widespread vulnerability of flowering plant seed production to pollinator declines. Science Advances, 2021, 7, eabd3524.	4.7	92
10	SEXUAL ALLOCATION STRATEGY IN WINDâ€POLLINATED PLANTS. Evolution; International Journal of Organic Evolution, 1988, 42, 403-407.	1.1	88
11	Social group size, potential sperm competition and reproductive investment in a hermaphroditic leech, Helobdella papillornata (Euhirudinea: Glossiphoniidae). Journal of Evolutionary Biology, 2004, 17, 574-580.	0.8	84
12	Selfâ€compatibility is overâ€represented on islands. New Phytologist, 2017, 215, 469-478.	3.5	84
13	Land use and pollinator dependency drives global patterns of pollen limitation in the Anthropocene. Nature Communications, 2020, 11, 3999.	5.8	84
14	Ovule number per flower in a world of unpredictable pollination. American Journal of Botany, 2009, 96, 1159-1167.	0.8	81
15	OVULE PACKAGING IN STOCHASTIC POLLINATION AND FERTILIZATION ENVIRONMENTS. Evolution; International Journal of Organic Evolution, 1995, 49, 100-109.	1.1	78
16	Flower colour and phylogeny along an altitudinal gradient in the <scp>H</scp>imalayas of <scp>N</scp>epal. Journal of Ecology, 2014, 102, 126-135.	1.9	78
17	"Excess" Flower Production and Selective Fruit Abortion: A Model of Potential Benefits. Ecology, 1998, 79, 2123.	1.5	74
18	Head-on encounter rates and walking speed of foragers in leaf-cutting ant traffic. Insectes Sociaux, 2003, 50, 3-8.	0.7	72

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19	Floral colours in a world without birds and bees: the plants of <scp>M</scp>acquarie <scp>I</scp>sland. Plant Biology, 2016, 18, 842-850.	1.8	71
20	Investigating collective escape behaviours in complex situations. Safety Science, 2013, 60, 87-94.	2.6	68
21	The Haigâ€Westoby Model Revisited. American Naturalist, 2008, 171, 400-404.	1.0	62
22	Enhancing the Safety of Pedestrians during Emergency Egress. Transportation Research Record, 2009, 2137, 31-37.	1.0	54
23	Distinctive convergence in Australian floral colours seen through the eyes of Australian birds. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20132862.	1.2	52
24	Foraging Performance by Atta colombica, a Leaf-Cutting Ant. American Naturalist, 1996, 148, 597-612.	1.0	51
25	Mapping species distributions with social media geo-tagged images: Case studies of bees and flowering plants in Australia. Ecological Informatics, 2017, 39, 23-31.	2.3	51
26	Ovule Packaging in Stochastic Pollination and Fertilization Environments. Evolution; International Journal of Organic Evolution, 1995, 49, 100.	1.1	50
27	Using non-human biological entities to understand pedestrian crowd behaviour under emergency conditions. Safety Science, 2014, 66, 1-8.	2.6	48
28	Coevolutionary elaboration of pollinationâ€related traits in an alpine ginger (Roscoea purpurea) and a tabanid fly in the Nepalese Himalayas. New Phytologist, 2016, 211, 1402-1411.	3.5	47
29	Excavation and architecture of Argentine ant nests. Insectes Sociaux, 2005, 52, 350-356.	0.7	44
30	Why background colour matters to bees and flowers. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 2017, 203, 369-380.	0.7	44
31	Energetics of trail clearing in the leaf-cutter ant Atta. Behavioral Ecology and Sociobiology, 2017, 71, 1.	0.6	43
32	Butterfly wing colour patterns and flying heights in the seasonally wet forest of Barro Colorado Island, Panama. Journal of Tropical Ecology, 1994, 10, 601-610.	0.5	42
33	Body size effects on locomotion and load carriage in the highly polymorphic leaf-cutting ants Atta colombica and Atta cephalotes. Behavioral Ecology, 2000, 11, 125-131.	1.0	42
34	GloPL, a global data base on pollen limitation of plant reproduction. Scientific Data, 2018, 5, 180249.	2.4	39
35	Phenological Aspects of Male and Female Function in Hermaphroditic Plants. American Naturalist, 1992, 140, 305-324.	1.0	36
36	â€œEXCESSâ€•FLOWER PRODUCTION AND SELECTIVE FRUIT ABORTION: A MODEL OF POTENTIAL BENEFITS. Ecology, 1998, 79, 2123-2132.	1.5	36

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37	Psychophysics of the hoverfly: categorical or continuous color discrimination?. Environmental Epigenetics, 2019, 65, 483-492.	0.9	35
38	Ecological consequences of traffic organisation in ant societies. Physica A: Statistical Mechanics and Its Applications, 2006, 372, 124-131.	1.2	34
39	A test of simultaneous resource and pollen limitation in Stylidium armeria. New Phytologist, 2008, 179, 557-565.	3.5	34
40	Foraging behaviour of Atta cephalotes (leaf-cutting ants): an examination of two predictions for load selection. Animal Behaviour, 2000, 60, 781-788.	0.8	33
41	Assessing the ecological significance of bee visual detection and colour discrimination on the evolution of flower colours. Evolutionary Ecology, 2017, 31, 153-172.	0.5	33
42	Pollinator Behavioural Responses to Reward Size in Lobelia Deckenii: No Escape from Pollen Limitation of Seed Set. Journal of Ecology, 1995, 83, 865.	1.9	31
43	Biologically Inspired Modeling Approach for Collective Pedestrian Dynamics under Emergency Conditions. Transportation Research Record, 2010, 2196, 176-184.	1.0	31
44	Colour evolution within orchids depends on whether the pollinator is a bee or a fly. Plant Biology, 2019, 21, 745-752.	1.8	31
45	Central-place foraging continues beyond the nest entrance: the underground performance of leaf-cutting ants. Animal Behaviour, 2005, 70, 737-744.	0.8	30
46	Modeling Pedestrian Crowd Exit Choice through Combining Sources of Stated Preference Data. Transportation Research Record, 2015, 2490, 84-93.	1.0	30
47	Floral colour structure in two Australian herbaceous communities: it depends on who is looking. Annals of Botany, 2019, 124, 221-232.	1.4	30
48	Rewardlessness in orchids: how frequent and how rewardless?. Plant Biology, 2020, 22, 555-561.	1.8	30
49	Can irrational behaviour maximise fitness?. Behavioral Ecology and Sociobiology, 2009, 63, 461-471.	0.6	29
50	Consequence of Turning Movements in Pedestrian Crowds during Emergency Egress. Transportation Research Record, 2011, 2234, 97-104.	1.0	28
51	Animal dynamics based approach for modeling pedestrian crowd egress under panic conditions. Procedia, Social and Behavioral Sciences, 2011, 17, 438-461.	0.5	28
52	Exploring Pedestrian Walking through Angled Corridors. Transportation Research Procedia, 2014, 2, 19-25.	0.8	28
53	Turning Angle Effect on Emergency Egress: Experimental Evidence and Pedestrian Crowd Simulation. Transportation Research Record, 2012, 2312, 120-127.	1.0	26
54	Random Utility Models of Pedestrian Crowd Exit Selection based on SP-off-RP Experiments. Transportation Research Procedia, 2014, 2, 524-532.	0.8	26

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55	Global optimization from suboptimal parts: foraging sensu lato by leaf-cutting ants. Behavioral Ecology and Sociobiology, 2005, 59, 234-242.	0.6	25
56	AGEâ€“SIZE PLASTICITY FOR REPRODUCTION IN MONOCARPIC PLANTS. Ecology, 2006, 87, 2755-2764.	1.5	25
57	Reproductive isolation in alpine gingers: How do coexisting Roscoea (R. purpurea and) Tj ETQq1 1 0.784314 rgBT /Overlo Evolution, 2018, 72, 1840-1850.	1.1	25
58	Allometric scaling of foraging rate with trail dimensions in leaf-cutting ants. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 2442-2447.	1.2	24
59	Elevated Desired Speed and Change in Desired Direction. Transportation Research Record, 2015, 2490, 65-75.	1.0	24
60	Variable load size-ant size matching in leaf-cutting ants,Atta colombica (Hymenoptera: Formicidae). Journal of Insect Behavior, 1995, 8, 715-722.	0.4	23
61	Mass flowering and parental death in the regeneration of Cerberiopsis candelabra (Apocynaceae), a longâ€lived monocarpic tree in New Caledonia1. American Journal of Botany, 2008, 95, 558-567.	0.8	23
62	Why did heterospory evolve?. Biological Reviews, 2017, 92, 1739-1754.	4.7	23
63	Server System and Queuing Models of Leaf Harvesting by Leaf-Cutting Ants. American Naturalist, 1996, 148, 613-629.	1.0	22
64	Nonequilibrium dynamics of social groups: insights from foraging Argentine ants. Insectes Sociaux, 2004, 51, 226.	0.7	21
65	ARE RELATIONSHIPS BETWEEN POLLEN-OVULE RATIO AND POLLEN AND SEED SIZE EXPLAINED BY SEX ALLOCATION?. Evolution; International Journal of Organic Evolution, 2011, 65, 3002-3005.	1.1	21
66	Evaluating the spectral discrimination capabilities of different pollinators and their effect on the evolution of flower colors. Communicative and Integrative Biology, 2013, 6, e24000.	0.6	21
67	Adaptive function of drip tips: a test of the epiphyll hypothesis in Psychotria marginata and Faramea occidentalis (Rubiaceae). Journal of Tropical Ecology, 2007, 23, 449-455.	0.5	20
68	Plant traits moderate pollen limitation of introduced and native plants: a phylogenetic metaâ€analysis of global scale. New Phytologist, 2019, 223, 2063-2075.	3.5	20
69	Infrastructure construction without information exchange: the trail clearing mechanism in Atta leafcutter ants. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20182539.	1.2	19
70	Nest architecture and traffic flow: large potential effects from small structural features. Ecological Entomology, 2010, 35, 464-468.	1.1	17
71	Does tree size influence timing of flowering in Cerberiopsis candelabra (Apocynaceae), a long-lived monocarpic rain-forest tree?. Journal of Tropical Ecology, 2006, 22, 621-629.	0.5	16
72	Reproductive investment within inflorescences of Stylidium armeria varies with the strength of early resource commitment. Annals of Botany, 2010, 105, 697-705.	1.4	16

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73	Fragmentary Blue: Resolving the Rarity Paradox in Flower Colors. Frontiers in Plant Science, 2020, 11, 618203.	1.7	16
74	A Probabilistic Analysis of Pollinator Behavior and Seed Production in Lobelia Deckenii. Ecology, 1994, 75, 1635-1646.	1.5	15
75	Leaf tissue transport as a function of loading ratio in the leaf-cutting ant Atta cephalotes. Ecological Entomology, 2001, 26, 551-556.	1.1	15
76	FLOWERING PHENOLOGY AND SEXUAL ALLOCATION IN SINGLE-MUTATION LINEAGES OF ARABIDOPSIS THALIANA. Evolution; International Journal of Organic Evolution, 2005, 59, 970-978.	1.1	14
77	Optimality in a partitioned task performed by social insects. Biology Letters, 2008, 4, 627-629.	1.0	14
78	Parallel foraging cycles for different resources in leafâ€cutting ants: a clue to the mechanisms of rhythmic activity. Ecological Entomology, 2017, 42, 849-852.	1.1	14
79	Australian native flower colours: Does nectar reward drive bee pollinator flower preferences?. PLoS ONE, 2020, 15, e0226469.	1.1	14
80	Multitasking in a plantâ€“ant interaction: how does Acacia myrtifolia manage both ants and pollinators?. Oecologia, 2015, 178, 461-471.	0.9	13
81	Pollen Limitation Is Commonâ€”Should It Be?. American Naturalist, 2016, 187, 388-396.	1.0	13
82	Leaf heteroblasty in eucalypts: biogeographic evidence of ecological function. Australian Journal of Botany, 2018, 66, 191.	0.3	13
83	Flower number and floral components in ten angiosperm species: an examination of assumptions about trade-offs in reproductive evolution. Biological Journal of the Linnean Society, 1999, 68, 579-592.	0.7	12
84	Examining the Impact of Different Turning Angles on the Collective Egress of Crowds. Journal of Transportation Safety and Security, 2014, 6, 167-181.	1.1	12
85	The adaptive value of heterospory: Evidence from Selaginella. Evolution; International Journal of Organic Evolution, 2018, 72, 1080-1091.	1.1	12
86	Tall trails: ants resolve an asymmetry of information and capacity in collective maintenance of infrastructure. Animal Behaviour, 2017, 127, 179-185.	0.8	11
87	Integrating the Passenger-Driver hypothesis and plant community functional traits to the restoration of lands degraded by invasive trees. Forest Ecology and Management, 2018, 408, 112-120.	1.4	10
88	Fly pollination drives convergence of flower coloration. New Phytologist, 2022, 233, 52-61.	3.5	10
89	Vegetative and reproductive variation among unisexual and hermaphroditic individuals of Wurmbea dioica (Colchicaceae). Australian Journal of Botany, 2001, 49, 603.	0.3	8
90	OFFSPRING QUALITY IN RELATION TO EXCESS FLOWERS IN PULTENAEA GUNNII (FABACEAE). Evolution; International Journal of Organic Evolution, 2004, 58, 2371-2376.	1.1	8

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91	Automated calculation of spectral-reflectance marker-points to enable analysis of plant colour-signalling to pollinators. MethodsX, 2020, 7, 100827.	0.7	8
92	Resource Allocation and Seed Size Selection in Perennial Plants under Pollen Limitation. American Naturalist, 2017, 190, 430-441.	1.0	7
93	The Effect of Pollen Limitation on the Evolution of Mating System and Seed Size in Hermaphroditic Plants. American Naturalist, 2019, 193, 447-457.	1.0	7
94	Similar Crowd Behavior in Organisms of Vastly Different Body Size. Journal of Insect Behavior, 2014, 27, 239-250.	0.4	6
95	The enigma of sex allocation in Selaginella. Annals of Botany, 2018, 121, 377-383.	1.4	6
96	Flower colour and size signals differ depending on geographical location and altitude region. Plant Biology, 2021, 23, 905-914.	1.8	6
97	Correlated response of autogeny to selection for adult starvation resistance in the blowfly, Lucilia cuprina. Heredity, 2002, 88, 35-38.	1.2	5
98	Sibling competition in a brood-tending leech. Proceedings of the Royal Society B: Biological Sciences, 2006, 273, 2461-2466.	1.2	5
99	Hunting, gathering, investing, globalizing: The biological roots of economic behaviour. Systems Research and Behavioral Science, 2010, 27, 510-522.	0.9	5
100	Costs of parental care on hunting behaviour of Helobdella papillornata (Euhirudinea:) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382 Td (Glos	1.0	4
101	Population age structures, persistence and flowering cues in Cerberiopsis candelabra (Apocynaceae), a long-lived monocarpic rain-forest tree in New Caledonia. Journal of Tropical Ecology, 2021, 37, 263-275.	0.5	4
102	Flowering phenology and sexual allocation in single-mutation lineages of Arabidopsis thaliana. Evolution; International Journal of Organic Evolution, 2005, 59, 970-8.	1.1	4
103	Sexual Selection and Human Evolution: All or None Adaptation?. American Anthropologist, 1986, 88, 167-172.	0.7	2
104	The digging dynamics of ant tunnels: movement, encounters, and nest space. Insectes Sociaux, 2019, 66, 119-127.	0.7	2
105	Competition and pollen wars: simulations reveal the dynamics of competition mediated through heterospecific pollen transfer by non-flower constant insects. Theoretical Ecology, 2021, 14, 207-218.	0.4	2
106	Bird community recovery following removal of an invasive tree. Ecological Solutions and Evidence, 2021, 2, e12080.	0.8	2
107	A model of decision making in an ecologically realistic environment: Relative comparison and the Independence of Irrelevant Alternatives. Journal of Bioeconomics, 2012, 14, 197-215.	1.5	1
108	The evolutionary ecology of pollination and the functional biology of agricultural plants. , 0, , 65-80.		0

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109	Evolution: An Expanded View. Science, 1984, 226, 1252-1252.	6.0	0
110	FLOWERING PHENOLOGY AND SEXUAL ALLOCATION IN SINGLE-MUTATION LINEAGES OF ARABIDOPSIS THALIANA. Evolution; International Journal of Organic Evolution, 2005, 59, 970.	1.1	0
111	Frequencyâ€dependent and densityâ€dependent larval competition between lifeâ€history strains of a fly, Lucilia cuprina. Ecological Entomology, 2012, 37, 109-116.	1.1	0
112	The colorful language of Australian flowers. Communicative and Integrative Biology, 2014, 7, e28940.	0.6	0
113	The role of spore size in the global pattern of coâ€occurrence among Selaginella species. Journal of Biogeography, 2019, 46, 807-815.	1.4	0
114	Dual mechanisms of autonomous selfing in Roscoea nepalensis (Zingiberaceae). Ecology, 2021, 102, e03337.	1.5	0