Luke G Barrett

List of Publications by Year
in descending order

50 papers	2,847 citations	186265 28 h-index	189892 50 g-index
55 all docs	55 docs citations	55 times ranked	3370 citing authors

#	Article	IF	Citations
1	Life history determines genetic structure and evolutionary potential of hostâ€"parasite interactions. Trends in Ecology and Evolution, 2008, 23, 678-685.	8.7	302
2	Rapid genetic change underpins antagonistic coevolution in a natural hostâ€pathogen metapopulation. Ecology Letters, 2012, 15, 425-435.	6.4	189
3	The long-term maintenance of a resistance polymorphism through diffuse interactions. Nature, 2014, 512, 436-440.	27.8	182
4	Continua of specificity and virulence in plant hostâ€"pathogen interactions: causes and consequences. New Phytologist, 2009, 183, 513-529.	7.3	176
5	Guiding deployment of resistance in cereals using evolutionary principles. Evolutionary Applications, 2014, 7, 609-624.	3.1	171
6	Unifying concepts and mechanisms in the specificity of plantâ€"enemy interactions. Trends in Plant Science, 2012, 17, 282-292.	8.8	155
7	Diversity and Evolution of Effector Loci in Natural Populations of the Plant Pathogen Melampsora lini. Molecular Biology and Evolution, 2009, 26, 2499-2513.	8.9	130
8	Variation in infectivity and aggressiveness in space and time in wild hostâ€"pathogen systems: causes and consequences. Journal of Evolutionary Biology, 2012, 25, 1918-1936.	1.7	129
9	Assessing the durability and efficiency of landscape-based strategies to deploy plant resistance to pathogens. PLoS Computational Biology, 2018, 14, e1006067.	3.2	72
10	Symbiosis limits establishment of legumes outside their native range at a global scale. Nature Communications, 2017, 8, 14790.	12.8	71
11	MALADAPTATION IN WILD POPULATIONS OF THE GENERALIST PLANT PATHOGEN PSEUDOMONAS SYRINGAE. Evolution; International Journal of Organic Evolution, 2011, 65, 818-830.	2.3	70
12	Contrasting impacts of pollen and seed dispersal on spatial genetic structure in the bird-pollinated Banksia hookeriana. Heredity, 2009, 102, 274-285.	2.6	65
13	Epidemiological and Evolutionary Outcomes in Gene-for-Gene and Matching Allele Models. Frontiers in Plant Science, 2015, 6, 1084.	3.6	62
14	Cheating, trade-offs and the evolution of aggressiveness in a natural pathogen population. Ecology Letters, 2011, 14, 1149-1157.	6.4	58
15	Addressing the Challenges of Pathogen Evolution on the Worldâ€™s Arable Crops. Phytopathology, 2016, 106, 1117-1127.	2.2	55
16	Host promiscuity in symbiont associations can influence exotic legume establishment and colonization of novel ranges. Diversity and Distributions, 2015, 21, 1193-1203.	4.1	52
17	Mosaics, mixtures, rotations or pyramiding: What is the optimal strategy to deploy major gene resistance?. Evolutionary Applications, 2018, 11, 1791-1810.	3.1	52
18	Partner diversity and identity impacts on plant productivity in <i>Acacia</i>â€"rhizobial interactions. Journal of Ecology, 2015, 103, 130-142.	4.0	49

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19	Temporal patterns of genetic variation across a 9-year-old aerial seed bank of the shrub Banksia hookeriana (Proteaceae). Molecular Ecology, 2005, 14, 4169-4179.	3.9	48
20	Models of Plant Resistance Deployment. Annual Review of Phytopathology, 2021, 59, 125-152.	7.8	47
21	EVOLUTIONARY DIVERSIFICATION THROUGH HYBRIDIZATION IN A WILD HOST?PATHOGEN INTERACTION. Evolution; International Journal of Organic Evolution, 2007, 61, 1613-1621.	2.3	46
22	Geographic adaptation in plantâ€"soil mutualisms: tests using <i>Acacia</i> spp. and rhizobial bacteria. Functional Ecology, 2012, 26, 457-468.	3.6	45
23	Resistance to natural and synthetic gene drive systems. Journal of Evolutionary Biology, 2020, 33, 1345-1360.	1.7	43
24	Mutualisms are not constraining crossâ€continental invasion success of <i><scp>A</scp>cacia</i> species within <scp>A</scp>ustralia. Diversity and Distributions, 2012, 18, 962-976.	4.1	42
25	Host species and environmental variation can influence rhizobial community composition. Journal of Ecology, 2017, 105, 540-548.	4.0	38
26	Larger plants promote a greater diversity of symbiotic nitrogenâ€fixing soil bacteria associated with an Australian endemic legume. Journal of Ecology, 2019, 107, 977-991.	4.0	38
27	Variation in pathogen aggressiveness within a metapopulation of the Cakile maritima-Alternaria brassicicola host-pathogen association. Plant Pathology, 2005, 54, 265-274.	2.4	37
28	Population structure and diversity in sexual and asexual populations of the pathogenic fungus <i>Melampsora lini</i>. Molecular Ecology, 2008, 17, 3401-3415.	3.9	36
29	Gene drives in plants: opportunities and challenges for weed control and engineered resilience. Proceedings of the Royal Society B: Biological Sciences, 2019, 286, 20191515.	2.6	36
30	Positive selection in AvrP4 avirulence gene homologues across the genus Melampsora. Proceedings of the Royal Society B: Biological Sciences, 2009, 276, 2913-2922.	2.6	33
31	Spatioâ€temporal connectivity and host resistance influence evolutionary and epidemiological dynamics of the canola pathogen <i>Leptosphaeria maculans</i>. Evolutionary Applications, 2018, 11, 1354-1370.	3.1	31
32	Isolation and characterization of microsatellite loci from the rust pathogen, Melampsora lini. Molecular Ecology Notes, 2006, 6, 930-932.	1.7	27
33	Can natural gene drives be part of future fungal pathogen control strategies in plants?. New Phytologist, 2020, 228, 1431-1439.	7.3	26
34	Local demographic and epidemiological patterns in the <i><scp>L</scp>inum marginale</i>â€"<i><scp>M</scp>elampsora lini</i> association: a multiâ€year study. Journal of Ecology, 2017, 105, 1399-1412.	4.0	25
35	Mixed infections alter transmission potential in a fungal plant pathogen. Environmental Microbiology, 2021, 23, 2315-2330.	3.8	25
36	Phylogenetic signals and predictability in plantâ€"soil feedbacks. New Phytologist, 2020, 228, 1440-1449.	7.3	19

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37	Evolutionary history shapes patterns of mutualistic benefit in Acacia â€“rhizobial interactions. Evolution; International Journal of Organic Evolution, 2016, 70, 1473-1485.	2.3	18
38	Maintenance of variation in virulence and reproduction in populations of an agricultural plant pathogen. Evolutionary Applications, 2021, 14, 335-347.	3.1	18
39	Gene drive strategies of pest control in agricultural systems: Challenges and opportunities. Evolutionary Applications, 2021, 14, 2162-2178.	3.1	17
40	Differential plant invasiveness is not always driven by host promiscuity with bacterial symbionts. AoB PLANTS, 2016, 8, plw060.	2.3	15
41	Availability of soil mutualists may not limit nonâ€native <i>Acacia</i> invasion but could increase their impact on native soil communities. Journal of Applied Ecology, 2020, 57, 786-793.	4.0	14
42	Population Processes at Multiple Spatial Scales Maintain Diversity and Adaptation in the Linum marginale - Melampsora lini Association. PLoS ONE, 2012, 7, e41366.	2.5	14
43	Maximizing World Food Production through Disease Control. BioScience, 2020, 70, 126-128.	4.9	13
44	Specialization for resistance in wild host-pathogen interaction networks. Frontiers in Plant Science, 2015, 6, 761.	3.6	11
45	Gene technologies in weed management: a technical feasibility analysis. Current Opinion in Insect Science, 2020, 38, 6-14.	4.4	9
46	Similar levels of gene content variation observed for Pseudomonas syringae populations extracted from single and multiple host species. PLoS ONE, 2017, 12, e0184195.	2.5	8
47	Genetic analysis reveals long-standing population differentiation and high diversity in the rust pathogen Melampsora lini. PLoS Pathogens, 2020, 16, e1008731.	4.7	8
48	Novel modelâ€based clustering reveals ecologically differentiated bacterial genomes across a large climate gradient. Ecology Letters, 2019, 22, 2077-2086.	6.4	3
49	Soil biotic effects and competition; What are the mechanisms behind being a successful invader?. Pedobiologia, 2021, 87-88, 150749.	1.2	3
50	Metapopulation Structure Predicts Population Dynamics in the Cakile maritimaâ€“Alternaria brassicicola Host-Pathogen Interaction. American Naturalist, 2021, 197, E55-E71.	2.1	2