

# James F Gillooly

## List of Publications by Year in descending order

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Version: 2024-02-01

38  
papers

9,028  
citations

279798

23  
h-index

330143

37  
g-index

42  
all docs

42  
docs citations

42  
times ranked

12038  
citing authors

#	ARTICLE	IF	CITATIONS
1	TOWARD A METABOLIC THEORY OF ECOLOGY. <i>Ecology</i> , 2004, 85, 1771-1789.	3.2	5,745
2	Effects of size and temperature on developmental time. <i>Nature</i> , 2002, 417, 70-73.	27.8	798
3	The rate of DNA evolution: Effects of body size and temperature on the molecular clock. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 140-145.	7.1	441
4	Scaling of number, size, and metabolic rate of cells with body size in mammals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 4718-4723.	7.1	262
5	Thermodynamic and metabolic effects on the scaling of production and population energy use. <i>Ecology Letters</i> , 2003, 6, 990-995.	6.4	215
6	The metabolic basis of whole-organism RNA and phosphorus content. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 11923-11927.	7.1	151
7	Predicting natural mortality rates of plants and animals. <i>Ecology Letters</i> , 2008, 11, 710-716.	6.4	137
8	The energetic basis of acoustic communication. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2010, 277, 1325-1331.	2.6	136
9	Energetic and biomechanical constraints on animal migration distance. <i>Ecology Letters</i> , 2012, 15, 104-110.	6.4	127
10	Energetic basis of colonial living in social insects. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 3634-3638.	7.1	123
11	Allometric scaling of maximum population density: a common rule for marine phytoplankton and terrestrial plants. <i>Ecology Letters</i> , 2002, 5, 611-613.	6.4	120
12	Nuclear DNA Content Varies with Cell Size across Human Cell Types. <i>Cold Spring Harbor Perspectives in Biology</i> , 2015, 7, a019091.	5.5	95
13	Energetics of stress: linking plasma cortisol levels to metabolic rate in mammals. <i>Biology Letters</i> , 2016, 12, 20150867.	2.3	76
14	LINKING GLOBAL PATTERNS IN BIODIVERSITY TO EVOLUTIONARY DYNAMICS USING METABOLIC THEORY. <i>Ecology</i> , 2007, 88, 1890-1894.	3.2	66
15	Dinosaur Fossils Predict Body Temperatures. <i>PLoS Biology</i> , 2006, 4, e248.	5.6	60
16	Characterizing the microbiomes of Antarctic sponges: a functional metagenomic approach. <i>Scientific Reports</i> , 2020, 10, 645.	3.3	50
17	The mechanistic basis of the metabolic theory of ecology. <i>Oikos</i> , 2007, 116, 1073-1077.	2.7	49
18	Effects of metabolic rate on protein evolution. <i>Biology Letters</i> , 2007, 3, 655-660.	2.3	48

#	ARTICLE	IF	CITATIONS
19	RESPONSE TO FORUM COMMENTARY ON "TOWARD A METABOLIC THEORY OF ECOLOGY" Ecology, 2004, 85, 1818-1821.	3.2	47
20	Body mass scaling of passive oxygen diffusion in endotherms and ectotherms. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5340-5345.	7.1	44
21	Eusocial insects as superorganisms. Communicative and Integrative Biology, 2010, 3, 360-362.	1.4	35
22	A broad-scale comparison of aerobic activity levels in vertebrates: endotherms versus ectotherms. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20162328.	2.6	33
23	Changes in body temperature influence the scaling of and aerobic scope in mammals. Biology Letters, 2007, 3, 100-103.	2.3	27
24	Evaluating the influences of temperature, primary production, and evolutionary history on bivalve growth rates. Paleobiology, 2019, 45, 405-420.	2.0	22
25	Explaining differences in the lifespan and replicative capacity of cells: a general model and comparative analysis of vertebrates. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 3976-3980.	2.6	20
26	Brain size varies with temperature in vertebrates. PeerJ, 2014, 2, e301.	2.0	20
27	Response to Comment on "Global Biodiversity, Biochemical Kinetics, and the Energetic-Equivalence Rule". Science, 2003, 299, 346c-346.	12.6	11
28	Energetic constraints on an early developmental stage: a comparative view. Biology Letters, 2008, 4, 123-126.	2.3	11
29	Stridulation by <i>Jadera haematoloma</i> (Hemiptera: Rhopalidae): Production Mechanism and Associated Behaviors. Annals of the Entomological Society of America, 2012, 105, 118-127.	2.5	9
30	Vertebrate blood cell volume increases with temperature: implications for aerobic activity. PeerJ, 2014, 2, e346.	2.0	9
31	Temperature effects on virion volume and genome length in dsDNA viruses. Biology Letters, 2016, 12, 20160023.	2.3	9
32	Predicting egg size across temperatures in marine teleost fishes. Fish and Fisheries, 2020, 21, 1027-1033.	5.3	8
33	Common metabolic constraints on dive duration in endothermic and ectothermic vertebrates. PeerJ, 2016, 4, e2569.	2.0	8
34	How reliable is the biological time clock?. Nature, 2003, 424, 270-270.	27.8	5
35	Allometric scaling of Lyapunov exponents in chaotic populations. Population Ecology, 2020, 62, 364-369.	1.2	5
36	Host cell volume explains differences in the size of DsDNA viruses. Virus Research, 2021, 295, 198321.	2.2	3

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37	Evaluating the tradeoff between offspring number and survivorship across fishes, amphibians, reptiles and mammals. <i>Oikos</i> , 2021, 130, 798-807.	2.7	3
38	Idiographic and nomothetic approaches to heterogeneity are complementary: Response to comments on "Evaluating the influences of temperature, primary production, and evolutionary history on bivalve growth rates". <i>Paleobiology</i> , 2020, 46, 275-277.	2.0	0