Robert M May

List of Publications by Year
in descending order

167 papers	46,670 citations	9786 73 h-index	5988 160 g-index
182 all docs	182 docs citations	182 times ranked	27505 citing authors

#	Article	IF	Citations
1	The price of complexity in financial networks. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10031-10036.	7.1	141
2	Tracking and forecasting ecosystem interactions in real time. Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20152258.	2.6	185
3	DYNAMICAL EVIDENCE FOR CAUSALITY BETWEEN GALACTIC COSMIC RAYS AND GLOBAL TEMPERATURE. , 2016, , .		0
4	Dynamical evidence for causality between galactic cosmic rays and interannual variation in global temperature. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3253-3256.	7.1	80
5	Back to the fundamentals: a reply to Barot et al.. Trends in Ecology and Evolution, 2015, 30, 370-371.	8.7	2
6	Reply to Luo et al.: Robustness of causal effects of galactic cosmic rays on interannual variation in global temperature. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4640-1.	7.1	6
7	Fundamental ecology is fundamental. Trends in Ecology and Evolution, 2015, 30, 9-16.	8.7	61
8	Combined inequality in wealth and risk leads to disaster in the climate change game. Climatic Change, 2013, 120, 815-830.	3.6	56
9	John Snow's legacy: epidemiology without borders. Lancet, The, 2013, 381, 1302-1311.	13.7	34
10	Can We Name Earth's Species Before They Go Extinct?. Science, 2013, 339, 413-416.	12.6	479
11	Response to Comments on â€œCan We Name Earthâ€™s Species Before They Go Extinct?â€. Science, 2013, 341, 237-237.	12.6	22
12	Networks and webs in ecosystems and financial systems. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2013, 371, 20120376.	3.4	24
13	Size and complexity in model financial systems. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 18338-18343.	7.1	104
14	Q&A: Extinctions and the impact of Homo sapiens. BMC Biology, 2012, 10, 106.	3.8	0
15	Why should we be concerned about loss of biodiversity. Comptes Rendus - Biologies, 2011, 334, 346-350.	0.2	18
16	Systemic risk in banking ecosystems. Nature, 2011, 469, 351-355.	27.8	1,090
17	Individual versus systemic risk and the Regulator's Dilemma. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 12647-12652.	7.1	125
18	Are exploited fish populations stable?. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E1224-5; author reply E1226.	7.1	37

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19	Science as organized scepticism. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 4685-4689.	3.4	11
20	Why Worry about How Many Species and Their Loss?. PLoS Biology, 2011, 9, e1001130.	5.6	66
21	Ecological science and tomorrow's world. Philosophical Transactions of the Royal Society B: Biological Sciences, 2010, 365, 41-47.	4.0	67
22	Systemic risk: the dynamics of model banking systems. Journal of the Royal Society Interface, 2010, 7, 823-838.	3.4	214
23	Tropical Arthropod Species, More or Less?. Science, 2010, 329, 41-42.	12.6	94
24	Food-web assembly and collapse: mathematical models and implications for conservation. Philosophical Transactions of the Royal Society B: Biological Sciences, 2009, 364, 1643-1646.	4.0	33
25	Why fishing magnifies fluctuations in fish abundance. Nature, 2008, 452, 835-839.	27.8	548
26	Ecology for bankers. Nature, 2008, 451, 893-894.	27.8	651
27	Parasites, people and policy: infectious diseases and the Millennium Development Goals. Trends in Ecology and Evolution, 2007, 22, 497-503.	8.7	26
28	Network structure and the biology of populations. Trends in Ecology and Evolution, 2006, 21, 394-399.	8.7	268
29	Fishing elevates variability in the abundance of exploited species. Nature, 2006, 443, 859-862.	27.8	493
30	Observations on related ecological exponents. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6931-6933.	7.1	30
31	Infectious Disease: Can We Avert a Lethal Flu Pandemic?. Current Biology, 2005, 15, R922-R924.	3.9	7
32	Subnets of scale-free networks are not scale-free: Sampling properties of networks. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 4221-4224.	7.1	436
33	Tomorrow's taxonomy: collecting new species in the field will remain the rateâ€"limiting step. Philosophical Transactions of the Royal Society B: Biological Sciences, 2004, 359, 733-734.	4.0	47
34	Raising Europe's game. Nature, 2004, 430, 831-832.	27.8	6
35	Uses and Abuses of Mathematics in Biology. Science, 2004, 303, 790-793.	12.6	351
36	Simple mathematical models with very complicated dynamics. , 2004, , 85-93.		66

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37	Infection dynamics on scale-free networks. Physical Review E, 2001, 64, 066112.	2.1	603
38	Infectious disease dynamics: what characterizes a successful invader?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2001, 356, 901-910.	4.0	137
39	EPIDEMIOLOGY: How Viruses Spread Among Computers and People. Science, 2001, 292, 1316-1317.	12.6	558
40	British birds by number. Nature, 2000, 404, 559-560.	27.8	8
41	Crash tests for real. Nature, 1999, 398, 371-372.	27.8	31
42	Synchronicity, chaos and population cycles: spatial coherence in an uncertain world. Trends in Ecology and Evolution, 1999, 14, 417-418.	8.7	39
43	The voles of Hokkaido. Nature, 1998, 396, 409-410.	27.8	6
44	Extinction and the Loss of Evolutionary History. Science, 1997, 278, 692-694.	12.6	302
45	Case studies of extinction. Nature, 1997, 385, 776-777.	27.8	3
46	The hen harrier and the grouse. Nature, 1997, 389, 330-331.	27.8	11
47	Anti-viral Drug Treatment: Dynamics of Resistance in Free Virus and Infected Cell Populations. Journal of Theoretical Biology, 1997, 184, 203-217.	1.7	239
48	Spatial Heterogeneity in Epidemic Models. Journal of Theoretical Biology, 1996, 179, 1-11.	1.7	269
49	The maintenance of strain structure in populations of recombining infectious agents. Nature Medicine, 1996, 2, 437-442.	30.7	276
50	Robustness of cooperation. Nature, 1996, 379, 126-126.	27.8	24
51	Explaining "Linguistic Features" of Noncoding DNA. Science, 1996, 271, 14-15.	12.6	0
52	Explaining "Linguistic Features" of Noncoding DNA. Science, 1996, 271, 14-15.	12.6	0
53	Necessity and chance: deterministic chaos in ecology and evolution. Bulletin of the American Mathematical Society, 1995, 32, 291-308.	1.5	39
54	The rise and fall and rise of tuberculosis. Nature Medicine, 1995, 1, 752-752.	30.7	0

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55	The cheetah controversy. Nature, 1995, 374, 309-310.	27.8	40
56	Antigenic oscillations and shifting immunodominance in HIV-1 infections. Nature, 1995, 375, 606-611.	27.8	342
57	The species alias problem. Nature, 1995, 378, 447-448.	27.8	26
58	The co-evolutionary dynamics of viruses and their hosts. , 1995, , 192-212.		6
59	Disease and the abundance and distribution of bird populations: a summary. Ibis, 1995, 137, S85.	1.9	20
60	Spatial games and evolution of cooperation. Lecture Notes in Computer Science, 1995, , 747-759.	1.3	9
61	MORE SPATIAL GAMES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1994, 04, 33-56.	1.7	249
62	Ecological science and the management of protected areas. Biodiversity and Conservation, 1994, 3, 437-448.	2.6	22
63	Uncertainties in extinction rates. Nature, 1994, 368, 105-105.	27.8	61
64	Species coexistence and self-organizing spatial dynamics. Nature, 1994, 370, 290-292.	27.8	334
65	Habitat destruction and the extinction debt. Nature, 1994, 371, 65-66.	27.8	2,236
66	The economics of extinction. Nature, 1994, 372, 42-43.	27.8	22
67	Spatial Chaos and its Role in Ecology and Evolution. Lecture Notes in Biomathematics, 1994, , 326-344.	0.3	6
68	PHYLOGENIES WITHOUT FOSSILS. Evolution; International Journal of Organic Evolution, 1994, 48, 523-529.	2.3	141
69	Bacterial tick-tock. Nature, 1993, 365, 492-492.	27.8	4
70	A dip into the deep seas. Nature, 1993, 365, 609-610.	27.8	52
71	Resisting resistance. Nature, 1993, 361, 593-594.	27.8	30
72	Marine species richness. Nature, 1993, 361, 598-598.	27.8	13

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73	THE SPATIAL DILEMMAS OF EVOLUTION. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1993, 03, 35-78.	1.7	573
74	AIDS pathogenesis. Aids, 1993, 7, S3-S18.	2.2	47
75	Dynamics of Metapopulations: Habitat Destruction and Competitive Coexistence. Journal of Animal Ecology, 1992, 61, 37.	2.8	442
76	Taxonomy of taxonomists. Nature, 1992, 356, 281-282.	27.8	232
77	Density-dependent populations. Nature, 1992, 356, 391-392.	27.8	4
78	Bottoms up for the oceans. Nature, 1992, 357, 278-279.	27.8	95
79	Evolutionary games and spatial chaos. Nature, 1992, 359, 826-829.	27.8	3,483
80	Comments on the Sustainable Biosphere Initiative. Conservation Biology, 1991, 5, 548-549.	4.7	6
81	A fondness for fungi. Nature, 1991, 352, 475-476.	27.8	96
82	Hypercycles spring to life. Nature, 1991, 353, 607-608.	27.8	24
83	The moorland owners' grouse. Nature, 1990, 343, 310-311.	27.8	7
84	Nonlinear forecasting as a way of distinguishing chaos from measurement error in time series. Nature, 1990, 344, 734-741.	27.8	1,649
85	Parasite clones in the wild. Nature, 1990, 346, 109-110.	27.8	12
86	Taxonomy as destiny. Nature, 1990, 347, 129-130.	27.8	405
87	Applications of fractals in ecology. Trends in Ecology and Evolution, 1990, 5, 79-86.	8.7	385
88	22. The Population Biology of Host-Parasite and Host-Parasitoid Associations. , 1989, , 319-347.		21
89	Out for the sperm count. Nature, 1989, 337, 508-509.	27.8	75
90	Detecting density dependence in imaginary worlds. Nature, 1989, 338, 16-17.	27.8	40

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91	Black-footed ferret update. Nature, 1989, 339, 104-104.	27.8	5
92	An inordinate fondness for ants. Nature, 1989, 341, 386-387.	27.8	9
93	High table tales. Nature, 1989, 341, 695-695.	27.8	1
94	Networks of sexual contacts. Aids, 1989, 3, 807-818.	2.2	257
95	The Transmission Dynamics of Human Immunodeficiency Virus (HIV). Biomathematics, 1989, , 263-311.	0.7	5
96	Complex dynamical behaviour in the interaction between HIV and the immune system. , 1989, , 335-349.		18
97	HIV infection in heterosexuals. Nature, 1988, 331, 655-656.	27.8	23
98	Epidemiological parameters of HI V transmission. Nature, 1988, 333, 514-519.	27.8	340
99	Tampering with territories. Nature, 1988, 335, 668-669.	27.8	1
100	Possible demographic consequences of HIV/AIDS epidemics. I. assuming HIV infection always leads to AIDS. Mathematical Biosciences, 1988, 90, 475-505.	1.9	73
101	Conservation and Disease. Conservation Biology, 1988, 2, 28-30.	4.7	110
102	Nonlinearities and Complex Behavior in Simple Ecological and Epidemiological Models. Annals of the New York Academy of Sciences, 1987, 504, 1-15.	3.8	28
103	More evolution of cooperation. Nature, 1987, 327, 15-17.	27.8	147
104	Chaos and the dynamics of biological populations. Nuclear Physics, Section B, Proceedings Supplements, 1987, 2, 225-245.	0.4	16
105	Transmission dynamics of HIV infection. Nature, 1987, 326, 137-142.	27.8	707
106	Problems in leaving the ark. Nature, 1987, 326, 245-246.	27.8	41
107	Living Latin binomials. Nature, 1987, 326, 642-643.	27.8	12
108	The Search for Patterns in the Balance of Nature: Advances and Retreats. Ecology, 1986, 67, 1115-1126.	3.2	236

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109	Endangered species: The fate of the California condor. Nature, 1986, 319, 16-16.	27.8	15
110	Population Biology of Microparasitic Infections. Biomathematics, 1986, , 405-442.	0.7	24
111	Regulation of Populations with Nonoverlapping Generations by Microparasites: A Purely Chaotic System. American Naturalist, 1985, 125, 573-584.	2.1	68
112	Ecology: Competition in imaginary worlds. Nature, 1985, 314, 228-229.	27.8	5
113	Population biology: Evolution of pesticide resistance. Nature, 1985, 315, 12-13.	27.8	25
114	Conservation biology: A discipline with a time limit. Nature, 1985, 317, 111-112.	27.8	6
115	Vaccination and herd immunity to infectious diseases. Nature, 1985, 318, 323-329.	27.8	617
116	Ecological Aspects of Disease and Human Populations. American Zoologist, 1985, 25, 441-450.	0.7	11
117	Helminth Infections of Humans: Mathematical Models, Population Dynamics, and Control. Advances in Parasitology, 1985, 24, 1-101.	3.2	487
118	Endemic infections in growing populations. Mathematical Biosciences, 1985, 77, 141-156.	1.9	35
119	Spatial, Temporal, and Genetic Heterogeneity in Host Populations And the Design of Immunization Programmes. Mathematical Medicine and Biology, 1984, 1, 233-266.	1.2	100
120	Ecology: Oceanic noise and fish stocks. Nature, 1984, 310, 190-190.	27.8	1
121	Mathematical modelling: The cubic map in theory and practice. Nature, 1984, 311, 13-14.	27.8	9
122	Spatial heterogeneity and the design of immunization programs. Mathematical Biosciences, 1984, 72, 83-111.	1.9	217
123	Ecology: The structure of food webs. Nature, 1983, 301, 566-568.	27.8	68
124	Long-term biological consequences of nuclear war. Science, 1983, 222, 1293-1300.	12.6	176
125	Reprints of Books Previously Reviewed in Science. Science, 1983, 221, 544-544.	12.6	0
126	Population dynamics of human helminth infections: control by chemotherapy. Nature, 1982, 297, 557-563.	27.8	256

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127	Population dynamics of fox rabies in Europe. Nature, 1981, 289, 765-771.	27.8	434
128	The Role of Theory in Ecology. American Zoologist, 1981, 21, 903-910.	0.7	32
129	The Dynamics of Multiparasitoid-Host Interactions. American Naturalist, 1981, 117, 234-261.	2.1	185
130	NOTES ON SOME TOPICS IN THEORETICAL ECOLOGY, IN RELATION TO THE MANAGEMENT OF LOCALLY ABUNDANT POPULATIONS OF MAMMALS. , 1981, , 205-216.		1
131	Period doubling and the onset of turbulence: An analytic estimate of the Feigenbaum ratio. Physics Letters, Section A: General, Atomic and Solid State Physics, 1980, 78, 1-3.	2.1	27
132	Evolutionarily stable dispersal strategies. Journal of Theoretical Biology, 1980, 82, 205-230.	1.7	415
133	The economics and management of commercial fisheries. Nature, 1980, 287, 675-676.	27.8	2
134	NONLINEAR PHENOMENA IN ECOLOGY AND EPIDEMIOLOGY*. Annals of the New York Academy of Sciences, 1980, 357, 267-281.	3.8	66
135	Management of Multispecies Fisheries. Science, 1979, 205, 267-277.	12.6	515
136	Population biology of infectious diseases: Part I. Nature, 1979, 280, 361-367.	27.8	2,499
137	Population biology of infectious diseases: Part II. Nature, 1979, 280, 455-461.	27.8	994
138	BIFURCATIONS AND DYNAMIC COMPLEXITY IN ECOLOGICAL SYSTEMS*. Annals of the New York Academy of Sciences, 1979, 316, 517-529.	3.8	71
139	Whaling: past, present and future. Nature, 1978, 276, 319-322.	27.8	2
140	Regulation and Stability of Host-Parasite Population Interactions: II. Destabilizing Processes. Journal of Animal Ecology, 1978, 47, 249.	2.8	510
141	Host-Parasitoid Systems in Patchy Environments: A Phenomenological Model. Journal of Animal Ecology, 1978, 47, 833.	2.8	419
142	Exploiting natural populations in an uncertain world. Mathematical Biosciences, 1978, 42, 219-252.	1.9	192
143	Consequences of helminth aggregation for the dynamics of schistosomiasis. Transactions of the Royal Society of Tropical Medicine and Hygiene, 1978, 72, 262-273.	1.8	67
144	Regulation and Stability of Host-Parasite Population Interactions: I. Regulatory Processes. Journal of Animal Ecology, 1978, 47, 219.	2.8	1,412

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145	Dynamical aspects of host-parasite associations: Crofton's model revisited. Parasitology, 1977, 75, 259-276.	1.5	67
146	Togetherness among Schistosomes: its effects on the dynamics of the infection. Mathematical Biosciences, 1977, 35, 301-343.	1.9	198
147	Predators that switch. Nature, 1977, 269, 103-104.	27.8	54
148	Thresholds and breakpoints in ecosystems with a multiplicity of stable states. Nature, 1977, 269, 471-477.	27.8	1,410
149	Dispersal in stable habitats. Nature, 1977, 269, 578-581.	27.8	1,187
150	A note on difference-delay equations. Theoretical Population Biology, 1976, 9, 178-187.	1.1	136
151	Bifurcations and Dynamic Complexity in Simple Ecological Models. American Naturalist, 1976, 110, 573-599.	2.1	1,135
152	Simple mathematical models with very complicated dynamics. Nature, 1976, 261, 459-467.	27.8	5,794
153	Coexistence with insect pests. Nature, 1976, 264, 211-212.	27.8	5
154	Biological populations obeying difference equations: Stable points, stable cycles, and chaos. Journal of Theoretical Biology, 1975, 51, 511-524.	1.7	414
155	Time delays are not necessarily destabilizing. Mathematical Biosciences, 1975, 27, 109-117.	1.9	69
156	Nonlinear Aspects of Competition Between Three Species. SIAM Journal on Applied Mathematics, 1975, 29, 243-253.	1.8	916
157	Ecosystem Patterns in Randomly Fluctuating Environments. , 1974, , 1-50.		62
158	On the theory of niche overlap. Theoretical Population Biology, 1974, 5, 297-332.	1.1	188
159	Time-Delay Versus Stability in Population Models with Two and Three Trophic Levels. Ecology, 1973, 54, 315-325.	3.2	332
160	Stability in Randomly Fluctuating Versus Deterministic Environments. American Naturalist, 1973, 107, 621-650.	2.1	293
161	On Relationships Among Various Types of Population Models. American Naturalist, 1973, 107, 46-57.	2.1	111
162	Will a Large Complex System be Stable?. Nature, 1972, 238, 413-414.	27.8	2,271

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163	Stability in multispecies community models. Mathematical Biosciences, 1971, 12, 59-79.	1.9	196
164	Some mathematical remarks on the paradox of voting. Systems Research and Behavioral Science, 1971, 16, 143-151.	0.2	99
165	Magnetic Properties of Charged Ideal Quantum Gases in n Dimensions. Journal of Mathematical Physics, 1965, 6, 1462-1468.	1.1	36
166	A New Method for Deuteron Stripping Calculations (II). Nature, 1965, 207, 1348-1349.	27.8	11
167	The Dynamics of Predatorâ€“Prey and Resourceâ€“Harvester Systems. , 0, , 431-457.		2