Karl Sigmund

List of Publications by Year
in descending order

98 papers	21,834 citations	50170 46 h-index	38300 95 g-index
116 all docs	116 docs citations	116 times ranked	7753 citing authors

#	Article	IF	Citations
1	Toward ecoevolutionary dynamics. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	8
2	Social evolution leads to persistent corruption. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13276-13281.	3.3	34
3	Partners or rivals? Strategies for the iterated prisoner's dilemma. Games and Economic Behavior, 2015, 92, 41-52.	0.4	93
4	Games of corruption: How to suppress illegal logging. Journal of Theoretical Biology, 2015, 367, 1-13.	0.8	48
5	The evolution of sanctioning institutions: an experimental approach to the social contract. Experimental Economics, 2014, 17, 285.	1.0	21
6	Evolution of extortion in Iterated Prisonerâ€™s Dilemma games. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 6913-6918.	3.3	224
7	The take-it-or-leave-it option allows small penalties to overcome social dilemmas. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 1165-1169.	3.3	117
8	Moral assessment in indirect reciprocity. Journal of Theoretical Biology, 2012, 299, 25-30.	0.8	89
9	Social Control and the Social Contract: The Emergence of Sanctioning Systems for Collective Action. Dynamic Games and Applications, 2011, 1, 149-171.	1.1	32
10	Freedom, enforcement, and the social dilemma of strong altruism. Journal of Evolutionary Economics, 2010, 20, 203-217.	0.8	31
11	The competition of assessment rules for indirect reciprocity. Journal of Theoretical Biology, 2010, 263, 13-19.	0.8	67
12	Social learning promotes institutions for governing the commons. Nature, 2010, 466, 861-863.	13.7	434
13	Incentives and opportunism: from the carrot to the stick. Proceedings of the Royal Society B: Biological Sciences, 2010, 277, 2427-2433.	1.2	188
14	The Calculus of Selfishness. , 2010, , .		452
15	Exploration dynamics in evolutionary games. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 709-712.	3.3	258
16	Sympathy and similarity: The evolutionary dynamics of cooperation. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 8405-8406.	3.3	41
17	Public Good Games with Incentives: The Role of Reputation. Springer Series in Game Theory, 2009, , 85-103.	0.2	3
18	A short tale of two cities: Otto schreier and the Hamburgâ€" Vienna connection. Mathematical Intelligencer, 2008, 30, 27-35.	0.1	1

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19	Public Goods With Punishment and Abstaining in Finite and Infinite Populations. Biological Theory, 2008, 3, 114-122.	0.8	63
20	Via Freedom to Coercion: The Emergence of Costly Punishment. Science, 2007, 316, 1905-1907.	6.0	628
21	Punish or perish? Retaliation and collaboration among humans. Trends in Ecology and Evolution, 2007, 22, 593-600.	4.2	314
22	A Survey of Indirect Reciprocity. , 2007, , 21-49.		12
23	Evolution theory system theory game theory Biocentric Modeling. , 2007, , 368-417.		0
24	The good, the bad and the discriminatorâ€"Errors in direct and indirect reciprocity. Journal of Theoretical Biology, 2006, 239, 183-194.	0.8	108
25	GÃ¶delâ€™s Vienna. Mathematical Intelligencer, 2006, 28, 44-55.	0.1	9
26	Punishing and abstaining for public goods. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 495-497.	3.3	168
27	Evolution of indirect reciprocity. Nature, 2005, 437, 1291-1298.	13.7	2,220
28	Indirect reciprocity, image scoring, and moral hazard. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 2666-2670.	3.3	145
29	Three's company when seeking unanimity. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 17885-17886.	3.3	0
30	Keplerâ€™s conjecture: How some of the greatest minds in history helped solve one of the oldest math problems in the world. Mathematical Intelligencer, 2004, 26, 66-67.	0.1	10
31	The logic of reprobation: assessment and action rules for indirect reciprocation. Journal of Theoretical Biology, 2004, 231, 475-486.	0.8	173
32	Evolutionary Dynamics of Biological Games. Science, 2004, 303, 793-799.	6.0	912
33	The dynamics of public goods. Discrete and Continuous Dynamical Systems - Series B, 2004, 4, 575-587.	0.5	31
34	Evolutionary game dynamics. Bulletin of the American Mathematical Society, 2003, 40, 479-520.	0.8	902
35	Punishment and reputation in spatial public goods games. Proceedings of the Royal Society B: Biological Sciences, 2003, 270, 1099-1104.	1.2	330
36	â€œWas you ever bit by a dead bee?â€•â€“ Evolutionary games and dominated strategies. Behavioral and Brain Sciences, 2003, 26, .	0.4	1

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37	Volunteering as Red Queen Mechanism for Cooperation in Public Goods Games. Science, 2002, 296, 1129-1132.	6.0	949
38	Altruism. Current Biology, 2002, 12, R270-R272.	1.8	13
39	Replicator Dynamics for Optional Public Good Games. Journal of Theoretical Biology, 2002, 218, 187-194.	0.8	287
40	Complex adaptive systems and the evolution of reciprocation. AIP Conference Proceedings, 2001, , .	0.3	0
41	Tides of tolerance. Nature, 2001, 414, 403-405.	13.7	53
42	Automata for Repeated Games. , 2001, , 335-347.		0
43	Exact thought in a demented time: Karl menger and his viennese mathematical colloquium. Mathematical Intelligencer, 2000, 22, 34-45.	0.1	10
44	Cooperation versus Competition. Financial Analysts Journal, 2000, 56, 13-22.	1.2	25
45	The spatial ultimatum game. Proceedings of the Royal Society B: Biological Sciences, 2000, 267, 2177-2182.	1.2	144
46	Fairness Versus Reason in the Ultimatum Game. Science, 2000, 289, 1773-1775.	6.0	762
47	Phage-lift for game theory. Nature, 1999, 398, 367-368.	13.7	39
48	Evolutionary game theory. Current Biology, 1999, 9, R503-R505.	1.8	136
49	Evolution of indirect reciprocity by image scoring. Nature, 1998, 393, 573-577.	13.7	2,098
50	Merging lines and emerging levels. Nature, 1998, 392, 439-441.	13.7	5
51	The Dynamics of Indirect Reciprocity. Journal of Theoretical Biology, 1998, 194, 561-574.	0.8	458
52	Complex Adaptive Systems and the Evolution of Reciprocation. Ecosystems, 1998, 1, 444-448.	1.6	10
53	Automata and Inner States for Repeated Games. , 1998, , 131-139.		0
54	Equal Pay for All Prisoners. American Mathematical Monthly, 1997, 104, 303.	0.2	18

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55	Equal Pay for All Prisoners. American Mathematical Monthly, 1997, 104, 303-305.	0.2	31
56	The Logic of Contrition. Journal of Theoretical Biology, 1997, 185, 281-293.	0.8	65
57	What is life? The next fifty years. Complexity, 1996, 2, 43-44.	0.9	10
58	Games Evolution Plays. , 1996, , 65-76.		1
59	Immune responses against multiple epitopes. Journal of Theoretical Biology, 1995, 175, 325-353.	0.8	60
60	Automata, repeated games and noise. Journal of Mathematical Biology, 1995, 33, 703.	0.8	76
61	The Arithmetics of Mutual Help. Scientific American, 1995, 272, 76-81.	1.0	207
62	A philosopherâ€™s mathematician: hans hahn and the vienna circle. Mathematical Intelligencer, 1995, 17, 16-29.	0.1	12
63	Invasion Dynamics of the Finitely Repeated Prisonerâ€²s Dilemma. Games and Economic Behavior, 1995, 11, 364-390.	0.4	19
64	The Alternating Prisoner's Dilemma. Journal of Theoretical Biology, 1994, 168, 219-226.	0.8	175
65	Cooperation in Heterogeneous Populations. Recent Research in Psychology, 1994, , 223-235.	0.5	2
66	A strategy of win-stay, lose-shift that outperforms tit-for-tat in the Prisoner's Dilemma game. Nature, 1993, 364, 56-58.	13.7	1,593
67	Tit for tat in heterogeneous populations. Nature, 1992, 355, 250-253.	13.7	908
68	On prisoners and cells. Nature, 1992, 359, 774-774.	13.7	13
69	Time averages for unpredictable orbits of deterministic systems. Annals of Operations Research, 1992, 37, 217-228.	2.6	24
70	On the dynamics of asymmetric games. Theoretical Population Biology, 1991, 39, 345-357.	0.5	37
71	The evolution of stochastic strategies in the Prisoner's Dilemma. Acta Applicandae Mathematicae, 1990, 20, 247-265.	0.5	232
72	Game-dynamical aspects of the prisoner's dilemma. Applied Mathematics and Computation, 1989, 30, 191-213.	1.4	56

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73	Oscillations in the evolution of reciprocity. Journal of Theoretical Biology, 1989, 137, 21-26.	0.8	123
74	Permanence and viability. Journal of Computational and Applied Mathematics, 1988, 22, 203-209.	1.1	5
75	A maximum principle for frequency dependent selection. Mathematical Biosciences, 1987, 84, 189-195.	0.9	14
76	Game dynamics, mixed strategies, and gradient systems. Theoretical Population Biology, 1987, 32, 114-126.	0.5	25
77	Gradients for the evolution of bimatrix games. Journal of Mathematical Biology, 1987, 25, 623-635.	0.8	5
78	A Survey of Replicator Equations. Biomathematics, 1986, , 88-104.	0.7	15
79	Dynamics of Evolutionary Optimization. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1985, 89, 668-682.	0.9	50
80	Replicator dynamics. Journal of Theoretical Biology, 1983, 100, 533-538.	0.8	538
81	The role of mendelian genetics in stragetic models on animal behaviour. Journal of Theoretical Biology, 1983, 101, 19-38.	0.8	30
82	A note on the evolution of sexual dimorphism. Journal of Theoretical Biology, 1982, 94, 107-110.	0.8	20
83	Game dynamics in mendelian populations. Biological Cybernetics, 1982, 43, 51-57.	0.6	32
84	Coyness, philandering and stable strategies. Animal Behaviour, 1981, 29, 186-192.	0.8	113
85	Selfregulation of behaviour in animal societies. Biological Cybernetics, 1981, 40, 1-8.	0.6	60
86	Selfregulation of behaviour in animal societies. Biological Cybernetics, 1981, 40, 9-15.	0.6	40
87	Selfregulation of behaviour in animal societies. Biological Cybernetics, 1981, 40, 17-25.	0.6	41
88	Mass action kinetics of selfreplication in flow reactors. Journal of Mathematical Analysis and Applications, 1980, 78, 88-112.	0.5	39
89	On minimal centers of attraction and generic points.. Journal Fur Die Reine Und Angewandte Mathematik, 1977, 1977, 72-79.	0.4	10
90	On the connectedness of ergodic systems. Manuscripta Mathematica, 1977, 22, 27-32.	0.3	9

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91	Topological dynamics of transformations induced on the space of probability measures. Monatshefte Fur Mathematik, 1975, 79, 81-92.	0.5	95
92	On dynamical systems with the specification property. Transactions of the American Mathematical Society, 1974, 190, 285-299.	0.5	124
93	Normal and quasiregular points for automorphisms of the torus. Mathematical Systems Theory, 1974, 8, 251-255.	0.5	6
94	On the time evolution of statistical states for Anosov systems. Mathematische Zeitschrift, 1974, 138, 183-189.	0.4	5
95	On the Space of Invariant Measures for Hyperbolic Flows. American Journal of Mathematics, 1972, 94, 31.	0.5	37
96	On mixing measures for axiom A diffeomorphisms. Proceedings of the American Mathematical Society, 1972, 36, 497-497.	0.4	14
97	On the prevalence of zero entropy. Israel Journal of Mathematics, 1971, 10, 281-288.	0.4	8
98	Generic properties of invariant measures for AxiomA-diffeomorphisms. Inventiones Mathematicae, 1970, 11, 99-109.	1.3	130