Attila Szolnoki

List of Publications by Citations

157 papers	15,071 citations	62 h-index	121 g-index
161 ext. papers	16,843 ext. citations	3.3 avg, IF	7.4 L-index

#	Paper	IF	Citations
157	Coevolutionary games--a mini review. *BioSystems*, **2010**, 99, 109-25	1.9	1399
156	Evolutionary dynamics of group interactions on structured populations: a review. *Journal of the Royal Society Interface*, **2013**, 10, 20120997	4.1	815
155	Statistical physics of human cooperation. *Physics Reports*, **2017**, 687, 1-51	27.7	725
154	Social diversity and promotion of cooperation in the spatial prisoner's dilemma game. *Physical Review E*, **2008**, 77, 011904	2.4	534
153	Evolutionary games on multilayer networks: a colloquium. *European Physical Journal B*, **2015**, 88, 1	1.2	507
152	Phase diagrams for an evolutionary prisoner's dilemma game on two-dimensional lattices. *Physical Review E*, **2005**, 72, 047107	2.4	376
151	Reward and cooperation in the spatial public goods game. *Europhysics Letters*, **2010**, 92, 38003	1.6	369
150	Cooperation enhanced by inhomogeneous activity of teaching for evolutionary Prisoner's Dilemma games. *Europhysics Letters*, **2007**, 77, 30004	1.6	329
149	Interdependent network reciprocity in evolutionary games. *Scientific Reports*, **2013**, 3, 1183	4.9	323
148	Cyclic dominance in evolutionary games: a review. *Journal of the Royal Society Interface*, **2014**, 11, 20140735	4.1	297
147	Evolution of public cooperation on interdependent networks: The impact of biased utility functions. *Europhysics Letters*, **2012**, 97, 48001	1.6	279
146	Topology-independent impact of noise on cooperation in spatial public goods games. *Physical Review E*, **2009**, 80, 056109	2.4	263
145	Cooperation in the noisy case: Prisoner's dilemma game on two types of regular random graphs. *Physical Review E*, **2006**, 73, 067103	2.4	251
144	Coevolution of teaching activity promotes cooperation. *New Journal of Physics*, **2008**, 10, 043036	2.9	250
143	Phase diagrams for the spatial public goods game with pool punishment. *Physical Review E*, **2011**, 83, 036101	2.4	240
142	Evolutionary establishment of moral and double moral standards through spatial interactions. *PLoS Computational Biology*, **2010**, 6, e1000758	5	237
141	Punish, but not too hard: how costly punishment spreads in the spatial public goods game. *New Journal of Physics*, **2010**, 12, 083005	2.9	235

140	Towards effective payoffs in the prisoner dilemma game on scale-free networks. *Physica A: Statistical Mechanics and Its Applications*, **2008**, 387, 2075-2082	3.3	225
139	Optimal interdependence between networks for the evolution of cooperation. *Scientific Reports*, **2013**, 3, 2470	4.9	216
138	Resolving social dilemmas on evolving random networks. *Europhysics Letters*, **2009**, 86, 30007	1.6	205
137	Making new connections towards cooperation in the prisoner's dilemma game. *Europhysics Letters*, **2008**, 84, 50007	1.6	192
136	Rewarding evolutionary fitness with links between populations promotes cooperation. *Journal of Theoretical Biology*, **2014**, 349, 50-6	2.3	182
135	Defense mechanisms of empathetic players in the spatial ultimatum game. *Physical Review Letters*, **2012**, 109, 078701	7.4	161
134	Self-organization towards optimally interdependent networks by means of coevolution. *New Journal of Physics*, **2014**, 16, 033041	2.9	158
133	If players are sparse social dilemmas are too: Importance of percolation for evolution of cooperation. *Scientific Reports*, **2012**, 2, 369	4.9	156
132	Wisdom of groups promotes cooperation in evolutionary social dilemmas. *Scientific Reports*, **2012**, 2, 576	4.9	155
131	Conformity enhances network reciprocity in evolutionary social dilemmas. *Journal of the Royal Society Interface*, **2015**, 12,	4.1	145
130	Rock-scissors-paper game on regular small-world networks. *Journal of Physics A*, **2004**, 37, 2599-2609		143
129	Competition and cooperation among different punishing strategies in the spatial public goods game. *Physical Review E*, **2015**, 92, 012819	2.4	142
128	Probabilistic sharing solves the problem of costly punishment. *New Journal of Physics*, **2014**, 16, 083016	2.9	142
127	Impact of aging on the evolution of cooperation in the spatial prisoner's dilemma game. *Physical Review E*, **2009**, 80, 021901	2.4	142
126	Diversity of reproduction rate supports cooperation in the prisoner's dilemma game on complex networks. *European Physical Journal B*, **2008**, 61, 505-509	1.2	141
125	Emergence of multilevel selection in the prisoner's dilemma game on coevolving random networks. *New Journal of Physics*, **2009**, 11, 093033	2.9	136
124	Self-organization of punishment in structured populations. *New Journal of Physics*, **2012**, 14, 043013	2.9	130
123	Restricted connections among distinguished players support cooperation. *Physical Review E*, **2008**, 78, 066101	2.4	126

122	Promoting cooperation in social dilemmas via simple coevolutionary rules. *European Physical Journal B*, **2009**, 67, 337-344	1.2	124
121	Conditional strategies and the evolution of cooperation in spatial public goods games. *Physical Review E*, **2012**, 85, 026104	2.4	119
120	Evolutionary prisoner's dilemma game on Newman-Watts networks. *Physical Review E*, **2008**, 77, 026109	2.4	116
119	Percolation threshold determines the optimal population density for public cooperation. *Physical Review E*, **2012**, 85, 037101	2.4	110
118	Group-size effects on the evolution of cooperation in the spatial public goods game. *Physical Review E*, **2011**, 84, 047102	2.4	107
117	Impact of critical mass on the evolution of cooperation in spatial public goods games. *Physical Review E*, **2010**, 81, 057101	2.4	105
116	Risk-driven migration and the collective-risk social dilemma. *Physical Review E*, **2012**, 86, 036101	2.4	105
115	Information sharing promotes prosocial behaviour. *New Journal of Physics*, **2013**, 15, 053010	2.9	104
114	Selection of noise level in strategy adoption for spatial social dilemmas. *Physical Review E*, **2009**, 80, 056112	2.4	104
113	Effectiveness of conditional punishment for the evolution of public cooperation. *Journal of Theoretical Biology*, **2013**, 325, 34-41	2.3	102
112	Cyclical interactions with alliance-specific heterogeneous invasion rates. *Physical Review E*, **2007**, 75, 052102	2.4	98
111	Evolution of extortion in structured populations. *Physical Review E*, **2014**, 89, 022804	2.4	96
110	Evolutionary advantages of adaptive rewarding. *New Journal of Physics*, **2012**, 14, 093016	2.9	92
109	Competition of tolerant strategies in the spatial public goods game. *New Journal of Physics*, **2016**, 18, 083021	2.9	92
108	Cooperation in spatial prisoner's dilemma with two types of players for increasing number of neighbors. *Physical Review E*, **2009**, 79, 016106	2.4	90
107	Competition of individual and institutional punishments in spatial public goods games. *Physical Review E*, **2011**, 84, 046106	2.4	90
106	Defector-accelerated cooperativeness and punishment in public goods games with mutations. *Physical Review E*, **2010**, 81, 057104	2.4	89
105	Noise-guided evolution within cyclical interactions. *New Journal of Physics*, **2007**, 9, 267-267	2.9	88

104	Antisocial pool rewarding does not deter public cooperation. *Proceedings of the Royal Society B: Biological Sciences*, **2015**, 282, 20151975	4.4	80
103	Leaders should not be conformists in evolutionary social dilemmas. *Scientific Reports*, **2016**, 6, 23633	4.9	79
102	Selection of dynamical rules in spatial Prisoner's Dilemma games. *Europhysics Letters*, **2009**, 87, 18007	1.6	78
101	Phase diagrams for three-strategy evolutionary prisoner's dilemma games on regular graphs. *Physical Review E*, **2009**, 80, 056104	2.4	77
100	Punishment and inspection for governing the commons in a feedback-evolving game. *PLoS Computational Biology*, **2018**, 14, e1006347	5	74
99	Different perceptions of social dilemmas: evolutionary multigames in structured populations. *Physical Review E*, **2014**, 90, 032813	2.4	71
98	Coevolutionary success-driven multigames. *Europhysics Letters*, **2014**, 108, 28004	1.6	71
97	Defection and extortion as unexpected catalysts of unconditional cooperation in structured populations. *Scientific Reports*, **2014**, 4, 5496	4.9	67
96	Phase transitions for rock-scissors-paper game on different networks. *Physical Review E*, **2004**, 70, 037102	2.4	65
95	Selfishness, fraternity, and other-regarding preference in spatial evolutionary games. *Journal of Theoretical Biology*, **2012**, 299, 81-7	2.3	60
94	Diverging fluctuations in a spatial five-species cyclic dominance game. *Physical Review E*, **2013**, 88, 022123	2.4	60
93	Imitating emotions instead of strategies in spatial games elevates social welfare. *Europhysics Letters*, **2011**, 96, 38002	1.6	60
92	Benefits of tolerance in public goods games. *Physical Review E*, **2015**, 92, 042813	2.4	57
91	A double-edged sword: Benefits and pitfalls of heterogeneous punishment in evolutionary inspection games. *Scientific Reports*, **2015**, 5, 11027	4.9	57
90	Collective influence in evolutionary social dilemmas. *Europhysics Letters*, **2016**, 113, 58004	1.6	56
89	Dynamically generated cyclic dominance in spatial prisoner's dilemma games. *Physical Review E*, **2010**, 82, 036110	2.4	56
88	Accuracy in strategy imitations promotes the evolution of fairness in the spatial ultimatum game. *Europhysics Letters*, **2012**, 100, 28005	1.6	55
87	Evolution of emotions on networks leads to the evolution of cooperation in social dilemmas. *Physical Review E*, **2013**, 87, 042805	2.4	55

86	Evolutionary dynamics of cooperation in neutral populations. *New Journal of Physics*, **2018**, 20, 013031	2.9	54
85	Self-organizing patterns maintained by competing associations in a six-species predator-prey model. *Physical Review E*, **2008**, 77, 041919	2.4	51
84	Stability of cooperation under image scoring in group interactions. *Scientific Reports*, **2015**, 5, 12145	4.9	49
83	Zealots tame oscillations in the spatial rock-paper-scissors game. *Physical Review E*, **2016**, 93, 062307	2.4	48
82	Second-Order Free-Riding on Antisocial Punishment Restores the Effectiveness of Prosocial Punishment. *Physical Review X*, **2017**, 7,	9.1	47
81	Alliance formation with exclusion in the spatial public goods game. *Physical Review E*, **2017**, 95, 052316	2.4	46
80	Vortices determine the dynamics of biodiversity in cyclical interactions with protection spillovers. *New Journal of Physics*, **2015**, 17, 113033	2.9	45
79	Three-state cyclic voter model extended with Potts energy. *Physical Review E*, **2002**, 65, 036115	2.4	45
78	Competitions between prosocial exclusions and punishments in finite populations. *Scientific Reports*, **2017**, 7, 46634	4.9	43
77	Impact of generalized benefit functions on the evolution of cooperation in spatial public goods games with continuous strategies. *Physical Review E*, **2012**, 85, 066133	2.4	43
76	Segregation process and phase transition in cyclic predator-prey models with an even number of species. *Physical Review E*, **2007**, 76, 051921	2.4	43
75	Reentrant phase transitions and defensive alliances in social dilemmas with informed strategies. *Europhysics Letters*, **2015**, 110, 38003	1.6	41
74	Phase transitions induced by variation of invasion rates in spatial cyclic predator-prey models with four or six species. *Physical Review E*, **2008**, 77, 011906	2.4	41
73	Individual wealth-based selection supports cooperation in spatial public goods games. *Scientific Reports*, **2016**, 6, 32802	4.9	40
72	Correlation of Positive and Negative Reciprocity Fails to Confer an Evolutionary Advantage: Phase Transitions to Elementary Strategies. *Physical Review X*, **2013**, 3,	9.1	39
71	Evolutionary dynamics of cooperation in a population with probabilistic corrupt enforcers and violators. *Mathematical Models and Methods in Applied Sciences*, **2019**, 29, 2127-2149	3.5	38
70	Decelerated invasion and waning-moon patterns in public goods games with delayed distribution. *Physical Review E*, **2013**, 87, 054801	2.4	36
69	Competition and partnership between conformity and payoff-based imitations in social dilemmas. *New Journal of Physics*, **2018**, 20, 093008	2.9	36

68	Imitate or innovate: Competition of strategy updating attitudes in spatial social dilemma games. *Europhysics Letters*, **2018**, 121, 18002	1.6	35
67	Biodiversity in models of cyclic dominance is preserved by heterogeneity in site-specific invasion rates. *Scientific Reports*, **2016**, 6, 38608	4.9	35
66	If cooperation is likely punish mildly: insights from economic experiments based on the snowdrift game. *PLoS ONE*, **2013**, 8, e64677	3.7	34
65	Costly hide and seek pays: unexpected consequences of deceit in a social dilemma. *New Journal of Physics*, **2014**, 16, 113003	2.9	31
64	From pairwise to group interactions in games of cyclic dominance. *Physical Review E*, **2014**, 89, 062125	2.4	30
63	Averting group failures in collective-risk social dilemmas. *Europhysics Letters*, **2012**, 99, 68003	1.6	29
62	Seasonal payoff variations and the evolution of cooperation in social dilemmas. *Scientific Reports*, **2019**, 9, 12575	4.9	28
61	Cooperation driven by success-driven group formation. *Physical Review E*, **2016**, 94, 042311	2.4	28
60	Environmental feedback drives cooperation in spatial social dilemmas. *Europhysics Letters*, **2017**, 120, 58001	1.6	28
59	Exploring optimal institutional incentives for public cooperation. *Communications in Nonlinear Science and Numerical Simulation*, **2019**, 79, 104914	3.7	27
58	Ordering in spatial evolutionary games for pairwise collective strategy updates. *Physical Review E*, **2010**, 82, 026110	2.4	27
57	Role-separating ordering in social dilemmas controlled by topological frustration. *Physical Review E*, **2017**, 95, 032307	2.4	26
56	Knowing the past improves cooperation in the future. *Scientific Reports*, **2019**, 9, 262	4.9	25
55	Pattern formations driven by cyclic interactions: A brief review of recent developments. *Europhysics Letters*, **2020**, 131, 68001	1.6	25
54	The coevolution of overconfidence and bluffing in the resource competition game. *Scientific Reports*, **2016**, 6, 21104	4.9	25
53	Central governance based on monitoring and reporting solves the collective-risk social dilemma. *Applied Mathematics and Computation*, **2019**, 347, 334-341	2.7	25
52	Binary birth-death dynamics and the expansion of cooperation by means of self-organized growth. *Europhysics Letters*, **2014**, 105, 48001	1.6	24
51	Dynamic-sensitive cooperation in the presence of multiple strategy updating rules. *Physica A: Statistical Mechanics and Its Applications*, **2018**, 511, 371-377	3.3	23

50	Facilitators on networks reveal optimal interplay between information exchange and reciprocity. *Physical Review E*, **2014**, 89, 042802	2.4	22
49	Correlations induced by transport in one-dimensional lattice gas. *Physical Review A*, **1991**, 44, 6375-6378	2.6	21
48	Gradual learning supports cooperation in spatial prisoner's dilemma game. *Chaos, Solitons and Fractals*, **2020**, 130, 109447	9.3	21
47	Three-state Potts model in combination with the rock-scissors-paper game. *Physical Review E*, **2005**, 71, 027102	2.4	20
46	Strategy dependent learning activity in cyclic dominant systems. *Chaos, Solitons and Fractals*, **2020**, 138, 109935	9.3	17
45	Coexistence of fraternity and egoism for spatial social dilemmas. *Journal of Theoretical Biology*, **2013**, 317, 126-32	2.3	17
44	Mobility restores the mechanism which supports cooperation in the voluntary prisoner's dilemma game. *New Journal of Physics*, **2019**, 21, 073038	2.9	16
43	Phase transitions in the kinetic ising model with competing dynamics. *Physical Review E*, **2000**, 62, 7466-9	2.4	16
42	Directed-percolation conjecture for cellular automata. *Physical Review E*, **1996**, 53, 2231-2238	2.4	16
41	Reciprocity-based cooperative phalanx maintained by overconfident players. *Physical Review E*, **2018**, 98, 022309	2.4	15
40	Generalized mean-field study of a driven lattice gas. *Physical Review E*, **1996**, 53, 2196-2199	2.4	15
39	Leaving bads provides better outcome than approaching goods in a social dilemma. *New Journal of Physics*, **2020**, 22, 023012	2.9	14
38	Spreading of families in cyclic predator-prey models. *Physical Review E*, **2004**, 70, 012901	2.4	13
37	Vertex dynamics during domain growth in three-state models. *Physical Review E*, **2004**, 70, 027101	2.4	13
36	The self-organizing impact of averaged payoffs on the evolution of cooperation. *New Journal of Physics*, **2021**, 23, 063068	2.9	13
35	Anisotropic ordering in a two-temperature lattice gas. *Physical Review E*, **1997**, 55, 2255-2259	2.4	12
34	Dynamical mean-field approximation for a pair contact process with a particle source. *Physical Review E*, **2002**, 66, 057102	2.4	12
33	Breaking of forward-backward symmetry in driven systems. *Physical Review E*, **1993**, 48, 611-613	2.4	11

32	Anisotropic polydomain structure in a driven lattice gas with repulsive interaction. *Physical Review E*, **1994**, 49, 299-304	2.4	11
31	Phase transitions in dependence of apex predator decaying ratio in a cyclic dominant system. *Europhysics Letters*, **2018**, 124, 68001	1.6	11
30	Invasion-controlled pattern formation in a generalized multispecies predator-prey system. *Physical Review E*, **2019**, 99, 052408	2.4	10
29	Influence of extended dynamics on phase transitions in a driven lattice gas. *Physical Review E*, **2002**, 65, 047101	2.4	9
28	Stationary state in a two-temperature model with competing dynamics. *Physical Review E*, **1999**, 60, 2425-28	2.4	9
27	Transport-driven reorientation in a square lattice-gas model. *Physical Review A*, **1990**, 41, 2235-2238	2.6	9
26	Blocking defector invasion by focusing on the most successful partner. *Applied Mathematics and Computation*, **2020**, 385, 125430	2.7	9
25	Cluster mean-field study of the parity-conserving phase transition. *Physical Review E*, **2005**, 71, 066128	2.4	8
24	Cooperation and competition between pair and multi-player social games in spatial populations. *Scientific Reports*, **2021**, 11, 12101	4.9	8
23	Combination of institutional incentives for cooperative governance of risky commons. *IScience*, **2021**, 24, 102844	6.1	8
22	Self-organizing domain structure in a driven lattice gas. *Physical Review E*, **1997**, 55, 5275-5279	2.4	7
21	Congestion phenomena caused by matching pennies in evolutionary games. *Physical Review E*, **2015**, 91, 032110	2.4	6
20	Equal partners do better in defensive alliances. *Europhysics Letters*, **2020**, 131, 58002	1.6	6
19	The power of games: comment on "climate change governance, cooperation and self-organization" by Pacheco, Vasconcelos and Santos. *Physics of Life Reviews*, **2014**, 11, 589-90	2.1	5
18	Non-equilibrium phase transition in a two-temperature lattice gas. *Journal of Physics A*, **1997**, 30, 7791-7799	5	
17	Orientation in a driven lattice gas. *Physical Review B*, **1992**, 46, 11432-11438	3.3	5
16	Breaking unidirectional invasions jeopardizes biodiversity in spatial May-Leonard systems. *Chaos, Solitons and Fractals*, **2020**, 141, 110356	9.3	5
15	Social dilemmas in off-lattice populations. *Chaos, Solitons and Fractals*, **2021**, 144, 110743	9.3	4

14	Small fraction of selective cooperators can elevate general wellbeing significantly. *Physica A: Statistical Mechanics and Its Applications*, **2021**, 582, 126222	3.3	4
13	INTERFACE INSTABILITY IN DRIVEN LATTICE GASES. *Fractals*, **1993**, 01, 954-958	3.2	3
12	Mercenary punishment in structured populations. *Applied Mathematics and Computation*, **2022**, 417, 126797	3.7	3
11	Mobility driven coexistence of living organisms. *Physica A: Statistical Mechanics and Its Applications*, **2021**, 572, 125854	3.3	3
10	Coupled-chain approximation for driven lattice-gas models. *Physical Review B*, **1993**, 47, 8260-8262	3.3	2
9	Enhanced fluctuations in driven lattice gases. *Physica A: Statistical Mechanics and Its Applications*, **1992**, 191, 445-448	3.3	2
8	Tactical cooperation of defectors in a multi-stage public goods game. *Chaos, Solitons and Fractals*, **2022**, 155, 111696	9.3	2
7	Cooperator driven oscillation in a time-delayed feedback-evolving game. *New Journal of Physics*, **2021**, 23, 053017	2.9	2
6	Environment driven oscillation in an off-lattice May-Leonard model. *Scientific Reports*, **2021**, 11, 12512	4.9	2
5	Effects of a pestilent species on the stability of cyclically dominant species. *Chaos, Solitons and Fractals*, **2021**, 151, 111255	9.3	2
4	Early exclusion leads to cyclical cooperation in repeated group interactions.. *Journal of the Royal Society Interface*, **2022**, 19, 20210755	4.1	2
3	Competition among alliances of different sizes. *Chaos, Solitons and Fractals*, **2022**, 157, 111940	9.3	0
2	How Much Interconnected Should Networks be for Cooperation to Thrive?. *Understanding Complex Systems*, **2016**, 125-139	0.4	
1	Mechanisms Supporting Cooperation for the Evolutionary Prisoner's Dilemma Games. *New Economic Windows*, **2010**, 24-31	0.5	