Kevin B Wood

List of Publications by Year
in descending order

39 papers	882 citations	567281 15 h-index	552781 26 g-index
55 all docs	55 docs citations	55 times ranked	926 citing authors

#	Article	IF	Citations
1	Mechanism-independent method for predicting response to multidrug combinations in bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 12254-12259.	7.1	126
2	Pervasive and diverse collateral sensitivity profiles inform optimal strategies to limit antibiotic resistance. PLoS Biology, 2019, 17, e3000515.	5.6	92
3	Population Density Modulates Drug Inhibition and Gives Rise to Potential Bistability of Treatment Outcomes for Bacterial Infections. PLoS Computational Biology, 2016, 12, e1005098.	3.2	61
4	Universality of Synchrony: Critical Behavior in a Discrete Model of Stochastic Phase-Coupled Oscillators. Physical Review Letters, 2006, 96, 145701.	7.8	60
5	Uncovering Scaling Laws to Infer Multidrug Response of Resistant Microbes and Cancer Cells. Cell Reports, 2014, 6, 1073-1084.	6.4	53
6	Antibiotics can be used to contain drug-resistant bacteria by maintaining sufficiently large sensitive populations. PLoS Biology, 2020, 18, e3000713.	5.6	50
7	Interplay between Antibiotic Efficacy and Drug-Induced Lysis Underlies Enhanced Biofilm Formation at Subinhibitory Drug Concentrations. Antimicrobial Agents and Chemotherapy, 2018, 62, .	3.2	48
8	Trade-offs between drug toxicity and benefit in the multi-antibiotic resistance system underlie optimal growth of E. coli. BMC Systems Biology, 2012, 6, 48.	3.0	42
9	Critical behavior and synchronization of discrete stochastic phase-coupled oscillators. Physical Review E, 2006, 74, 031113.	2.1	37
10	Continuous and discontinuous phase transitions and partial synchronization in stochastic three-state oscillators. Physical Review E, 2007, 76, 041132.	2.1	34
11	Tuning Spatial Profiles of Selection Pressure to Modulate the Evolution of Drug Resistance. Physical Review Letters, 2018, 120, 238102.	7.8	34
12	Effects of disorder on synchronization of discrete phase-coupled oscillators. Physical Review E, 2007, 75, 041107.	2.1	26
13	Antibiotic interactions shape short-term evolution of resistance in E. faecalis. PLoS Pathogens, 2020, 16, e1008278.	4.7	26
14	Roadmap on biology in time varying environments. Physical Biology, 2021, 18, 041502.	1.8	23
15	Pairwise interactions and the battle against combinatorics in multidrug therapies. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10231-10233.	7.1	21
16	Spatial segregation and cooperation in radially expanding microbial colonies under antibiotic stress. ISME Journal, 2021, 15, 3019-3033.	9.8	19
17	Comprehensive study of pattern formation in relaxational systems. Physical Review E, 2006, 73, 022101.	2.1	18
18	Price equation captures the role of drug interactions and collateral effects in the evolution of multidrug resistance. ELife, 2021, 10, .	6.0	18

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19	Delayed antibiotic exposure induces population collapse in enterococcal communities with drug-resistant subpopulations. ELife, 2020, 9, .	6.0	17
20	Using Selection by Nonantibiotic Stressors to Sensitize Bacteria to Antibiotics. Molecular Biology and Evolution, 2020, 37, 1394-1406.	8.9	16
21	Evolution in alternating environments with tunable interlandscape correlations. Evolution; International Journal of Organic Evolution, 2021, 75, 10-24.	2.3	11
22	Fluctuation theorem for entropy production during effusion of an ideal gas with momentum transfer. Physical Review E, 2007, 75, 061116.	2.1	7
23	Synchronization and phase redistribution in self-replicating populations of coupled oscillators and excitable elements. Physical Review E, 2015, 91, 062708.	2.1	5
24	Fluorescent reporter plasmids for single-cell and bulk-level composition assays in E. faecalis. PLoS ONE, 2020, 15, e0232539.	2.5	5
25	Noise-induced oscillatory behavior in field-dependent relaxational dynamics. Physical Review E, 2006, 73, 042101.	2.1	3
26	Microbial Ecology: Complex Bacterial Communities Reduce Selection for Antibiotic Resistance. Current Biology, 2019, 29, R1143-R1145.	3.9	3
27	Synchrony and Critical Behavior: Equilibrium Universality in Nonequilibrium Stochastic Oscillators. AIP Conference Proceedings, 2007, , .	0.4	2
28	Noise-induced phase transitions in field-dependent relaxational dynamics: The Gaussian ansatz. Physical Review E, 2007, 76, 051111.	2.1	1
29	Finding the right sequence of drugs. ELife, 2021, 10, .	6.0	1
30	Title is missing!. , 2020, 18, e3000713.		0
31	Title is missing!. , 2020, 18, e3000713.		0
32	Title is missing!. , 2020, 18, e3000713.		0
33	Title is missing!. , 2020, 18, e3000713.		0
34	Title is missing!. , 2020, 18, e3000713.		0
35	Title is missing!. , 2020, 18, e3000713.		0
36	Antibiotic interactions shape short-term evolution of resistance in E. faecalis. , 2020, 16, e1008278.		0

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37	Antibiotic interactions shape short-term evolution of resistance in E. faecalis. , 2020, 16, e1008278.		0
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39	Antibiotic interactions shape short-term evolution of resistance in E. faecalis. , 2020, 16, e1008278.		0