

# Alvaro San Millan

## List of Publications by Year in descending order

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Version: 2024-02-01

47  
papers

3,205  
citations

236833

25  
h-index

233338

45  
g-index

55  
all docs

55  
docs citations

55  
times ranked

3041  
citing authors

#	ARTICLE	IF	CITATIONS
1	The evolution of antibiotic resistance. <i>Science</i> , 2019, 365, 1082-1083.	6.0	322
2	Fitness Costs of Plasmids: a Limit to Plasmid Transmission. <i>Microbiology Spectrum</i> , 2017, 5, .	1.2	312
3	Evolution of Plasmid-Mediated Antibiotic Resistance in the Clinical Context. <i>Trends in Microbiology</i> , 2018, 26, 978-985.	3.5	284
4	Positive selection and compensatory adaptation interact to stabilize non-transmissible plasmids. <i>Nature Communications</i> , 2014, 5, 5208.	5.8	202
5	Beyond horizontal gene transfer: the role of plasmids in bacterial evolution. <i>Nature Reviews Microbiology</i> , 2021, 19, 347-359.	13.6	194
6	Cooperation, competition and antibiotic resistance in bacterial colonies. <i>ISME Journal</i> , 2018, 12, 1582-1593.	4.4	160
7	Interactions between horizontally acquired genes create a fitness cost in <i>Pseudomonas aeruginosa</i> . <i>Nature Communications</i> , 2015, 6, 6845.	5.8	147
8	Multicopy plasmids potentiate the evolution of antibiotic resistance in bacteria. <i>Nature Ecology and Evolution</i> , 2017, 1, 10.	3.4	147
9	Positive epistasis between co-infecting plasmids promotes plasmid survival in bacterial populations. <i>ISME Journal</i> , 2014, 8, 601-612.	4.4	143
10	Multiresistance in <i>Pasteurella multocida</i> Is Mediated by Coexistence of Small Plasmids. <i>Antimicrobial Agents and Chemotherapy</i> , 2009, 53, 3399-3404.	1.4	101
11	Pervasive transmission of a carbapenem resistance plasmid in the gut microbiota of hospitalized patients. <i>Nature Microbiology</i> , 2021, 6, 606-616.	5.9	101
12	Variability of plasmid fitness effects contributes to plasmid persistence in bacterial communities. <i>Nature Communications</i> , 2021, 12, 2653.	5.8	96
13	Microbial Evolution: Towards Resolving the Plasmid Paradox. <i>Current Biology</i> , 2015, 25, R764-R767.	1.8	82
14	Integrative analysis of fitness and metabolic effects of plasmids in <i>Pseudomonas aeruginosa</i> PAO1. <i>ISME Journal</i> , 2018, 12, 3014-3024.	4.4	80
15	Multicopy plasmids allow bacteria to escape from fitness trade-offs during evolutionary innovation. <i>Nature Ecology and Evolution</i> , 2018, 2, 873-881.	3.4	72
16	$\beta$ -Lactam Resistance in <i>Haemophilus parasuis</i> Is Mediated by Plasmid pB1000 Bearing bla <sub>ROB-1</sub> . <i>Antimicrobial Agents and Chemotherapy</i> , 2007, 51, 2260-2264.	1.4	67
17	Small-Plasmid-Mediated Antibiotic Resistance Is Enhanced by Increases in Plasmid Copy Number and Bacterial Fitness. <i>Antimicrobial Agents and Chemotherapy</i> , 2015, 59, 3335-3341.	1.4	63
18	Genetic dominance governs the evolution and spread of mobile genetic elements in bacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 15755-15762.	3.3	41

#	ARTICLE	IF	CITATIONS
19	<i>Haemophilus influenzae</i> Clinical Isolates with Plasmid pB1000 Bearing <i>bla</i> <sub>ROB-1</sub> : Fitness Cost and Interspecies Dissemination. <i>Antimicrobial Agents and Chemotherapy</i> , 2010, 54, 1506-1511.	1.4	40
20	Fitness Cost and Interference of Arm/Rmt Aminoglycoside Resistance with the RsmF Housekeeping Methyltransferases. <i>Antimicrobial Agents and Chemotherapy</i> , 2012, 56, 2335-2341.	1.4	39
21	Sequencing of plasmids pAMBL1 and pAMBL2 from <i>Pseudomonas aeruginosa</i> reveals a <i>bla</i> <sub>VIM-1</sub> amplification causing high-level carbapenem resistance. <i>Journal of Antimicrobial Chemotherapy</i> , 2015, 70, 3000-3003.	1.3	35
22	The Genomic Basis of Evolutionary Innovation in <i>Pseudomonas aeruginosa</i> . <i>PLoS Genetics</i> , 2016, 12, e1006005.	1.5	35
23	A Naturally Occurring Single Nucleotide Polymorphism in a Multicopy Plasmid Produces a Reversible Increase in Antibiotic Resistance. <i>Antimicrobial Agents and Chemotherapy</i> , 2017, 61, .	1.4	35
24	First Characterization of Fluoroquinolone Resistance in <i>Streptococcus suis</i> . <i>Antimicrobial Agents and Chemotherapy</i> , 2007, 51, 777-782.	1.4	34
25	Fluoroquinolone Efflux in <i>Streptococcus suis</i> Is Mediated by SatAB and Not by SmrA. <i>Antimicrobial Agents and Chemotherapy</i> , 2011, 55, 5850-5860.	1.4	28
26	ArmA Methyltransferase in a Monophasic <i>Salmonella enterica</i> Isolate from Food. <i>Antimicrobial Agents and Chemotherapy</i> , 2011, 55, 5262-5266.	1.4	26
27	PCR-Based Analysis of ColE1 Plasmids in Clinical Isolates and Metagenomic Samples Reveals Their Importance as Gene Capture Platforms. <i>Frontiers in Microbiology</i> , 2018, 9, 469.	1.5	26
28	Staphylococcal phages and pathogenicity islands drive plasmid evolution. <i>Nature Communications</i> , 2021, 12, 5845.	5.8	26
29	VanB-Type <i>Enterococcus faecium</i> Clinical Isolate Successively Inducibly Resistant to, Dependent on, and Constitutively Resistant to Vancomycin. <i>Antimicrobial Agents and Chemotherapy</i> , 2009, 53, 1974-1982.	1.4	20
30	Evaluating the effect of horizontal transmission on the stability of plasmids under different selection regimes. <i>Mobile Genetic Elements</i> , 2015, 5, 29-33.	1.8	20
31	Fitness Costs of Plasmids: A Limit to Plasmid Transmission. , 0, , 65-79.		18
32	Contribution of ROB-1 and PBP3 mutations to the resistance phenotype of a $\beta$ -lactamase-positive amoxicillin/clavulanic acid-resistant <i>Haemophilus influenzae</i> carrying plasmid pB1000 in Italy. <i>Journal of Antimicrobial Chemotherapy</i> , 2011, 66, 96-99.	1.3	17
33	Culturable aerobic and facultative bacteria from the gut of the polyphagous dung beetle <i>Thorectes lusitanicus</i> . <i>Insect Science</i> , 2015, 22, 178-190.	1.5	17
34	Methods to Study Fitness and Compensatory Adaptation in Plasmid-Carrying Bacteria. <i>Methods in Molecular Biology</i> , 2020, 2075, 371-382.	0.4	17
35	Collateral sensitivity associated with antibiotic resistance plasmids. <i>ELife</i> , 2021, 10, .	2.8	16
36	Novel genetic environment of qnrB2 associated with TEM-1 and SHV-12 on pB1004, an IncHI2 plasmid, in <i>Salmonella</i> Bredeney BB1047 from Spain. <i>Journal of Antimicrobial Chemotherapy</i> , 2009, 64, 1334-1336.	1.3	15

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37	Molecular Organization of Small Plasmids Bearing <i>bla</i> <sub>TEM-1</sub> and Conferring Resistance to $\beta$ -Lactams in <i>Haemophilus influenzae</i> . <i>Antimicrobial Agents and Chemotherapy</i> , 2012, 56, 4958-4960.	1.4	14
38	Mathematical Models of Plasmid Population Dynamics. <i>Frontiers in Microbiology</i> , 2021, 12, 606396.	1.5	14
39	Plasmid-borne 16S rRNA methylase ArmA in aminoglycoside-resistant <i>Klebsiella pneumoniae</i> in Poland. <i>Journal of Medical Microbiology</i> , 2011, 60, 1306-1311.	0.7	12
40	Simulating the Influence of Conjugative-Plasmid Kinetic Values on the Multilevel Dynamics of Antimicrobial Resistance in a Membrane Computing Model. <i>Antimicrobial Agents and Chemotherapy</i> , 2020, 64, .	1.4	11
41	Translational demand is not a major source of plasmid-associated fitness costs. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2022, 377, 20200463.	1.8	10
42	Transfer dynamics of Tn6648, a composite integrative conjugative element generated by tandem accretion of Tn5801 and Tn6647 in <i>Enterococcus faecalis</i> . <i>Journal of Antimicrobial Chemotherapy</i> , 2019, 74, 2517-2523.	1.3	8
43	SatR Is a Repressor of Fluoroquinolone Efflux Pump SatAB. <i>Antimicrobial Agents and Chemotherapy</i> , 2013, 57, 3430-3433.	1.4	6
44	Testing the Role of Multicopy Plasmids in the Evolution of Antibiotic Resistance. <i>Journal of Visualized Experiments</i> , 2018, , .	0.2	3
45	The bacterial capsule is a gatekeeper for mobile DNA. <i>PLoS Biology</i> , 2021, 19, e3001308.	2.6	3
46	The journey of bacterial genes. <i>Nature Ecology and Evolution</i> , 2022, 6, 498-499.	3.4	1
47	Resistencia a antibióticos: esquivando balas mágicas. <i>Metode</i> , 2019, , .	0.0	0