

# 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  | 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        |
| 2  | The journey of bacterial genes. <i>Nature Ecology and Evolution</i> , 2022, 6, 498-499.   | 3.4  | 1         |
| 3  | Beyond horizontal gene transfer: the role of plasmids in bacterial evolution. <i>Nature Reviews Microbiology</i> , 2021, 19, 347-359.   | 13.6 | 194       |
| 4  | Collateral sensitivity associated with antibiotic resistance plasmids. <i>ELife</i> , 2021, 10, .   | 2.8  | 16        |
| 5  | 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       |
| 6  | Variability of plasmid fitness effects contributes to plasmid persistence in bacterial communities. <i>Nature Communications</i> , 2021, 12, 2653.  | 5.8  | 96        |
| 7  | The bacterial capsule is a gatekeeper for mobile DNA. <i>PLoS Biology</i> , 2021, 19, e3001308.   | 2.6  | 3         |
| 8  | Staphylococcal phages and pathogenicity islands drive plasmid evolution. <i>Nature Communications</i> , 2021, 12, 5845.   | 5.8  | 26        |
| 9  | Mathematical Models of Plasmid Population Dynamics. <i>Frontiers in Microbiology</i> , 2021, 12, 606396.  | 1.5  | 14        |
| 10 | 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        |
| 11 | 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        |
| 12 | Methods to Study Fitness and Compensatory Adaptation in Plasmid-Carrying Bacteria. <i>Methods in Molecular Biology</i> , 2020, 2075, 371-382.   | 0.4  | 17        |
| 13 | The evolution of antibiotic resistance. <i>Science</i> , 2019, 365, 1082-1083.  | 6.0  | 322       |
| 14 | 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         |
| 15 | Resistencia a antibióticos: esquivando balas mágicas. <i>Metode</i> , 2019, , .   | 0.0  | 0         |
| 16 | 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        |
| 17 | Cooperation, competition and antibiotic resistance in bacterial colonies. <i>ISME Journal</i> , 2018, 12, 1582-1593.  | 4.4  | 160       |
| 18 | Testing the Role of Multicopy Plasmids in the Evolution of Antibiotic Resistance. <i>Journal of Visualized Experiments</i> , 2018, , .  | 0.2  | 3         |

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|----|---|-----|-----------|
| 19 | Evolution of Plasmid-Mediated Antibiotic Resistance in the Clinical Context. Trends in Microbiology, 2018, 26, 978-985.   | 3.5 | 284       |
| 20 | PCR-Based Analysis of ColE1 Plasmids in Clinical Isolates and Metagenomic Samples Reveals Their Importance as Gene Capture Platforms. Frontiers in Microbiology, 2018, 9, 469.  | 1.5 | 26        |
| 21 | Integrative analysis of fitness and metabolic effects of plasmids in <i>Pseudomonas aeruginosa</i> PAO1. ISME Journal, 2018, 12, 3014-3024.   | 4.4 | 80        |
| 22 | Multicopy plasmids potentiate the evolution of antibiotic resistance in bacteria. Nature Ecology and Evolution, 2017, 1, 10.  | 3.4 | 147       |
| 23 | A Naturally Occurring Single Nucleotide Polymorphism in a Multicopy Plasmid Produces a Reversible Increase in Antibiotic Resistance. Antimicrobial Agents and Chemotherapy, 2017, 61, .   | 1.4 | 35        |
| 24 | Fitness Costs of Plasmids: a Limit to Plasmid Transmission. Microbiology Spectrum, 2017, 5, .   | 1.2 | 312       |
| 25 | The Genomic Basis of Evolutionary Innovation in <i>Pseudomonas aeruginosa</i> . PLoS Genetics, 2016, 12, e1006005.  | 1.5 | 35        |
| 26 | Evaluating the effect of horizontal transmission on the stability of plasmids under different selection regimes. Mobile Genetic Elements, 2015, 5, 29-33.   | 1.8 | 20        |
| 27 | 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. Journal of Antimicrobial Chemotherapy, 2015, 70, 3000-3003. | 1.3 | 35        |
| 28 | Interactions between horizontally acquired genes create a fitness cost in <i>Pseudomonas aeruginosa</i> . Nature Communications, 2015, 6, 6845.   | 5.8 | 147       |
| 29 | Culturable aerobic and facultative bacteria from the gut of the polyphagic dung beetle <i>Thorectes lusitanicus</i> . Insect Science, 2015, 22, 178-190.  | 1.5 | 17        |
| 30 | Small-Plasmid-Mediated Antibiotic Resistance Is Enhanced by Increases in Plasmid Copy Number and Bacterial Fitness. Antimicrobial Agents and Chemotherapy, 2015, 59, 3335-3341.   | 1.4 | 63        |
| 31 | Microbial Evolution: Towards Resolving the Plasmid Paradox. Current Biology, 2015, 25, R764-R767.   | 1.8 | 82        |
| 32 | Positive epistasis between co-infecting plasmids promotes plasmid survival in bacterial populations. ISME Journal, 2014, 8, 601-612.  | 4.4 | 143       |
| 33 | Positive selection and compensatory adaptation interact to stabilize non-transmissible plasmids. Nature Communications, 2014, 5, 5208.  | 5.8 | 202       |
| 34 | SatR Is a Repressor of Fluoroquinolone Efflux Pump SatAB. Antimicrobial Agents and Chemotherapy, 2013, 57, 3430-3433.   | 1.4 | 6         |
| 35 | Fitness Cost and Interference of Arm/Rmt Aminoglycoside Resistance with the RsmF Housekeeping Methyltransferases. Antimicrobial Agents and Chemotherapy, 2012, 56, 2335-2341.   | 1.4 | 39        |
| 36 | Molecular Organization of Small Plasmids Bearing <i>bla</i> <sub>TEM-1</sub> and Conferring Resistance to <sup>12</sup> -Lactams in <i>Haemophilus influenzae</i> . Antimicrobial Agents and Chemotherapy, 2012, 56, 4958-4960.       | 1.4 | 14        |

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|----|---|-----|-----------|
| 37 | 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        |
| 38 | 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        |
| 39 | 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        |
| 40 | 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        |
| 41 | <i>Haemophilus influenzae</i> Clinical Isolates with Plasmid pB1000 Bearing bla <sub>ROB-1</sub> : Fitness Cost and Interspecies Dissemination. <i>Antimicrobial Agents and Chemotherapy</i> , 2010, 54, 1506-1511.   | 1.4 | 40        |
| 42 | 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        |
| 43 | 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        |
| 44 | 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       |
| 45 | $\beta$ -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        |
| 46 | First Characterization of Fluoroquinolone Resistance in <i>Streptococcus suis</i> . <i>Antimicrobial Agents and Chemotherapy</i> , 2007, 51, 777-782.   | 1.4 | 34        |
| 47 | Fitness Costs of Plasmids: A Limit to Plasmid Transmission. , 0, , 65-79.   |     | 18        |