# Rafael Giraldo

List of Publications by Year
in descending order



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|---|---|---|---|
| 66 papers | 3,299 citations | 201674 27 h-index | 149698 56 g-index |
| 69 all docs | 69 docs citations | 69 times ranked | 2708 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Replication and Control of Circular Bacterial Plasmids. Microbiology and Molecular Biology Reviews, 1998, 62, 434-464. | 6.6 | 836 |
| 2 | The Crystal Structure of the DNA-Binding Domain of Yeast RAP1 in Complex with Telomeric DNA. Cell, 1996, 85, 125-136. | 28.9 | 300 |
| 3 | Promotion of parallel DNA quadruplexes by a yeast telomere binding protein: a circular dichroism study.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 7658-7662. | 7.1 | 205 |
| 4 | Distortion of the DNA Double Helix by RAP1 at Silencers and Multiple Telomeric Binding Sites. Journal of Molecular Biology, 1993, 231, 293-310. | 4.2 | 201 |
| 5 | Telomere structure and function. Current Opinion in Structural Biology, 1995, 5, 311-322. | 5.7 | 194 |
| 6 | Common domains in the initiators of DNA replication inBacteria, ArchaeaandEukarya: combined structural, functional and phylogenetic perspectives. FEMS Microbiology Reviews, 2003, 26, 533-554. | 8.6 | 79 |
| 7 | A conformational switch between transcriptional repression and replication initiation in the RepA dimerization domain. Nature Structural and Molecular Biology, 2003, 10, 565-571. | 8.2 | 78 |
| 8 | Structural and Functional Analysis of the Kid Toxin Protein from E. coli Plasmid R1. Structure, 2002, 10, 1425-1433. | 3.3 | 77 |
| 9 | Genetic and functional analysis of the basic replicon of pPS10, a plasmid specific for Pseudomonas isolated from Pseudomonas syringae patovar savastanoi. Journal of Molecular Biology, 1992, 223, 415-426. | 4.2 | 72 |
| 10 | Twenty years of the pPS10 replicon: insights on the molecular mechanism for the activation of DNA replication in iteron-containing bacterial plasmids. Plasmid, 2004, 52, 69-83. | 1.4 | 67 |
| 11 | Protein domains and conformational changes in the activation of RepA, a DNA replication initiator. EMBO Journal, 1998, 17, 4511-4526. | 7.8 | 63 |
| 12 | Defined DNA sequences promote the assembly of a bacterial protein into distinct amyloid nanostructures. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 17388-17393. | 7.1 | 63 |
| 13 | Structural Changes in RepA, a Plasmid Replication Initiator, upon Binding to Origin DNA. Journal of Biological Chemistry, 2003, 278, 18606-18616. | 3.4 | 57 |
| 14 | Bacterial zipper. Nature, 1989, 342, 866-866. | 27.8 | 53 |
| 15 | Host growth temperature and a conservative amino acid substitution in the replication protein of pPS10 influence plasmid host range. Journal of Bacteriology, 1995, 177, 4377-4384. | 2.2 | 51 |
| 16 | Imaging the Asymmetrical DNA Bend Induced by Repressor Activator Protein 1 with Scanning Tunneling Microscopy. Journal of Structural Biology, 1994, 113, 1-12. | 2.8 | 48 |
| 17 | A DNAâ€promoted amyloid proteinopathy in <i>Escherichia coli</i>. Molecular Microbiology, 2010, 77, 1456-1469. | 2.5 | 45 |
| 18 | Direct assessment in bacteria of prionoid propagation and phenotype selection by <scp>Hsp</scp>70 chaperone. Molecular Microbiology, 2014, 91, 1070-1087. | 2.5 | 41 |

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|---|---|---|---|
| 19 | A leucine zipper motif determines different functions in a DNA replication protein.. EMBO Journal, 1996, 15, 925-934. | 7.8 | 40 |
| 20 | Similarities between the DNA replication initiators of Gram-negative bacteria plasmids (RepA) and eukaryotes (Orc4p)/archaea (Cdc6p). Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 4938-4943. | 7.1 | 39 |
| 21 | Antithrombin Murcia (K241E) causing antithrombin deficiency: a possible role for altered glycosylation. Haematologica, 2010, 95, 1358-1365. | 3.5 | 34 |
| 22 | Early Events in the Binding of the pPS10 Replication Protein RepA to Single Iteron and Operator DNA Sequences. Journal of Molecular Biology, 2006, 364, 909-920. | 4.2 | 32 |
| 23 | Functional amyloids as inhibitors of plasmid DNA replication. Scientific Reports, 2016, 6, 25425. | 3.3 | 32 |
| 24 | Genetic identification of two functional regions in the antitoxin of theparDkiller system of plasmid R1. FEMS Microbiology Letters, 2002, 206, 115-119. | 1.8 | 31 |
| 25 | Differential binding of wild-type and a mutant RepA protein to oriR sequence suggests a model for the initiation of plasmid R1 replication. Journal of Molecular Biology, 1992, 228, 787-802. | 4.2 | 29 |
| 26 | Transcription ofrepA, the Gene of the Initiation Protein of thePseudomonasPlasmid pPS10, is Autoregulated by Interactions of the RepA Protein at a Symmetrical Operator. Journal of Molecular Biology, 1995, 247, 211-223. | 4.2 | 29 |
| 27 | Functional interactions betweenchpBandparD, two homologous conditional killer systems found in theEscherichia colichromosome and in plasmid R1. FEMS Microbiology Letters, 1998, 168, 51-58. | 1.8 | 29 |
| 28 | Binding of sulphonated indigo derivatives to RepA-WH1 inhibits DNA-induced protein amyloidogenesis. Nucleic Acids Research, 2008, 36, 2249-2256. | 14.5 | 29 |
| 29 | Amyloid Assemblies: Protein Legos at a Crossroads in Bottomâ€Up Synthetic Biology. ChemBioChem, 2010, 11, 2347-2357. | 2.6 | 29 |
| 30 | DnaA dependent replication of plasmid R1 occurs in the presence of point mutations that disrupt the dnaA box oforiR. Nucleic Acids Research, 1992, 20, 2547-2551. | 14.5 | 26 |
| 31 | Amyloidogenesis of Bacterial Prionoid RepA-WH1 Recapitulates Dimer to Monomer Transitions of RepA in DNA Replication Initiation. Structure, 2015, 23, 183-189. | 3.3 | 26 |
| 32 | Negative regulation of pPS10 plasmid replication: origin pairing by zippingâ€up DNAâ€bound RepA monomers. Molecular Microbiology, 2008, 68, 560-572. | 2.5 | 24 |
| 33 | Functional interactions between homologous conditional killer systems of plasmid and chromosomal origin. FEMS Microbiology Letters, 2006, 152, 51-56. | 1.8 | 23 |
| 34 | Structural characterization of microcin E492 amyloid formation: Identification of the precursors. Journal of Structural Biology, 2012, 178, 54-60. | 2.8 | 22 |
| 35 | Self assembly of human septin 2 into amyloid filaments. Biochimie, 2012, 94, 628-636. | 2.6 | 22 |
| 36 | RepA-WH1, the agent of an amyloid proteinopathy in bacteria, builds oligomeric pores through lipid vesicles. Scientific Reports, 2016, 6, 23144. | 3.3 | 20 |

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| 37 | Pre-amyloid oligomers of the proteotoxic RepA-WH1 prionoid assemble at the bacterial nucleoid. Scientific Reports, 2015, 5, 14669. | 3.3 | 19 |
| 38 | RepA-WH1<i>prionoid</i>. Prion, 2011, 5, 60-64. | 1.8 | 17 |
| 39 | Nucleation of Amyloid Oligomers by RepAâ€WH1â€Prionoidâ€Functionalized Gold Nanorods. Angewandte Chemie - International Edition, 2016, 55, 11237-11241. | 13.8 | 17 |
| 40 | Non-cytotoxic variants of the Kid protein that retain their auto-regulatory activity. Plasmid, 2003, 50, 120-130. | 1.4 | 16 |
| 41 | Aggregation Interplay between Variants of the RepA-WH1 Prionoid in Escherichia coli. Journal of Bacteriology, 2014, 196, 2536-2542. | 2.2 | 16 |
| 42 | Outlining Core Pathways of Amyloid Toxicity in Bacteria with the RepA-WH1 Prionoid. Frontiers in Microbiology, 2017, 8, 539. | 3.5 | 16 |
| 43 | The heat-shock DnaK protein is required for plasmid R1 replication and it is dispensable for plasmid ColE1 replication. Nucleic Acids Research, 1993, 21, 5495-5499. | 14.5 | 14 |
| 44 | An intrinsic 5â€²-deoxyribose-5-phosphate lyase activity in DNA polymerase beta from Leishmania infantum supports a role in DNA repair. DNA Repair, 2006, 5, 89-101. | 2.8 | 13 |
| 45 | RepA-WH1 prionoid: Clues from bacteria on factors governing phase transitions in amyloidogenesis. Prion, 2016, 10, 41-49. | 1.8 | 12 |
| 46 | Structural Analysis of the Interactions Between Hsp70 Chaperones and the Yeast DNA Replication Protein Orc4p. Journal of Molecular Biology, 2010, 403, 24-39. | 4.2 | 11 |
| 47 | Crystallization and preliminary X-ray crystallographic studies on theparD-encoded protein Kid fromEscherichia coliplasmid R1. Acta Crystallographica Section D: Biological Crystallography, 2002, 58, 355-358. | 2.5 | 10 |
| 48 | Addressing Intracellular Amyloidosis in Bacteria with RepA-WH1, a Prion-Like Protein. Methods in Molecular Biology, 2018, 1779, 289-312. | 0.9 | 10 |
| 49 | Engineered bacterial hydrophobic oligopeptide repeats in a synthetic yeast prion, [REP-PSI+]. Frontiers in Microbiology, 2015, 06, 311. | 3.5 | 9 |
| 50 | Mutations Within the Minimal Replicon of Plasmid pPS10 Increase Its Host Range. , 1992, , 225-237. | | 9 |
| 51 | Optogenetic Navigation of Routes Leading to Protein Amyloidogenesis in Bacteria. Journal of Molecular Biology, 2019, 431, 1186-1202. | 4.2 | 8 |
| 52 | Intercellular Transmission of a Synthetic Bacterial Cytotoxic Prion-Like Protein in Mammalian Cells. MBio, 2020, 11, . | 4.1 | 8 |
| 53 | Defining a novel domain that provides an essential contribution to site-specific interaction of Rep protein with DNA. Nucleic Acids Research, 2021, 49, 3394-3408. | 14.5 | 8 |
| 54 | Modulation of the Aggregation of the Prion-like Protein RepA-WH1 by Chaperones in a Cell-Free Expression System and in Cytomimetic Lipid Vesicles. ACS Synthetic Biology, 2018, 7, 2087-2093. | 3.8 | 6 |

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| 55 | Conformational Priming of RepA-WH1 for Functional Amyloid Conversion Detected by NMR Spectroscopy. Structure, 2020, 28, 336-347.e4. | 3.3 | 6 |
| 56 | Fluorescence studies of the replication initiator protein RepA in complex with operator and iteron sequences and free in solution. FEBS Journal, 2008, 275, 5393-5407. | 4.7 | 5 |
| 57 | Enabling stop codon read-through translation in bacteria as a probe for amyloid aggregation. Scientific Reports, 2017, 7, 11908. | 3.3 | 5 |
| 58 | SynBio and the Boundaries between Functional and Pathogenic RepA-WH1 Bacterial Amyloids. MSystems, 2020, 5, . | 3.8 | 3 |
| 59 | Conversion of the OmpF Porin into a Device to Gather Amyloids on the E. coli Outer Membrane. ACS Synthetic Biology, 2021, , . | 3.8 | 3 |
| 60 | Genetic identification of two functional regions in the antitoxin of the parD killer system of plasmid R1. FEMS Microbiology Letters, 2002, 206, 115-119. | 1.8 | 2 |
| 61 | Functional interactions between chpB and parD, two homologous conditional killer systems found in the Escherichia coli chromosome and in plasmid R1. FEMS Microbiology Letters, 1998, 168, 51-58. | 1.8 | 2 |
| 62 | Voyage of RepA protein from plasmid DNA replication through amyloid aggregation towards synthetic biology. Journal of Applied Biomedicine, 2010, 8, 151-158. | 1.7 | 1 |
| 63 | Nucleation of Amyloid Oligomers by RepAâ€WH1â€Prionoidâ€Functionalized Gold Nanorods. Angewandte Chemie, 2016, 128, 11403-11407. | 2.0 | 1 |
| 64 | Zipperless bZips and Zipped Homeodomains.. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 1995, 71, 39-44. | 3.8 | 0 |
| 65 | Reconstruction of Cytotoxic Bacterial Protein Assemblies in Lipid Vesicles. Advances in Biomembranes and Lipid Self-Assembly, 2017, 26, 173-193. | 0.6 | 0 |
| 66 | SEM at 75: foreword. International Microbiology, 2021, 24, 471-472. | 2.4 | 0 |