

# Fernando De La Cruz

## List of Publications by Citations

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204  
papers

11,320  
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56  
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99  
g-index

221  
ext. papers

13,449  
ext. citations

6.5  
avg, IF

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L-index

#	Paper	IF	Citations
204	Mobility of plasmids. <i>Microbiology and Molecular Biology Reviews</i> , <b>2010</b> , 74, 434-52	13.2	634
203	Construction and properties of a family of pACYC184-derived cloning vectors compatible with pBR322 and its derivatives. <i>Gene</i> , <b>1991</b> , 102, 75-8	3.8	439
202	Horizontal gene transfer and the origin of species: lessons from bacteria. <i>Trends in Microbiology</i> , <b>2000</b> , 8, 128-33	12.4	388
201	The diversity of conjugative relaxases and its application in plasmid classification. <i>FEMS Microbiology Reviews</i> , <b>2009</b> , 33, 657-87	15.1	352
200	pACYC184-derived cloning vectors containing the multiple cloning site and lacZ alpha reporter gene of pUC8/9 and pUC18/19 plasmids. <i>Gene</i> , <b>1988</b> , 68, 159-62	3.8	297
199	The bacterial conjugation protein TrwB resembles ring helicases and F1-ATPase. <i>Nature</i> , <b>2001</b> , 409, 637-41	40.4	279
198	Bacterial conjugation: a two-step mechanism for DNA transport. <i>Molecular Microbiology</i> , <b>2002</b> , 45, 1-8	4.1	268
197	A classification scheme for mobilization regions of bacterial plasmids. <i>FEMS Microbiology Reviews</i> , <b>2004</b> , 28, 79-100	15.1	264
196	The repertoire of ICE in prokaryotes underscores the unity, diversity, and ubiquity of conjugation. <i>PLoS Genetics</i> , <b>2011</b> , 7, e1002222	6	246
195	Conjugative DNA metabolism in Gram-negative bacteria. <i>FEMS Microbiology Reviews</i> , <b>2010</b> , 34, 18-40	15.1	227
194	Dissemination of cephalosporin resistance genes between Escherichia coli strains from farm animals and humans by specific plasmid lineages. <i>PLoS Genetics</i> , <b>2014</b> , 10, e1004776	6	213
193	Genetic evidence of a coupling role for the TraG protein family in bacterial conjugation. <i>Molecular Genetics and Genomics</i> , <b>1997</b> , 254, 400-6		174
192	Breaking and joining single-stranded DNA: the HUH endonuclease superfamily. <i>Nature Reviews Microbiology</i> , <b>2013</b> , 11, 525-38	22.2	158
191	The Tn21 subgroup of bacterial transposable elements. <i>Plasmid</i> , <b>1990</b> , 24, 163-89	3.3	140
190	Ecology and evolution as targets: the need for novel eco-evo drugs and strategies to fight antibiotic resistance. <i>Antimicrobial Agents and Chemotherapy</i> , <b>2011</b> , 55, 3649-60	5.9	139
189	Key components of the eight classes of type IV secretion systems involved in bacterial conjugation or protein secretion. <i>Nucleic Acids Research</i> , <b>2014</b> , 42, 5715-27	20.1	137
188	Evolution of conjugation and type IV secretion systems. <i>Molecular Biology and Evolution</i> , <b>2013</b> , 30, 315-38	38.3	133

187	Towards an integrated model of bacterial conjugation. <i>FEMS Microbiology Reviews</i> , <b>2015</b> , 39, 81-95	15.1	132
186	Plasmid flux in Escherichia coli ST131 sublineages, analyzed by plasmid constellation network (PLACNET), a new method for plasmid reconstruction from whole genome sequences. <i>PLoS Genetics</i> , <b>2014</b> , 10, e1004766	6	127
185	Recognition and processing of the origin of transfer DNA by conjugative relaxase TrwC. <i>Nature Structural and Molecular Biology</i> , <b>2003</b> , 10, 1002-10	17.6	118
184	Why is entry exclusion an essential feature of conjugative plasmids?. <i>Plasmid</i> , <b>2008</b> , 60, 1-18	3.3	117
183	Identification of bacterial plasmids based on mobility and plasmid population biology. <i>FEMS Microbiology Reviews</i> , <b>2011</b> , 35, 936-56	15.1	116
182	Conjugative coupling proteins interact with cognate and heterologous VirB10-like proteins while exhibiting specificity for cognate relaxosomes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 10465-70	11.5	113
181	Dynamics of the IncW genetic backbone imply general trends in conjugative plasmid evolution. <i>FEMS Microbiology Reviews</i> , <b>2006</b> , 30, 942-66	15.1	111
180	Spread of bla(CTX-M-14) is driven mainly by IncK plasmids disseminated among Escherichia coli phylogroups A, B1, and D in Spain. <i>Antimicrobial Agents and Chemotherapy</i> , <b>2009</b> , 53, 5204-12	5.9	102
179	A bacterial conjugation machinery recruited for pathogenesis. <i>Molecular Microbiology</i> , <b>2003</b> , 49, 1253-66	4.1	101
178	Transposon Tn21 encodes a RecA-independent site-specific integration system. <i>Molecular Genetics and Genomics</i> , <b>1988</b> , 211, 320-5		98
177	TrwB, the coupling protein involved in DNA transport during bacterial conjugation, is a DNA-dependent ATPase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 8156-61	11.5	90
176	Site-specific recombinase and integrase activities of a conjugative relaxase in recipient cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 16385-90	11.5	86
175	The hha gene modulates haemolysin expression in Escherichia coli. <i>Molecular Microbiology</i> , <b>1991</b> , 5, 1285-93	4.3	85
174	Genetic organization of the conjugal DNA processing region of the IncW plasmid R388. <i>Journal of Molecular Biology</i> , <b>1994</b> , 235, 448-64	6.5	84
173	Toward minimal bacterial cells: evolution vs. design. <i>FEMS Microbiology Reviews</i> , <b>2009</b> , 33, 225-35	15.1	83
172	Characterization of ATP and DNA binding activities of TrwB, the coupling protein essential in plasmid R388 conjugation. <i>Journal of Biological Chemistry</i> , <b>1999</b> , 274, 36117-24	5.4	83
171	Coupling factors in macromolecular type-IV secretion machineries. <i>Current Pharmaceutical Design</i> , <b>2004</b> , 10, 1551-65	3.3	83
170	TrwD, a protein encoded by the IncW plasmid R388, displays an ATP hydrolase activity essential for bacterial conjugation. <i>Journal of Biological Chemistry</i> , <b>1997</b> , 272, 25583-90	5.4	81

169	Unsaturated fatty acids are inhibitors of bacterial conjugation. <i>Microbiology (United Kingdom)</i> , <b>2005</b> , 151, 3517-3526	2.9	80
168	Differential roles of the transposon termini in IS91 transposition. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>1994</b> , 91, 1922-6	11.5	80
167	Enzymology of type IV macromolecule secretion systems: the conjugative transfer regions of plasmids RP4 and R388 and the cag pathogenicity island of <i>Helicobacter pylori</i> encode structurally and functionally related nucleoside triphosphate hydrolases. <i>Journal of Bacteriology</i> , <b>2000</b> , 182, 2761-70	3.5	78
166	Release of lipid vesicle contents by the bacterial protein toxin alpha-haemolysin. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , <b>1993</b> , 1147, 81-8	3.8	77
165	General organization of the conjugal transfer genes of the IncW plasmid R388 and interactions between R388 and IncN and IncP plasmids. <i>Journal of Bacteriology</i> , <b>1990</b> , 172, 5795-802	3.5	76
164	In-depth resistome analysis by targeted metagenomics. <i>Microbiome</i> , <b>2018</b> , 6, 11	16.6	73
163	Transcription factor-based biosensors enlightened by the analyte. <i>Frontiers in Microbiology</i> , <b>2015</b> , 6, 648	5.7	73
162	Complementation of transposition of tnpA mutants of Tn3, Tn21, Tn501, and Tn1721. <i>Plasmid</i> , <b>1982</b> , 8, 276-86	3.3	71
161	Four main virotypes among extended-spectrum-β-lactamase-producing isolates of <i>Escherichia coli</i> O25b:H4-B2-ST131: bacterial, epidemiological, and clinical characteristics. <i>Journal of Clinical Microbiology</i> , <b>2013</b> , 51, 3358-67	9.7	69
160	PLACNETw: a web-based tool for plasmid reconstruction from bacterial genomes. <i>Bioinformatics</i> , <b>2017</b> , 33, 3796-3798	7.2	68
159	Two active-site tyrosyl residues of protein TrwC act sequentially at the origin of transfer during plasmid R388 conjugation. <i>Journal of Molecular Biology</i> , <b>2000</b> , 295, 1163-72	6.5	68
158	Nicking activity of TrwC directed against the origin of transfer of the IncW plasmid R388. <i>Journal of Molecular Biology</i> , <b>1995</b> , 246, 54-62	6.5	67
157	Functional domains in protein TrwC of plasmid R388: dissected DNA strand transferase and DNA helicase activities reconstitute protein function. <i>Journal of Molecular Biology</i> , <b>1996</b> , 264, 56-67	6.5	67
156	A degenerate primer MOB typing (DPMT) method to classify gamma-proteobacterial plasmids in clinical and environmental settings. <i>PLoS ONE</i> , <b>2012</b> , 7, e40438	3.7	67
155	Pathways for horizontal gene transfer in bacteria revealed by a global map of their plasmids. <i>Nature Communications</i> , <b>2020</b> , 11, 3602	17.4	66
154	<i>Escherichia coli</i> genes affecting recipient ability in plasmid conjugation: are there any?. <i>BMC Genomics</i> , <b>2009</b> , 10, 71	4.5	65
153	The ATPase activity of the DNA transporter TrwB is modulated by protein TrwA: implications for a common assembly mechanism of DNA translocating motors. <i>Journal of Biological Chemistry</i> , <b>2007</b> , 282, 25569-76	5.4	65
152	Conjugative plasmid protein TrwB, an integral membrane type IV secretion system coupling protein. Detailed structural features and mapping of the active site cleft. <i>Journal of Biological Chemistry</i> , <b>2002</b> , 277, 7556-66	5.4	63

151	Carriage of Extended-Spectrum Beta-Lactamase-Plasmids Does Not Reduce Fitness but Enhances Virulence in Some Strains of Pandemic E. coli Lineages. <i>Frontiers in Microbiology</i> , <b>2016</b> , 7, 336	5.7	61
150	Requirements for mobilization of plasmids RSF1010 and ColE1 by the IncW plasmid R388: trwB and RP4 traG are interchangeable. <i>Journal of Bacteriology</i> , <b>1994</b> , 176, 4455-8	3.5	59
149	Unveiling the molecular mechanism of a conjugative relaxase: The structure of TrwC complexed with a 27-mer DNA comprising the recognition hairpin and the cleavage site. <i>Journal of Molecular Biology</i> , <b>2006</b> , 358, 857-69	6.5	58
148	oriT-processing and regulatory roles of TrwA protein in plasmid R388 conjugation. <i>Journal of Molecular Biology</i> , <b>1997</b> , 270, 188-200	6.5	55
147	Purification and properties of TrwB, a hexameric, ATP-binding integral membrane protein essential for R388 plasmid conjugation. <i>Journal of Biological Chemistry</i> , <b>2002</b> , 277, 46456-62	5.4	55
146	The carboxyl terminus of protein TraD adds specificity and efficiency to F-plasmid conjugative transfer. <i>Journal of Bacteriology</i> , <b>1998</b> , 180, 6039-42	3.5	55
145	Conjugative transfer can be inhibited by blocking relaxase activity within recipient cells with intrabodies. <i>Molecular Microbiology</i> , <b>2007</b> , 63, 404-16	4.1	54
144	Bacterial conjugation: a potential tool for genomic engineering. <i>Research in Microbiology</i> , <b>2005</b> , 156, 1-6	4	54
143	Hemolysis determinant common to Escherichia coli hemolytic plasmids of different incompatibility groups. <i>Journal of Bacteriology</i> , <b>1980</b> , 143, 825-33	3.5	54
142	The hexameric structure of a conjugative VirB4 protein ATPase provides new insights for a functional and phylogenetic relationship with DNA translocases. <i>Journal of Biological Chemistry</i> , <b>2012</b> , 287, 39925-32	5.4	53
141	Conjugation-independent, site-specific recombination at the oriT of the IncW plasmid R388 mediated by TrwC. <i>Journal of Bacteriology</i> , <b>1994</b> , 176, 3210-7	3.5	53
140	Secondary-sites for integration mediated by the Tn21 integrase. <i>Molecular Microbiology</i> , <b>1993</b> , 10, 823-84.1	4.1	53
139	Transcription modulation of Salmonella enterica serovar Typhimurium promoters by sub-MIC levels of rifampin. <i>Journal of Bacteriology</i> , <b>2006</b> , 188, 7988-91	3.5	52
138	Genomic analysis of the emergence and evolution of multidrug resistance during a Klebsiella pneumoniae outbreak including carbapenem and colistin resistance. <i>Journal of Antimicrobial Chemotherapy</i> , <b>2014</b> , 69, 632-6	5.1	51
137	The calcium-binding C-terminal domain of Escherichia coli alpha-hemolysin is a major determinant in the surface-active properties of the protein. <i>Journal of Biological Chemistry</i> , <b>2007</b> , 282, 11827-35	5.4	51
136	Different pathways to acquiring resistance genes illustrated by the recent evolution of IncW plasmids. <i>Antimicrobial Agents and Chemotherapy</i> , <b>2008</b> , 52, 1472-80	5.9	50
135	Genes involved in conjugative DNA processing of plasmid R6K. <i>Molecular Microbiology</i> , <b>1997</b> , 24, 1157-68.1	4.1	49
134	The Int11 integron integrase preferentially binds single-stranded DNA of the attC site. <i>Journal of Bacteriology</i> , <b>1999</b> , 181, 6844-9	3.5	49

133	Single-stranded DNA intermediates in IS91 rolling-circle transposition. <i>Molecular Microbiology</i> , <b>2001</b> , 39, 494-501	4.1	48
132	IS91 transposase is related to the rolling-circle-type replication proteins of the pUB110 family of plasmids. <i>Nucleic Acids Research</i> , <b>1992</b> , 20, 3521	20.1	48
131	PipX, the coactivator of NtcA, is a global regulator in cyanobacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, E2423-30	11.5	47
130	Viral replication in patients with concomitant hepatitis B and C virus infections. <i>European Journal of Clinical Microbiology and Infectious Diseases</i> , <b>1997</b> , 16, 445-51	5.3	45
129	Purification and biochemical characterization of TrwC, the helicase involved in plasmid R388 conjugal DNA transfer. <i>FEBS Journal</i> , <b>1994</b> , 226, 403-12		45
128	Physical and genetic map of the IncW plasmid R388. <i>Plasmid</i> , <b>1988</b> , 20, 155-7	3.3	45
127	Synthetic Fatty Acids Prevent Plasmid-Mediated Horizontal Gene Transfer. <i>MBio</i> , <b>2015</b> , 6, e01032-15	7.8	44
126	Alpha-haemolysin from E. coli. Purification and self-aggregation properties. <i>FEBS Letters</i> , <b>1991</b> , 280, 195-88		44
125	Multicellular computing using conjugation for wiring. <i>PLoS ONE</i> , <b>2013</b> , 8, e65986	3.7	43
124	Analysis of DNA processing reactions in bacterial conjugation by using suicide oligonucleotides. <i>EMBO Journal</i> , <b>2007</b> , 26, 3847-57	13	43
123	Escherichia coli alpha-haemolysin synthesis and export genes are flanked by a direct repetition of IS91-like elements. <i>Molecular Genetics and Genomics</i> , <b>1984</b> , 197, 90-7		43
122	Functional interactions between type IV secretion systems involved in DNA transfer and virulence. <i>Microbiology (United Kingdom)</i> , <b>2005</b> , 151, 3505-3516	2.9	43
121	Two atypical mobilization proteins are involved in plasmid CloDF13 relaxation. <i>Molecular Microbiology</i> , <b>2001</b> , 39, 1088-99	4.1	42
120	Severe clinical course of de novo hepatitis B infection after liver transplantation. <i>Liver Transplantation</i> , <b>1999</b> , 5, 175-83		42
119	Incompatibility among alpha-hemolytic plasmids studied after inactivation of the alpha-hemolysin gene by transposition of Tn802. <i>Plasmid</i> , <b>1979</b> , 2, 507-19	3.3	42
118	Molecular epidemiology and virulence of Escherichia coli O16:H5-ST131: comparison with H30 and H30-Rx subclones of O25b:H4-ST131. <i>International Journal of Medical Microbiology</i> , <b>2014</b> , 304, 1247-57	3.7	41
117	Functional interactions of VirB11 traffic ATPases with VirB4 and VirD4 molecular motors in type IV secretion systems. <i>Journal of Bacteriology</i> , <b>2013</b> , 195, 4195-201	3.5	41
116	DNA binding properties of protein TrwA, a possible structural variant of the Arc repressor superfamily. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , <b>2004</b> , 1701, 15-23	4	41

115	Structural and functional analysis of the origin of conjugal transfer of the broad-host-range IncW plasmid R388 and comparison with the related IncN plasmid R46. <i>Molecular Genetics and Genomics</i> , <b>1991</b> , 226, 473-83		41
114	<i>Escherichia coli</i> hha mutants, DNA supercoiling and expression of the haemolysin genes from the recombinant plasmid pANN202-312. <i>Molecular Microbiology</i> , <b>1993</b> , 9, 1011-8	4.1	40
113	Plasmid typing and genetic context of AmpC $\beta$ -lactamases in Enterobacteriaceae lacking inducible chromosomal ampC genes: findings from a Spanish hospital 1999-2007. <i>Journal of Antimicrobial Chemotherapy</i> , <b>2012</b> , 67, 115-22	5.1	39
112	AcCNET (Accessory Genome Constellation Network): comparative genomics software for accessory genome analysis using bipartite networks. <i>Bioinformatics</i> , <b>2017</b> , 33, 283-285	7.2	38
111	ATPase activity and oligomeric state of TrwK, the VirB4 homologue of the plasmid R388 type IV secretion system. <i>Journal of Bacteriology</i> , <b>2008</b> , 190, 5472-9	3.5	38
110	Plasmid Diversity and Adaptation Analyzed by Massive Sequencing of <i>Escherichia coli</i> Plasmids. <i>Microbiology Spectrum</i> , <b>2014</b> , 2,	8.9	37
109	Negative feedback and transcriptional overshooting in a regulatory network for horizontal gene transfer. <i>PLoS Genetics</i> , <b>2014</b> , 10, e1004171	6	37
108	Functional dissection of the conjugative coupling protein TrwB. <i>Journal of Bacteriology</i> , <b>2010</b> , 192, 2655-69	5.9	37
107	Association of composite IS26-sul3 elements with highly transmissible IncI1 plasmids in extended-spectrum-beta-lactamase-producing <i>Escherichia coli</i> clones from humans. <i>Antimicrobial Agents and Chemotherapy</i> , <b>2011</b> , 55, 2451-7	5.9	37
106	The stb operon balances the requirements for vegetative stability and conjugative transfer of plasmid R388. <i>PLoS Genetics</i> , <b>2011</b> , 7, e1002073	6	37
105	Regulation of finP transcription by DNA adenine methylation in the virulence plasmid of <i>Salmonella enterica</i> . <i>Journal of Bacteriology</i> , <b>2005</b> , 187, 5691-9	3.5	37
104	Plasmids containing one inverted repeat of Tn21 can fuse with other plasmids in the presence of Tn21 transposase. <i>Molecular Genetics and Genomics</i> , <b>1984</b> , 195, 288-93		37
103	Comparative Genomics of the Conjugation Region of F-like Plasmids: Five Shades of F. <i>Frontiers in Molecular Biosciences</i> , <b>2016</b> , 3, 71	5.6	37
102	Specificity of insertion of IS91, an insertion sequence present in alpha-haemolysin plasmids of <i>Escherichia coli</i> . <i>Molecular Microbiology</i> , <b>1989</b> , 3, 979-84	4.1	35
101	Purification of alpha-hemolysin from an overproducing <i>E. coli</i> strain. <i>Molecular Genetics and Genomics</i> , <b>1985</b> , 199, 106-10		35
100	TrwB: an F(1)-ATPase-like molecular motor involved in DNA transport during bacterial conjugation. <i>Research in Microbiology</i> , <b>2006</b> , 157, 299-305	4	34
99	Plasmid r1 conjugative DNA processing is regulated at the coupling protein interface. <i>Journal of Bacteriology</i> , <b>2009</b> , 191, 6877-87	3.5	33
98	Plasmid R6K contains two functional oriT's which can assemble simultaneously in relaxosomes in vivo. <i>Journal of Molecular Biology</i> , <b>1996</b> , 261, 135-43	6.5	33

97	MOBscan: Automated Annotation of MOB Relaxases. <i>Methods in Molecular Biology</i> , <b>2020</b> , 2075, 295-308	1.4	33
96	Orthogonal Protein Assembly on DNA Nanostructures Using Relaxases. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 4348-52	16.4	32
95	Junction sequences generated by one-ended transposition. <i>Nucleic Acids Research</i> , <b>1985</b> , 13, 3335-42	20.1	32
94	Type IV traffic ATPase TrwD as molecular target to inhibit bacterial conjugation. <i>Molecular Microbiology</i> , <b>2016</b> , 100, 912-21	4.1	32
93	Structure and role of coupling proteins in conjugal DNA transfer. <i>Research in Microbiology</i> , <b>2002</b> , 153, 199-204	4	31
92	Genomic and metagenomic technologies to explore the antibiotic resistance mobilome. <i>Annals of the New York Academy of Sciences</i> , <b>2017</b> , 1388, 26-41	6.5	30
91	Analysis of ColE1 MbeC unveils an extended ribbon-helix-helix family of nicking accessory proteins. <i>Journal of Bacteriology</i> , <b>2009</b> , 191, 1446-55	3.5	30
90	A new domain of conjugative relaxase TrwC responsible for efficient oriT-specific recombination on minimal target sequences. <i>Molecular Microbiology</i> , <b>2006</b> , 62, 984-96	4.1	30
89	Distribution of IS91 family insertion sequences in bacterial genomes: evolutionary implications. <i>FEMS Microbiology Ecology</i> , <b>2002</b> , 42, 303-13	4.3	30
88	Purification of Escherichia coli pro-haemolysin, and a comparison with the properties of mature alpha-haemolysin. <i>FEBS Journal</i> , <b>1996</b> , 238, 418-22		30
87	Role of IncHI2 plasmids harbouring blaVIM-1, blaCTX-M-9, aac(69)-Ib and qnrA genes in the spread of multiresistant Enterobacter cloacae and Klebsiella pneumoniae strains in different units at Hospital Vall d'Hebron, Barcelona, Spain. <i>International Journal of Antimicrobial Agents</i> , <b>2012</b> , 39, 514-7	14.3	29
86	Towards a taxonomy of conjugative plasmids. <i>Current Opinion in Microbiology</i> , <b>2017</b> , 38, 106-113	7.9	29
85	Tanzawaic Acids, a Chemically Novel Set of Bacterial Conjugation Inhibitors. <i>PLoS ONE</i> , <b>2016</b> , 11, e0148098	3.7	29
84	Determination of conjugation rates on solid surfaces. <i>Plasmid</i> , <b>2012</b> , 67, 174-82	3.3	28
83	The conjugative DNA translocase TrwB is a structure-specific DNA-binding protein. <i>Journal of Biological Chemistry</i> , <b>2010</b> , 285, 17537-44	5.4	28
82	Engineering the fatty acid synthesis pathway in PCC 7942 improves omega-3 fatty acid production. <i>Biotechnology for Biofuels</i> , <b>2018</b> , 11, 239	7.8	28
81	Conjugation Inhibitors and Their Potential Use to Prevent Dissemination of Antibiotic Resistance Genes in Bacteria. <i>Frontiers in Microbiology</i> , <b>2017</b> , 8, 2329	5.7	26
80	Genetic and biochemical characterization of MbeA, the relaxase involved in plasmid ColE1 conjugative mobilization. <i>Molecular Microbiology</i> , <b>2003</b> , 48, 481-93	4.1	26



79	Construction of a family of Mycobacterium/Escherichia coli shuttle vectors derived from pAL5000 and pACYC184: their use for cloning an antibiotic-resistance gene from Mycobacterium fortuitum. <i>Gene</i> , <b>1996</b> , 176, 23-6	3.8	26
78	Natural and Artificial Strategies To Control the Conjugative Transmission of Plasmids. <i>Microbiology Spectrum</i> , <b>2018</b> , 6,	8.9	25
77	CRISPR-Cas systems preferentially target the leading regions of MOB <sub>F</sub> conjugative plasmids. <i>RNA Biology</i> , <b>2013</b> , 10, 749-61	4.8	25
76	Relaxase DNA binding and cleavage are two distinguishable steps in conjugative DNA processing that involve different sequence elements of the <i>nic</i> site. <i>Journal of Biological Chemistry</i> , <b>2010</b> , 285, 8918-26	5.4	24
75	Role of the transmembrane domain in the stability of TrwB, an integral protein involved in bacterial conjugation. <i>Journal of Biological Chemistry</i> , <b>2004</b> , 279, 10955-61	5.4	24
74	IHF protein inhibits cleavage but not assembly of plasmid R388 relaxosomes. <i>Molecular Microbiology</i> , <b>1999</b> , 31, 1643-52	4.1	23
73	Catalytic domain of plasmid pAD1 relaxase TraX defines a group of relaxases related to restriction endonucleases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 13606-11	11.5	22
72	Cointegrates are not obligatory intermediates in transposition of Tn3 and Tn21. <i>Nature</i> , <b>1983</b> , 305, 743-44	5.4	22
71	Host Range and Genetic Plasticity Explain the Coexistence of Integrative and Extrachromosomal Mobile Genetic Elements. <i>Molecular Biology and Evolution</i> , <b>2018</b> , 35, 2230-2239	8.3	21
70	The transmembrane domain provides nucleotide binding specificity to the bacterial conjugation protein TrwB. <i>FEBS Letters</i> , <b>2006</b> , 580, 3075-82	3.8	21
69	Characterization of the new insertion sequence IS91 from an alpha-hemolysin plasmid of Escherichia coli. <i>Molecular Genetics and Genomics</i> , <b>1984</b> , 193, 493-9		21
68	Use of limited proteolysis and mutagenesis to identify folding domains and sequence motifs critical for wax ester synthase/acyl coenzyme A:diacylglycerol acyltransferase activity. <i>Applied and Environmental Microbiology</i> , <b>2014</b> , 80, 1132-41	4.8	20
67	Intramolecular transposition of insertion sequence IS91 results in second-site simple insertions. <i>Molecular Microbiology</i> , <b>1999</b> , 33, 223-34	4.1	20
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