Didier Mazel

List of Publications by Year
in descending order

125 papers	10,672 citations	30070 54 h-index	34986 98 g-index
159 all docs	159 docs citations	159 times ranked	7785 citing authors

#	Article	IF	Citations
1	A qnr-plasmid allows aminoglycosides to induce SOS in Escherichia coli. ELife, 2022, 11, .	6.0	4
2	Unbridled Integrons: A Matter of Host Factors. Cells, 2022, 11, 925.	4.1	10
3	Cholera-causing bacteria have defences that degrade plasmid invaders. Nature, 2022, 604, 250-252.	27.8	0
4	Real-time tracking of bacterial membrane vesicles reveals enhanced membrane traffic upon antibiotic exposure. Science Advances, 2021, 7, .	10.3	36
5	The coordinated replication of <i>Vibrio cholerae</i>â€™s two chromosomes required the acquisition of a unique domain by the RctB initiator. Nucleic Acids Research, 2021, 49, 11119-11133.	14.5	8
6	Cassette recruitment in the chromosomal Integron of <i>Vibrio cholerae</i>. Nucleic Acids Research, 2021, 49, 5654-5670.	14.5	17
7	Metagenomic strategies identify diverse integronâ€integrase and antibiotic resistance genes in the Antarctic environment. MicrobiologyOpen, 2021, 10, e1219.	3.0	18
8	Sleeping ribosomes: Bacterial signaling triggers RaiA mediated persistence to aminoglycosides. IScience, 2021, 24, 103128.	4.1	25
9	Deficiency in cytosine DNA methylation leads to high chaperonin expression and tolerance to aminoglycosides in Vibrio cholerae. PLoS Genetics, 2021, 17, e1009748.	3.5	11
10	Interplay between Sublethal Aminoglycosides and Quorum Sensing: Consequences on Survival in V. cholerae. Cells, 2021, 10, 3227.	4.1	8
11	Structure-specific DNA recombination sites: Design, validation, and machine learningâ€“based refinement. Science Advances, 2020, 6, eaay2922.	10.3	17
12	Macromolecular crowding links ribosomal protein gene dosage to growth rate in Vibrio cholerae. BMC Biology, 2020, 18, 43.	3.8	10
13	Primary and promiscuous functions coexist during evolutionary innovation through whole protein domain acquisitions. ELife, 2020, 9, .	6.0	7
14	Integron Identification in Bacterial Genomes and Cassette Recombination Assays. Methods in Molecular Biology, 2020, 2075, 189-208.	0.9	9
15	RadD Contributes to R-Loop Avoidance in Sub-MIC Tobramycin. MBio, 2019, 10, .	4.1	17
16	Engineered toxinâ€“intein antimicrobials can selectively target and kill antibiotic-resistant bacteria in mixed populations. Nature Biotechnology, 2019, 37, 755-760.	17.5	107
17	Enhanced emergence of antibiotic-resistant pathogenic bacteria after in vitro induction with cancer chemotherapy drugs. Journal of Antimicrobial Chemotherapy, 2019, 74, 1572-1577.	3.0	17
18	Structural heterogeneity of<i>attC</i>integron recombination sites revealed by optical tweezers. Nucleic Acids Research, 2019, 47, 1861-1870.	14.5	18

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19	Recoding of synonymous genes to expand evolutionary landscapes requires control of secondary structure affecting translation. Biotechnology and Bioengineering, 2018, 115, 184-191.	3.3	4
20	Bacteria from Fildes Peninsula carry class 1 integrons and antibiotic resistance genes in conjugative plasmids. Antarctic Science, 2018, 30, 22-28.	0.9	5
21	Integrons as Adaptive Devices. Grand Challenges in Biology and Biotechnology, 2018, , 199-239.	2.4	11
22	Vibrio cholerae chromosome 2 copy number is controlled by the methylation-independent binding of its monomeric initiator to the chromosome 1 crtS site. Nucleic Acids Research, 2018, 46, 10145-10156.	14.5	16
23	Expansion of the SOS regulon of Vibrio cholerae through extensive transcriptome analysis and experimental validation. BMC Genomics, 2018, 19, 373.	2.8	34
24	Replicate Once Per Cell Cycle: Replication Control of Secondary Chromosomes. Frontiers in Microbiology, 2018, 9, 1833.	3.5	35
25	The Proximity of Ribosomal Protein Genes to <i>oriC</i> Enhances <i>Vibrio cholerae</i> Fitness in the Absence of Multifork Replication. MBio, 2017, 8, .	4.1	14
26	Differences in Integron Cassette Excision Dynamics Shape a Trade-Off between Evolvability and Genetic Capacitance. MBio, 2017, 8, .	4.1	27
27	Multicopy plasmids potentiate the evolution of antibiotic resistance in bacteria. Nature Ecology and Evolution, 2017, 1, 10.	7.8	147
28	An att site-based recombination reporter system for genome engineering and synthetic DNA assembly. BMC Biotechnology, 2017, 17, 62.	3.3	4
29	Dynamic stepwise opening of integron attC DNA hairpins by SSB prevents toxicity and ensures functionality. Nucleic Acids Research, 2017, 45, 10555-10563.	14.5	23
30	Genomic Plasticity of Vibrio cholerae. International Microbiology, 2017, 20, 138-148.	2.4	8
31	Unmasking the ancestral activity of integron integrases reveals a smooth evolutionary transition during functional innovation. Nature Communications, 2016, 7, 10937.	12.8	24
32	A checkpoint control orchestrates the replication of the two chromosomes of <i>Vibrio cholerae</i>. Science Advances, 2016, 2, e1501914.	10.3	122
33	Efficiency of integron cassette insertion in correct orientation is ensured by the interplay of the three unpaired features of<i>attC</i>recombination sites. Nucleic Acids Research, 2016, 44, 7792-7803.	14.5	38
34	The Integron: Adaptation On Demand. Microbiology Spectrum, 2015, 3, MDNA3-0019-2014.	3.0	95
35	A single regulatory gene is sufficient to alter <scp><i>V</i></scp><i>ibrio aestuarianus</i> pathogenicity in oysters. Environmental Microbiology, 2015, 17, 4189-4199.	3.8	58
36	The emergence of Vibrio pathogens in Europe: ecology, evolution, and pathogenesis (Paris, 11â€“12th) Tj ETQq0 0 0 rgBT /Overlock 10	3.5	136

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37	Genomic Location of the Major Ribosomal Protein Gene Locus Determines Vibrio cholerae Global Growth and Infectivity. PLoS Genetics, 2015, 11, e1005156.	3.5	36
38	Comprehensive Functional Analysis of the 18 Vibrio cholerae N16961 Toxin-Antitoxin Systems Substantiates Their Role in Stabilizing the Superintegron. Journal of Bacteriology, 2015, 197, 2150-2159.	2.2	78
39	Management of multipartite genomes: the Vibrio cholerae model. Current Opinion in Microbiology, 2014, 22, 120-126.	5.1	45
40	Fuse or die: how to survive the loss of <scp>Dam</scp> in <scp><i>V</i></scp><i>ibrio cholerae</i>. Molecular Microbiology, 2014, 91, 665-678.	2.5	39
41	Identification of genes involved in low aminoglycoside-induced SOS response in Vibrio cholerae: a role for transcription stalling and Mfd helicase. Nucleic Acids Research, 2014, 42, 2366-2379.	14.5	32
42	DNA Secondary Structure Formation in Bacterial Gene Capture Systems at Single-Molecule Resolution. Biophysical Journal, 2014, 106, 272a-273a.	0.5	0
43	The Integron Integrase Efficiently Prevents the Melting Effect of Escherichia coli Single-Stranded DNA-Binding Protein on Folded <i>attC</i> Sites. Journal of Bacteriology, 2014, 196, 762-771.	2.2	17
44	Influence of very short patch mismatch repair on SOS inducing lesions after aminoglycoside treatment in Escherichia coli. Research in Microbiology, 2014, 165, 476-480.	2.1	2
45	SOS, the formidable strategy of bacteria against aggressions. FEMS Microbiology Reviews, 2014, 38, 1126-1145.	8.6	312
46	Evolution of Integrons and Evolution of Antibiotic Resistance. , 2014, , 139-154.		0
47	The Superintegron Integrase and the Cassette Promoters Are Co-Regulated in Vibrio cholerae. PLoS ONE, 2014, 9, e91194.	2.5	14
48	Shuffling of DNA Cassettes in a Synthetic Integron. Methods in Molecular Biology, 2013, 1073, 169-174.	0.9	5
49	Comparative genomics of pathogenic lineages of <i>Vibrio nigripulchritudo</i> identifies virulence-associated traits. ISME Journal, 2013, 7, 1985-1996.	9.8	30
50	RpoS Plays a Central Role in the SOS Induction by Sub-Lethal Aminoglycoside Concentrations in Vibrio cholerae. PLoS Genetics, 2013, 9, e1003421.	3.5	86
51	Multiple Pathways of Genome Plasticity Leading to Development of Antibiotic Resistance. Antibiotics, 2013, 2, 288-315.	3.7	34
52	Characterization of the <i>phd-doc</i> and <i>ccd</i> Toxin-Antitoxin Cassettes from Vibrio Superintegrons. Journal of Bacteriology, 2013, 195, 2270-2283.	2.2	46
53	A Natural System of Chromosome Transfer in Yersinia pseudotuberculosis. PLoS Genetics, 2012, 8, e1002529.	3.5	31
54	Genome Engineering in Vibrio cholerae: A Feasible Approach to Address Biological Issues. PLoS Genetics, 2012, 8, e1002472.	3.5	136

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55	Evidence for Induction of Integron-Based Antibiotic Resistance by the SOS Response in a Clinical Setting. PLoS Pathogens, 2012, 8, e1002778.	4.7	109
56	Connecting Environment and Genome Plasticity in the Characterization of Transformation-Induced SOS Regulation and Carbon Catabolite Control of the Vibrio cholerae Integron Integrase. Journal of Bacteriology, 2012, 194, 1659-1667.	2.2	71
57	Replicative resolution of integron cassette insertion. Nucleic Acids Research, 2012, 40, 8361-8370.	14.5	39
58	Antibiotics as physiological stress inducers and bacterial response to the challenge. Current Opinion in Microbiology, 2012, 15, 553-554.	5.1	4
59	Vibrio cholerae Triggers SOS and Mutagenesis in Response to a Wide Range of Antibiotics: a Route towards Multiresistance. Antimicrobial Agents and Chemotherapy, 2011, 55, 2438-2441.	3.2	185
60	Virulence of an emerging pathogenic lineage of <i>Vibrio nigripulchritudo</i> is dependent on two plasmids. Environmental Microbiology, 2011, 13, 296-306.	3.8	31
61	Prevalence of SOS-mediated control of integron integrase expression as an adaptive trait of chromosomal and mobile integrons. Mobile DNA, 2011, 2, 6.	3.6	104
62	High-Level Gene Cassette Transcription Prevents Integrase Expression in Class 1 Integrons. Journal of Bacteriology, 2011, 193, 5675-5682.	2.2	55
63	Cellular pathways controlling integron cassette site folding. EMBO Journal, 2010, 29, 2623-2634.	7.8	32
64	Cellular pathways controlling integron cassette site folding. EMBO Journal, 2010, 29, 3745-3745.	7.8	8
65	The major outer membrane protein OmpU of <i>Vibrio splendidus</i> contributes to host antimicrobial peptide resistance and is required for virulence in the oyster <i>Crassostrea gigas</i>. Environmental Microbiology, 2010, 12, 951-963.	3.8	98
66	The synthetic integron: an in vivo genetic shuffling device. Nucleic Acids Research, 2010, 38, e153-e153.	14.5	35
67	The relaxed requirements of the integron cleavage site allow predictable changes in integron target specificity. Nucleic Acids Research, 2010, 38, 559-569.	14.5	21
68	An end-joining repair mechanism in <i>Escherichia coli</i>. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 2141-2146.	7.1	132
69	Conjugative DNA Transfer Induces the Bacterial SOS Response and Promotes Antibiotic Resistance Development through Integron Activation. PLoS Genetics, 2010, 6, e1001165.	3.5	228
70	Inverse Correlation between Promoter Strength and Excision Activity in Class 1 Integrons. PLoS Genetics, 2010, 6, e1000793.	3.5	166
71	Silent Mischief: Bacteriophage Mu Insertions Contaminate Products of <i>Escherichia coli</i> Random Mutagenesis Performed Using Suicidal Transposon Delivery Plasmids Mobilized by Broad-Host-Range RP4 Conjugative Machinery. Journal of Bacteriology, 2010, 192, 6418-6427.	2.2	276
72	Vibrio aestuarianus zinc metalloprotease causes lethality in the Pacific oyster Crassostrea gigas and impairs the host cellular immune defenses. Fish and Shellfish Immunology, 2010, 29, 753-758.	3.6	69

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73	Integrons. Annual Review of Genetics, 2010, 44, 141-166.	7.6	442
74	Folded DNA in Action: Hairpin Formation and Biological Functions in Prokaryotes. Microbiology and Molecular Biology Reviews, 2010, 74, 570-588.	6.6	161
75	Structural Features of Single-Stranded Integron Cassette attC Sites and Their Role in Strand Selection. PLoS Genetics, 2009, 5, e1000632.	3.5	56
76	Translation regulation of integrons gene cassette expression by the <i>attC</i> sites. Molecular Microbiology, 2009, 72, 1475-1486.	2.5	44
77	Genome sequence of <i>Vibrio splendidus</i>: an abundant planctonic marine species with a large genotypic diversity. Environmental Microbiology, 2009, 11, 1959-1970.	3.8	98
78	The SOS Response Controls Integron Recombination. Science, 2009, 324, 1034-1034.	12.6	359
79	Delineation of the recombination sites necessary for integration of pathogenicity islands II and III into the Escherichia coli 536 chromosome. Molecular Microbiology, 2008, 68, 139-151.	2.5	17
80	Construction of an improved RP4 (RK2)-based conjugative system. Research in Microbiology, 2008, 159, 545-549.	2.1	37
81	Metalloprotease Vsm Is the Major Determinant of Toxicity for Extracellular Products of<i>Vibrio splendidus</i>. Applied and Environmental Microbiology, 2008, 74, 7108-7117.	3.1	85
82	Synonymous Genes Explore Different Evolutionary Landscapes. PLoS Genetics, 2008, 4, e1000256.	3.5	36
83	Correlation between Detection of a Plasmid and High-Level Virulence of <i>Vibrio nigripulchritudo</i> , a Pathogen of the Shrimp <i>Litopenaeus stylirostris</i>. Applied and Environmental Microbiology, 2008, 74, 3038-3047.	3.1	21
84	Construction of a Vibrio splendidus Mutant Lacking the Metalloprotease Gene vsm by Use of a Novel Counterselectable Suicide Vector. Applied and Environmental Microbiology, 2007, 73, 777-784.	3.1	240
85	Identification of key structural determinants of the IntI1 integron integrase that influence attCÃ—attI1 recombination efficiency. Nucleic Acids Research, 2007, 35, 6475-6489.	14.5	58
86	Vibrio splendidus as the Source of Plasmid-Mediated QnrS-Like Quinolone Resistance Determinants. Antimicrobial Agents and Chemotherapy, 2007, 51, 2650-2651.	3.2	100
87	Functional Interactions between Coexisting Toxin-Antitoxin Systems of the ccd Family in Escherichia coli O157:H7. Journal of Bacteriology, 2007, 189, 2712-2719.	2.2	55
88	Chromosomal toxin-antitoxin loci can diminish large-scale genome reductions in the absence of selection. Molecular Microbiology, 2007, 63, 1588-1605.	2.5	162
89	Integrons: agents of bacterial evolution. Nature Reviews Microbiology, 2006, 4, 608-620.	28.6	896
90	Structural basis for broad DNA-specificity in integron recombination. Nature, 2006, 440, 1157-1162.	27.8	131

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91	Vibrio2005: the First International Conference on the Biology of Vibrios. Journal of Bacteriology, 2006, 188, 4592-4596.	2.2	17
92	Integron cassette insertion: a recombination process involving a folded single strand substrate. EMBO Journal, 2005, 24, 4356-4367.	7.8	122
93	Comparative Study of Class 1 Integron and Vibrio cholerae Superintegron Integrase Activities. Journal of Bacteriology, 2005, 187, 1740-1750.	2.2	88
94	Integron-Associated Antibiotic Resistance and Phylogenetic Grouping of Escherichia coli Isolates from Healthy Subjects Free of Recent Antibiotic Exposure. Antimicrobial Agents and Chemotherapy, 2005, 49, 3062-3065.	3.2	115
95	The Single-Stranded Genome of Phage CTX Is the Form Used for Integration into the Genome of Vibrio cholerae. Molecular Cell, 2005, 19, 559-566.	9.7	146
96	A new family of mobilizable suicide plasmids based on broad host range R388 plasmid (IncW) and RP4 plasmid (IncPÎ±) conjugative machineries and their cognate Escherichia coli host strains. Research in Microbiology, 2005, 156, 245-255.	2.1	270
97	A new family of conditional replicating plasmids and their cognate Escherichia coli host strains. Research in Microbiology, 2004, 155, 455-461.	2.1	19
98	Erythromycin Esterase Gene ere(A) Is Located in a Functional Gene Cassette in an Unusual Class 2 Integron. Antimicrobial Agents and Chemotherapy, 2003, 47, 3326-3331.	3.2	88
99	Comparative Analysis of Superintegrons: Engineering Extensive Genetic Diversity in the Vibrionaceae. Genome Research, 2003, 13, 428-442.	5.5	199
100	The role of integrons in antibiotic resistance gene capture. International Journal of Medical Microbiology, 2002, 292, 115-125.	3.6	196
101	Bacterial resistance evolution by recruitment of super-integron gene cassettes. Molecular Microbiology, 2002, 43, 1657-1669.	2.5	207
102	The evolutionary history of chromosomal super-integrons provides an ancestry for multiresistant integrons. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 652-657.	7.1	224
103	Integrons: natural tools for bacterial genome evolution. Current Opinion in Microbiology, 2001, 4, 565-569.	5.1	124
104	Molecular Analysis of Antibiotic Resistance Gene Clusters in Vibrio cholerae O139 and O1 SXT Constins. Antimicrobial Agents and Chemotherapy, 2001, 45, 2991-3000.	3.2	300
105	Antibiotic Resistance in the ECOR Collection: Integrons and Identification of a Novel aad Gene. Antimicrobial Agents and Chemotherapy, 2000, 44, 1568-1574.	3.2	304
106	Gene capture in Vibrio cholerae: Response. Trends in Microbiology, 1999, 7, 95.	7.7	4
107	Gene capture in Vibrio cholerae. Trends in Microbiology, 1999, 7, 93-95.	7.7	18
108	Resistance gene capture. Current Opinion in Microbiology, 1999, 2, 483-488.	5.1	102

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109	Super-integrons. Research in Microbiology, 1999, 150, 641-651.	2.1	114
110	A Distinctive Class of Integron in the Vibrio cholerae Genome. Science, 1998, 280, 605-608.	12.6	361
111	A survey of polypeptide deformylase function throughout the eubacterial lineage. Journal of Molecular Biology, 1997, 266, 939-949.	4.2	60
112	A role for cpeYZ in cyanobacterial phycoerythrin biosynthesis. Journal of Bacteriology, 1997, 179, 998-1006.	2.2	84
113	Tn5469 Mutagenesis of Chromatic Adaptation Genes in Calothrix sp. strain PCC 7601. , 1995, , 2393-2396.		2
114	Highly repetitive DNA sequences in cyanobacterial genomes. Journal of Bacteriology, 1990, 172, 2755-2761.	2.2	131
115	Adaptive eradication of methionine and cysteine from cyanobacterial light-harvesting proteins. Nature, 1989, 341, 245-248.	27.8	173
116	SÃ©quences d'ADN mobiles altÃ©rant l'expression des gÃ¨nes des phycobiliprotÃ©ines chezCalothrix7601. Bulletin De La SociÃ©tÃ© Botanique De France ActualitÃ©s Botaniques, 1989, 136, 165-167.	0.0	0
117	Photoregulation of gene expression in the filamentous cyanobacterium Calothrix sp. PCC 7601: light-harvesting complexes and cell differentiation. Photosynthesis Research, 1988, 18, 99-132.	2.9	99
118	A multigene family in Calothrix sp. PCC 7601 encodes phycocyanin, the major component of the cyanobacterial light-harvesting antenna. Molecular Genetics and Genomics, 1988, 211, 296-304.	2.4	88
119	Complete nucleotide sequence of the red-light specific set of phycocyanin genes from the cyanobacteriumCalothrixPCC 7601. Nucleic Acids Research, 1988, 16, 1626-1626.	14.5	24
120	Photoregulation of gene expression in the filamentous cyanobacterium Calothrix sp. PCC 7601: light-harvesting complexes and cell differentiation. , 1988, , 195-228.		0
121	Green light induces transcription of the phycoerythrin operon in the cyanobacteriumCalothrix7601. Nucleic Acids Research, 1986, 14, 8279-8290.	14.5	132
122	Molecular cloning and nucleotide sequence of a developmentally regulated gene from the cyanobacteriumCalothrixPCC 7601: a gas vesicle protein gene. Nucleic Acids Research, 1985, 13, 7223-7236.	14.5	88
123	The Evolution of Antibiotic Resistance. , 0, , 221-241.		3
124	The Adaptive Genetic Arsenal of Pathogenic Vibrio Species: the Role of Integrons. , 0, , 95-111.		5
125	The Integron: Adaptation On Demand. , 0, , 139-161.		7