Carmen Mndez

List of Publications by Citations

180 papers	8,357 citations	52 h-index	83 g-index
189 ext. papers	9,122 ext. citations	6.4 avg, IF	5.61 L-index

#	Paper	IF	Citations
180	Minimum Information about a Biosynthetic Gene cluster. *Nature Chemical Biology*, **2015**, 11, 625-31	11.7	498
179	Indolocarbazole natural products: occurrence, biosynthesis, and biological activity. *Natural Product Reports*, **2006**, 23, 1007-45	15.1	305
178	Improving production of bioactive secondary metabolites in actinomycetes by metabolic engineering. *Metabolic Engineering*, **2008**, 10, 281-92	9.7	226
177	Antitumor compounds from marine actinomycetes. *Marine Drugs*, **2009**, 7, 210-48	6	217
176	Combinatorial biosynthesis of antitumor indolocarbazole compounds. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 461-6	11.5	211
175	The biosynthetic gene cluster for the antitumor rebeccamycin: characterization and generation of indolocarbazole derivatives. *Chemistry and Biology*, **2002**, 9, 519-31		172
174	The developmental fate of S. coelicolor hyphae depends upon a gene product homologous with the motility sigma factor of B. subtilis. *Cell*, **1989**, 59, 133-43	56.2	168
173	Two glycosyltransferases and a glycosidase are involved in oleandomycin modification during its biosynthesis by Streptomyces antibioticus. *Molecular Microbiology*, **1998**, 28, 1177-85	4.1	159
172	Activation and identification of five clusters for secondary metabolites in Streptomyces albus J1074. *Microbial Biotechnology*, **2014**, 7, 242-56	6.3	152
171	Deciphering the biosynthesis pathway of the antitumor thiocoraline from a marine actinomycete and its expression in two streptomyces species. *ChemBioChem*, **2006**, 7, 366-76	3.8	146
170	Altering the glycosylation pattern of bioactive compounds. *Trends in Biotechnology*, **2001**, 19, 449-56	15.1	146
169	A regioselective tryptophan 5-halogenase is involved in pyrroindomycin biosynthesis in Streptomyces rugosporus LL-42D005. *Chemistry and Biology*, **2005**, 12, 445-52		144
168	Post-PKS tailoring steps in natural product-producing actinomycetes from the perspective of combinatorial biosynthesis. *Natural Product Reports*, **2010**, 27, 571-616	15.1	130
167	The aureolic acid family of antitumor compounds: structure, mode of action, biosynthesis, and novel derivatives. *Applied Microbiology and Biotechnology*, **2006**, 73, 1-14	5.7	129
166	Engineering the glycosylation of natural products in actinomycetes. *Trends in Microbiology*, **2007**, 15, 219-32	12.4	108
165	Mithramycin SK, a novel antitumor drug with improved therapeutic index, mithramycin SA, and demycarosyl-mithramycin SK: three new products generated in the mithramycin producer Streptomyces argillaceus through combinatorial biosynthesis. *Journal of the American Chemical Society*, **2003**, 125, 5745-53	16.4	108
164	The role of ABC transporters in antibiotic-producing organisms: drug secretion and resistance mechanisms. *Research in Microbiology*, **2001**, 152, 341-50	4	103

163	Deciphering the late steps in the biosynthesis of the anti-tumour indolocarbazole staurosporine: sugar donor substrate flexibility of the StaG glycosyltransferase. *Molecular Microbiology*, **2005**, 58, 17-27	4.1	99
162	Engineering deoxysugar biosynthetic pathways from antibiotic-producing microorganisms. A tool to produce novel glycosylated bioactive compounds. *Chemistry and Biology*, **2002**, 9, 721-9		94
161	Antitumor compounds from actinomycetes: from gene clusters to new derivatives by combinatorial biosynthesis. *Natural Product Reports*, **2009**, 26, 628-60	15.1	93
160	Isolation, characterization, and heterologous expression of the biosynthesis gene cluster for the antitumor anthracycline steffimycin. *Applied and Environmental Microbiology*, **2006**, 72, 4172-83	4.8	92
159	Characterization of Streptomyces argillaceus genes encoding a polyketide synthase involved in the biosynthesis of the antitumor mithramycin. *Gene*, **1996**, 172, 87-91	3.8	87
158	Identification and expression of genes involved in biosynthesis of L-oleandrose and its intermediate L-olivose in the oleandomycin producer Streptomyces antibioticus. *Antimicrobial Agents and Chemotherapy*, **2000**, 44, 1266-75	5.9	86
157	Reevaluation of the violacein biosynthetic pathway and its relationship to indolocarbazole biosynthesis. *ChemBioChem*, **2006**, 7, 1231-40	3.8	82
156	Visualizing gene expression in time and space in the filamentous bacterium Streptomyces coelicolor. *Science*, **1988**, 240, 768-72	33.3	82
155	The biosynthetic gene cluster for the beta-lactam carbapenem thienamycin in Streptomyces cattleya. *Chemistry and Biology*, **2003**, 10, 301-11		78
154	Identification of a sugar flexible glycosyltransferase from Streptomyces olivaceus, the producer of the antitumor polyketide elloramycin. *Chemistry and Biology*, **2001**, 8, 253-63		76
153	Rationally designed glycosylated premithramycins: hybrid aromatic polyketides using genes from three different biosynthetic pathways. *Journal of the American Chemical Society*, **2002**, 124, 6056-62	16.4	74
152	Role of glycosylation and deglycosylation in biosynthesis of and resistance to oleandomycin in the producer organism, Streptomyces antibioticus. *Journal of Bacteriology*, **1992**, 174, 161-5	3.5	72
151	Oxidative cleavage of premithramycin B is one of the last steps in the biosynthesis of the antitumor drug mithramycin. *Chemistry and Biology*, **1999**, 6, 19-30		71
150	Engineering specificity of starter unit selection by the erythromycin-producing polyketide synthase. *Molecular Microbiology*, **2002**, 43, 1215-25	4.1	70
149	Role of substrate mycelium in colony development in Streptomyces. *Canadian Journal of Microbiology*, **1985**, 31, 446-50	3.2	70
148	The structure of mithramycin reinvestigated. *Journal of Natural Products*, **1999**, 62, 119-21	4.9	69
147	Characterisation of a Streptomyces antibioticus gene encoding a type I polyketide synthase which has an unusual coding sequence. *Molecular Genetics and Genomics*, **1994**, 242, 358-62		68
146	Cloning and insertional inactivation of Streptomyces argillaceus genes involved in the earliest steps of biosynthesis of the sugar moieties of the antitumor polyketide mithramycin. *Journal of Bacteriology*, **1997**, 179, 3354-7	3.5	66

145	Glycosyltransferases, important tools for drug design. *Current Topics in Medicinal Chemistry*, **2008**, 8, 680-709	3	66
144	Streptomyces antibioticus contains at least three oleandomycin-resistance determinants, one of which shows similarity with proteins of the ABC-transporter superfamily. *Molecular Microbiology*, **1993**, 8, 571-82	4.1	66
143	Engineering biosynthetic pathways for deoxysugars: branched-chain sugar pathways and derivatives from the antitumor tetracenomycin. *Chemistry and Biology*, **2004**, 11, 1709-18		64
142	A novel mithramycin analogue with high antitumor activity and less toxicity generated by combinatorial biosynthesis. *Journal of Medicinal Chemistry*, **2012**, 55, 5813-25	8.3	62
141	A second ABC transporter is involved in oleandomycin resistance and its secretion by Streptomyces antibioticus. *Molecular Microbiology*, **1995**, 16, 333-43	4.1	62
140	The mithramycin gene cluster of Streptomyces argillaceus contains a positive regulatory gene and two repeated DNA sequences that are located at both ends of the cluster. *Journal of Bacteriology*, **1999**, 181, 642-7	3.5	61
139	Cloning of whiG, a gene critical for sporulation of Streptomyces coelicolor A3(2). *Journal of Bacteriology*, **1987**, 169, 5715-20	3.5	60
138	Generation of new landomycins by combinatorial biosynthetic manipulation of the LndGT4 gene of the landomycin E cluster in S. globisporus. *Chemistry and Biology*, **2004**, 11, 547-55		59
137	Ketopremithramycins and ketomithramycins, four new aureolic acid-type compounds obtained upon inactivation of two genes involved in the biosynthesis of the deoxysugar moieties of the antitumor drug mithramycin by Streptomyces argillaceus, reveal novel insights into post-PKS tailoring steps of the mithramycin biosynthetic pathway. *Journal of the American Chemical Society*, **2005**, 127, 6212-22	16.4	59
136	Biosynthesis of the angiogenesis inhibitor borrelidin by Streptomyces parvulus Tü4055: insights into nitrile formation. *Molecular Microbiology*, **2004**, 52, 1745-56	4.1	58
135	Evidence from engineered gene fusions for the repeated use of a module in a modular polyketide synthase. *Chemical Communications*, **2003**, 2780-2	5.8	58
134	Engineering precursor metabolite pools for increasing production of antitumor mithramycins in Streptomyces argillaceus. *Metabolic Engineering*, **2013**, 20, 187-97	9.7	57
133	Deciphering biosynthesis of the RNA polymerase inhibitor streptolydigin and generation of glycosylated derivatives. *Chemistry and Biology*, **2009**, 16, 1031-44		57
132	Biosynthesis of the angiogenesis inhibitor borrelidin by Streptomyces parvulus Tü4055: cluster analysis and assignment of functions. *Chemistry and Biology*, **2004**, 11, 87-97		57
131	Characterization of two polyketide methyltransferases involved in the biosynthesis of the antitumor drug mithramycin by Streptomyces argillaceus. *Journal of Biological Chemistry*, **2000**, 275, 3065-74	5.4	56
130	Novel Hybrid Tetracenomycins through Combinatorial Biosynthesis Using a Glycosyltransferase Encoded by the elm Genes in Cosmid 16F4 and Which Shows a Broad Sugar Substrate Specificity. *Journal of the American Chemical Society*, **1998**, 120, 10596-10601	16.4	55
129	The Biosynthesis of Aureolic Acid Group Antibiotics. *Bioorganic Chemistry*, **1999**, 27, 41-54	5.1	53
128	Biosynthesis pathways for deoxysugars in antibiotic-producing actinomycetes: isolation, characterization and generation of novel glycosylated derivatives. *Journal of Molecular Microbiology and Biotechnology*, **2005**, 9, 77-85	0.9	52

127	Identification of the function of gene lndM2 encoding a bifunctional oxygenase-reductase involved in the biosynthesis of the antitumor antibiotic landomycin E by Streptomyces globisporus 1912 supports the originally assigned structure for landomycinone. *Journal of Organic Chemistry*, **2005**, 70, 631-8	4.2	51
126	Analysis of a Streptomyces antibioticus chromosomal region involved in oleandomycin biosynthesis, which encodes two glycosyltransferases responsible for glycosylation of the macrolactone ring. *Molecular Genetics and Genomics*, **1998**, 259, 299-308		50
125	Biosynthesis of oleandomycin by Streptomyces antibioticus: influence of nutritional conditions and development of resistance. *Journal of General Microbiology*, **1990**, 136, 1447-54		49
124	Combining sugar biosynthesis genes for the generation of L- and D-amicetose and formation of two novel antitumor tetracenomycins. *Chemical Communications*, **2005**, 1604-6	5.8	48
123	Mithramycin analogues generated by combinatorial biosynthesis show improved bioactivity. *Journal of Natural Products*, **2008**, 71, 199-207	4.9	47
122	Characterization of two glycosyltransferases involved in early glycosylation steps during biosynthesis of the antitumor polyketide mithramycin by Streptomyces argillaceus. *Molecular Genetics and Genomics*, **2000**, 262, 991-1000		47
121	DNA binding characteristics of mithramycin and chromomycin analogues obtained by combinatorial biosynthesis. *Biochemistry*, **2010**, 49, 10543-52	3.2	46
120	Generation of potent and selective kinase inhibitors by combinatorial biosynthesis of glycosylated indolocarbazoles. *Chemical Communications*, **2009**, 4118-20	5.8	46
119	Deoxysugar methylation during biosynthesis of the antitumor polyketide elloramycin by Streptomyces olivaceus. Characterization of three methyltransferase genes. *Journal of Biological Chemistry*, **2001**, 276, 18765-74	5.4	46
118	Analysis of two chromosomal regions adjacent to genes for a type II polyketide synthase involved in the biosynthesis of the antitumor polyketide mithramycin in Streptomyces argillaceus. *Molecular Genetics and Genomics*, **1999**, 261, 216-25		46
117	ABC transporters in antibiotic-producing actinomycetes. *FEMS Microbiology Letters*, **1998**, 158, 1-8	2.9	45
116	Genetic organization of the biosynthetic gene cluster for the antitumor angucycline oviedomycin in Streptomyces antibioticus ATCC 11891. *ChemBioChem*, **2004**, 5, 1181-7	3.8	45
115	Generation of new derivatives of the antitumor antibiotic mithramycin by altering the glycosylation pattern through combinatorial biosynthesis. *ChemBioChem*, **2008**, 9, 2295-304	3.8	44
114	Identification of transcriptional activators for thienamycin and cephamycin C biosynthetic genes within the thienamycin gene cluster from Streptomyces cattleya. *Molecular Microbiology*, **2008**, 69, 633-45	4.1	43
113	Production of landomycins in Streptomyces globisporus 1912 and S cyanogenus S136 is regulated by genes encoding putative transcriptional activators. *FEMS Microbiology Letters*, **2003**, 222, 149-53	2.9	43
112	Digitoxosyltetracenomycin C and glucosyltetracenomycin C, two novel elloramycin analogues obtained by exploring the sugar donor substrate specificity of glycosyltransferase ElmGT. *Journal of Natural Products*, **2002**, 65, 1685-9	4.9	43
111	Combinatorial biosynthesis of antitumor deoxysugar pathways in Streptomyces griseus: Reconstitution of "unnatural natural gene clusters" for the biosynthesis of four 2,6-D-dideoxyhexoses. *Applied and Environmental Microbiology*, **2006**, 72, 6644-52	4.8	42
110	Entropically-driven binding of mithramycin in the minor groove of C/G-rich DNA sequences. *Nucleic Acids Research*, **2007**, 35, 2215-26	20.1	42

109	Characterization of a Streptomyces antibioticus gene cluster encoding a glycosyltransferase involved in oleandomycin inactivation. *Gene*, **1993**, 134, 139-40	3.8	42
108	Indolocarbazole antitumour compounds by combinatorial biosynthesis. *Current Opinion in Chemical Biology*, **2009**, 13, 152-60	9.7	41
107	Biosynthesis of the antitumor chromomycin A3 in Streptomyces griseus: analysis of the gene cluster and rational design of novel chromomycin analogs. *Chemistry and Biology*, **2004**, 11, 21-32		41
106	Functional analysis of OleY L-oleandrosyl 3-O-methyltransferase of the oleandomycin biosynthetic pathway in Streptomyces antibioticus. *Journal of Bacteriology*, **2001**, 183, 5358-63	3.5	41
105	Deoxysugar transfer during chromomycin A3 biosynthesis in Streptomyces griseus subsp. griseus: new derivatives with antitumor activity. *Applied and Environmental Microbiology*, **2006**, 72, 167-77	4.8	40
104	Tailoring modification of deoxysugars during biosynthesis of the antitumour drug chromomycin A by Streptomyces griseus ssp. griseus. *Molecular Microbiology*, **2004**, 53, 903-15	4.1	40
103	The mtmVUC genes of the mithramycin gene cluster in Streptomyces argillaceus are involved in the biosynthesis of the sugar moieties. *Molecular Genetics and Genomics*, **2001**, 264, 827-35	3.1	40
102	Deoxysugars in bioactive natural products: development of novel derivatives by altering the sugar pattern. *Current Topics in Medicinal Chemistry*, **2008**, 8, 710-24	3	39
101	Glycosylated derivatives of steffimycin: insights into the role of the sugar moieties for the biological activity. *ChemBioChem*, **2008**, 9, 624-33	3.8	39
100	Engineering biosynthetic pathways to generate antitumor indolocarbazole derivatives. *Journal of Industrial Microbiology and Biotechnology*, **2006**, 33, 560-8	4.2	38
99	Deciphering the biosynthetic origin of the aglycone of the aureolic acid group of anti-tumor agents. *Chemistry and Biology*, **1996**, 3, 193-6		38
98	Biosynthesis of the angiogenesis inhibitor borrelidin: directed biosynthesis of novel analogues. *Chemical Communications*, **2006**, 2341-3	5.8	37
97	Genome Mining of Streptomyces sp. T□6176: Characterization of the Nataxazole Biosynthesis Pathway. *ChemBioChem*, **2015**, 16, 1461-73	3.8	35
96	Elucidating the biosynthetic pathway for the polyketide-nonribosomal peptide collismycin A: mechanism for formation of the 2,2Rbipyridyl ring. *Chemistry and Biology*, **2012**, 19, 399-413		35
95	Separation of anti-angiogenic and cytotoxic activities of borrelidin by modification at the C17 side chain. *Bioorganic and Medicinal Chemistry Letters*, **2006**, 16, 5814-7	2.9	35
94	Biosynthesis of the Antitumor Chromomycin A3 in Streptomyces griseusAnalysis of the Gene Cluster and Rational Design of Novel Chromomycin Analogs. *Chemistry and Biology*, **2004**, 11, 21-32		35
93	Biosynthesis of elloramycin in Streptomyces olivaceus requires glycosylation by enzymes encoded outside the aglycon cluster. *Microbiology (United Kingdom)*, **2008**, 154, 781-788	2.9	34
92	Involvement of a chromomycin ABC transporter system in secretion of a deacetylated precursor during chromomycin biosynthesis. *Microbiology (United Kingdom)*, **2007**, 153, 3061-3070	2.9	33

91	Hybridization and DNA sequence analyses suggest an early evolutionary divergence of related biosynthetic gene sets encoding polyketide antibiotics and spore pigments in Streptomyces spp. *Gene*, **1993**, 130, 107-16	3.8	32
90	Reactome array: forging a link between metabolome and genome. *Science*, **2009**, 326, 252-7	33.3	30
89	Engineered biosynthesis of gilvocarcin analogues with altered deoxyhexopyranose moieties. *Applied and Environmental Microbiology*, **2011**, 77, 435-41	4.8	29
88	Oviedomycin, an unusual angucyclinone encoded by genes of the oleandomycin-producer Streptomyces antibioticus ATCC11891. *Journal of Natural Products*, **2002**, 65, 779-82	4.9	29
87	Synthesis of ribosomal proteins during growth of Streptomyces coelicolor. *Molecular Microbiology*, **1994**, 12, 375-85	4.1	29
86	Elucidation of oxygenation steps during oviedomycin biosynthesis and generation of derivatives with increased antitumor activity. *ChemBioChem*, **2009**, 10, 296-303	3.8	28
85	Parallel pathways for oxidation of 14-membered polyketide macrolactones in Saccharopolyspora erythraea. *Molecular Microbiology*, **2002**, 44, 771-81	4.1	28
84	Uncovering production of specialized metabolites by Streptomyces argillaceus: Activation of cryptic biosynthesis gene clusters using nutritional and genetic approaches. *PLoS ONE*, **2018**, 13, e0198145	2.7	28
83	Tetracenomycin M, a Novel Genetically Engineered Tetracenomycin Resulting from a Combination of Mithramycin and Tetracenomycin Biosynthetic Genes. *Chemistry - A European Journal*, **1997**, 3, 1675-1678	4.8	27
82	Molecular insights on the biosynthesis of antitumour compounds by actinomycetes. *Microbial Biotechnology*, **2011**, 4, 144-64	6.3	26
81	An ABC transporter is essential for resistance to the antitumor agent mithramycin in the producer Streptomyces argillaceus. *Molecular Genetics and Genomics*, **1996**, 251, 692-8		26
80	Engineering the biosynthesis of the polyketide-nonribosomal peptide collismycin A for generation of analogs with neuroprotective activity. *Chemistry and Biology*, **2013**, 20, 1022-32		25
79	Expanding the Chemical Diversity of the Antitumoral Compound Mithramycin by Combinatorial Biosynthesis and Biocatalysis: The Quest for Mithralogs with Improved Therapeutic Window. *Planta Medica*, **2015**, 81, 1326-38	3.1	25
78	Biosynthesis of the RNA polymerase inhibitor streptolydigin in Streptomyces lydicus: tailoring modification of 3-methyl-aspartate. *Journal of Bacteriology*, **2011**, 193, 2647-51	3.5	24
77	Metabolic engineering of the heterologous production of clorobiocin derivatives and elloramycin in Streptomyces coelicolor M512. *Metabolic Engineering*, **2006**, 8, 653-61	9.7	24
76	An ATP-binding cassette transporter and two rRNA methyltransferases are involved in resistance to avilamycin in the producer organism Streptomyces viridochromogenes Tü57. *Antimicrobial Agents and Chemotherapy*, **2001**, 45, 690-5	5.9	24
75	Amino acid precursor supply in the biosynthesis of the RNA polymerase inhibitor streptolydigin by Streptomyces lydicus. *Journal of Bacteriology*, **2011**, 193, 4214-23	3.5	23
74	Interaction between ATP, oleandomycin and the OleB ATP-binding cassette transporter of Streptomyces antibioticus involved in oleandomycin secretion. *Biochemical Journal*, **1997**, 321 (Pt 1), 139-44	3.8	23

73	Elucidation of the glycosylation sequence of mithramycin biosynthesis: isolation of 3A-deolivosylpremithramycin B and its conversion to premithramycin B by glycosyltransferase MtmGII. *ChemBioChem*, **2005**, 6, 632-6	3.8	23
72	Cloning and disruption of a fragment of Streptomyces halstedii DNA involved in the biosynthesis of a spore pigment. *Gene*, **1992**, 112, 59-65	3.8	23
71	Caboxamycin biosynthesis pathway and identification of novel benzoxazoles produced by cross-talk in Streptomyces sp. NTK 937. *Microbial Biotechnology*, **2017**, 10, 873-885	6.3	22
70	Identification by Genome Mining of a Type I Polyketide Gene Cluster from Involved in the Biosynthesis of Pyridine and Piperidine Alkaloids Argimycins P. *Frontiers in Microbiology*, **2017**, 8, 194	5.7	22
69	Genetic manipulation of antitumor-agent biosynthesis to produce novel drugs. *Trends in Biotechnology*, **1998**, 16, 475-82	15.1	22
68	Mithramycin SK modulates polyploidy and cell death in colon carcinoma cells. *Molecular Cancer Therapeutics*, **2008**, 7, 2988-97	6.1	22
67	Insights in the glycosylation steps during biosynthesis of the antitumor anthracycline cosmomycin: characterization of two glycosyltransferase genes. *Applied Microbiology and Biotechnology*, **2006**, 73, 122-31	5.7	22
66	The structures of premithramycinone and demethylpremithramycinone, plausible early intermediates of the aureolic acid group antibiotic mithramycin. *Chemical Communications*, **1998**, 437-438	5.8	22
65	Characterization and engineering of the biosynthesis gene cluster for antitumor macrolides PM100117 and PM100118 from a marine actinobacteria: generation of a novel improved derivative. *Microbial Cell Factories*, **2016**, 15, 44	6.4	21
64	On the generation of novel anticancer drugs by recombinant DNA technology: the use of combinatorial biosynthesis to produce novel drugs. *Combinatorial Chemistry and High Throughput Screening*, **2003**, 6, 513-26	1.3	21
63	New insights into paulomycin biosynthesis pathway in Streptomyces albus J1074 and generation of novel derivatives by combinatorial biosynthesis. *Microbial Cell Factories*, **2016**, 15, 56	6.4	21
62	The chromomycin CmmA acetyltransferase: a membrane-bound enzyme as a tool for increasing structural diversity of the antitumour mithramycin. *Microbial Biotechnology*, **2011**, 4, 226-38	6.3	20
61	DNA-binding properties of cosmomycin D, an anthracycline with two trisaccharide chains. *Journal of Antibiotics*, **2004**, 57, 647-54	3.7	20
60	A hydroxylase-like gene product contributes to synthesis of a polyketide spore pigment in Streptomyces halstedii. *Journal of Bacteriology*, **1993**, 175, 8043-8	3.5	20
59	The Novel Hybrid Antitumor Compound Premithramycinone H Provides Indirect Evidence for a Tricyclic Intermediate of the Biosynthesis of the Aureolic Acid Antibiotic Mithramycin. *Angewandte Chemie - International Edition*, **2000**, 39, 796-799	16.4	19
58	Insertional inactivation of mtrX and mtrY genes from the mithramycin gene cluster affects production and growth of the producer organism Streptomyces argillaceus. *FEMS Microbiology Letters*, **2000**, 186, 61-5	2.9	18
57	Mutation and cloning of clustered Streptomyces genes essential for sulphate metabolism. *Molecular Genetics and Genomics*, **1988**, 211, 415-423		18
56	Transcriptional regulation of mithramycin biosynthesis in Streptomyces argillaceus: dual role as activator and repressor of the PadR-like regulator MtrY. *Microbiology (United Kingdom)*, **2015**, 161, 272-284	2.9	16

55	Novel mithramycins abrogate the involvement of protein factors in the transcription of cell cycle control genes. *Biochemical Pharmacology*, **2012**, 84, 1133-42	6	16
54	Folding of the polyketide chain is not dictated by minimal polyketide synthase in the biosynthesis of mithramycin and anthracycline. *Chemistry and Biology*, **1997**, 4, 751-5		16
53	Elucidation of the glycosylation steps during biosynthesis of antitumor macrolides PM100117 and PM100118 and engineering for novel derivatives. *Microbial Cell Factories*, **2016**, 15, 187	6.4	15
52	Searching for Glycosylated Natural Products in Actinomycetes and Identification of Novel Macrolactams and Angucyclines. *Frontiers in Microbiology*, **2018**, 9, 39	5.7	15
51	Mutational analysis of the thienamycin biosynthetic gene cluster from Streptomyces cattleya. *Antimicrobial Agents and Chemotherapy*, **2011**, 55, 1638-49	5.9	15
50	Novel compounds produced by Streptomyces lydicus NRRL 2433 engineered mutants altered in the biosynthesis of streptolydigin. *Journal of Antibiotics*, **2012**, 65, 341-8	3.7	14
49	Modulation of deoxysugar transfer by the elloramycin glycosyltransferase ElmGT through site-directed mutagenesis. *Journal of Bacteriology*, **2009**, 191, 2871-5	3.5	14
48	Involvement of the beta subunit of RNA polymerase in resistance to streptolydigin and streptovaricin in the producer organisms Streptomyces lydicus and Streptomyces spectabilis. *Antimicrobial Agents and Chemotherapy*, **2010**, 54, 1684-92	5.9	13
47	Three pathway-specific regulators control streptolydigin biosynthesis in Streptomyces lydicus. *Microbiology (United Kingdom)*, **2012**, 158, 2504-2514	2.9	13
46	Laccase-catalysed biotransformation of collismycin derivatives. A novel enzymatic approach for the cleavage of oximes. *Green Chemistry*, **2016**, 18, 989-994	10	12
45	New Insights into the Biosynthesis Pathway of Polyketide Alkaloid Argimycins P in. *Frontiers in Microbiology*, **2018**, 9, 252	5.7	12
44	Characterization of the ATPase activity of the N-terminal nucleotide binding domain of an ABC transporter involved in oleandomycin secretion by Streptomyces antibioticus. *FEMS Microbiology Letters*, **1996**, 141, 157-62	2.9	12
43	High-Quality Draft Genome Sequence of the Actinobacterium Nocardia terpenica IFM 0406, Producer of the Immunosuppressant Brasilicardins, Using Illumina and PacBio Technologies. *Genome Announcements*, **2016**, 4,		12
42	Cellular response and activation of apoptosis by mithramycin SK in p21(WAF1)-deficient HCT116 human colon carcinoma cells. *Cancer Letters*, **2010**, 292, 80-90	9.9	11
41	Chapter 11. Sugar biosynthesis and modification. *Methods in Enzymology*, **2009**, 458, 277-307	1.7	11
40	Differential inhibition of restriction enzyme cleavage by chromophore-modified analogues of the antitumour antibiotics mithramycin and chromomycin reveals structure-activity relationships. *Biochemical Pharmacology*, **2010**, 79, 1418-27	6	11
39	Increasing antibiotic production yields by favoring the biosynthesis of precursor metabolites glucose-1-phosphate and/or malonyl-CoA in Streptomyces producer strains. *Journal of Antibiotics*, **2016**, 69, 179-82	3.7	10
38	Collismycin A biosynthesis in Streptomyces sp. CS40 is regulated by iron levels through two pathway-specific regulators. *Microbiology (United Kingdom)*, **2014**, 160, 467-478	2.9	10

37	Characterization of P2Y receptors mediating ATP induced relaxation in guinea pig airway smooth muscle: involvement of prostaglandins and K+ channels. *Pflugers Archiv European Journal of Physiology*, **2011**, 462, 573-85	4.6	10
36	Structure alteration of polyketides by recombinant DNA technology in producer organisms--prospects for the generation of novel pharmaceutical drugs. *Current Pharmaceutical Biotechnology*, **2000**, 1, 355-95	2.6	10
35	Cooperative Involvement of Glycosyltransferases in the Transfer of Amino Sugars during the Biosynthesis of the Macrolactam Sipanmycin by Streptomyces sp. Strain CS149. *Applied and Environmental Microbiology*, **2018**, 84,	4.8	9
34	Cloning and sequence of a gene encoding the L7/L12 ribosomal protein equivalent of Streptomyces antibioticus. *Gene*, **1992**, 118, 127-9	3.8	9
33	Ketoolivosyl-tetracenomycin C: a new ketosugar bearing tetracenomycin reveals new insight into the substrate flexibility of glycosyltransferase ElmGT. *Bioorganic and Medicinal Chemistry Letters*, **2012**, 22, 2247-50	2.9	8
32	Characterization of the Jomthonic Acids Biosynthesis Pathway and Isolation of Novel Analogues in GUA-06-05-006A. *Marine Drugs*, **2018**, 16,	6	7
31	Generation by mutasynthesis of potential neuroprotectant derivatives of the bipyridyl collismycin A. *Bioorganic and Medicinal Chemistry Letters*, **2013**, 23, 5707-9	2.9	7
30	New Sipanmycin Analogues Generated by Combinatorial Biosynthesis and Mutasynthesis Approaches Relying on the Substrate Flexibility of Key Enzymes in the Biosynthetic Pathway. *Applied and Environmental Microbiology*, **2020**, 86,	4.8	7
29	Discovery of Cryptic Largimycins in Reveals Novel Biosynthetic Avenues Enriching the Structural Diversity of the Leinamycin Family. *ACS Chemical Biology*, **2020**, 15, 1541-1553	4.9	6
28	Crosstalk of Nataxazole Pathway with Chorismate-Derived Ionophore Biosynthesis Pathways in Streptomyces sp. TÜ6176. *ChemBioChem*, **2015**, 16, 1925-1932	3.8	5
27	High level of antibiotic production in a double polyphosphate kinase and phosphate-binding protein mutant of Streptomyces lividans. *FEMS Microbiology Letters*, **2013**, 342, 123-9	2.9	5
26	Engineering glycosylation in bioactive compounds by combinatorial biosynthesis. *Ernst Schering Research Foundation Workshop*, **2005**, 127-46		5
25	Exploring the biocombinatorial potential of benzoxazoles: generation of novel caboxamycin derivatives. *Microbial Cell Factories*, **2017**, 16, 93	6.4	4
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