Andriy Luzhetskyy

List of Publications by Year
in descending order

134	5,976	81743	88477
papers	citations	39 h-index	70 g-index

138	138	138	5027
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Minimum Information about a Biosynthetic Gene cluster. Nature Chemical Biology, 2015, 11, 625-631.	3.9	715
2	Type II polyketide synthases: gaining a deeper insight into enzymatic teamwork. Natural Product Reports, 2007, 24, 162-190.	5.2	513
3	Towards the sustainable discovery and development of new antibiotics. Nature Reviews Chemistry, 2021, 5, 726-749.	13.8	439
4	Î²-Glucuronidase as a Sensitive and Versatile Reporter in Actinomycetes. Applied and Environmental Microbiology, 2011, 77, 5370-5383.	1.4	182
5	Design, construction and characterisation of a synthetic promoter library for fine-tuned gene expression in actinomycetes. Metabolic Engineering, 2013, 19, 98-106.	3.6	172
6	Generation of a cluster-free Streptomyces albus chassis strains for improved heterologous expression of secondary metabolite clusters. Metabolic Engineering, 2018, 49, 316-324.	3.6	140
7	Insights into naturally minimised Streptomyces albus J1074 genome. BMC Genomics, 2014, 15, 97.	1.2	137
8	Enabling the valorization of guaiacol-based lignin: Integrated chemical and biochemical production of cis,cis-muconic acid using metabolically engineered Amycolatopsis sp ATCC 39116. Metabolic Engineering, 2018, 45, 200-210.	3.6	125
9	Native and engineered promoters in natural product discovery. Natural Product Reports, 2016, 33, 1006-1019.	5.2	97
10	SimReg1 is a master switch for biosynthesis and export of simocyclinone D8 and its precursors. AMB Express, 2012, 2, 1.	1.4	89
11	Site-Specific Recombination Strategies for Engineering Actinomycete Genomes. Applied and Environmental Microbiology, 2012, 78, 1804-1812.	1.4	88
12	New natural products identified by combined genomics-metabolomics profiling of marine Streptomyces sp. MP131-18. Scientific Reports, 2017, 7, 42382.	1.6	86
13	Biosynthesis of the Terpene Phenalinolactone in Streptomyces sp. TÃ¼6071: Analysis of the Gene Cluster and Generation of Derivatives. Chemistry and Biology, 2006, 13, 365-377.	6.2	71
14	Glycosyltransferases, Important Tools for Drug Design. Current Topics in Medicinal Chemistry, 2008, 8, 680-709.	1.0	70
15	Engineering of Streptomyces lividans for heterologous expression of secondary metabolite gene clusters. Microbial Cell Factories, 2020, 19, 5.	1.9	68
16	Metabolic engineering of natural product biosynthesis in actinobacteria. Current Opinion in Biotechnology, 2016, 42, 98-107.	3.3	66
17	Heterologous production of small molecules in the optimizedStreptomyceshosts. Natural Product Reports, 2019, 36, 1281-1294.	5.2	65
18	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, 547-555.	6.2	63

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19	Actinomycetes biosynthetic potential: how to bridge in silico and in vivo?. Journal of Industrial Microbiology and Biotechnology, 2014, 41, 387-402.	1.4	63
20	Regio- and Stereoselective Intermolecular Oxidative Phenol Coupling in Streptomyces. Journal of the American Chemical Society, 2014, 136, 6195-6198.	6.6	63
21	Secondary metabolites overproduction through transcriptional gene cluster refactoring. Metabolic Engineering, 2018, 49, 299-315.	3.6	63
22	Novel and tightly regulated resorcinol and cumate-inducible expression systems for Streptomyces and other actinobacteria. Applied Microbiology and Biotechnology, 2014, 98, 8641-8655.	1.7	61
23	Cloning and Heterologous Expression of the Grecocycline Biosynthetic Gene Cluster. PLoS ONE, 2016, 11, e0158682.	1.1	61
24	Rational Design of an Aryl-C-Glycoside Catalyst from a Natural Product O-Glycosyltransferase. Chemistry and Biology, 2011, 18, 520-530.	6.2	58
25	Functional expression of the Cre recombinase in actinomycetes. Applied Microbiology and Biotechnology, 2008, 78, 1065-1070.	1.7	56
26	Pleiotropic regulatory genes bldA , adpA and absB are implicated in production of phosphoglycolipid antibiotic moenomycin. Open Biology, 2013, 3, 130121.	1.5	56
27	Iteratively Acting Glycosyltransferases Involved in the Hexasaccharide Biosynthesis of Landomycin A. Chemistry and Biology, 2005, 12, 725-729.	6.2	54
28	Identification of the Function of GenelndM2Encoding a Bifunctional Oxygenase-Reductase Involved in the Biosynthesis of the Antitumor Antibiotic Landomycin E byStreptomyces globisporus1912 Supports the Originally Assigned Structure for Landomycinone. Journal of Organic Chemistry, 2005, 70, 631-638.	1.7	52
29	Marker removal from actinomycetes genome using Flp recombinase. Gene, 2008, 419, 43-47.	1.0	52
30	Glycosyltransferases involved in the biosynthesis of biologically active natural products that contain oligosaccharides. Molecular BioSystems, 2005, 1, 117.	2.9	51
31	Generation of New Landomycins with Altered Saccharide Patterns through Over-expression of the Glycosyltransferase GenelanGT3 in the Biosynthetic Gene Cluster of Landomycin A inStreptomyces cyanogenus S-136. ChemBioChem, 2007, 8, 83-88.	1.3	51
32	A set of synthetic versatile genetic control elements for the efficient expression of genes in Actinobacteria. Scientific Reports, 2018, 8, 491.	1.6	50
33	Iterative marker excision system. Applied Microbiology and Biotechnology, 2014, 98, 4557-4570.	1.7	49
34	Cloning and Heterologous Expression of the Aranciamycin Biosynthetic Gene Cluster Revealed a New Flexible Glycosyltransferase. ChemBioChem, 2007, 8, 599-602.	1.3	48
35	LanGT2 Catalyzes the First Glycosylation Step during Landomycin A Biosynthesis. ChemBioChem, 2005, 6, 1406-1410.	1.3	47
36	Expression of the landomycin biosynthetic gene cluster in a PKS mutant of Streptomyces fradiae is dependent on the coexpression of a putative transcriptional activator gene. FEMS Microbiology Letters, 2004, 230, 91-97.	0.7	43

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37	Generation of Novel Landomycins M and O through Targeted Gene Disruption. ChemBioChem, 2005, 6, 675-678.	1.3	43
38	Deoxysugars in Bioactive Natural Products: Development of Novel Derivatives by Altering the Sugar Pattern. Current Topics in Medicinal Chemistry, 2008, 8, 710-724.	1.0	43
39	Unusual site-specific DNA integration into the highly active pseudo-attB of the Streptomyces albus J1074 genome. Applied Microbiology and Biotechnology, 2014, 98, 5095-5104.	1.7	42
40	Coordination of export and glycosylation of landomycins inStreptomyces cyanogenusS136. FEMS Microbiology Letters, 2008, 285, 195-202.	0.7	41
41	I-SceI endonuclease: a new tool for DNA repair studies and genetic manipulations in streptomycetes. Applied Microbiology and Biotechnology, 2010, 87, 1525-1532.	1.7	40
42	Features and applications of bacterial glycosyltransferases: current state and prospects. Applied Microbiology and Biotechnology, 2008, 80, 945-952.	1.7	38
43	Engineering a Function into a Glycosyltransferase. Chemistry and Biology, 2009, 16, 28-35.	6.2	38
44	Streptomyces albus: A New Cell Factory for Non-Canonical Amino Acids Incorporation into Ribosomally Synthesized Natural Products. ACS Chemical Biology, 2017, 12, 2362-2370.	1.6	38
45	On the Acceptor Substrate of C-Glycosyltransferase UrdGT2: Three Prejadomycin C-Glycosides from an Engineered Mutant ofStreptomyces globisporus 1912 Î”IndE(urdGT2). Angewandte Chemie - International Edition, 2006, 45, 7842-7846.	7.2	36
46	The pathway-specific regulatory genes, tei15* and tei16*, are the master switches of teicoplanin production in Actinoplanes teichomyceticus. Applied Microbiology and Biotechnology, 2014, 98, 9295-9309.	1.7	36
47	Cloning and Expression of Metagenomic DNA in Streptomyces lividans and Subsequent Fermentation for Optimized Production. Methods in Molecular Biology, 2017, 1539, 99-144.	0.4	36
48	Cloning and Sequencing of the Biosynthetic Gene Cluster for Saquayamycin Z and Galtamycin B and the Elucidation of the Assembly of Their Saccharide Chains. ChemBioChem, 2009, 10, 1392-1401.	1.3	35
49	Chromosomal position effect influences the heterologous expression of genes and biosynthetic gene clusters in Streptomyces albus J1074. Microbial Cell Factories, 2017, 16, 5.	1.9	34
50	Identification of butenolide regulatory system controlling secondary metabolism in Streptomyces albus J1074. Scientific Reports, 2017, 7, 9784.	1.6	34
51	Design, development and application of whole-cell based antibiotic-specific biosensor. Metabolic Engineering, 2018, 47, 263-270.	3.6	33
52	Dual control system â€“ A novel scaffolding architecture of an inducible regulatory device for the precise regulation of gene expression. Metabolic Engineering, 2016, 37, 11-23.	3.6	31
53	Genome rearrangements of Streptomyces albus J1074 lead to the carotenoid gene cluster activation. Applied Microbiology and Biotechnology, 2014, 98, 795-806.	1.7	30
54	Function of lanGT3, a Glycosyltransferase Gene Involved in Landomycin A Biosynthesis. ChemBioChem, 2004, 5, 1567-1570.	1.3	29

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55	Multi-Omics and Targeted Approaches to Determine the Role of Cellular Proteases in Streptomyces Protein Secretion. Frontiers in Microbiology, 2018, 9, 1174.	1.5	29
56	Development of a Biosensor Concept to Detect the Production of Cluster-Specific Secondary Metabolites. ACS Synthetic Biology, 2017, 6, 1026-1033.	1.9	28
57	Function of lanI in regulation of landomycin A biosynthesis in Streptomyces cyanogenus S136 and cross-complementation studies with Streptomyces antibiotic regulatory proteins encoding genes. Archives of Microbiology, 2008, 189, 111-120.	1.0	27
58	In vivo random mutagenesis of streptomycetes using mariner-based transposon Himar1. Applied Microbiology and Biotechnology, 2013, 97, 351-359.	1.7	27
59	Insights into the Pamamycin Biosynthesis. Angewandte Chemie - International Edition, 2015, 54, 2280-2284.	7.2	27
60	In vivo Tn5-based transposon mutagenesis of Streptomycetes. Applied Microbiology and Biotechnology, 2009, 83, 979-986.	1.7	26
61	Actinomycetes genome engineering approaches. Antonie Van Leeuwenhoek, 2012, 102, 503-516.	0.7	26
62	Evaluation of heterologous promoters for genetic analysis of Actinoplanes teichomyceticusâ€"Producer of teicoplanin, drug of last defense. Journal of Biotechnology, 2013, 168, 367-372.	1.9	26
63	Complete genome sequence of producer of the glycopeptide antibiotic Aculeximycin Kutzneria albida DSM 43870T, a representative of minor genus of Pseudonocardiaceae. BMC Genomics, 2014, 15, 885.	1.2	26
64	New Simocyclinones: Surprising Evolutionary and Biosynthetic Insights. ACS Chemical Biology, 2016, 11, 241-250.	1.6	26
65	Gene miaA for postâ€transcriptional modification of tRNA_{XXA} is important for morphological and metabolic differentiation in Streptomyces. Molecular Microbiology, 2019, 112, 249-265.	1.2	26
66	Generation of new compounds through unbalanced transcription of landomycin A cluster. Applied Microbiology and Biotechnology, 2016, 100, 9175-9186.	1.7	24
67	Properties of Streptomyces albus J1074 mutant deficient in tRNALeu UAA gene bldA. Archives of Microbiology, 2017, 199, 1175-1183.	1.0	24
68	Pimprinols Aâ€"C, from the terrestrial actinomycete, Streptomyces sp.. Tetrahedron Letters, 2012, 53, 3009-3011.	0.7	23
69	Oleaceran: A Novel Spiro[isobenzofuran-1,2â€²-naptho[1,8-bc]furan] Isolated from a Terrestrial Streptomyces sp.. Organic Letters, 2013, 15, 3487-3489.	2.4	23
70	Characterization of Sigma Factor Genes in Streptomyces lividans TK24 Using a Genomic Library-Based Approach for Multiple Gene Deletions. Frontiers in Microbiology, 2018, 9, 3033.	1.5	23
71	Effect of â€œribosome engineeringâ€•on the transcription level and production of S. albus indigenous secondary metabolites. Applied Microbiology and Biotechnology, 2019, 103, 7097-7110.	1.7	23
72	Heterologous Expression of the Nybomycin Gene Cluster from the Marine Strain Streptomyces albus subsp. chlorinus NRRL B-24108. Marine Drugs, 2018, 16, 435.	2.2	22

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73	Heterologous AdpA transcription factors enhance landomycin production in Streptomyces cyanogenus S136 under a broad range of growth conditions. Applied Microbiology and Biotechnology, 2018, 102, 8419-8428.	1.7	22
74	Microparticles globallyÂreprogram Streptomyces albus toward accelerated morphogenesis, streamlined carbon core metabolism, and enhanced production of the antituberculosis polyketide pamamycin. Biotechnology and Bioengineering, 2020, 117, 3858-3875.	1.7	22
75	Thioholgamide A, a New Anti-Proliferative Anti-Tumor Agent, Modulates Macrophage Polarization and Metabolism. Cancers, 2020, 12, 1288.	1.7	22
76	Oleamycins A and B: new antibacterial cyclic hexadepsipeptides isolated from a terrestrial Streptomyces sp.. Journal of Antibiotics, 2014, 67, 339-343.	1.0	21
77	Generation of Streptomyces globisporus SMY622 Strain with Increased Landomycin E Production and It's Initial Characterization. Journal of Antibiotics, 2004, 57, 383-389.	1.0	20
78	LanV, a Bifunctional Enzyme: Aromatase and Ketoreductase during Landomycin A Biosynthesis. ChemBioChem, 2005, 6, 2312-2315.	1.3	19
79	New Alpiniamides From Streptomyces sp. IB2014/011-12 Assembled by an Unusual Hybrid Non-ribosomal Peptide Synthetase Trans-AT Polyketide Synthase Enzyme. Frontiers in Microbiology, 2018, 9, 1959.	1.5	19
80	Baikalomycins A-C, New Aquayamycin-Type Angucyclines Isolated from Lake Baikal Derived Streptomyces sp. IB201691-2A. Microorganisms, 2020, 8, 680.	1.6	19
81	Total In Vitro Biosynthesis of the Thioamitide Thioholgamide and Investigation of the Pathway. Journal of the American Chemical Society, 2022, 144, 5136-5144.	6.6	19
82	It works: combinatorial biosynthesis for generating novel glycosylated compounds. Molecular Microbiology, 2005, 58, 3-5.	1.2	18
83	A strategy for cloning glycosyltransferase genes involved in natural product biosynthesis. Applied Microbiology and Biotechnology, 2007, 75, 1367-1375.	1.7	18
84	Leopolic acid A, isolated from a terrestrial actinomycete, Streptomyces sp.. Tetrahedron Letters, 2012, 53, 6300-6301.	0.7	18
85	An influence of the copy number of biosynthetic gene clusters on the production level of antibiotics in a heterologous host. Journal of Biotechnology, 2016, 232, 110-117.	1.9	18
86	Characterization of the Post-Assembly Line Tailoring Processes in Teicoplanin Biosynthesis. ACS Chemical Biology, 2016, 11, 2254-2264.	1.6	18
87	The bottromycin epimerase BotH defines a group of atypical Î±/Î²-hydrolase-fold enzymes. Nature Chemical Biology, 2020, 16, 1013-1018.	3.9	18
88	Identification and Heterologous Expression of the Albucidin Gene Cluster from the Marine Strain Streptomyces Albus Subsp. Chlorinus NRRL B-24108. Microorganisms, 2020, 8, 237.	1.6	18
89	Aranciamycin analogs generated by combinatorial biosynthesis show improved antitumor activity. Applied Microbiology and Biotechnology, 2008, 80, 15-19.	1.7	17
90	Characterization and analysis of the regulatory network involved in control of lipomycin biosynthesis in Streptomyces aureofaciens TÃ¼117. Applied Microbiology and Biotechnology, 2010, 85, 1069-1079.	1.7	17

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91	A transposon-based strategy to identify the regulatory gene network responsible for landomycin E biosynthesis. FEMS Microbiology Letters, 2013, 342, 138-146.	0.7	16
92	Genome engineering in actinomycetes using site-specific recombinases. Applied Microbiology and Biotechnology, 2013, 97, 4701-4712.	1.7	16
93	Juniperolide A: A New Polyketide Isolated from a Terrestrial Actinomycete, Streptomyces sp.. Organic Letters, 2012, 14, 5860-5863.	2.4	15
94	The isolation and characterization of actinobacteria from dominant benthic macroinvertebrates endemic to Lake Baikal. Folia Microbiologica, 2016, 61, 159-168.	1.1	15
95	Benzanthric Acid, a Novel Metabolite From Streptomyces albus Del14 Expressing the Nybomycin Gene Cluster. Frontiers in Chemistry, 2019, 7, 896.	1.8	15
96	Microparticles enhance the formation of seven major classes of natural products in native and metabolically engineered actinobacteria through accelerated morphological development. Biotechnology and Bioengineering, 2021, 118, 3076-3093.	1.7	15
97	Differences in the substrate specificity of glycosyltransferases involved in landomycins A and E biosynthesis. Applied Microbiology and Biotechnology, 2009, 83, 1067-1076.	1.7	14
98	Tracking Down Biotransformation to the Genetic Level: Identification of a Highly Flexible Glycosyltransferase from Saccharothrix espanaensis. Applied and Environmental Microbiology, 2013, 79, 5224-5232.	1.4	13
99	<scp>MoeH</scp>5: a natural glycorandomizer from the moenomycin biosynthetic pathway. Molecular Microbiology, 2013, 90, 1324-1338.	1.2	13
100	Endophytic Streptomyces in the traditional medicinal plant Arnica montana L.: secondary metabolites and biological activity. Antonie Van Leeuwenhoek, 2015, 108, 391-402.	0.7	13
101	A gene cluster for the biosynthesis of moenomycin family antibiotics in the genome of teicoplanin producer Actinoplanes teichomyceticus. Applied Microbiology and Biotechnology, 2016, 100, 7629-7638.	1.7	12
102	Monitoring Protein Secretion in Streptomyces Using Fluorescent Proteins. Frontiers in Microbiology, 2018, 9, 3019.	1.5	11
103	Identification of a Biosynthetic Gene Cluster Responsible for the Production of a New Pyrrolopyrimidine Natural Productâ€”Huimycin. Biomolecules, 2020, 10, 1074.	1.8	11
104	Superior production of heavy pamamycin derivatives using a bkdR deletion mutant of Streptomyces albus J1074/R2. Microbial Cell Factories, 2021, 20, 111.	1.9	11
105	Gene ssfg_01967 (miaB) for tRNA modification influences morphogenesis and moenomycin biosynthesis in Streptomyces ghanaensis ATCC14672. Microbiology (United Kingdom), 2019, 165, 233-245.	0.7	11
106	Cloning, purification and characterization of a functional anthracycline glycosyltransferase. Journal of Biotechnology, 2006, 125, 425-433.	1.9	10
107	Lorneic acids C and D, new trialkyl-substituted aromatic acids isolated from a terrestrial Streptomyces sp.. Journal of Antibiotics, 2013, 66, 347-349.	1.0	10
108	The adpA-like regulatory gene from Actinoplanes teichomyceticus: in silico analysis and heterologous expression. World Journal of Microbiology and Biotechnology, 2015, 31, 1297-1301.	1.7	10

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109	Perquinolines Aâ€“C: Unprecedented Bacterial Tetrahydroisoquinolines Involving an Intriguing Biosynthesis. Angewandte Chemie - International Edition, 2019, 58, 12930-12934.	7.2	10
110	Novel Fredericamycin Variant Overproduced by a Streptomycin-Resistant Streptomyces albus subsp. chlorinus Strain. Marine Drugs, 2020, 18, 284.	2.2	10
111	A putative proteinase gene is involved in regulation of landomycin E biosynthesis inStreptomyces globisporus1912. FEMS Microbiology Letters, 2006, 255, 280-285.	0.7	9
112	Non-Heme Monooxygenase ThoJ Catalyzes Thioholgamide Î²-Hydroxylation. ACS Chemical Biology, 2020, 15, 2815-2819.	1.6	9
113	Rubimycinone A, a new anthraquinone from a terrestrial Streptomyces sp.. Tetrahedron Letters, 2013, 54, 900-902.	0.7	8
114	Loseolamycins: A Group of New Bioactive Alkylresorcinols Produced after Heterologous Expression of a Type III PKS from Micromonospora endolithica. Molecules, 2020, 25, 4594.	1.7	7
115	Engineering the precursor pool to modulate the production of pamamycins in the heterologous host S. albus J1074. Metabolic Engineering, 2021, 67, 11-18.	3.6	7
116	Scandiumâ€“microorganism interactions in new biotechnologies. Trends in Biotechnology, 2022, 40, 1088-1101.	4.9	7
117	Multiple copies of the oxytetracycline gene cluster in selected Streptomyces rimosus strains can provide significantly increased titers. Microbial Cell Factories, 2021, 20, 47.	1.9	5
118	Genetically engineered rpsL merodiploidy impacts secondary metabolism and antibiotic resistance in Streptomyces. World Journal of Microbiology and Biotechnology, 2021, 37, 62.	1.7	5
119	The diversity and antibacterial activity of culturable actinobacteria isolated from the rhizosphere soil of Deschampsia antarctica (Galindez Island, Maritime Antarctic). Polar Biology, 2021, 44, 1859-1868.	0.5	5
120	Amycomycins C and D, new angucyclines from Kitasatospora sp.. Tetrahedron Letters, 2014, 55, 5771-5773.	0.7	4
121	Engineering Corynebacterium glutamicum with a comprehensive genomic library and phage-based vectors. Metabolic Engineering, 2020, 62, 221-234.	3.6	4
122	Dudomycins: New Secondary Metabolites Produced after Heterologous Expression of an Nrps Cluster from Streptomyces albus ssp. Chlorinus Nrrl B-24108. Microorganisms, 2020, 8, 1800.	1.6	4
123	A Promiscuous Halogenase for the Derivatization of Flavonoids. Molecules, 2021, 26, 6220.	1.7	4
124	Genome Engineering Approaches to Improve Nosokomycin A Production by Streptomyces ghanaensis B38.3. Indian Journal of Microbiology, 2019, 59, 109-111.	1.5	3
125	Targeted Genome Miningâ€”From Compound Discovery to Biosynthetic Pathway Elucidation. Microorganisms, 2020, 8, 2034.	1.6	3
126	Cyclofaulknamycin with the Rare Amino Acid D-capreomycidine Isolated from a Well-Characterized Streptomyces albus Strain. Microorganisms, 2021, 9, 1609.	1.6	3

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127	Bonsecamin: A New Cyclic Pentapeptide Discovered through Heterologous Expression of a Cryptic Gene Cluster. Microorganisms, 2021, 9, 1640.	1.6	3
128	New Kendomycin Derivative Isolated from Streptomyces sp. Cl 58-27. Molecules, 2021, 26, 6834.	1.7	3
129	Novel Biosynthetic Route to the Isoquinoline Scaffold. ACS Chemical Biology, 2022, 17, 598-608.	1.6	3
130	Discovery and Heterologous Production of New Cyclic Depsibosamycins. Microorganisms, 2021, 9, 1396.	1.6	2
131	Complete Draft Genome Sequence of the Actinobacterium Nocardiopsis sinuspersici UTMC102 (DSM) Tj ETQq1 1 0.784314 rgBT /Over	0.8	1
132	New Scabimycins A-C Isolated from Streptomyces acidiscabies (Lu19992). Molecules, 2021, 26, 5922.	1.7	1
133	Perquinolineâ€…Aâ€“C: neuartige bakterielle Tetrahydroisochinoline mit einer bemerkenswerten Biosynthese. Angewandte Chemie, 2019, 131, 13063-13068.	1.6	0
134	Back Cover Image, Volume 117, Number 12, December 2020. Biotechnology and Bioengineering, 2020, 117, .	1.7	0