Hiroyasu Onaka

List of Publications by Year
in descending order

96	5,352	101543	88630
papers	citations	36 h-index	70 g-index

111	111	111	4573
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ribosomally synthesized and post-translationally modified peptide natural products: overview and recommendations for a universal nomenclature. Natural Product Reports, 2013, 30, 108-160.	10.3	1,692
2	The A-factor regulatory cascade leading to streptomycin biosynthesis in Streptomyces griseus : identification of a target gene of the A-factor receptor. Molecular Microbiology, 1999, 34, 102-111.	2.5	229
3	Mycolic Acid-Containing Bacteria Induce Natural-Product Biosynthesis in Streptomyces Species. Applied and Environmental Microbiology, 2011, 77, 400-406.	3.1	220
4	Cloning and characterization of the A-factor receptor gene from Streptomyces griseus. Journal of Bacteriology, 1995, 177, 6083-6092.	2.2	134
5	Cloning of the Staurosporine Biosynthetic Gene Cluster from Streptomyces sp. TP-A0274 and Its Heterologous Expression in Streptomyces lividans.. Journal of Antibiotics, 2002, 55, 1063-1071.	2.0	129
6	Studies on Endophytic Actinomycetes (I) Streptomyces sp. Isolated from Rhododendron and Its Antifungal Activity. Journal of General Plant Pathology, 2000, 66, 360-366.	1.0	121
7	Characterization of the Biosynthetic Gene Cluster of Rebeccamycin fromLechevalieria aerocolonigenesATCC 39243. Bioscience, Biotechnology and Biochemistry, 2003, 67, 127-138.	1.3	112
8	Crystal structures and catalytic mechanism of cytochrome P450 StaP that produces the indolocarbazole skeleton. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 11591-11596.	7.1	108
9	Novel antibiotic screening methods to awaken silent or cryptic secondary metabolic pathways in actinomycetes. Journal of Antibiotics, 2017, 70, 865-870.	2.0	96
10	Involvement of two A-factor receptor homologues in Streptomyces coelicolor A3(2) in the regulation of secondary metabolism and morphogenesis. Molecular Microbiology, 2002, 28, 743-753.	2.5	91
11	Goadsporin, a Chemical Substance which Promotes Secondary Metabolism and Morphogenesis in Streptomycetes. I. Purification and Characterization.. Journal of Antibiotics, 2001, 54, 1036-1044.	2.0	90
12	Cloning and characterization of the goadsporin biosynthetic gene cluster from Streptomyces sp. TP-A0584. Microbiology (United Kingdom), 2005, 151, 3923-3933.	1.8	86
13	DNAâ€binding activity of the Aâ€factor receptor protein and its recognition DNA sequences. Molecular Microbiology, 1997, 24, 991-1000.	2.5	82
14	Dissection of goadsporin biosynthesis by in vitro reconstitution leading to designer analogues expressed in vivo. Nature Communications, 2017, 8, 14207.	12.8	69
15	Fistupyrone, a Novel Inhibitor of the Infection of Chinese Cabbage by Alternaria brassicicola, from Streptomyces sp. TP-A0569.. Journal of Antibiotics, 2000, 53, 1117-1122.	2.0	68
16	5-Alkyl-1,2,3,4-tetrahydroquinolines, New Membrane-Interacting Lipophilic Metabolites Produced by Combined Culture of Streptomyces nigrescens and Tsukamurella pulmonis. Organic Letters, 2015, 17, 1918-1921.	4.6	66
17	Theoretical and Experimental Studies of the Conversion of Chromopyrrolic Acid to an Antitumor Derivative by Cytochrome P450 StaP: The Catalytic Role of Water Molecules. Journal of the American Chemical Society, 2009, 131, 6748-6762.	13.7	64
18	Niizalactams Aâ€“C, Multicyclic Macrolactams Isolated from Combined Culture of Streptomyces with Mycolic Acid-Containing Bacterium. Journal of Natural Products, 2015, 78, 3011-3017.	3.0	62

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19	Chojalactones Aâ€“C, Cytotoxic Butanolides Isolated from Streptomyces sp. Cultivated with Mycolic Acid Containing Bacterium. Organic Letters, 2015, 17, 1501-1504.	4.6	57
20	pTOYAMAcos, pTYM18, and pTYM19, Actinomycete-Escherichia coli Integrating Vectors for Heterologous Gene Expression. Journal of Antibiotics, 2003, 56, 950-956.	2.0	56
21	Genome Mining Reveals a Minimum Gene Set for the Biosynthesis of 32-Membered Macrocyclic Thiopeptides Lactazoles. Chemistry and Biology, 2014, 21, 679-688.	6.0	56
22	Activation of silent biosynthetic pathways and discovery of novel secondary metabolites in actinomycetes by co-culture with mycolic acid-containing bacteria. Journal of Industrial Microbiology and Biotechnology, 2019, 46, 363-374.	3.0	55
23	Goadsporin, a Chemical Substance which Promotes Secondary Metabolism and Morphogenesis in Streptomycetes. II. Structure Determination.. Journal of Antibiotics, 2001, 54, 1045-1053.	2.0	53
24	TPU-0037-A, B, C and D, Novel Lydicamycin Congeners with Anti-MRSA Activity from Streptomyces platensis TP-A0598.. Journal of Antibiotics, 2002, 55, 873-880.	2.0	53
25	Arcyriaflavin E, a new cytotoxic indolocarbazole alkaloid isolated by combined-culture of mycolic acid-containing bacteria and Streptomyces cinnamoneus NBRC 13823. Journal of Antibiotics, 2015, 68, 342-344.	2.0	52
26	Alchivemycin A, a Bioactive Polycyclic Polyketide with an Unprecedented Skeleton from Streptomyces sp.. Organic Letters, 2010, 12, 3402-3405.	4.6	51
27	Electron Transfer Activation of Chromopyrrolic Acid by Cytochrome P450 En Route to the Formation of an Antitumor Indolocarbazole Derivative: Theory Supports Experiment. Journal of the American Chemical Society, 2008, 130, 7170-7171.	13.7	49
28	Insights into the Biosynthesis of Dehydroalanines in Goadsporin. ChemBioChem, 2016, 17, 218-223.	2.6	47
29	Absolute Configuration and Antitumor Activity of Myxochelin A Produced by Nonomuraea pusilla TP-A0861â€. Journal of Antibiotics, 2006, 59, 698-703.	2.0	45
30	Mycolic Acid Containing Bacterium Stimulates Tandem Cyclization of Polyene Macrolactam in a Lake Sediment Derived Rare Actinomycete. Organic Letters, 2017, 19, 4992-4995.	4.6	42
31	Rakicidin D, an inhibitor of tumor cell invasion from marine-derived Streptomyces sp.. Journal of Antibiotics, 2010, 63, 563-565.	2.0	41
32	A copper-containing oxidase catalyzes C-nitrosation in nitrosobenzamide biosynthesis. Nature Chemical Biology, 2010, 6, 641-643.	8.0	41
33	Minimal lactazole scaffold for in vitro thiopeptide bioengineering. Nature Communications, 2020, 11, 2272.	12.8	40
34	Site-directed mutagenesis of the A-factor receptor protein:. Gene, 1998, 222, 133-144.	2.2	39
35	Direct formation of chromopyrrolic acid from indole-3-pyruvic acid by StaD, a novel hemoprotein in indolocarbazole biosynthesis. Tetrahedron Letters, 2006, 47, 473-475.	1.4	38
36	pTONA5: A hyperexpression vector in streptomycetes. Protein Expression and Purification, 2008, 62, 244-248.	1.3	38

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37	Crystal Structure of VioE, a Key Player in the Construction of the Molecular Skeleton of Violacein. Journal of Biological Chemistry, 2008, 283, 6459-6466.	3.4	38
38	Production of a Novel Amideâ€Containing Polyene by Activating a Cryptic Biosynthetic Gene Cluster in Streptomyces sp. MSC090213JE08. ChemBioChem, 2016, 17, 1464-1471.	2.6	38
39	Acyltransferase that catalyses the condensation of polyketide and peptide moieties of goadvionin hybrid lipopeptides. Nature Chemistry, 2020, 12, 869-877.	13.6	37
40	Search Method for Inhibitors of Staphyloxanthin Production by Methicillin-Resistant Staphylococcus aureus. Biological and Pharmaceutical Bulletin, 2012, 35, 48-53.	1.4	36
41	Discovery and Total Synthesis of Streptoaminals: Antimicrobial [5,5]â€Spirohemiaminals from the Combinedâ€Culture of Streptomyces nigrescens and Tsukamurella pulmonis. Angewandte Chemie - International Edition, 2016, 55, 10278-10282.	13.8	36
42	Cytochrome P450 Homolog Is Responsible for Câ€“N Bond Formation between Aglycone and Deoxysugar in the Staurosporine Biosynthesis ofStreptomycessp. TP-A0274. Bioscience, Biotechnology and Biochemistry, 2005, 69, 1753-1759.	1.3	34
43	Association of Induced Disease Resistance of Rhododendron Seedlings with Inoculation of Streptomyces sp. R-5 and Treatment with Actinomycin D and Amphotericin B to the Tissue-culture Medium.. Journal of Antibiotics, 2001, 54, 501-505.	2.0	33
44	Nocardimicins A, B, C, D, E, and F, Siderophores with Muscarinic M3 Receptor Inhibiting Activity fromNocardiasp. TP-A0674. Journal of Natural Products, 2005, 68, 1061-1065.	3.0	31
45	Anti-invasive and anti-angiogenic activities of naturally occurring dibenzodiazepine BU-4664L and its derivatives. Bioorganic and Medicinal Chemistry Letters, 2010, 20, 963-965.	2.2	27
46	Revision of the Structure Assigned to the Antibiotic BU-4664L from Micromonopora. Journal of Antibiotics, 2005, 58, 350-352.	2.0	26
47	Biosynthesis of Indolocarbazole and Goadsporin, Two Different Heterocyclic Antibiotics Produced by Actinomycetes. Bioscience, Biotechnology and Biochemistry, 2009, 73, 2149-2155.	1.3	26
48	Umezawamides, new bioactive polycyclic tetramate macrolactams isolated from a combined-culture of Umezawaea sp. and mycolic acid-containing bacterium. Journal of Antibiotics, 2018, 71, 653-657.	2.0	26
49	Catenulobactins A and B, Heterocyclic Peptides from Culturing Catenuloplanes sp. with a Mycolic Acid-Containing Bacterium. Journal of Natural Products, 2018, 81, 2106-2110.	3.0	26
50	Disease Resistance of Tissue-cultured Seedlings of Rhododendron after Treatment with Streptomyces sp. R-5. Journal of General Plant Pathology, 2001, 67, 325-332.	1.0	25
51	Selective tryptophan determination using tryptophan oxidases involved in bis-indole antibiotic biosynthesis. Analytical Biochemistry, 2013, 438, 124-132.	2.4	25
52	Killing of Mycolic Acid-Containing Bacteria Aborted Induction of Antibiotic Production by Streptomyces in Combined-Culture. PLoS ONE, 2015, 10, e0142372.	2.5	25
53	VioE, a prodeoxyviolacein synthase involved in violacein biosynthesis, is responsible for intramolecular indole rearrangement. Tetrahedron Letters, 2007, 48, 2923-2926.	1.4	24
54	Biosynthetic Origin of Alchivemycin A, a New Polyketide from Streptomyces and Absolute Configuration of Alchivemycin B. Organic Letters, 2013, 15, 3514-3517.	4.6	24

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55	Synthesis and evaluation of myxochelin analogues as antimetastatic agents. Bioorganic and Medicinal Chemistry, 2009, 17, 2724-2732.	3.0	23
56	Promiscuous Enzymes Cooperate at the Substrate Level En Route to Lactazole A. Journal of the American Chemical Society, 2020, 142, 13886-13897.	13.7	23
57	Multiplication of isolate R-5 of Streptomyces galbus on rhododendron leaves and its production of cell wall-degrading enzymes. Journal of General Plant Pathology, 2003, 69, 65-70.	1.0	22
58	Cloning of the Gene Cluster Responsible for Biosynthesis of KS-505a (Longestin), a Unique Tetraterpenoid. Bioscience, Biotechnology and Biochemistry, 2007, 71, 3072-3081.	1.3	21
59	Mycolic acid-containing bacteria activate heterologous secondary metabolite expression in Streptomyces lividans. Journal of Antibiotics, 2015, 68, 594-597.	2.0	19
60	Novel desferrioxamine derivatives synthesized using the secondary metabolism-specific nitrous acid biosynthetic pathway in Streptomyces davawensis. Journal of Antibiotics, 2018, 71, 911-919.	2.0	19
61	Mirilactams Câ€“E, Novel Polycyclic Macrolactams Isolated from Combined-Culture of <i>Actinosynnema mirum</i> NBRC 14064 and Mycolic Acid-Containing Bacterium. Chemical and Pharmaceutical Bulletin, 2018, 66, 660-667.	1.3	19
62	Characterization and Functional Modification of StaC and RebC, Which Are Involved in the Pyrrole Oxidation of Indolocarbazole Biosynthesis. Bioscience, Biotechnology and Biochemistry, 2011, 75, 2184-2193.	1.3	18
63	New structural scaffold 14-membered macrocyclic lactone ring for selective inhibitors of cell wall peptidoglycan biosynthesis in Staphylococcus aureus. Journal of Antibiotics, 2013, 66, 303-304.	2.0	17
64	Genetic approaches to generate hyper-producing strains of goadsporin: the relationships between productivity and gene duplication in secondary metabolite biosynthesis. Bioscience, Biotechnology and Biochemistry, 2014, 78, 394-399.	1.3	17
65	Identification of the common biosynthetic gene cluster for both antimicrobial streptoaminals and antifungal 5-alkyl-1,2,3,4-tetrahydroquinolines. Organic and Biomolecular Chemistry, 2019, 17, 2370-2378.	2.8	17
66	Identification of endophytic Streptomyces sp. R-5 and analysis of its antimicrobial metabolites. Journal of General Plant Pathology, 2004, 70, 66-68.	1.0	15
67	Anicemycin, a New Inhibitor of Anchorage-independent Growth of Tumor Cells from Streptomyces sp. TP-A0648. Journal of Antibiotics, 2005, 58, 322-326.	2.0	15
68	Biosynthesis of Heterocyclic Antibiotics in Actinomycetes and an Approach to Synthesize the Natural Compounds. Nihon Hosenkin Gakkai Shi = Actinomycetologica, 2006, 20, 62-71.	0.3	14
69	Coupling Reaction of Indolepyruvic Acid by StaD and Its Product: Implications for Biosynthesis of Indolocarbazole and Violacein. ChemBioChem, 2012, 13, 2495-2500.	2.6	14
70	Organization and nucleotide sequence of the secE-nusG region of Streptomyces griseus. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 1994, 1217, 93-96.	2.4	13
71	Accurate Broadcasting of Substrate Fitness for Lactazole Biosynthetic Pathway from Reactivity-Profiling mRNA Display. Journal of the American Chemical Society, 2020, 142, 20329-20334.	13.7	13
72	Longicatenamides Aâ€“D, Two Diastereomeric Pairs of Cyclic Hexapeptides Produced by Combined-culture of Streptomyces sp. KUSC_F05 and Tsukamurella pulmonis TP-B0596. Journal of Antibiotics, 2021, 74, 307-316.	2.0	12

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73	Amycolapeptins A and B, Cyclic Nonadepsipeptides Produced by Combined-culture of <i>Amycolatopsis</i> sp. and <i>Tsukamurella pulmonis</i>. Journal of Organic Chemistry, 2021, 86, 1843-1849.	3.2	12
74	Isolation of DNA Fragments Bound by Transcriptional Factors, AdpA and ArpA, in the A-Factor Regulatory Cascade.. Nihon Hosenkin Gakkai Shi = Actinomycetologica, 2000, 14, 37-42.	0.3	11
75	Differential Biosynthesis and Roles of Two Ferrichrome-Type Siderophores, ASP2397/AS2488053 and Ferricrocin, in <i>Acremonium persicinum</i>. ACS Chemical Biology, 2022, 17, 207-216.	3.4	11
76	Accurate Models of Substrate Preferences of Post-Translational Modification Enzymes from a Combination of mRNA Display and Deep Learning. ACS Central Science, 2022, 8, 814-824.	11.3	11
77	Absolute Configuration of TPU-0043, a Pentaene Macrolide from Streptomyces sp.. Journal of Antibiotics, 2005, 58, 523-525.	2.0	10
78	Discovery and Total Synthesis of Streptoaminals: Antimicrobial [5,5]â€Spirohemiaminals from the Combinedâ€Culture of <i>Streptomyces nigrescens</i> and <i>Tsukamurella pulmonis</i>. Angewandte Chemie, 2016, 128, 10434-10438.	2.0	10
79	Enhancement of saccharothriolide production and discovery of a new metabolite, saccharothriolide C2, by combined-culture of Saccharothrix sp. and Tsukamurella pulmonis. Tetrahedron Letters, 2019, 60, 1072-1074.	1.4	10
80	5-Prenyltryptophol, a new inhibitor of bone morphogenetic protein-induced alkaline phosphatase expression in myoblasts, produced by Streptomyces colinus subsp. albescens HEK608. Journal of Antibiotics, 2014, 67, 589-591.	2.0	9
81	Phage tail-like nanostructures affect microbial interactions between Streptomyces and fungi. Scientific Reports, 2021, 11, 20116.	3.3	9
82	Chemical Interactions of Cryptic Actinomycete Metabolite 5â€Alkylâ€1,2,3,4â€tetrahydroquinolines through Aggregate Formation. Angewandte Chemie - International Edition, 2019, 58, 13486-13491.	13.8	8
83	Intimate relationships among actinomycetes and mycolic acid-containing bacteria. Scientific Reports, 2022, 12, 7222.	3.3	6
84	Effects of carbon ion beam-induced mutagenesis for the screening of RED production-deficient mutants of Streptomyces coelicolor JCM4020. PLoS ONE, 2022, 17, e0270379.	2.5	6
85	å¯Œå±±æ¹¾æ·±å±±æ°´ã•ã‚‰ã®Enterococcus å±žä¹³é…¸èŒã®å†é›¢ã¨è«¸æ€§çŠ¶ã®æœèŽ. Japanese Journal of Lactic Acid Bacteria, 200	0.1	5
86	Bioactive properties of streptomyces may affect the dominance of Tricholoma matsutake in shiro. Symbiosis, 2020, 81, 1-13.	2.3	4
87	NMR characterization of streptogramin B and Lâ€156,587, a nonâ€synergistic pair of the streptogramin family antibiotic complexes produced inductively by a combined culture of <scp><i>Streptomyces albogriseolus</i></scp> and <scp><i>Tsukamurella pulmonis</i></scp>. Magnetic Resonance in Chemistry, 2022, 60, 261-270.	1.9	3
88	Effective Production of Aromatic Polyketides in <i>Streptomyces</i> using a Combined-Culture Method. Natural Product Communications, 2016, 11, 1934578X1601100.	0.5	2
89	Chemical Interactions of Cryptic Actinomycete Metabolite 5â€Alkylâ€1,2,3,4â€tetrahydroquinolines through Aggregate Formation. Angewandte Chemie, 2019, 131, 13620-13625.	2.0	1
90	Streptomyces Species as Boundary Microorganisms: Eucaryotic Regulatory Systems for Secondary Metabolism and Morphological Differentiation.. Nihon Hosenkin Gakkai Shi = Actinomycetologica, 1995, 9, 244-253.	0.3	1

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91	Kimidinomycin, a new antibiotic against Mycobacterium avium complex, produced by Streptomyces sp. KKTA-0263. Journal of Antibiotics, 2022, 75, 72-76.	2.0	1
92	3P100 X-ray crystal structures of cytochrome P450 StaP which produces skeleton of an anticancer drug suggest unusual catalytic mechanism of P450(Hemeproteins,Poster Presentations). Seibutsu Butsuri, 2007, 47, S228.	0.1	0
93	Title is missing!. Kagaku To Seibutsu, 2010, 48, 660-662.	0.0	0
94	2P001 Crystal structure of a mutant flavoenzyme RebC and construction mechanism of indolocarbazole aglycone structure(01A. Protein: Structure,Poster). Seibutsu Butsuri, 2013, 53, S159.	0.1	0
95	ç”Ÿå•ˆæˆé•ä¼å¦šé†’â€•å–éƒ¨å°æ¿€ã«ã‚ˆã‚‹æ–°è¦å©ç„¶ç‰©ç”Ÿç”£ã®æ´»æ€§åŒ–å…±åŸ¹é¤Šæ³•ã‚'ä¸å¿ƒã«. Kagaku To Seibutsu, 201	0.0	0
96	Metabolite Induction via Microorganism Symbiosis and Co-Culturing: A Potential Way to Enhance Chemical Diversity. , 2020, , 487-501.		0