

# Steven G Van Lanen

## List of Publications by Year in descending order

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74  
papers

3,412  
citations

136950

32  
h-index

149698

56  
g-index

76  
all docs

76  
docs citations

76  
times ranked

3518  
citing authors

#	ARTICLE	IF	CITATIONS
1	The crystal structure of <i>AbsH3</i> : A putative flavin adenine dinucleotide-dependent reductase in the abyssomicin biosynthesis pathway. <i>Proteins: Structure, Function and Bioinformatics</i> , 2021, 89, 132-137.	2.6	1
2	Identification and characterization of enzymes involved in the biosynthesis of pyrimidine nucleoside antibiotics. <i>Natural Product Reports</i> , 2021, 38, 1362-1407.	10.3	14
3	Structural characterization of DynU16, a START/Bet v1-like protein involved in dynemicin biosynthesis. <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2021, 77, 328-333.	0.8	1
4	Structure and Function of a Dual Reductase-Dehydratase Enzyme System Involved in <i>p</i> -Terphenyl Biosynthesis. <i>ACS Chemical Biology</i> , 2021, 16, 2816-2824.	3.4	8
5	Enzymatic C <sup>2</sup> -H Functionalization of <i>l</i> -Arg and <i>l</i> -Leu in Nonribosomally Derived Peptidyl Natural Products: A Tale of Two Oxidoreductases. <i>Journal of the American Chemical Society</i> , 2021, 143, 19425-19437.	13.7	6
6	Mithramycin 2-Oximes with Improved Selectivity, Pharmacokinetics, and Ewing Sarcoma Antitumor Efficacy. <i>Journal of Medicinal Chemistry</i> , 2020, 63, 14067-14086.	6.4	8
7	Pyridoxal-5-phosphate-dependent alkyl transfer in nucleoside antibiotic biosynthesis. <i>Nature Chemical Biology</i> , 2020, 16, 904-911.	8.0	24
8	Sugar-Pirating as an Enabling Platform for the Synthesis of 4,6-Dideoxyhexoses. <i>Journal of the American Chemical Society</i> , 2020, 142, 9389-9395.	13.7	7
9	Theranostic Gallium Siderophore Ciprofloxacin Conjugate with Broad Spectrum Antibiotic Potency. <i>Journal of Medicinal Chemistry</i> , 2019, 62, 9947-9960.	6.4	47
10	Biosynthetic and Synthetic Strategies for Assembling Capuramycin-Type Antituberculosis Antibiotics. <i>Molecules</i> , 2019, 24, 433.	3.8	12
11	Refining and expanding nonribosomal peptide synthetase function and mechanism. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2019, 46, 493-513.	3.0	36
12	Macrolide derivatives reduce proinflammatory macrophage activation and macrophage-mediated neurotoxicity. <i>CNS Neuroscience and Therapeutics</i> , 2019, 25, 591-600.	3.9	30
13	Baraphenazines A-G, Divergent Fused Phenazine-Based Metabolites from a Himalayan <i>Streptomyces</i> . <i>Journal of Natural Products</i> , 2019, 82, 1686-1693.	3.0	25
14	Total synthesis of griseusins and elucidation of the griseusin mechanism of action. <i>Chemical Science</i> , 2019, 10, 7641-7648.	7.4	13
15	Introduction to the special issue: "Natural Product Discovery and Development in the Genomic Era: 2019". <i>Journal of Industrial Microbiology and Biotechnology</i> , 2019, 46, 249-249.	3.0	1
16	Structure Determination, Functional Characterization, and Biosynthetic Implications of Nybomycin Metabolites from a Mining Reclamation Site-Associated <i>Streptomyces</i> . <i>Journal of Natural Products</i> , 2019, 82, 3469-3476.	3.0	12
17	Insights into the Target Interaction of Naturally Occurring Muraymycin Nucleoside Antibiotics. <i>ChemMedChem</i> , 2018, 13, 779-784.	3.2	28
18	Pyridoxal-5-phosphate as an oxygenase cofactor: Discovery of a carboxamide-forming, $\beta$ -amino acid monooxygenase-decarboxylase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 974-979.	7.1	26

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19	Antibacterial Muraymycins from Mutant Strains of <i>Streptomyces</i> sp. NRRL 30471. <i>Journal of Natural Products</i> , 2018, 81, 942-948.	3.0	26
20	Enzymatic Synthesis of the Ribosylated Glycyl-Uridine Disaccharide Core of Peptidyl Nucleoside Antibiotics. <i>Journal of Organic Chemistry</i> , 2018, 83, 7239-7249.	3.2	11
21	Self-Resistance during Muraymycin Biosynthesis: a Complementary Nucleotidyltransferase and Phosphotransferase with Identical Modification Sites and Distinct Temporal Order. <i>Antimicrobial Agents and Chemotherapy</i> , 2018, 62, .	3.2	16
22	Evidence that oxidative dephosphorylation by the nonheme Fe(II), $\alpha$ -ketoglutarate:UMP oxygenase occurs by stereospecific hydroxylation. <i>FEBS Letters</i> , 2017, 591, 468-478.	2.8	11
23	Bi- and Tetracyclic Spirotetronates from the Coal Mine Fire Isolate <i>Streptomyces</i> sp. LC-6-2. <i>Journal of Natural Products</i> , 2017, 80, 1141-1149.	3.0	32
24	SAM cycles up for colibactin. <i>Nature Chemical Biology</i> , 2017, 13, 1059-1061.	8.0	3
25	Computer-aided drug design of capuramycin analogues as anti-tuberculosis antibiotics by 3D-QSAR and molecular docking. <i>Open Chemistry</i> , 2017, 15, 299-307.	1.9	4
26	Functional AdoMet Isosteres Resistant to Classical AdoMet Degradation Pathways. <i>ACS Chemical Biology</i> , 2016, 11, 2484-2491.	3.4	36
27	Antibacterial and Cytotoxic Actinomycins Y <sub>6</sub> and Z <sub>p</sub> from <i>Streptomyces</i> sp. Strain GÅ-GS12. <i>Journal of Natural Products</i> , 2016, 79, 2731-2739.	3.0	39
28	The Role of a Nonribosomal Peptide Synthetase in $\epsilon$ -Lysine Lactamization During Capuramycin Biosynthesis. <i>ChemBioChem</i> , 2016, 17, 804-810.	2.6	10
29	A biocatalytic approach to capuramycin analogues by exploiting a substrate permissive N-transacylase CapW. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 3956-3962.	2.8	16
30	A Branch Point of <i>Streptomyces</i> Sulfur Amino Acid Metabolism Controls the Production of Albomycin. <i>Applied and Environmental Microbiology</i> , 2016, 82, 467-477.	3.1	20
31	The Biosynthesis of Capuramycin-type Antibiotics. <i>Journal of Biological Chemistry</i> , 2015, 290, 13710-13724.	3.4	28
32	Terfestatins B and C, New <i>p</i> -Terphenyl Glycosides Produced by <i>Streptomyces</i> sp. RM-5 <sup>8</sup> . <i>Organic Letters</i> , 2015, 17, 2796-2799.	4.6	42
33	Enzymatic strategies and biocatalysts for amide bond formation: tricks of the trade outside of the ribosome. <i>Molecular BioSystems</i> , 2015, 11, 338-353.	2.9	99
34	Microbial genome mining for accelerated natural products discovery: is a renaissance in the making?. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2014, 41, 175-184.	3.0	226
35	Facile Chemoenzymatic Strategies for the Synthesis and Utilization of <i>S</i> -Adenosyl-L-Methionine Analogues. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 3965-3969.	13.8	120
36	Structure-Based Gene Targeting Discovery of Sphaerimicin, a Bacterial Translocase...I Inhibitor. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 11607-11611.	13.8	27

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37	A sulfonate relay revealed. <i>Nature Chemical Biology</i> , 2013, 9, 602-603.	8.0	3
38	The muraminomicin biosynthetic gene cluster and enzymatic formation of the 2-deoxyaminoribosyl appendage. <i>MedChemComm</i> , 2013, 4, 239-243.	3.4	18
39	Roles of the Synergistic Reductive <i>O</i> -Methyltransferase GilM and of <i>O</i> -Methyltransferase GilMT in the Gilvocarcin Biosynthetic Pathway. <i>Journal of the American Chemical Society</i> , 2012, 134, 12402-12405.	13.7	18
40	Cooperation of Two Bifunctional Enzymes in the Biosynthesis and Attachment of Deoxysugars of the Antitumor Antibiotic Mithramycin. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 10638-10642.	13.8	27
41	Amalgamation of Nucleosides and Amino Acids in Antibiotic Biosynthesis: Discovery of an <i>l</i> -Threonine:Uridine-5'-Aldehyde Transaldolase. <i>Journal of the American Chemical Society</i> , 2012, 134, 18514-18517.	13.7	59
42	Fe(II)-Dependent, Uridine-5'-Monophosphate $\hat{=}$ -Ketoglutarate Dioxygenases in the Synthesis of 5'-Modified Nucleosides. <i>Methods in Enzymology</i> , 2012, 516, 153-168.	1.0	8
43	Biosynthesis of Albomycin $\hat{=}$ <sub>2</sub> Provides a Template for Assembling Siderophore and Aminoacyl-tRNA Synthetase Inhibitor Conjugates. <i>ACS Chemical Biology</i> , 2012, 7, 1565-1575.	3.4	59
44	Biosynthetic Origin and Mechanism of Formation of the Aminoribosyl Moiety of Peptidyl Nucleoside Antibiotics. <i>Journal of the American Chemical Society</i> , 2011, 133, 14452-14459.	13.7	36
45	Characterization of LipL as a Non-heme, Fe(II)-dependent $\hat{=}$ -Ketoglutarate:UMP Dioxygenase That Generates Uridine-5'-aldehyde during A-90289 Biosynthesis*. <i>Journal of Biological Chemistry</i> , 2011, 286, 7885-7892.	3.4	47
46	A High-Throughput Screen for Directed Evolution of the Natural Product Sulfotransferase LipB. <i>Journal of Biomolecular Screening</i> , 2011, 16, 845-851.	2.6	4
47	The Biosynthesis of Liposidomycin-like A-90289 Antibiotics Featuring a New Type of Sulfotransferase. <i>ChemBioChem</i> , 2010, 11, 184-190.	2.6	53
48	Characterization of a dual specificity aryl acid adenylation enzyme with dual function in nikkomycin biosynthesis. <i>Biopolymers</i> , 2010, 93, 791-801.	2.4	15
49	An ATP-independent strategy for amide bond formation in antibiotic biosynthesis. <i>Nature Chemical Biology</i> , 2010, 6, 581-586.	8.0	57
50	Functional and Kinetic Analysis of the Phosphotransferase CapP Conferring Selective Self-resistance to Capuramycin Antibiotics. <i>Journal of Biological Chemistry</i> , 2010, 285, 12899-12905.	3.4	21
51	Delineating the earliest steps of gilvocarcin biosynthesis: role of GilP and GilQ in starter unit specificity. <i>Organic and Biomolecular Chemistry</i> , 2010, 8, 3851.	2.8	11
52	A free-standing condensation enzyme catalyzing ester bond formation in C-1027 biosynthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 4183-4188.	7.1	80
53	Identification of the biosynthetic gene cluster of A-500359s in <i>Streptomyces griseus</i> SANK60196. <i>Journal of Antibiotics</i> , 2009, 62, 325-332.	2.0	34
54	Characterization of SgcE6, the flavin reductase component supporting FAD-dependent halogenation and hydroxylation in the biosynthesis of the enediyne antitumor antibiotic C-1027. <i>FEMS Microbiology Letters</i> , 2009, 300, 237-241.	1.8	19

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55	chapter 5 Iterative Type I Polyketide Synthases for Eneidyne Core Biosynthesis. <i>Methods in Enzymology</i> , 2009, 459, 97-112.	1.0	22
56	Characterization of the Two-Component, FAD-Dependent Monooxygenase SgcC That Requires Carrier Protein-Tethered Substrates for the Biosynthesis of the Eneidyne Antitumor Antibiotic C-1027. <i>Journal of the American Chemical Society</i> , 2008, 130, 6616-6623.	13.7	37
57	The Role of Tandem Acyl Carrier Protein Domains in Polyunsaturated Fatty Acid Biosynthesis. <i>Journal of the American Chemical Society</i> , 2008, 130, 6336-6337.	13.7	83
58	Biosynthesis of the enediyne antitumor antibiotic C-1027 involves a new branching point in chorismate metabolism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 494-499.	7.1	49
59	A phosphopantetheinylating polyketide synthase producing a linear polyene to initiate enediyne antitumor antibiotic biosynthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 1460-1465.	7.1	87
60	Biosynthesis of Eneidyne Antitumor Antibiotics. <i>Current Topics in Medicinal Chemistry</i> , 2008, 8, 448-459.	2.1	91
61	Advances in polyketide synthase structure and function. <i>Current Opinion in Drug Discovery &amp; Development</i> , 2008, 11, 186-95.	1.9	12
62	Characterization of the Maduropeptin Biosynthetic Gene Cluster from <i>Actinomadura madurae</i> ATCC 39144 Supporting a Unifying Paradigm for Eneidyne Biosynthesis. <i>Journal of the American Chemical Society</i> , 2007, 129, 13082-13094.	13.7	134
63	Regiospecific Chlorination of $\beta$ -Tyrosyl-Carrier Protein Catalyzed by SgcC3 in the Biosynthesis of the Eneidyne Antitumor Antibiotic C-1027. <i>Journal of the American Chemical Society</i> , 2007, 129, 12432-12438.	13.7	87
64	Characterization of NcsB2 as a Promiscuous Naphthoic Acid/Coenzyme A Ligase Integral to the Biosynthesis of the Eneidyne Antitumor Antibiotic Neocarzinostatin. <i>Journal of the American Chemical Society</i> , 2007, 129, 7728-7729.	13.7	27
65	Progress in combinatorial biosynthesis for drug discovery. <i>Drug Discovery Today: Technologies</i> , 2006, 3, 285-292.	4.0	14
66	The Bifunctional Glyceryl Transferase/Phosphatase OzmB Belonging to the HAD Superfamily That Diverts 1,3-Bisphosphoglycerate into Polyketide Biosynthesis. <i>Journal of the American Chemical Society</i> , 2006, 128, 10386-10387.	13.7	51
67	Microbial genomics for the improvement of natural product discovery. <i>Current Opinion in Microbiology</i> , 2006, 9, 252-260.	5.1	146
68	Substrate Specificity of the Adenylation Enzyme SgcC1 Involved in the Biosynthesis of the Eneidyne Antitumor Antibiotic C-1027. <i>Journal of Biological Chemistry</i> , 2006, 281, 29633-29640.	3.4	29
69	The Neocarzinostatin Biosynthetic Gene Cluster from <i>Streptomyces carzinostaticus</i> ATCC 15944 Involving Two Iterative Type I Polyketide Synthases. <i>Chemistry and Biology</i> , 2005, 12, 293-302.	6.0	125
70	From cyclohydrolase to oxidoreductase: Discovery of nitrile reductase activity in a common fold. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 4264-4269.	7.1	100
71	Biosynthesis of the $\beta$ -Amino Acid Moiety of the Eneidyne Antitumor Antibiotic C-1027 Featuring $\beta$ -Amino Acyl-S-carrier Protein Intermediates. <i>Journal of the American Chemical Society</i> , 2005, 127, 11594-11595.	13.7	49
72	Antitumor Antibiotics: Bleomycin, Eneidyne, and Mitomycin. <i>Chemical Reviews</i> , 2005, 105, 739-758.	47.7	502

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73	tRNA Modification by S-Adenosylmethionine:tRNA Ribosyltransferase-Isomerase. Journal of Biological Chemistry, 2003, 278, 10491-10499.	3.4	42
74	Hypermethylation of tRNA in Thermophilic Archaea. Journal of Biological Chemistry, 2000, 275, 28731-28738.	3.4	39