

Facile Chemoenzymatic Strategies for the Synthesis and
S-Adenosyl-L-Methionine Anal

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Enzymatic Methylation and Structure-Activity-Relationship Studies on Polycarcin V, a Gilvocarcin-Type Antitumor Agent. <i>ChemBioChem</i> , 2014, 15, 2729-2735.	1.3	8
2	Large-Scale, Protection-Free Synthesis of Se-Adenosyl-L-selenomethionine Analogues and Their Application as Cofactor Surrogates of Methyltransferases. <i>Organic Letters</i> , 2014, 16, 3056-3059.	2.4	48
3	Getting a handle on peptides. <i>Nature Chemistry</i> , 2014, 6, 1037-1038.	6.6	1
4	Understanding molecular recognition of promiscuity of thermophilic methionine adenosyltransferase s<sc>MAT</sc> from <i>SulfolobusÂsolfataricus</i>. <i>FEBS Journal</i> , 2014, 281, 4224-4239.	2.2	36
5	Indimicins Aâ€E, Bisindole Alkaloids from the Deep-Sea-Derived <i>Streptomyces</i> sp. SCSIO 03032. <i>Journal of Natural Products</i> , 2014, 77, 1887-1892.	1.5	49
6	Enzymatic Allylation of Catechols. <i>Chemistry Letters</i> , 2015, 44, 949-951.	0.7	1
7	Regiocomplementary Oâ€Methylation of Catechols by Using Threeâ€Enzyme Cascades. <i>ChemBioChem</i> , 2015, 16, 2576-2579.	1.3	37
8	Rationally engineered variants of S-adenosylmethionine (SAM) synthase: reduced product inhibition and synthesis of artificial cofactor homologues. <i>Chemical Communications</i> , 2015, 51, 3637-3640.	2.2	40
9	Emerging Enzymes for ATP Regeneration in Biocatalytic Processes. <i>ChemBioChem</i> , 2015, 16, 380-386.	1.3	149
10	A comprehensive review of glycosylated bacterial natural products. <i>Chemical Society Reviews</i> , 2015, 44, 7591-7697.	18.7	347
12	An efficient method for the synthesis of selenium modified nucleosides: its application in the synthesis of Se-adenosyl-<sc>l</sc>-selenomethionine (SeAM). <i>Organic and Biomolecular Chemistry</i> , 2015, 13, 9405-9417.	1.5	9
13	Cytotoxic Indolocarbazoles from <i>Actinomadura melliaura</i> ATCC 39691. <i>Journal of Natural Products</i> , 2015, 78, 1723-1729.	1.5	37
14	Site-specific bioalkylation of rapamycin by the RapM 16-O-methyltransferase. <i>Chemical Science</i> , 2015, 6, 2885-2892.	3.7	47
15	Opportunities for enzyme catalysis in natural product chemistry. <i>Tetrahedron</i> , 2015, 71, 1473-1508.	1.0	43
16	Loop dynamics of thymidine diphosphate-rhamnose 3â€O-methyltransferase (CalS11), an enzyme in calicheamicin biosynthesis. <i>Structural Dynamics</i> , 2016, 3, 012004.	0.9	5
17	Characterisation of the Broadly-Specific O-Methyl-transferase JerF from the Late Stages of Jerangolid Biosynthesis. <i>Molecules</i> , 2016, 21, 1443.	1.7	6
18	Functional AdoMet Isosteres Resistant to Classical AdoMet Degradation Pathways. <i>ACS Chemical Biology</i> , 2016, 11, 2484-2491.	1.6	36
19	Eine biokatalytische Kaskade fÃ¼r die vielseitige Eintopfâ€Modifizierung von mRNA ausgehend von Methioninanaloga. <i>Angewandte Chemie</i> , 2016, 128, 1951-1954.	1.6	28

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20	Effects of Active-Site Modification and Quaternary Structure on the Regioselectivity of Catechol-O-Methyltransferase. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 2683-2687.	7.2	58
21	AdoMet analog synthesis and utilization: current state of the art. <i>Current Opinion in Biotechnology</i> , 2016, 42, 189-197.	3.3	66
22	DNA Labeling Using DNA Methyltransferases. <i>Advances in Experimental Medicine and Biology</i> , 2016, 945, 511-535.	0.8	5
23	A Biocatalytic Cascade for Versatile One-Pot Modification of mRNA Starting from Methionine Analogues. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 1917-1920.	7.2	66
24	Chemoenzymatic synthesis and utilization of a SAM analog with an isomorphous nucleobase. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 6189-6192.	1.5	20
25	Effects of Active-Site Modification and Quaternary Structure on the Regioselectivity of Catechol-O-Methyltransferase. <i>Angewandte Chemie</i> , 2016, 128, 2733-2737.	1.6	25
26	One-pot modification of 5'-capped RNA based on methionine analogs. <i>Methods</i> , 2016, 107, 3-9.	1.9	18
27	An Enzyme Cascade for Selective Modification of Tyrosine Residues in Structurally Diverse Peptides and Proteins. <i>Journal of the American Chemical Society</i> , 2016, 138, 3038-3045.	6.6	49
28	Capturing Unknown Substrates via <i>In Situ</i> Formation of Tightly Bound Bisubstrate Adducts: S-Adenosyl-vinylthionine as a Functional Probe for AdoMet-Dependent Methyltransferases. <i>Journal of the American Chemical Society</i> , 2016, 138, 2877-2880.	6.6	19
29	Probing Chromatin-modifying Enzymes with Chemical Tools. <i>ACS Chemical Biology</i> , 2016, 11, 689-705.	1.6	15
30	Enzymatic Halogenation and Dehalogenation Reactions: Pervasive and Mechanistically Diverse. <i>Chemical Reviews</i> , 2017, 117, 5619-5674.	23.0	281
31	Catalytic Alkylation Using a Cyclic S-Adenosylmethionine Regeneration System. <i>Angewandte Chemie</i> , 2017, 129, 4095-4099.	1.6	42
32	Catalytic Alkylation Using a Cyclic S-Adenosylmethionine Regeneration System. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 4037-4041.	7.2	124
33	Recent advances in methyltransferase biocatalysis. <i>Current Opinion in Chemical Biology</i> , 2017, 37, 97-106.	2.8	90
34	Die Methyltransferase-gesteuerte Markierung von Biomolekülen und ihre Anwendungen. <i>Angewandte Chemie</i> , 2017, 129, 5266-5285.	1.6	13
35	Identification and characterization of a biosynthetic gene cluster for tryptophan dimers in deep sea-derived <i>Streptomyces</i> sp. SCSIO 03032. <i>Applied Microbiology and Biotechnology</i> , 2017, 101, 6123-6136.	1.7	16
36	New insights into polyene macrolide biosynthesis in <i>Couchioplanes caeruleus</i> . <i>Molecular BioSystems</i> , 2017, 13, 866-873.	2.9	9
37	A Tandem Enzymatic ² -Adenosyl-S-Methionine Formation with Methyl Transfer. <i>ChemBioChem</i> , 2017, 18, 992-995.	1.3	27

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38	New AdoMet Analogues as Tools for Enzymatic Transfer of Photo-Cross-Linkers and Capturing RNA-Protein Interactions. <i>Chemistry - A European Journal</i> , 2017, 23, 5988-5993.	1.7	48
39	Methyltransferase-Directed Labeling of Biomolecules and its Applications. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 5182-5200.	7.2	60
40	Chemo-enzymatic modification of eukaryotic mRNA. <i>Organic and Biomolecular Chemistry</i> , 2017, 15, 278-284.	1.5	10
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43	An ortho C-methylation/O-glycosylation motif on a hydroxy-coumarin scaffold, selectively installed by biocatalysis. <i>Organic and Biomolecular Chemistry</i> , 2017, 15, 7917-7924.	1.5	11
44	Deciphering Nature's Intricate Way of N-S-Dimethylating Cysteine: Sequential Action of Two Bifunctional Adenylation Domains. <i>Biochemistry</i> , 2017, 56, 6087-6097.	1.2	17
45	Enabling techniques in the search for new antibiotics: Combinatorial biosynthesis of sugar-containing antibiotics. <i>Biochemical Pharmacology</i> , 2017, 134, 56-73.	2.0	14
46	Enzymatic or In Vivo Installation of Propargyl Groups in Combination with Click Chemistry for the Enrichment and Detection of Methyltransferase Target Sites in RNA. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 6342-6346.	7.2	82
47	Enzymatischer oder In-vivo-Einbau von Propargylgruppen in Kombination mit Klick-Chemie zur Anreicherung und Detektion von Methyltransferase-Zielsequenzen in RNA. <i>Angewandte Chemie</i> , 2018, 130, 6451-6455.	1.6	19
48	Reversible modification of DNA by methyltransferase-catalyzed transfer and light-triggered removal of photo-caging groups. <i>Chemical Communications</i> , 2018, 54, 449-451.	2.2	42
49	Chemistry and Properties of Indolocarbazoles. <i>Chemical Reviews</i> , 2018, 118, 9058-9128.	23.0	125
50	Construction of Fluorescent Analogs to Follow the Uptake and Distribution of Cobalamin (Vitamin B12). <i>Journal of the American Chemical Society</i> , 2018, 140, 1000-1008.	2.5	30
52	Preparation, Assay, and Application of Chlorinase Sall for the Chemoenzymatic Synthesis of S-Adenosyl-L-Methionine and Analogs. <i>Methods in Enzymology</i> , 2018, 604, 367-388.	0.4	9
53	Streamlined recycling of S-adenosylmethionine. <i>Nature Catalysis</i> , 2019, 2, 644-645.	16.1	7
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55	S-Adenosyl Methionine Cofactor Modifications Enhance the Biocatalytic Repertoire of Small Molecule C-Alkylation. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 17583-17588.	7.2	30
56	Specific Residues Expand the Substrate Scope and Enhance the Regioselectivity of a Plant O-Methyltransferase. <i>ChemCatChem</i> , 2019, 11, 3227-3233.	1.8	10

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57	In-Cell Synthesis of Bioorthogonal Alkene Tag S-Allyl-Homocysteine and Its Coupling with Reprogrammed Translation. <i>International Journal of Molecular Sciences</i> , 2019, 20, 2299.	1.8	9
58	Repurposing enzymatic transferase reactions for targeted labeling and analysis of DNA and RNA. <i>Current Opinion in Biotechnology</i> , 2019, 55, 114-123.	3.3	22
59	Bisindole. , 2020, , 467-485.		1
60	Chemoenzymatic treatment of RNA to facilitate analyses. <i>Wiley Interdisciplinary Reviews RNA</i> , 2020, 11, e1561.	3.2	31
61	Lysine Ethylation by Histone Lysine Methyltransferases. <i>ChemBioChem</i> , 2020, 21, 392-400.	1.3	9
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64	Engineering Orthogonal Methyltransferases to Create Alternative Bioalkylation Pathways. <i>Angewandte Chemie</i> , 2020, 132, 15060-15066.	1.6	21
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66	Round, round we go – strategies for enzymatic cofactor regeneration. <i>Natural Product Reports</i> , 2020, 37, 1316-1333.	5.2	115
67	Methionine Adenosyltransferase Engineering to Enable Bioorthogonal Platforms for AdoMet-Utilizing Enzymes. <i>ACS Chemical Biology</i> , 2020, 15, 695-705.	1.6	20
68	Nucleoside-modified AdoMet analogues for differential methyltransferase targeting. <i>Chemical Communications</i> , 2020, 56, 2115-2118.	2.2	27
69	Identification of a novel methyltransferase-type 12 protein from <i>Haemonchus contortus</i> and its effects on functions of goat PBMCs. <i>Parasites and Vectors</i> , 2020, 13, 154.	1.0	6
70	Engineered SAM Synthetases for Enzymatic Generation of AdoMet Analogs with Photocaging Groups and Reversible DNA Modification in Cascade Reactions. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 480-485.	7.2	36
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72	Tag-Free Internal RNA Labeling and Photocaging Based on mRNA Methyltransferases. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 4098-4103.	7.2	40
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74	Tag-Free Internal RNA Labeling and Photocaging Based on mRNA Methyltransferases. <i>Angewandte Chemie</i> , 2021, 133, 4144-4149.	1.6	11

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75	Directed Evolution of a Halide Methyltransferase Enables Biocatalytic Synthesis of Diverse SAM Analogs. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 1524-1527.	7.2	54
76	A bicyclic <i>S</i> -adenosylmethionine regeneration system applicable with different nucleosides or nucleotides as cofactor building blocks. <i>RSC Chemical Biology</i> , 2021, 2, 883-891.	2.0	24
77	Precise identification of an RNA methyltransferase's substrate modification site. <i>Chemical Communications</i> , 2021, 57, 2499-2502.	2.2	7
78	Recent trends in biocatalysis. <i>Chemical Society Reviews</i> , 2021, 50, 8003-8049.	18.7	175
80	Enzymkatalysierte späte Modifizierungen: Besser spät als nie. <i>Angewandte Chemie</i> , 2021, 133, 16962-16993.	1.6	11
81	Enzymatic Late-Stage Modifications: Better Late Than Never. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 16824-16855.	7.2	75
82	From Natural Methylation to Versatile Alkylations Using Halide Methyltransferases. <i>ChemBioChem</i> , 2021, 22, 2584-2590.	1.3	15
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89	From Stoichiometric Reagents to Catalytic Partners: Selenonium Salts as Alkylating Agents for Nucleophilic Displacement Reactions in Water. <i>Advanced Synthesis and Catalysis</i> , 0, .	2.1	5
90	Visible-Light Removable Photocaging Groups Accepted by MjMAT Variant: Structural Basis and Compatibility with DNA and RNA Methyltransferases. <i>ChemBioChem</i> , 2022, 23, e202100437.	1.3	9
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96	Substrate Profiling of Anion Methyltransferases for Promiscuous Synthesis of S-Adenosylmethionine Analogs from Haloalkanes. ChemBioChem, 2022, 23, .	1.3	20
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98	Functionalised Cofactor Mimics for Interactome Discovery and Beyond. Angewandte Chemie - International Edition, 2022, , .	7.2	10
99	Analogs of S-Adenosyl-L-Methionine in Studies of Methyltransferases. Molecular Biology, 2022, 56, 229-250.	0.4	15
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105	Selective Biocatalytic N-Methylation of Unsaturated Heterocycles. Angewandte Chemie - International Edition, 2022, 61, .	7.2	13
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111	Sequence-specific DNA labelling for fluorescence microscopy. Biosensors and Bioelectronics, 2023, 230, 115256.	5.3	1

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113	Comparative <i>S</i> -adenosyl-methionine analogue generation for selective biocatalytic Friedel-Crafts alkylation. <i>Chemical Communications</i> , 2023, 59, 5463-5466.	2.2	0