

Katherine S Ryan

List of Publications by Year in descending order

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Version: 2024-02-01

38
papers

1,677
citations

430754

18
h-index

330025

37
g-index

42
all docs

42
docs citations

42
times ranked

1995
citing authors

#	ARTICLE	IF	CITATIONS
1	Direct cloning and refactoring of a silent lipopeptide biosynthetic gene cluster yields the antibiotic taromycin A. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 1957-1962.	3.3	403
2	Biocatalysis. <i>Nature Reviews Methods Primers</i> , 2021, 1, .	11.8	255
3	Biosynthetic Manipulation of Tryptophan in Bacteria: Pathways and Mechanisms. <i>Chemistry and Biology</i> , 2015, 22, 317-328.	6.2	142
4	A heme-dependent enzyme forms the nitrogen–nitrogen bond in piperazate. <i>Nature Chemical Biology</i> , 2017, 13, 836-838.	3.9	108
5	Biosynthetic Pathways to Nonproteinogenic Î±-Amino Acids. <i>Chemical Reviews</i> , 2020, 120, 3161-3209.	23.0	94
6	Pyridoxal phosphate-dependent reactions in the biosynthesis of natural products. <i>Natural Product Reports</i> , 2019, 36, 430-457.	5.2	75
7	Two-Enzyme Pathway Links <i>l</i> -Arginine to Nitric Oxide in <i>N</i> -Nitroso Biosynthesis. <i>Journal of the American Chemical Society</i> , 2019, 141, 4026-4033.	6.6	64
8	Piperazic acid-containing natural products: structures and biosynthesis. <i>Natural Product Reports</i> , 2019, 36, 1628-1653.	5.2	53
9	In vitro reconstitution of indolmycin biosynthesis reveals the molecular basis of oxazolinone assembly. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 2717-2722.	3.3	51
10	The Biosynthetic Gene Cluster of Pyrazomycin–A Nucleoside Antibiotic with a Rare Pyrazole Moiety. <i>ChemBioChem</i> , 2020, 21, 644-649.	1.3	38
11	A pyridoxal phosphate–dependent enzyme that oxidizes an unactivated carbon-carbon bond. <i>Nature Chemical Biology</i> , 2016, 12, 194-199.	3.9	37
12	Synthetic and biosynthetic routes to nitrogen–nitrogen bonds. <i>Chemical Society Reviews</i> , 2022, 51, 2991-3046.	18.7	37
13	In vitro Reconstitution of the Biosynthetic Pathway to the Nitroimidazole Antibiotic Azomycin. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 11647-11651.	7.2	36
14	Biosynthesis of the N–N Bond–Containing Compound <i>l</i> -Alanosine. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 3881-3885.	7.2	35
15	Biosynthetic Gene Cluster for the Cladoniamides, Bis-Indoles with a Rearranged Scaffold. <i>PLoS ONE</i> , 2011, 6, e23694.	1.1	34
16	Emergence of oxygen– and pyridoxal phosphate–dependent reactions. <i>FEBS Journal</i> , 2020, 287, 1403-1428.	2.2	29
17	N-Carbamoylation of 2,4-Diaminobutyrate Reroutes the Outcome in Padanamide Biosynthesis. <i>Chemistry and Biology</i> , 2013, 20, 1002-1011.	6.2	24
18	Expansion of Bisindole Biosynthetic Pathways by Combinatorial Construction. <i>ACS Synthetic Biology</i> , 2015, 4, 682-688.	1.9	22

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19	Reduced deformability of parasitized red blood cells as a biomarker for anti-malarial drug efficacy. <i>Malaria Journal</i> , 2015, 14, 428.	0.8	17
20	Catalytic repertoire of bacterial bisindole formation. <i>Current Opinion in Chemical Biology</i> , 2016, 31, 74-81.	2.8	14
21	Incarnatopeptins A and B, Nonribosomal Peptides Discovered Using Genome Mining and ¹ H/ ¹⁵ N HSQC-TOCSY. <i>Organic Letters</i> , 2020, 22, 4053-4057.	2.4	14
22	Snapshots of the Catalytic Cycle of an O ₂ , Pyridoxal Phosphate-Dependent Hydroxylase. <i>ACS Chemical Biology</i> , 2018, 13, 965-974.	1.6	12
23	Convergent biosynthetic transformations to a bacterial specialized metabolite. <i>Nature Chemical Biology</i> , 2019, 15, 1043-1048.	3.9	10
24	Glycine-derived nitronates bifurcate to O-methylation or denitrification in bacteria. <i>Nature Chemistry</i> , 2021, 13, 599-606.	6.6	10
25	Biosynthesis of the N ⁶ -N ⁶ -Bond ⁶ -Containing Compound I ⁶ -Alanosine. <i>Angewandte Chemie</i> , 2020, 132, 3909-3913.	1.6	9
26	Comparative Genomics Identified a Genetic Locus in Plant-Associated <i>Pseudomonas</i> spp. That Is Necessary for Induced Systemic Susceptibility. <i>MBio</i> , 2020, 11, .	1.8	9
27	Expansion of Gamma-Butyrolactone Signaling Molecule Biosynthesis to Phosphotriester Natural Products. <i>ACS Chemical Biology</i> , 2020, 15, 3253-3261.	1.6	8
28	A shared mechanistic pathway for pyridoxal phosphate ⁶ -dependent arginine oxidases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	7
29	N-Glycan Degradation Pathways in Gut- and Soil-Dwelling Actinobacteria Share Common Core Genes. <i>ACS Chemical Biology</i> , 2021, 16, 701-711.	1.6	6
30	An Asymmetric Reductase That Intercepts Acyclic Imino Acids Produced <i>in Situ</i> by a Partner Oxidase. <i>Journal of the American Chemical Society</i> , 2019, 141, 12258-12267.	6.6	5
31	Metalloenzymes in natural product biosynthetic pathways. <i>Natural Product Reports</i> , 2018, 35, 612-614.	5.2	4
32	Generating a fucose permease deletion mutant in <i>Bifidobacterium longum</i> subspecies <i>infantis</i> ATCC 15697. <i>Anaerobe</i> , 2021, 68, 102320.	1.0	3
33	Dentigerumycin F and G: Dynamic structures retrieved through a genome-mining/nitrogen-NMR methodology. <i>Tetrahedron Letters</i> , 2022, 94, 153688.	0.7	3
34	In ⁶ -vitro Reconstitution of the Biosynthetic Pathway to the Nitroimidazole Antibiotic Azomycin. <i>Angewandte Chemie</i> , 2019, 131, 11773-11777.	1.6	2
35	An engineered biosynthetic ⁶ -synthetic platform for production of halogenated indolmycin antibiotics. <i>Chemical Science</i> , 2021, 12, 8817-8821.	3.7	2
36	Natural Products Produced in Culture by Biosynthetically Talented <i>Salinispora arenicola</i> Strains Isolated from Northeastern and South Pacific Marine Sediments. <i>Molecules</i> , 2022, 27, 3569.	1.7	1

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37	Editorial: Mechanistic biology in the biosynthesis of specialized metabolites. Current Opinion in Chemical Biology, 2020, 59, A1-A3.	2.8	0
38	Snapshots of the catalytic cycle of an O ₂ , pyridoxal phosphate-dependent hydroxylase. FASEB Journal, 2018, 32, 796.35.	0.2	0