

# Dominic J Campopiano

## List of Publications by Year in descending order

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103  
papers

5,084  
citations

117625

34  
h-index

95266

68  
g-index

113  
all docs

113  
docs citations

113  
times ranked

6412  
citing authors

#	ARTICLE	IF	CITATIONS
1	Creation of an Engineered Amide Synthetase Biocatalyst by the Rational Separation of a Two-Step Nitrile Synthetase. <i>ChemBioChem</i> , 2022, 23, .	2.6	3
2	<i>N</i> -Phenylputrescine (NPP): a natural product inspired amine donor for biocatalysis. <i>Green Chemistry</i> , 2022, 24, 2010-2016.	9.0	11
3	Convergent evolution of bacterial ceramide synthesis. <i>Nature Chemical Biology</i> , 2022, 18, 305-312.	8.0	36
4	Buy one, get one free. , 2022, 1, 420-421.		2
5	Characterization of inositol lipid metabolism in gut-associated Bacteroidetes. <i>Nature Microbiology</i> , 2022, 7, 986-1000.	13.3	19
6	Direct monitoring of biocatalytic deacetylation of amino acid substrates by <sup>1</sup> H NMR reveals fine details of substrate specificity. <i>Organic and Biomolecular Chemistry</i> , 2021, 19, 4904-4909.	2.8	1
7	The <i>N</i> -Acetyl Amino Acid Racemases (NAAARs); Native and evolved biocatalysts applied to the synthesis of canonical and non-canonical amino acids. <i>Current Opinion in Biotechnology</i> , 2021, 69, 212-220.	6.6	3
8	Solution Structure and Conformational Dynamics of a Doublet Acyl Carrier Protein from Prodigiosin Biosynthesis. <i>Biochemistry</i> , 2021, 60, 219-230.	2.5	4
9	<i>D</i> -Phenylglycine aminotransferase ( <i>D</i> -PhgAT) – substrate scope and structural insights of a stereo-inverting biocatalyst used in the preparation of aromatic amino acids. <i>Catalysis Science and Technology</i> , 2020, 10, 6533-6543.	4.1	2
10	Editorial overview: Biocatalysis and biotransformations. <i>Current Opinion in Chemical Biology</i> , 2020, 55, A1-A3.	6.1	0
11	Harnessing and engineering amide bond forming ligases for the synthesis of amides. <i>Current Opinion in Chemical Biology</i> , 2020, 55, 77-85.	6.1	36
12	Synthesis of <i>N</i> -acyl amide natural products using a versatile adenylating biocatalyst. <i>MedChemComm</i> , 2019, 10, 1192-1196.	3.4	22
13	Use of isotopically labeled substrates reveals kinetic differences between human and bacterial serine palmitoyltransferase. <i>Journal of Lipid Research</i> , 2019, 60, 953-962.	4.2	7
14	The carbon chain-selective adenylation enzyme TamA: the missing link between fatty acid and pyrrole natural product biosynthesis. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 2735-2740.	2.8	17
15	Non-invasive <sup>19</sup> F NMR analysis of a protein-templated <i>N</i> -acylhydrazone dynamic combinatorial library. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 8144-8149.	2.8	7
16	Hydrogen Peroxide-Based Fluorometric Assay for Real-Time Monitoring of SAM-Dependent Methyltransferases. <i>Frontiers in Bioengineering and Biotechnology</i> , 2018, 6, 146.	4.1	8
17	Sphingolipid biosynthesis in man and microbes. <i>Natural Product Reports</i> , 2018, 35, 921-954.	10.3	116
18	Using the pimeloyl-CoA synthetase adenylation fold to synthesize fatty acid thioesters. <i>Nature Chemical Biology</i> , 2017, 13, 660-667.	8.0	21

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19	Structural evidence for the covalent modification of FabH by 4,5-dichloro-1,2-dithiol-3-one (HR45). <i>Organic and Biomolecular Chemistry</i> , 2017, 15, 6310-6313.	2.8	8
20	Characterization of homologous sphingosine-1-phosphate lyase isoforms in the bacterial pathogen <i>Burkholderia pseudomallei</i> . <i>Journal of Lipid Research</i> , 2017, 58, 137-150.	4.2	11
21	IL-1 $\beta$ -Induced Protection of Keratinocytes against <i>Staphylococcus aureus</i> -Secreted Proteases Is Mediated by Human $\beta$ -Defensin 2. <i>Journal of Investigative Dermatology</i> , 2017, 137, 95-105.	0.7	39
22	Insight into Coenzyme A cofactor binding and the mechanism of acyl-transfer in an acylating aldehyde dehydrogenase from <i>Clostridium phytofermentans</i> . <i>Scientific Reports</i> , 2016, 6, 22108.	3.3	18
23	Characterization of secreted sphingosine-1-phosphate lyases required for virulence and intracellular survival of <i>Burkholderia pseudomallei</i> . <i>Molecular Microbiology</i> , 2016, 102, 1004-1019.	2.5	19
24	Determination of Protein Thiol Reduction Potential by Isotope Labeling and Intact Mass Measurement. <i>Analytical Chemistry</i> , 2016, 88, 2727-2733.	6.5	5
25	Molecular basis of <i>Streptococcus mutans</i> sortase A inhibition by the flavonoid natural product trans-chalcone. <i>Chemical Communications</i> , 2015, 51, 10483-10485.	4.1	39
26	Insights into the Conformations of Three Structurally Diverse Proteins: Cytochrome <i>c</i> , p53, and MDM2, Provided by Variable-Temperature Ion Mobility Mass Spectrometry. <i>Analytical Chemistry</i> , 2015, 87, 3231-3238.	6.5	33
27	Continuous Colorimetric Assay That Enables High-Throughput Screening of N-Acetylamino Acid Racemases. <i>Analytical Chemistry</i> , 2015, 87, 3923-3928.	6.5	11
28	Desalting large protein complexes during native electrospray mass spectrometry by addition of amino acids to the working solution. <i>Analyst</i> , 2015, 140, 2679-2686.	3.5	35
29	Garlic Revisited: Antimicrobial Activity of Allicin-Containing Garlic Extracts against <i>Burkholderia cepacia</i> Complex. <i>PLoS ONE</i> , 2014, 9, e112726.	2.5	96
30	ACP $\beta$ -AasS You Like It. <i>Chemistry and Biology</i> , 2014, 21, 1257-1259.	6.0	3
31	Reconstitution of the pyridoxal 5-phosphate (PLP) dependent enzyme serine palmitoyltransferase (SPT) with pyridoxal reveals a crucial role for the phosphate during catalysis. <i>Chemical Communications</i> , 2013, 49, 7058.	4.1	13
32	Triazole biotin: a tight-binding biotinidase-resistant conjugate. <i>Organic and Biomolecular Chemistry</i> , 2013, 11, 7700.	2.8	18
33	Ribosomally synthesized and post-translationally modified peptide natural products: overview and recommendations for a universal nomenclature. <i>Natural Product Reports</i> , 2013, 30, 108-160.	10.3	1,692
34	The Chemical Basis of Serine Palmitoyltransferase Inhibition by Myriocin. <i>Journal of the American Chemical Society</i> , 2013, 135, 14276-14285.	13.7	98
35	The Pyridoxal 5-Phosphate (PLP)-Dependent Enzyme Serine Palmitoyltransferase (SPT): Effects of the Small Subunits and Insights from Bacterial Mimics of Human hLCB2a HSN1 Mutations. <i>BioMed Research International</i> , 2013, 2013, 1-13.	1.9	8
36	Partial Complementation of <i>Sinorhizobium meliloti</i> bacA Mutant Phenotypes by the <i>Mycobacterium tuberculosis</i> BacA Protein. <i>Journal of Bacteriology</i> , 2013, 195, 389-398.	2.2	24

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37	l-Penicillamine is a mechanism-based inhibitor of serine palmitoyltransferase by forming a pyridoxal-5-phosphate-thiazolidine adduct. <i>MedChemComm</i> , 2012, 3, 1003.	3.4	14
38	An Improved Racemase/Acylase Biotransformation for the Preparation of Enantiomerically Pure Amino Acids. <i>Journal of the American Chemical Society</i> , 2012, 134, 19310-19313.	13.7	64
39	Structural, mechanistic and regulatory studies of serine palmitoyltransferase. <i>Biochemical Society Transactions</i> , 2012, 40, 547-554.	3.4	80
40	Bivalent Enzyme Inhibitors Discovered Using Dynamic Covalent Chemistry. <i>Chemistry - A European Journal</i> , 2012, 18, 10562-10570.	3.3	44
41	Ferric ion (hydr)oxo clusters in the "Venus flytrap" cleft of FbpA: MÃ¶ssbauer, calorimetric and mass spectrometric studies. <i>Journal of Biological Inorganic Chemistry</i> , 2012, 17, 573-588.	2.6	3
42	Role of a conserved arginine residue during catalysis in serine palmitoyltransferase. <i>FEBS Letters</i> , 2011, 585, 1729-1734.	2.8	15
43	The serine palmitoyltransferase from <i>Sphingomonas wittichii</i> RW1: An interesting link to an unusual acyl carrier protein. <i>Biopolymers</i> , 2010, 93, 811-822.	2.4	37
44	Nucleophilic catalysis of acylhydrazone equilibration for protein-directed dynamic covalent chemistry. <i>Nature Chemistry</i> , 2010, 2, 490-497.	13.6	170
45	Niobium Uptake and Release by Bacterial Ferric Ion Binding Protein. <i>Bioinorganic Chemistry and Applications</i> , 2010, 2010, 1-11.	4.1	6
46	Peptide Fragments of a Î²-Defensin Derivative with Potent Bactericidal Activity. <i>Antimicrobial Agents and Chemotherapy</i> , 2010, 54, 1922-1929.	3.2	13
47	Antimicrobial Activity of CHIR-090, an Inhibitor of Lipopolysaccharide Biosynthesis, against the <i>Burkholderia cepacia</i> Complex. <i>Antimicrobial Agents and Chemotherapy</i> , 2010, 54, 3531-3533.	3.2	15
48	Subdivision of the Bacterioferritin Comigratory Protein Family of Bacterial Peroxiredoxins Based on Catalytic Activity. <i>Biochemistry</i> , 2010, 49, 1319-1330.	2.5	34
49	Interaction of Human Î²-Defensin 2 (HBD2) with Glycosaminoglycans. <i>Biochemistry</i> , 2010, 49, 10486-10495.	2.5	46
50	Conformational Preferences of Linear Î²-Defensins Are Revealed by Ion Mobility-Mass Spectrometry. <i>Journal of Physical Chemistry B</i> , 2010, 114, 2312-2318.	2.6	15
51	Isoleucine/leucine <sup>2</sup> is essential for chemoattractant activity of Î²-defensin Defb14 through chemokine receptor 6. <i>Molecular Immunology</i> , 2010, 47, 1378-1382.	2.2	21
52	Synthesis and application of a new cleavable linker for "click"-based affinity chromatography. <i>Organic and Biomolecular Chemistry</i> , 2010, 8, 56-59.	2.8	42
53	Binding a heparin derived disaccharide to defensin inspired peptides: insights to antimicrobial inhibition from gas-phase measurements. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 3589.	2.8	11
54	Inhibition of the PLP-dependent enzyme serine palmitoyltransferase by cycloserine: evidence for a novel decarboxylative mechanism of inactivation. <i>Molecular BioSystems</i> , 2010, 6, 1682.	2.9	39

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55	The External Aldimine Form of Serine Palmitoyltransferase. <i>Journal of Biological Chemistry</i> , 2009, 284, 17328-17339.	3.4	57
56	Dying and Necrotic Neutrophils Are Anti-Inflammatory Secondary to the Release of $\hat{\imath}^2$ -Defensins. <i>Journal of Immunology</i> , 2009, 183, 2122-2132.	0.8	141
57	Contributions of two UDP-glucose dehydrogenases to viability and polymyxin B resistance of <i>Burkholderia cenocepacia</i> . <i>Microbiology (United Kingdom)</i> , 2009, 155, 2029-2039.	1.8	31
58	Insights into How Nucleotide-Binding Domains Power ABC Transport. <i>Structure</i> , 2009, 17, 1213-1222.	3.3	40
59	Defensin-related peptide 1 (Defr1) is allelic to Defb8 and chemoattracts immature DC and CD4 <sup>+</sup> T cells independently of CCR6. <i>European Journal of Immunology</i> , 2009, 39, 1353-1360.	2.9	22
60	Effective Binding and Sensing of Lipopolysaccharide: Combining Complementary Pattern Recognition Receptors. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 356-360.	13.8	37
61	Interrogating the Molecular Details of the Peroxiredoxin Activity of the <i>Escherichia coli</i> Bacterioferritin Comigratory Protein Using High-Resolution Mass Spectrometry. <i>Biochemistry</i> , 2009, 48, 3904-3914.	2.5	18
62	Preparation of isotopically labelled recombinant $\hat{\imath}^2$ -defensin for NMR studies. <i>Protein Expression and Purification</i> , 2009, 65, 179-184.	1.3	6
63	Structural and Functional Studies of the Biotin Protein Ligase from <i>Aquifex aeolicus</i> Reveal a Critical Role for a Conserved Residue in Target Specificity. <i>Journal of Molecular Biology</i> , 2009, 387, 129-146.	4.2	39
64	Efficient Production of Human $\hat{\imath}^2$ -Defensin 2 (HBD2) in <i>Escherichia coli</i> . <i>Protein and Peptide Letters</i> , 2009, 16, 668-676.	0.9	17
65	Nitrilotriacetic Acid-Derivatized Quantum Dots for Simple Purification and Site-Selective Fluorescent Labeling of Active Proteins in a Single Step. <i>Bioconjugate Chemistry</i> , 2008, 19, 1964-1967.	3.6	32
66	Plant host and sugar alcohol induced exopolysaccharide biosynthesis in the <i>Burkholderia cepacia</i> complex. <i>Microbiology (United Kingdom)</i> , 2008, 154, 2513-2521.	1.8	37
67	Analysis and Separation of Residues Important for the Chemoattractant and Antimicrobial Activities of $\hat{\imath}^2$ -Defensin 3. <i>Journal of Biological Chemistry</i> , 2008, 283, 6631-6639.	3.4	81
68	Covalent Dimer Species of $\hat{\imath}^2$ -Defensin Defr1 Display Potent Antimicrobial Activity against Multidrug-Resistant Bacterial Pathogens. <i>Antimicrobial Agents and Chemotherapy</i> , 2007, 51, 1719-1724.	3.2	29
69	A Putative Gene Cluster for Aminoarabinose Biosynthesis Is Essential for <i>Burkholderia cenocepacia</i> Viability. <i>Journal of Bacteriology</i> , 2007, 189, 3639-3644.	2.2	101
70	The Structure of Serine Palmitoyltransferase; Gateway to Sphingolipid Biosynthesis. <i>Journal of Molecular Biology</i> , 2007, 370, 870-886.	4.2	124
71	Maturation of McjA precursor peptide into active microcin MccJ25. <i>Organic and Biomolecular Chemistry</i> , 2007, 5, 2564.	2.8	49
72	Metals in membranes. <i>Chemical Society Reviews</i> , 2007, 36, 968.	38.1	25

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73	Histidine ligands in bacterial metallothionein enhance cluster stability. <i>Journal of Biological Inorganic Chemistry</i> , 2007, 12, 393-405.	2.6	41
74	Essential metals. <i>Natural Product Reports</i> , 2007, 24, B46-7.	10.3	0
75	Mechanism of $\hat{L}\pm$ -oxoamine synthases: identification of the intermediate Claisen product in the 8-amino-7-oxononanoate synthase reaction. <i>Chemical Communications</i> , 2006, , 60-62.	4.1	32
76	Suicide inhibition of $\hat{L}\pm$ -oxamine synthases: structures of the covalent adducts of 8-amino-7-oxononanoate synthase with trifluoroalanine. <i>Organic and Biomolecular Chemistry</i> , 2006, 4, 1209.	2.8	35
77	Discovery of Glutathione S-Transferase Inhibitors Using Dynamic Combinatorial Chemistry. <i>Journal of the American Chemical Society</i> , 2006, 128, 8459-8467.	13.7	78
78	Structural and functional studies of defensin-inspired peptides. <i>Biochemical Society Transactions</i> , 2006, 34, 251.	3.4	13
79	Characterisation of DEFB107 by mass spectrometry: Lessons from an anti-antimicrobial defensin. <i>International Journal of Mass Spectrometry</i> , 2006, 252, 180-188.	1.5	14
80	Short Oxo $\hat{L}$ -Titanium(IV) Bond in Bacterial Transferrin: A Protein Target for Metalloantibiotics. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 2758-2761.	13.8	23
81	Is it biologically relevant to measure the structures of small peptides in the gas-phase?. <i>International Journal of Mass Spectrometry</i> , 2005, 240, 273-284.	1.5	67
82	Temperate bacteriophages DK4 and BcepMu from <i>Burkholderia cenocepacia</i> 2315 are identical. <i>FEMS Immunology and Medical Microbiology</i> , 2005, 45, 349-350.	2.7	5
83	Cloning, expression, purification, crystallization and preliminary X-ray characterization of the full-length single-stranded DNA-binding protein from the hyperthermophilic bacterium <i>Aquifex aeolicus</i> . <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2004, 60, 2009-2012.	2.5	1
84	Assembly of an Oxo-Zirconium(IV) Cluster in a Protein Cleft. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 5914-5918.	13.8	32
85	Structure-Activity Relationships in Defensin Dimers. <i>Journal of Biological Chemistry</i> , 2004, 279, 48671-48679.	3.4	85
86	Biotinylation in the hyperthermophile <i>Aquifex aeolicus</i> . Isolation of a cross-linked BPL:BCCP complex. <i>FEBS Journal</i> , 2003, 270, 1277-1287.	0.2	14
87	A novel protein $\hat{L}$ -mineral interface. <i>Nature Structural and Molecular Biology</i> , 2003, 10, 297-302.	8.2	48
88	The mechanism of 7,8-diaminopelargonate synthase; the role of S-adenosylmethionine as the amino donor. <i>Organic and Biomolecular Chemistry</i> , 2003, 1, 3498.	2.8	17
89	Synergistic Anion and Metal Binding to the Ferric Ion-binding Protein from <i>Neisseria gonorrhoeae</i> . <i>Journal of Biological Chemistry</i> , 2003, 278, 2490-2502.	3.4	61
90	Oxo-iron clusters in a bacterial iron-trafficking protein: new roles for a conserved motif. <i>Biochemical Journal</i> , 2003, 376, 35-41.	3.7	42

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91	Purification and characterisation of the BIOH protein from the biotin biosynthetic pathway. FEBS Letters, 2002, 513, 299-304.	2.8	28
92	Probing the NADPH-binding site of Escherichia coli flavodoxin oxidoreductase. Biochemical Journal, 2000, 352, 257.	3.7	6
93	Identification of the [Fe-S] Cluster-binding Residues of Escherichia coli Biotin Synthase. Journal of Biological Chemistry, 2000, 275, 13888-13894.	3.4	28
94	Mechanism of 8-Amino-7-oxononanoate Synthase: Spectroscopic, Kinetic, and Crystallographic Studies. Biochemistry, 2000, 39, 516-528.	2.5	129
95	Mechanistic Studies Of 8-Amino-7-Oxononanoate Synthase.. , 2000, , 135-142.		0
96	Cubic crystals of chloramphenicol phosphotransferase from Streptomyces venezuelae in complex with chloramphenicol. Acta Crystallographica Section D: Biological Crystallography, 1999, 55, 1086-1088.	2.5	5
97	Ferredoxin NADP+ reductase; identification of key residues involved in NADPH binding and electron transfer. Biochemical Society Transactions, 1999, 27, A56-A56.	3.4	0
98	Characterisation of ferredoxin (flavodoxin) NADP+ reductase and flavodoxin; key components of electron transfer in Escherichia coli. Biochemical Society Transactions, 1999, 27, A56-A56.	3.4	0
99	Characterisation of flavodoxin NADP+ oxidoreductase and flavodoxin; key components of electron transfer in Escherichia coli. FEBS Journal, 1998, 257, 577-585.	0.2	90
100	Rational design of an inhibitor of dethiobiotin synthetase; interaction of 6-hydroxypyrimidin-4(3H)-one with the adenine base binding site. Tetrahedron, 1998, 54, 15891-15898.	1.9	8
101	The crystal structure of 8-amino-7-oxononanoate synthase: a bacterial PLP-dependent, acyl-CoA-condensing enzyme 1 Edited by R. Huber. Journal of Molecular Biology, 1998, 284, 401-419.	4.2	127
102	Characterisation of 8-amino-7-oxononanoate synthase: A bacterial PLP-dependent, acyl CoA condensing enzyme. Biochemical Society Transactions, 1998, 26, S268-S268.	3.4	8
103	An investigation of flavoprotein redox partners. Biochemical Society Transactions, 1998, 26, S271-S271.	3.4	0