

# Catherine L Drennan

## List of Publications by Year in descending order

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Version: 2024-02-01

27  
papers

523  
citations

687363

13  
h-index

677142

22  
g-index

28  
all docs

28  
docs citations

28  
times ranked

617  
citing authors

#	ARTICLE	IF	CITATIONS
1	Structure of a trapped radical transfer pathway within a ribonucleotide reductase holocomplex. <i>Science</i> , 2020, 368, 424-427.	12.6	82
2	Redox-dependent rearrangements of the NiFeS cluster of carbon monoxide dehydrogenase. <i>ELife</i> , 2018, 7, .	6.0	43
3	Structural basis for methylphosphonate biosynthesis. <i>Science</i> , 2017, 358, 1336-1339.	12.6	39
4	Structure-Guided Identification of a Small Molecule That Inhibits Anaerobic Choline Metabolism by Human Gut Bacteria. <i>Journal of the American Chemical Society</i> , 2019, 141, 33-37.	13.7	39
5	3.3-Å... resolution cryo-EM structure of human ribonucleotide reductase with substrate and allosteric regulators bound. <i>ELife</i> , 2018, 7, .	6.0	37
6	X-ray crystallography-based structural elucidation of enzyme-bound intermediates along the 1-deoxy-d-xylulose 5-phosphate synthase reaction coordinate. <i>Journal of Biological Chemistry</i> , 2019, 294, 12405-12414.	3.4	24
7	Cobalamin-Dependent Radical S-Adenosylmethionine Enzymes: Capitalizing on Old Motifs for New Functions. <i>ACS Bio &amp; Med Chem Au</i> , 2022, 2, 173-186.	3.7	24
8	Conformational Motions and Water Networks at the $\hat{1}\pm/\hat{1}^2$ Interface in <i>E. coli</i> Ribonucleotide Reductase. <i>Journal of the American Chemical Society</i> , 2020, 142, 13768-13778.	13.7	21
9	A widely distributed diheme enzyme from Burkholderia that displays an atypically stable bis-Fe(IV) state. <i>Nature Communications</i> , 2019, 10, 1101.	12.8	20
10	Crystallographic Characterization of the Carbonylated A-Cluster in Carbon Monoxide Dehydrogenase/Acetyl-CoA Synthase. <i>ACS Catalysis</i> , 2020, 10, 9741-9746.	11.2	19
11	The Solvent-Exposed Fe-S D-Cluster Contributes to Oxygen-Resistance in <i>Desulfovibrio vulgaris</i> Ni-Fe Carbon Monoxide Dehydrogenase. <i>ACS Catalysis</i> , 2020, 10, 7328-7335.	11.2	18
12	Biochemical and crystallographic investigations into isonitrile formation by a nonheme iron-dependent oxidase/decarboxylase. <i>Journal of Biological Chemistry</i> , 2021, 296, 100231.	3.4	16
13	Molecular basis for catabolism of the abundant metabolite trans-4-hydroxy-L-proline by a microbial glycol radical enzyme. <i>ELife</i> , 2020, 9, .	6.0	16
14	Structural insight into metal cofactor maturation in carbon monoxide dehydrogenase. <i>Journal of Biological Chemistry</i> , 2019, 294, 13017-13026.	3.4	15
15	Solution structure and biochemical characterization of a spare part protein that restores activity to an oxygen-damaged glycol radical enzyme. <i>Journal of Biological Inorganic Chemistry</i> , 2019, 24, 817-829.	2.6	14
16	Gated Proton Release during Radical Transfer at the Subunit Interface of Ribonucleotide Reductase. <i>Journal of the American Chemical Society</i> , 2021, 143, 176-183.	13.7	14
17	Biochemical and Structural Characterization of a Schiff Base in the Radical-Mediated Biosynthesis of 4-Demethylwyosine by TYW1. <i>Journal of the American Chemical Society</i> , 2018, 140, 6842-6852.	13.7	13
18	Biophysical Examination of the Calcium-Modulated Nickel-Binding Properties of Human Calprotectin Reveals Conformational Change in the EF-Hand Domains and His <sub>3</sub> Asp Site. <i>Biochemistry</i> , 2018, 57, 4155-4164.	2.5	13

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19	Discovery of a Cyclic Choline Analog That Inhibits Anaerobic Choline Metabolism by Human Gut Bacteria. <i>ACS Medicinal Chemistry Letters</i> , 2020, 11, 1980-1985.	2.8	13
20	Crystal structure of AdoMet radical enzyme 7- <i>carboxy</i> -7- <i>deazaguanine</i> synthase from <i>Escherichia coli</i> suggests how modifications near [4Fe-4S] cluster engender flavodoxin specificity. <i>Protein Science</i> , 2019, 28, 202-215.	7.6	11
21	Ribonucleotide reductase, a novel drug target for gonorrhea. <i>ELife</i> , 2022, 11, .	6.0	8
22	Structural and Biochemical Investigations of the [4Fe-4S] Cluster-Containing Fumarate Hydratase from <i>Leishmania major</i> . <i>Biochemistry</i> , 2019, 58, 5011-5021.	2.5	6
23	Crystal Structures of Fumarate Hydratases from <i>Leishmania major</i> in a Complex with Inhibitor 2-Thiomalate. <i>ACS Chemical Biology</i> , 2019, 14, 266-275.	3.4	6
24	The Atypical Cobalamin-Dependent <i>S</i> -Adenosyl-Methionine Nonradical Methylase TsrM and Its Radical Counterparts. <i>Journal of the American Chemical Society</i> , 2022, 144, 5673-5684.	13.7	6
25	A Stable Ferryl Porphyrin at the Active Site of Y463M BthA. <i>Journal of the American Chemical Society</i> , 2020, 142, 11978-11982.	13.7	1
26	Crystal Structure of the [4Fe-4S] Cluster-Containing Adenosine-5 <sup>2</sup> -phosphosulfate Reductase from <i>Mycobacterium tuberculosis</i> . <i>ACS Omega</i> , 2021, 6, 13756-13765.	3.5	1
27	A rapid and sensitive assay for quantifying the activity of both aerobic and anaerobic ribonucleotide reductases acting upon any or all substrates. <i>PLoS ONE</i> , 2022, 17, e0269572.	2.5	0