Megan L Matthews

List of Publications by Year
in descending order

25 papers	1,757 citations	430874 18 h-index	552781 26 g-index
28 all docs	28 docs citations	28 times ranked	1918 citing authors

#	Article	IF	Citations
1	Discovery of Potent and Selective Inhibitors against Protein-Derived Electrophilic Cofactors. Journal of the American Chemical Society, 2022, 144, 5377-5388.	13.7	15
2	Activity-Based Hydrazine Probes for Protein Profiling of Electrophilic Functionality in Therapeutic Targets. ACS Central Science, 2021, 7, 1524-1534.	11.3	21
3	Discovery of Electrophiles and Profiling of Enzyme Cofactors. Current Protocols in Chemical Biology, 2020, 12, e86.	1.7	9
4	Evidence for Modulation of Oxygen Rebound Rate in Control of Outcome by Iron(II)- and 2-Oxoglutarate-Dependent Oxygenases. Journal of the American Chemical Society, 2019, 141, 15153-15165.	13.7	28
5	Metal-free class Ie ribonucleotide reductase from pathogens initiates catalysis with a tyrosine-derived dihydroxyphenylalanine radical. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 10022-10027.	7.1	49
6	Design of Benzoxathiazin-3-one 1,1-Dioxides as a New Class of Irreversible Serine Hydrolase Inhibitors: Discovery of a Uniquely Selective PNPLA4 Inhibitor. Journal of the American Chemical Society, 2017, 139, 7052-7061.	13.7	25
7	Vanadyl as a Stable Structural Mimic of Reactive Ferryl Intermediates in Mononuclear Nonheme-Iron Enzymes. Inorganic Chemistry, 2017, 56, 13382-13389.	4.0	19
8	Chemoproteomic profiling and discovery of protein electrophiles in human cells. Nature Chemistry, 2017, 9, 234-243.	13.6	68
9	Electronic Structure of the Ferryl Intermediate in the Î±-Ketoglutarate Dependent Non-Heme Iron Halogenase SyrB2: Contributions to H Atom Abstraction Reactivity. Journal of the American Chemical Society, 2016, 138, 5110-5122.	13.7	68
10	Chemical Proteomic Profiling of Human Methyltransferases. Journal of the American Chemical Society, 2016, 138, 13335-13343.	13.7	79
11	Mechanisms of 2-Oxoglutarate-Dependent Oxygenases: The Hydroxylation Paradigm and Beyond. 2-Oxoglutarate-Dependent Oxygenases, 2015, , 95-122.	0.8	69
12	Direct nitration and azidation of aliphatic carbons by an iron-dependent halogenase. Nature Chemical Biology, 2014, 10, 209-215.	8.0	113
13	Design of activated serineâ€“containing catalytic triads with atomic-level accuracy. Nature Chemical Biology, 2014, 10, 386-391.	8.0	68
14	Elucidation of the Fe(iv)=O intermediate in the catalytic cycle of the halogenase SyrB2. Nature, 2013, 499, 320-323.	27.8	192
15	Novel approaches for the accumulation of oxygenated intermediates to multi-millimolar concentrations. Coordination Chemistry Reviews, 2013, 257, 234-243.	18.8	15
16	Highly Selective Inhibitors of Monoacylglycerol Lipase Bearing a Reactive Group that Is Bioisosteric with Endocannabinoid Substrates. Chemistry and Biology, 2012, 19, 579-588.	6.0	155
17	Remote Enzyme Microsurgery. Science, 2010, 327, 1337-1338.	12.6	3
18	The Nonribosomal Peptide Synthetase Enzyme DdaD Tethers N_{Î²}-Fumaramoyl-<scp>l</scp>-2,3-diaminopropionate for Fe(II)/Î±-Ketoglutarate-Dependent Epoxidation by DdaC during Dapdiamide Antibiotic Biosynthesis. Journal of the American Chemical Society, 2010, 132, 15773-15781.	13.7	35

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19	Substrate positioning controls the partition between halogenation and hydroxylation in the aliphatic halogenase, SyrB2. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17723-17728.	7.1	206
20	Substrate-Triggered Formation and Remarkable Stability of the Câ”H Bond-Cleaving Chloroferryl Intermediate in the Aliphatic Halogenase, SyrB2. Biochemistry, 2009, 48, 4331-4343.	2.5	212
21	myo-Inositol oxygenase: a radical new pathway for O₂and Câ€“H activation at a nonheme diiron cluster. Dalton Transactions, 2009, , 905-914.	3.3	73
22	Spectroscopic Evidence for a High-Spin Br-Fe(IV)-Oxo Intermediate in the Î±-Ketoglutarate-Dependent Halogenase CytC3 from Streptomyces. Journal of the American Chemical Society, 2007, 129, 13408-13409.	13.7	140
23	AurF from Streptomyces thioluteus and a Possible New Family of Manganese/Iron Oxygenases. Biochemistry, 2007, 46, 10413-10418.	2.5	37
24	Probing the Reaction Mechanism of thed-ala-d-ala Dipeptidase, VanX, by Using Stopped-Flow Kinetic and Rapid-Freeze Quench EPR Studies on the Co(II)-Substituted Enzyme. Journal of the American Chemical Society, 2006, 128, 13050-13051.	13.7	16
25	A Five-coordinate Metal Center in Co(II)-substituted VanX. Journal of Biological Chemistry, 2005, 280, 11074-11081.	3.4	36