

# Steve S-F Yu

## List of Publications by Citations

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67  
papers

1,976  
citations

23  
h-index

43  
g-index

80  
ext. papers

2,249  
ext. citations

7.1  
avg. IF

4.67  
L-index

#	Paper	IF	Citations
67	Alkane Oxidation: Methane Monooxygenases, Related Enzymes, and Their Biomimetics. <i>Chemical Reviews</i> , <b>2017</b> , 117, 8574-8621	68.1	225
66	Controlled oxidation of hydrocarbons by the membrane-bound methane monooxygenase: the case for a tricopper cluster. <i>Accounts of Chemical Research</i> , <b>2008</b> , 41, 969-79	24.3	173
65	Efficient oxidation of methane to methanol by dioxygen mediated by tricopper clusters. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 3731-5	16.4	138
64	Toward delineating the structure and function of the particulate methane monooxygenase from methanotrophic bacteria. <i>Biochemistry</i> , <b>2004</b> , 43, 4421-30	3.2	135
63	Redox potentiometry studies of particulate methane monooxygenase: support for a trinuclear copper cluster active site. <i>Angewandte Chemie - International Edition</i> , <b>2007</b> , 46, 1992-4	16.4	112
62	Production of high-quality particulate methane monooxygenase in high yields from <i>Methylococcus capsulatus</i> (Bath) with a hollow-fiber membrane bioreactor. <i>Journal of Bacteriology</i> , <b>2003</b> , 185, 5915-24	3.5	91
61	Quantitative proteomic analysis of metabolic regulation by copper ions in <i>Methylococcus capsulatus</i> (Bath). <i>Journal of Biological Chemistry</i> , <b>2004</b> , 279, 51554-60	5.4	71
60	Heterogeneous formulation of the tricopper complex for efficient catalytic conversion of methane into methanol at ambient temperature and pressure. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 1361-1374	35.4	58
59	Adsorption of a statherin peptide fragment on the surface of nanocrystallites of hydroxyapatite. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 2862-8	16.4	55
58	Steric zipper of the amyloid fibrils formed by residues 109-122 of the Syrian hamster prion protein. <i>Journal of Molecular Biology</i> , <b>2008</b> , 378, 1142-54	6.5	47
57	Bacterial siderophores: the solution stoichiometry and coordination of the Fe(III) complexes of pyochelin and related compounds. <i>Journal of Biological Inorganic Chemistry</i> , <b>2006</b> , 11, 419-32	3.7	47
56	Development of the Tricopper Cluster as a Catalyst for the Efficient Conversion of Methane into MeOH. <i>ChemCatChem</i> , <b>2014</b> , 6, 429-437	5.2	44
55	The Copper Clusters in the Particulate Methane Monooxygenase (pMMO) from <i>Methylococcus Capsulatus</i> (Bath). <i>Journal of the Chinese Chemical Society</i> , <b>2004</b> , 51, 1081-1098	1.5	42
54	Efficient Room-Temperature Oxidation of Hydrocarbons Mediated by Tricopper Cluster Complexes with Different Ligands. <i>Advanced Synthesis and Catalysis</i> , <b>2012</b> , 354, 3275-3282	5.6	39
53	Probing the hydrophobic pocket of the active site in the particulate methane monooxygenase (pMMO) from <i>Methylococcus capsulatus</i> (Bath) by variable stereoselective alkane hydroxylation and olefin epoxidation. <i>ChemBioChem</i> , <b>2008</b> , 9, 1116-23	3.8	39
52	Improved mass spectrometric analysis of membrane proteins based on rapid and versatile sample preparation on nanodiamond particles. <i>Analytical Chemistry</i> , <b>2013</b> , 85, 6748-55	7.8	37
51	The stereospecific hydroxylation of [2,2-2H <sub>2</sub> ]butane and chiral dideuteriobutanes by the particulate methane monooxygenase from <i>Methylococcus capsulatus</i> (Bath). <i>Journal of Biological Chemistry</i> , <b>2003</b> , 278, 40658-69	5.4	34

50	A Carbon Electrode Functionalized by a Tricopper Cluster Complex: Overcoming Overpotential and Production of Hydrogen Peroxide in the Oxygen Reduction Reaction. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 3612-3616	16.4	33
49	Developing an efficient catalyst for controlled oxidation of small alkanes under ambient conditions. <i>Catalysis Science and Technology</i> , <b>2014</b> , 4, 930-935	5.5	33
48	Dioxygen activation of a trinuclear Cu(I)Cu(I)Cu(I) cluster capable of mediating facile oxidation of organic substrates: competition between O-atom transfer and abortive intercomplex reduction. <i>Chemistry - A European Journal</i> , <b>2012</b> , 18, 3955-68	4.8	33
47	Isolation, purification and characterization of hemerythrin from <i>Methylococcus capsulatus</i> (Bath). <i>Journal of Inorganic Biochemistry</i> , <b>2008</b> , 102, 1607-14	4.2	32
46	The Catalytic Copper Clusters of the Particulate Methane Monooxygenase from Methanotrophic Bacteria: Electron Paramagnetic Resonance Spectral Simulations. <i>Journal of the Chinese Chemical Society</i> , <b>2004</b> , 51, 1229-1244	1.5	32
45	Efficient Oxidation of Methane to Methanol by Dioxygen Mediated by Tricopper Clusters. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 3819-3823	3.6	27
44	A turn-like structure "KKPE" segment mediates the specific binding of viral protein A27 to heparin and heparan sulfate on cell surfaces. <i>Journal of Biological Chemistry</i> , <b>2009</b> , 284, 36535-36546	5.4	21
43	The C-terminal aqueous-exposed domain of the 45 kDa subunit of the particulate methane monooxygenase in <i>Methylococcus capsulatus</i> (Bath) is a Cu(I) sponge. <i>Biochemistry</i> , <b>2007</b> , 46, 13762-74	3.2	21
42	A study of NO trafficking from dinitrosyl-iron complexes to the recombinant E. coli transcriptional factor SoxR. <i>Journal of Biological Inorganic Chemistry</i> , <b>2008</b> , 13, 961-72	3.7	21
41	The metal core structures in the recombinant <i>Escherichia coli</i> transcriptional factor SoxR. <i>Chemistry - A European Journal</i> , <b>2012</b> , 18, 2565-77	4.8	20
40	Mechanistic study for the selective oxidation of benzene and toluene catalyzed by Fe(CIO4)2 in an H2O2-H2O-CH3CN system. <i>Molecular Catalysis</i> , <b>2017</b> , 441, 114-121	3.3	18
39	Polarized ATR-FTIR spectroscopy of the membrane-embedded domains of the particulate methane monooxygenase. <i>Biochemistry</i> , <b>2004</b> , 43, 13283-92	3.2	18
38	Determination of the carbon kinetic isotope effects on propane hydroxylation mediated by the methane monooxygenases from <i>Methylococcus capsulatus</i> (Bath) by using stable carbon isotopic analysis. <i>ChemBioChem</i> , <b>2002</b> , 3, 760-5	3.8	18
37	Tuning the regio- and stereoselectivity of C-H activation in n-octanes by cytochrome P450 BM-3 with fluorine substituents: evidence for interactions between a C-F bond and aromatic $\pi$ systems. <i>Chemistry - A European Journal</i> , <b>2011</b> , 17, 4774-87	4.8	17
36	A (13)C solid-state NMR analysis of vitamin D compounds. <i>Solid State Nuclear Magnetic Resonance</i> , <b>2009</b> , 36, 24-31	3.1	16
35	Regioselective hydroxylation of C(12)-C(15) fatty acids with fluorinated substituents by cytochrome P450 BM3. <i>Chemistry - A European Journal</i> , <b>2013</b> , 19, 13680-91	4.8	15
34	Chemistry in confined space: a strategy for selective oxidation of hydrocarbons with high catalytic efficiencies and conversion yields under ambient conditions. <i>Catalysis Science and Technology</i> , <b>2016</b> , 6, 7623-7630	5.5	15
33	Electrochemical Hydroxylation of C-C n-Alkanes by Recombinant Alkane Hydroxylase (AlkB) and Rubredoxin-2 (AlkG) from <i>Pseudomonas putida</i> GPo1. <i>Scientific Reports</i> , <b>2017</b> , 7, 8369	4.9	14

32	An efficient and recyclable copper nano-catalyst for the selective oxidation of benzene to p-benzoquinone (p-BQ) using H <sub>2</sub> O <sub>2</sub> (aq) in CH <sub>3</sub> CN. <i>Journal of Catalysis</i> , <b>2019</b> , 370, 332-346	7.3	13
31	Catalytic Oxidation of Light Alkanes Mediated at Room Temperature by a Tricopper Cluster Complex Immobilized in Mesoporous Silica Nanoparticles. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2018</b> , 6, 5431-5440	8.3	13
30	Overexpression and purification of the particulate methane monooxygenase from <i>Methylococcus capsulatus</i> (Bath). <i>Methods in Enzymology</i> , <b>2011</b> , 495, 177-93	1.7	13
29	A Carbon Electrode Functionalized by a Tricopper Cluster Complex: Overcoming Overpotential and Production of Hydrogen Peroxide in the Oxygen Reduction Reaction. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 3674-3678	3.6	12
28	Inactivation of the particulate methane monooxygenase (pMMO) in <i>Methylococcus capsulatus</i> (Bath) by acetylene. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , <b>2015</b> , 1854, 1842-1852	4	11
27	The PmoB subunit of particulate methane monooxygenase (pMMO) in <i>Methylococcus capsulatus</i> (Bath): The Cu sponge and its function. <i>Journal of Inorganic Biochemistry</i> , <b>2019</b> , 196, 110691	4.2	10
26	Controlled oxidation of aliphatic CH bonds in metallo-monoxygenases: mechanistic insights derived from studies on deuterated and fluorinated hydrocarbons. <i>Journal of Inorganic Biochemistry</i> , <b>2014</b> , 134, 118-33	4.2	10
25	Controlling the Orientation of Pendants in Two-Dimensional Comb-Like Polymers by Varying Stiffness of Polymeric Backbones. <i>Macromolecules</i> , <b>2014</b> , 47, 6166-6172	5.5	10
24	The bacteriohemerythrin from <i>Methylococcus capsulatus</i> (Bath): Crystal structures reveal that Leu114 regulates a water tunnel. <i>Journal of Inorganic Biochemistry</i> , <b>2015</b> , 150, 81-9	4.2	9
23	Vaccinia viral protein A27 is anchored to the viral membrane via a cooperative interaction with viral membrane protein A17. <i>Journal of Biological Chemistry</i> , <b>2014</b> , 289, 6639-6655	5.4	8
22	Regio-selective hydroxylation of gem-difluorinated octanes by alkane hydroxylase (AlkB). <i>Tetrahedron Letters</i> , <b>2011</b> , 52, 2950-2953	2	8
21	Mechanistic Study of the Stereoselective Hydroxylation of [2- H ,3- H ]Butanes Catalyzed by Cytochrome P450 BM3 Variants. <i>Chemistry - A European Journal</i> , <b>2017</b> , 23, 2571-2582	4.8	7
20	Preparation and characterization of a (Cu,Zn)-pMMO from <i>Methylococcus capsulatus</i> (Bath). <i>Journal of Inorganic Biochemistry</i> , <b>2004</b> , 98, 2125-30	4.2	7
19	The oversolubility of methane gas in nano-confined water in nanoporous silica materials. <i>Microporous and Mesoporous Materials</i> , <b>2020</b> , 293, 109793	5.3	7
18	Quantum Chemical Studies of Methane Oxidation to Methanol on a Biomimetic Tricopper Complex: Mechanistic Insights. <i>ChemistrySelect</i> , <b>2018</b> , 3, 5113-5122	1.8	6
17	Selective Oxidation of Simple Aromatics Catalyzed by Nano-Biomimetic Metal Oxide Catalysts: A Mini Review. <i>Frontiers in Chemistry</i> , <b>2020</b> , 8, 589178	5	6
16	Identification of the proteins required for fatty acid desaturation in zebrafish ( <i>Danio rerio</i> ). <i>Biochemical and Biophysical Research Communications</i> , <b>2013</b> , 440, 671-6	3.4	5
15	Selective catalytic oxidation of benzene to phenol by a vanadium oxide nanorod (Vnr) catalyst in CH <sub>3</sub> CN using H <sub>2</sub> O <sub>2</sub> (aq) and pyrazine-2-carboxylic acid (PCA). <i>New Journal of Chemistry</i> , <b>2019</b> , 43, 17819-17830	3.6	4

14	Selective oxidation of light alkanes under mild conditions. <i>Current Opinion in Green and Sustainable Chemistry</i> , <b>2020</b> , 22, 39-46	7.9	4
13	Mechanism of Pyrroloquinoline Quinone-Dependent Hydride Transfer Chemistry from Spectroscopic and High-Resolution X-ray Structural Studies of the Methanol Dehydrogenase from (Bath). <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 3359-3372	16.4	4
12	Dicopper Dioxygenase Model Immobilized in Mesoporous Silica Nanoparticles for Toluene Oxidation: A Mechanism to Harness Both O Atoms of O <sub>2</sub> for Catalysis. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 11032-11043	3.8	3
11	Probing Anti-Proliferative 24-Homoscleranes from a Sponge sp. <i>Marine Drugs</i> , <b>2020</b> , 18,	6	3
10	Indirect exchange interaction in semimagnetic semiconductors. <i>Physical Review B</i> , <b>1989</b> , 40, 10621-10624.	3.3	1
9	Sponge-Derived 24-Homoscleranes as Potent Anti-Inflammatory Agents. <i>Marine Drugs</i> , <b>2020</b> , 18,	6	1
8	Catalytic machinery of methane oxidation in particulate methane monooxygenase (pMMO). <i>Journal of Inorganic Biochemistry</i> , <b>2021</b> , 225, 111602	4.2	0
7	The Antileukemic and Anti-Prostatic Effect of Aeroplysinin-1 Is Mediated through ROS-Induced Apoptosis via NOX Activation and Inhibition of HIF-1a Activity. <i>Life</i> , <b>2022</b> , 12, 687	3	0
6	Heterologous Expression of Membrane-Protein Subunits in E. coli: The Subunit B of the Particulate Methane Monooxygenase from <i>Methylococcus capsulatus</i> (Bath). <i>FASEB Journal</i> , <b>2008</b> , 22, 323-323	0.9	
5	Regio- and stereo-selective oxidation of fluorinated substrates by recombinant cytochrome P450 BM3 variants. <i>FASEB Journal</i> , <b>2013</b> , 27, 1007.5	0.9	
4	Regio-selective alkane hydroxylation by the isolated membrane-bound non-heme iron oxygenase, AlkB. <i>FASEB Journal</i> , <b>2013</b> , 27, 787.2	0.9	
3	Selective Oxidation of Alkanes by Metallo-Monooxygenases and Their Nanobiomimetics <b>2018</b> , 293-317		
2	Methane oxidation by the copper methane monooxygenase: Before and after the cryogenic electron microscopy structure of particulate methane monooxygenase from <i>Methylococcus capsulatus</i> (Bath). <i>Journal of the Chinese Chemical Society</i> ,	1.5	
1	Selective oxidation of benzene by an iron oxide carbonaceous nanocatalyst prepared from iron perchlorate salts and hydrogen peroxide in benzene and acetonitrile. <i>Molecular Catalysis</i> , <b>2022</b> , 526, 112397	3.3	