## Sam P De Visser

List of Publications by Year in descending order

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276 papers 18,167 citations

72 h-index 16605

292 all docs

292 docs citations

times ranked

292

8619 citing authors

g-index

#	Article	IF	CITATIONS
1	Density Functional Theory Study into the Reaction Mechanism of Isonitrile Biosynthesis by the Nonheme Iron Enzyme ScoE. Topics in Catalysis, 2022, 65, 528-543.	1.3	8
2	Oxidative dehalogenation of halophenols by high-valent nonheme iron( <scp>iv</scp> )-oxo intermediates. Faraday Discussions, 2022, 234, 58-69.	1.6	5
3	Biodegradation of Herbicides by a Plant Nonheme Iron Dioxygenase: Mechanism and Selectivity of Substrate Analogues. Chemistry - A European Journal, 2022, 28, .	1.7	6
4	Electrostatic Perturbations in the Substrateâ€Binding Pocket of Taurine/αâ€Ketoglutarate Dioxygenase Determine its Selectivity. Chemistry - A European Journal, 2022, 28, .	1.7	32
5	Status report on the quantum chemical cluster approach for modeling enzyme reactions. Communications Chemistry, 2022, 5, .	2.0	40
6	Cluster Model Study into the Catalytic Mechanism of $\hat{l}$ ±-Ketoglutarate Biodegradation by the Ethylene-Forming Enzyme Reveals Structural Differences with Nonheme Iron Hydroxylases. ACS Catalysis, 2022, 12, 3923-3937.	<b>5.</b> 5	17
7	Mechanism of substrate inhibition in cytochrome-c dependent NO reductases from denitrifying bacteria (cNORs). Journal of Inorganic Biochemistry, 2022, 231, 111781.	1.5	1
8	Local Charge Distributions, Electric Dipole Moments, and Local Electric Fields Influence Reactivity Patterns and Guide Regioselectivities in α-Ketoglutarate-Dependent Non-heme Iron Dioxygenases. Accounts of Chemical Research, 2022, 55, 65-74.	7.6	48
9	Second Coordination Sphere Effects on the Mechanistic Pathways for Dioxygen Activation by a Ferritin: Involvement of a Tyr Radical and the Identification of a Cation Binding Site. ChemBioChem, 2022, 23, .	1.3	12
10	What Drives Radical Halogenation versus Hydroxylation in Mononuclear Nonheme Iron Complexes? A Combined Experimental and Computational Study. Journal of the American Chemical Society, 2022, 144, 10752-10767.	6.6	27
11	A comprehensive insight into aldehyde deformylation: mechanistic implications from biology and chemistry. Organic and Biomolecular Chemistry, 2021, 19, 1879-1899.	1.5	25
12	What Determines the Selectivity of Arginine Dihydroxylation by the Nonheme Iron Enzyme OrfP?. Chemistry - A European Journal, 2021, 27, 1795-1809.	1.7	26
13	Theoretical studies unveil the unusual bonding in oxygenation reactions involving cobalt( <scp>ii</scp> )-iodylarene complexes. Chemical Communications, 2021, 57, 3115-3118.	2.2	4
14	Taurine/Alpha-Ketoglutarate Dioxygenase: Computational Studies. , 2021, , 1-4.		O
15	How Do Electrostatic Perturbations of the Protein Affect the Bifurcation Pathways of Substrate Hydroxylation versus Desaturation in the Nonheme Iron-Dependent Viomycin Biosynthesis Enzyme?. Journal of Physical Chemistry A, 2021, 125, 1720-1737.	1.1	33
16	Glutarate Hydroxylation by the Carbon Starvation-Induced Protein D: A Computational Study into the Stereo- and Regioselectivities of the Reaction. Inorganic Chemistry, 2021, 60, 4800-4815.	1.9	14
17	Mechanism of Oxidative Ringâ€Closure as Part of the Hygromycin Biosynthesis Step by a Nonheme Iron Dioxygenase. ChemCatChem, 2021, 13, 3054-3066.	1.8	13
18	A Noncanonical Tryptophan Analogue Reveals an Active Site Hydrogen Bond Controlling Ferryl Reactivity in a Heme Peroxidase. Jacs Au, 2021, 1, 913-918.	3.6	8

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19	Substrate sulfoxidation by a biomimetic cytochrome P450 Compound I mimic: How do porphyrin and phthalocyanine equatorial ligands compare?. Journal of Chemical Sciences, 2021, 133, 1.	0.7	2
20	Electrostatic Perturbations from the Protein Affect Câ <sup>^</sup> H Bond Strengths of the Substrate and Enable Negative Catalysis in the TmpA Biosynthesis Enzyme. Chemistry - A European Journal, 2021, 27, 8851-8864.	1.7	20
21	pH Changes That Induce an Axial Ligand Effect on Nonheme Iron(IV) Oxo Complexes with an Appended Aminopropyl Functionality. Inorganic Chemistry, 2021, 60, 13821-13832.	1.9	О
22	Energy–entropy method using multiscale cell correlation to calculate binding free energies in the SAMPL8 host–guest challenge. Journal of Computer-Aided Molecular Design, 2021, 35, 911-921.	1.3	11
23	Product Distributions of Cytochrome P450 OleTJE with Phenyl-Substituted Fatty Acids: A Computational Study. International Journal of Molecular Sciences, 2021, 22, 7172.	1.8	6
24	Inspiration from Nature: Influence of Engineered Ligand Scaffolds and Auxiliary Factors on the Reactivity of Biomimetic Oxidants. ACS Catalysis, 2021, 11, 9761-9797.	<b>5.</b> 5	54
25	Negative catalysis / non-Bell-Evans-Polanyi reactivity by metalloenzymes: Examples from mononuclear heme and non-heme iron oxygenases. Coordination Chemistry Reviews, 2021, 439, 213914.	9.5	41
26	Structure and Functional Differences of Cysteine and 3â€Mercaptopropionate Dioxygenases: A Computational Study. Chemistry - A European Journal, 2021, 27, 13793-13806.	1.7	12
27	Proton-coupled electron transfer reactivities of electronically divergent heme superoxide intermediates: a kinetic, thermodynamic, and theoretical study. Chemical Science, 2021, 12, 8872-8883.	3.7	13
28	Can a Mononuclear Iron(III)â€Superoxo Active Site Catalyze the Decarboxylation of Dodecanoic Acid in UndA to Produce Biofuels?. Chemistry - A European Journal, 2020, 26, 2233-2242.	1.7	24
29	Computational Study on the Catalytic Reaction Mechanism of Heme Haloperoxidase Enzymes. Israel Journal of Chemistry, 2020, 60, 963-972.	1.0	5
30	Secondâ€Coordination Sphere Effects on Selectivity and Specificity of Heme and Nonheme Iron Enzymes. Chemistry - A European Journal, 2020, 26, 5308-5327.	1.7	75
31	Hydroxyl Transfer to Carbon Radicals by Mn(OH) vs Fe(OH) Corrole Complexes. Inorganic Chemistry, 2020, 59, 16053-16064.	1.9	24
32	How Do Vanadium Chloroperoxidases Generate Hypochlorite from Hydrogen Peroxide and Chloride? A Computational Study. ACS Catalysis, 2020, 10, 14067-14079.	5.5	19
33	How Do Metal Ions Modulate the Rateâ€Determining Electronâ€Transfer Step in Cytochrome P450 Reactions?. Chemistry - A European Journal, 2020, 26, 15270-15281.	1.7	15
34	Fe-Catalyzed Aziridination Is Governed by the Electron Affinity of the Active Imido-Iron Species. ACS Catalysis, 2020, 10, 10010-10020.	5.5	42
35	Catalytic Mechanism of Aromatic Nitration by Cytochrome P450 TxtE: Involvement of a Ferric-Peroxynitrite Intermediate. Journal of the American Chemical Society, 2020, 142, 15764-15779.	6.6	55
36	How external perturbations affect the chemoselectivity of substrate activation by cytochrome P450 OleT <sub>JE</sub> . Physical Chemistry Chemical Physics, 2020, 22, 27178-27190.	1.3	13

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37	Bioengineering of Cytochrome P450 OleTJE: How Does Substrate Positioning Affect the Product Distributions?. Molecules, 2020, 25, 2675.	1.7	21
38	Computational Study on O–O Bond Formation on a Mononuclear Nonâ€Heme Iron Center. European Journal of Inorganic Chemistry, 2020, 2020, 2573-2581.	1.0	2
39	Inorganic reaction mechanisms. Dalton Transactions, 2020, 49, 4597-4598.	1.6	0
40	Cross-linking of aromatic phenolate groups by cytochrome P450 enzymes: a model for the biosynthesis of vancomycin by OxyB. Organic and Biomolecular Chemistry, 2020, 18, 4610-4618.	1.5	19
41	Comparison of Free-Energy Methods to Calculate the Barriers for the Nucleophilic Substitution of Alkyl Halides by Hydroxide. Journal of Physical Chemistry B, 2020, 124, 6835-6842.	1.2	8
42	Lignin Biodegradation by a Cytochrome P450 Enzyme: A Computational Study into Syringol Activation by GcoA. Chemistry - A European Journal, 2020, 26, 13093-13102.	1.7	34
43	Computational studies of DNA base repair mechanisms by nonheme iron dioxygenases: selective epoxidation and hydroxylation pathways. Dalton Transactions, 2020, 49, 4266-4276.	1.6	15
44	O <sub>2</sub> Activation by Non-Heme Thiolate-Based Dinuclear Fe Complexes. Inorganic Chemistry, 2020, 59, 3249-3259.	1.9	17
45	Sluggish reactivity by a nonheme iron( <scp>iv</scp> )-tosylimido complex as compared to its oxo analogue. Dalton Transactions, 2020, 49, 5921-5931.	1.6	17
46	Frontispiece: Secondâ€Coordination Sphere Effects on Selectivity and Specificity of Heme and Nonheme Iron Enzymes. Chemistry - A European Journal, 2020, 26, .	1.7	1
47	How Does Replacement of the Axial Histidine Ligand in Cytochrome c Peroxidase by Nδ-Methyl Histidine Affect Its Properties and Functions? A Computational Study. International Journal of Molecular Sciences, 2020, 21, 7133.	1.8	5
48	Cysteine Dioxygenase – Computational Studies. , 2020, , 1-3.		0
49	The Hunt for the Closed Conformation of the Fruitâ∈Ripening Enzyme 1â∈Aminocyclopropaneâ∈1â∈carboxylic Oxidase: A Combined Electron Paramagnetic Resonance and Molecular Dynamics Study. Chemistry - A European Journal, 2019, 25, 13766-13776.	1.7	4
50	Mechanistic Investigation of Oxygen Rebound in a Mononuclear Nonheme Iron Complex. Inorganic Chemistry, 2019, 58, 9557-9561.	1.9	14
51	CO <sub>2</sub> Reduction on an Iron-Porphyrin Center: A Computational Study. Journal of Physical Chemistry A, 2019, 123, 6527-6535.	1.1	45
52	Mechanism of Oxidative Activation of Fluorinated Aromatic Compounds by Nâ€Bridged Diironâ€Phthalocyanine: What Determines the Reactivity?. Chemistry - A European Journal, 2019, 25, 14320-14331.	1.7	43
53	Second-Coordination Sphere Effect on the Reactivity of Vanadium–Peroxo Complexes: A Computational Study. Inorganic Chemistry, 2019, 58, 15741-15750.	1.9	7
54	Properties and reactivity of $\hat{l}$ 4-nitrido-bridged dimetal porphyrinoid complexes: how does ruthenium compare to iron?. Journal of Biological Inorganic Chemistry, 2019, 24, 1127-1134.	1.1	5

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55	Interplay Between Steric and Electronic Effects: A Joint Spectroscopy and Computational Study of Nonheme Iron(IV)â€Oxo Complexes. Chemistry - A European Journal, 2019, 25, 5086-5098.	1.7	44
56	Hydrogen by Deuterium Substitution in an Aldehyde Tunes the Regioselectivity by a Nonheme Manganese(III)–Peroxo Complex. Angewandte Chemie, 2019, 131, 10749-10753.	1.6	15
57	Flavonol biosynthesis by nonheme iron dioxygenases: A computational study into the structure and mechanism. Journal of Inorganic Biochemistry, 2019, 198, 110728.	1.5	17
58	Hydrogen by Deuterium Substitution in an Aldehyde Tunes the Regioselectivity by a Nonheme Manganese(III)–Peroxo Complex. Angewandte Chemie - International Edition, 2019, 58, 10639-10643.	7.2	37
59	A Non-Heme Diiron Complex for (Electro)catalytic Reduction of Dioxygen: Tuning the Selectivity through Electron Delivery. Journal of the American Chemical Society, 2019, 141, 8244-8253.	6.6	56
60	The Quest for Accurate Theoretical Models of Metalloenzymes: An Aid to Experiment. Challenges and Advances in Computational Chemistry and Physics, 2019, , 439-462.	0.6	0
61	Regio―and Enantioâ€selective Chemoâ€enzymatic Câ^'Hâ€Lactonization of Decanoic Acid to ( <i>S</i> )â€Îâ€Decalactone. Angewandte Chemie - International Edition, 2019, 58, 5668-5671.	7.2	50
62	Regio―and Enantioâ€selective Chemoâ€enzymatic Câ^'Hâ€Lactonization of Decanoic Acid to ( <i>S</i> )â€Î´ã€Decalactone. Angewandte Chemie, 2019, 131, 5724-5727.	1.6	8
63	The Equatorial Ligand Effect on the Properties and Reactivity of Iron(V) Oxo Intermediates. Chemistry - A European Journal, 2019, 25, 8092-8104.	1.7	17
64	Equatorial ligand plane perturbations lead to a spin-state change in an iron(iii) porphyrin dimer. Dalton Transactions, 2019, 48, 6353-6357.	1.6	17
65	Selective Hydrogen Atom Abstraction from Dihydroflavonol by a Nonheme Iron Center Is the Key Step in the Enzymatic Flavonol Synthesis and Avoids Byproducts. Journal of the American Chemical Society, 2019, 141, 20278-20292.	6.6	66
66	Hydrogen Atom Abstraction by High-Valent Fe(OH) versus Mn(OH) Porphyrinoid Complexes: Mechanistic Insights from Experimental and Computational Studies. Inorganic Chemistry, 2019, 58, 16761-16770.	1.9	24
67	Reactivity patterns of vanadium( <scp>iv</scp> / <scp>v</scp> )-oxo complexes with olefins in the presence of peroxides: a computational study. Dalton Transactions, 2019, 48, 16899-16910.	1.6	12
68	How Does the Oxidation State of Palladium Surfaces Affect the Reactivity and Selectivity of Direct Synthesis of Hydrogen Peroxide from Hydrogen and Oxygen Gases? A Density Functional Study. Journal of the American Chemical Society, 2019, 141, 901-910.	6.6	52
69	Selective Formation of an Fe <sup>IV</sup> O or an Fe <sup>III</sup> OOH Intermediate From Iron(II) and H <sub>2</sub> O <sub>2</sub> : Controlled Heterolytic versus Homolytic Oxygen–Oxygen Bond Cleavage by the Second Coordination Sphere. Angewandte Chemie - International Edition, 2019, 58, 854-858.	7.2	54
70	Mechanistic Studies of Fatty Acid Activation by CYP152 Peroxygenases Reveal Unexpected Desaturase Activity. ACS Catalysis, 2019, 9, 565-577.	5.5	76
71	Selective Formation of an Fe <sup>IV</sup> O or an Fe <sup>III</sup> OOH Intermediate From Iron(II) and H <sub>2</sub> O <sub>2</sub> : Controlled Heterolytic versus Homolytic Oxygen–Oxygen Bond Cleavage by the Second Coordination Sphere. Angewandte Chemie, 2019, 131, 864-868.	1.6	25
72	Hydrogen Atom vs. Hydride Transfer in Cytochrome P450 Oxidations: A Combined Mass Spectrometry and Computational Study. European Journal of Inorganic Chemistry, 2018, 2018, 1854-1865.	1.0	7

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73	Can Manganese(III)â€Iodosylarene Act as an Oxidant Alongside Highâ€Valent Manganese(V)â€Oxo Complexes?. ChemistrySelect, 2018, 3, 3208-3213.	0.7	5
74	Nitrogen Reduction to Ammonia on a Biomimetic Mononuclear Iron Centre: Insights into the Nitrogenase Enzyme. Chemistry - A European Journal, 2018, 24, 5293-5302.	1.7	44
<b>7</b> 5	Mechanistic Insight on the Activity and Substrate Selectivity of Nonheme Iron Dioxygenases. Chemical Record, 2018, 18, 1501-1516.	2.9	30
76	Does Substrate Positioning Affect the Selectivity and Reactivity in the Hectochlorin Biosynthesis Halogenase?. Frontiers in Chemistry, 2018, 6, 513.	1.8	37
77	Editorial: Quantum Mechanical/Molecular Mechanical Approaches for the Investigation of Chemical Systems – Recent Developments and Advanced Applications. Frontiers in Chemistry, 2018, 6, 357.	1.8	32
78	Catalytic Mechanism of Nogalamycin Monoxygenase: How Does Nature Synthesize Antibiotics without a Metal Cofactor?. Journal of Physical Chemistry B, 2018, 122, 10841-10854.	1.2	11
79	Dramatic rate-enhancement of oxygen atom transfer by an iron( <scp>iv</scp> )-oxo species by equatorial ligand field perturbations. Dalton Transactions, 2018, 47, 14945-14957.	1.6	32
80	A Comparative Review on the Catalytic Mechanism of Nonheme Iron Hydroxylases and Halogenases. Catalysts, 2018, 8, 314.	1.6	50
81	Group Transfer to an Aliphatic Bond: A Biomimetic Study Inspired by Nonheme Iron Halogenases. ACS Catalysis, 2018, 8, 8685-8698.	5 <b>.</b> 5	32
82	Quantum Mechanics/Molecular Mechanics Studies on the Relative Reactivities of Compound I and II in Cytochrome P450 Enzymes. International Journal of Molecular Sciences, 2018, 19, 1974.	1.8	14
83	Solvent―and Halide―nduced (Inter)conversion between Iron(II)â€Disulfide and Iron(III)â€Thiolate Complexes. Chemistry - A European Journal, 2018, 24, 11973-11982.	1.7	19
84	Oxygen Atom Transfer Using an Iron(IV)â€Oxo Embedded in a Tetracyclic Nâ€Heterocyclic Carbene System: How Does the Reactivity Compare to Cytochrome P450 Compoundâ€I?. Chemistry - A European Journal, 2017, 23, 2935-2944.	1.7	36
85	Modulation of Antimalarial Activity at a Putative Bisquinoline Receptor In Vivo Using Fluorinated Bisquinolines. Chemistry - A European Journal, 2017, 23, 6811-6828.	1.7	11
86	Reactivity Patterns of (Protonated) Compound II and Compound I of Cytochrome P450: Which is the Better Oxidant?. Chemistry - A European Journal, 2017, 23, 6406-6418.	1.7	71
87	Glutathione binding to dirhodium tetraacetate: a spectroscopic, mass spectral and computational study of an anti-tumour compound. Metallomics, 2017, 9, 501-516.	1.0	6
88	A Highâ€Valent Nonâ€Heme μâ€Oxo Manganese(IV) Dimer Generated from a Thiolateâ€Bound Manganese(II) Complex and Dioxygen. Angewandte Chemie - International Edition, 2017, 56, 8211-8215.	7.2	29
89	Sulfoxide Synthase versus Cysteine Dioxygenase Reactivity in a Nonheme Iron Enzyme. Journal of the American Chemical Society, 2017, 139, 9259-9270.	6.6	97
90	A Highâ€Valent Nonâ€Heme μâ€Oxo Manganese(IV) Dimer Generated from a Thiolateâ€Bound Manganese(II) Complex and Dioxygen. Angewandte Chemie, 2017, 129, 8323-8327.	1.6	10

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91	Prediction of Reduction Potentials of Copper Proteins with Continuum Electrostatics and Density Functional Theory. Chemistry - A European Journal, 2017, 23, 15436-15445.	1.7	20
92	Features of reactive cysteines discovered through computation: from kinase inhibition to enrichment around protein degrons. Scientific Reports, 2017, 7, 16338.	1.6	19
93	Keto–Enol Tautomerization Triggers an Electrophilic Aldehyde Deformylation Reaction by a Nonheme Manganese(III)-Peroxo Complex. Journal of the American Chemical Society, 2017, 139, 18328-18338.	6.6	66
94	The Role of Nonheme Transition Metal-Oxo, -Peroxo, and -Superoxo Intermediates in Enzyme Catalysis and Reactions of Bioinspired Complexes. Advances in Inorganic Chemistry, 2017, 70, 167-194.	0.4	2
95	Understanding How Prolyl-4-hydroxylase Structure Steers a Ferryl Oxidant toward Scission of a Strong C–H Bond. Journal of the American Chemical Society, 2017, 139, 9855-9866.	6.6	80
96	Recombinant silicateins as model biocatalysts in organosiloxane chemistry. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E5285-E5291.	3.3	23
97	Biodegradation of Cosmetics Products: A Computational Study of Cytochrome P450 Metabolism of Phthalates. Inorganics, 2017, 5, 77.	1.2	16
98	How Are Substrate Binding and Catalysis Affected by Mutating Glu127 and Arg161 in Prolyl-4-hydroxylase? A QM/MM and MD Study. Frontiers in Chemistry, 2017, 5, 94.	1.8	14
99	Challenging Density Functional Theory Calculations with Hemes and Porphyrins. International Journal of Molecular Sciences, 2016, 17, 519.	1.8	25
100	Influence of cysteine 164 on active site structure in rat cysteine dioxygenase. Journal of Biological Inorganic Chemistry, 2016, 21, 501-510.	1.1	18
101	Arene activation by a nonheme iron(III)–hydroperoxo complex: pathways leading to phenol and ketone products. Journal of Biological Inorganic Chemistry, 2016, 21, 453-462.	1.1	16
102	Deformylation Reaction by a Nonheme Manganese(III)–Peroxo Complex via Initial Hydrogenâ€Atom Abstraction. Angewandte Chemie, 2016, 128, 11257-11261.	1.6	23
103	A Systematic Account on Aromatic Hydroxylation by a Cytochrome P450 Model Compound I: A Lowâ€Pressure Mass Spectrometry and Computational Study. Chemistry - A European Journal, 2016, 22, 18608-18619.	1.7	74
104	Influence of Ligand Architecture in Tuning Reaction Bifurcation Pathways for Chlorite Oxidation by Non-Heme Iron Complexes. Inorganic Chemistry, 2016, 55, 10170-10181.	1.9	17
105	Deformylation Reaction by a Nonheme Manganese(III)–Peroxo Complex via Initial Hydrogenâ€Atom Abstraction. Angewandte Chemie - International Edition, 2016, 55, 11091-11095.	7.2	73
106	Singlet versus Triplet Reactivity in an Mn(V)–Oxo Species: Testing Theoretical Predictions Against Experimental Evidence. Journal of the American Chemical Society, 2016, 138, 12375-12386.	6.6	88
107	Substrate Sulfoxidation by an Iron(IV)-Oxo Complex: Benchmarking Computationally Calculated Barrier Heights to Experiment. Journal of Physical Chemistry A, 2016, 120, 9805-9814.	1.1	80
108	Quantum Mechanics/Molecular Mechanics Modeling of Enzymatic Processes: Caveats and Breakthroughs. Chemistry - A European Journal, 2016, 22, 2562-2581.	1.7	133

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109	Frontispiece: Origin of the Regioselective Fatty-Acid Hydroxylation versus Decarboxylation by a Cytochrome P450 Peroxygenase: What Drives the Reaction to Biofuel Production?. Chemistry - A European Journal, 2016, 22, .	1.7	O
110	Origin of the Regioselective Fattyâ€Acid Hydroxylation versus Decarboxylation by a Cytochrome P450 Peroxygenase: What Drives the Reaction to Biofuel Production?. Chemistry - A European Journal, 2016, 22, 5478-5483.	1.7	102
111	Origin of the Enhanced Reactivity of $\hat{l}$ <sup>1</sup> /4-Nitrido-Bridged Diiron(IV)-Oxo Porphyrinoid Complexes over Cytochrome P450 Compound I. ACS Catalysis, 2016, 6, 2230-2243.	5.5	98
112	Methane Hydroxylation by Axially Ligated Iron (IV)-oxo Porphyrin Cation Radical Models. International Journal of Science, Technology and Society, 2016, $1,\dots$	0.2	2
113	Drug Metabolism by Cytochrome P450 Enzymes: What Distinguishes the Pathways Leading to Substrate Hydroxylation Over Desaturation?. Chemistry - A European Journal, 2015, 21, 8973-8973.	1.7	3
114	Structure and Mechanism Leading to Formation of the Cysteine Sulfinate Product Complex of a Biomimetic Cysteine Dioxygenase Model. Chemistry - A European Journal, 2015, 21, 7470-7479.	1.7	20
115	Alkyl Chain Growth on a Transition Metal Center: How Does Iron Compare to Ruthenium and Osmium?. International Journal of Molecular Sciences, 2015, 16, 23369-23381.	1.8	0
116	Enzymatic Halogenases and Haloperoxidases. Advances in Protein Chemistry and Structural Biology, 2015, 100, 113-151.	1.0	17
117	Catalytic Mechanism of Cofactor-Free Dioxygenases and How They Circumvent Spin-Forbidden Oxygenation of Their Substrates. Journal of the American Chemical Society, 2015, 137, 7474-7487.	6.6	70
118	A comprehensive test set of epoxidation rate constants for iron(⟨scp⟩iv⟨ scp⟩)–oxo porphyrin cation radical complexes. Chemical Science, 2015, 6, 1516-1529.	3.7	96
119	Identification and Spectroscopic Characterization of Nonheme Iron(III) Hypochlorite Intermediates. Angewandte Chemie, 2015, 127, 4431-4435.	1.6	13
120	Identification and Spectroscopic Characterization of Nonheme Iron(III) Hypochlorite Intermediates. Angewandte Chemie - International Edition, 2015, 54, 4357-4361.	7.2	38
121	Spin-State Ordering in Hydroxo-Bridged Diiron(III)bisporphyrin Complexes. Inorganic Chemistry, 2015, 54, 1919-1930.	1.9	49
122	Hydrogenâ€Bonding Interactions Trigger a Spinâ€Flip in Iron(III) Porphyrin Complexes. Angewandte Chemie, 2015, 127, 4878-4882.	1.6	33
123	Site-selective formation of an iron( <scp>iv</scp> )–oxo species at the more electron-rich iron atom of heteroleptic μ-nitrido diiron phthalocyanines. Chemical Science, 2015, 6, 5063-5075.	3.7	70
124	Drug Metabolism by Cytochrome P450 Enzymes: What Distinguishes the Pathways Leading to Substrate Hydroxylation Over Desaturation?. Chemistry - A European Journal, 2015, 21, 9083-9092.	1.7	116
125	A Trimetal Carbene with Reactivity Reminiscent of Fischer–Tropsch Catalysis. Organometallics, 2015, 34, 1651-1660.	1.1	5
126	Hydrogenâ€Bonding Interactions Trigger a Spinâ€Flip in Iron(III) Porphyrin Complexes. Angewandte Chemie - International Edition, 2015, 54, 4796-4800.	7.2	83

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127	Differences and Comparisons of the Properties and Reactivities of Iron(III)–hydroperoxo Complexes with Saturated Coordination Sphere. Chemistry - A European Journal, 2015, 21, 1221-1236.	1.7	67
128	Thioether-ligated iron(ii) and iron(iii)-hydroperoxo/alkylperoxo complexes with an H-bond donor in the second coordination sphere. Dalton Transactions, 2014, 43, 7522.	1.6	30
129	Long-Range Electron Transfer Triggers Mechanistic Differences between Iron(IV)-Oxo and Iron(IV)-Imido Oxidants. Journal of the American Chemical Society, 2014, 136, 17102-17115.	6.6	106
130	Experimental and Computational Evidence for the Mechanism of Intradiol Catechol Dioxygenation by Nonâ∈Heme Iron(III) Complexes. Chemistry - A European Journal, 2014, 20, 15686-15691.	1.7	22
131	Origin of the Proton-transfer Step in the Cofactor-free (1H)-3-Hydroxy-4-oxoquinaldine 2,4-Dioxygenase. Journal of Biological Chemistry, 2014, 289, 8620-8632.	1.6	31
132	Metabolism of Halogenated Alkanes by Cytochrome P450 enzymes. Aerobic Oxidation versus Anaerobic Reduction. Chemistry - an Asian Journal, 2014, 9, 1175-1182.	1.7	19
133	Computational modelling of oxygenation processes in enzymes and biomimetic model complexes. Chemical Communications, 2014, 50, 262-282.	2.2	110
134	Direct Observation of a Nonheme Iron(IV)–Oxo Complex That Mediates Aromatic C–F Hydroxylation. Journal of the American Chemical Society, 2014, 136, 13542-13545.	6.6	66
135	Oxygen-Atom Transfer Reactivity of Axially Ligated Mn(V)–Oxo Complexes: Evidence for Enhanced Electrophilic and Nucleophilic Pathways. Journal of the American Chemical Society, 2014, 136, 13845-13852.	6.6	68
136	Properties and reactivities of nonheme iron( <scp>iv</scp> )â€"oxo versus iron( <scp>v</scp> )â€"oxo: long-range electron transfer versus hydrogen atom abstraction. Physical Chemistry Chemical Physics, 2014, 16, 22611-22622.	1.3	7
137	Frontispiece: Experimental and Computational Evidence for the Mechanism of Intradiol Catechol Dioxygenation by Non-Heme Iron(III) Complexes. Chemistry - A European Journal, 2014, 20, n/a-n/a.	1.7	0
138	Dramatic Influence of an Anionic Donor on the Oxygenâ€Atom Transfer Reactivity of a Mn <sup>V</sup> –Oxo Complex. Chemistry - A European Journal, 2014, 20, 14584-14588.	1.7	26
139	Quantum Mechanics/Molecular Mechanics Study on the Oxygen Binding and Substrate Hydroxylation Step in AlkB Repair Enzymes. Chemistry - A European Journal, 2014, 20, 435-446.	1.7	122
140	Secondary Coordination Sphere Influence on the Reactivity of Nonheme Iron(II) Complexes: An Experimental and DFT Approach. Journal of the American Chemical Society, 2013, 135, 10590-10593.	6.6	102
141	Synthesis and Ligand Non-Innocence of Thiolate-Ligated (N4S) Iron(II) and Nickel(II) Bis(imino)pyridine Complexes. Inorganic Chemistry, 2013, 52, 10467-10480.	1.9	21
142	Inversion of Enantioselectivity of a Mononuclear Nonâ€Heme Iron(II)â€dependent Hydroxylase by Tuning the Interplay of Metalâ€Center Geometry and Protein Structure. Angewandte Chemie - International Edition, 2013, 52, 9677-9681.	7.2	62
143	Mechanistic insight into halide oxidation by non-heme iron complexes. Haloperoxidase versus halogenase activity. Chemical Communications, 2013, 49, 10926.	2.2	45
144	Does Hydrogenâ€Bonding Donation to Manganese(IV)–Oxo and Iron(IV)–Oxo Oxidants Affect the Oxygenâ€Atom Transfer Ability? A Computational Study. Chemistry - A European Journal, 2013, 19, 4058-4068.	1.7	76

#	Article	IF	CITATIONS
145	Comparison of the Reactivity of Nonheme Iron(IV)–Oxo versus Iron(IV)–Imido Complexes: Which is the Better Oxidant?. Angewandte Chemie - International Edition, 2013, 52, 12288-12292.	7.2	88
146	Intrinsic properties and reactivities of mononuclear nonheme iron–oxygen complexes bearing the tetramethylcyclam ligand. Coordination Chemistry Reviews, 2013, 257, 381-393.	9.5	157
147	Rationalization of the Barrier Height for <i>p</i> -Z-styrene Epoxidation by Iron(IV)-Oxo Porphyrin Cation Radicals with Variable Axial Ligands. Inorganic Chemistry, 2013, 52, 7968-7979.	1.9	66
148	Generation of a High-Valent Iron Imido Corrolazine Complex and NR Group Transfer Reactivity. Inorganic Chemistry, 2013, 52, 4668-4682.	1.9	54
149	Differences in chemical properties and reactivity patterns of mono- and dioxomanganese(V) porphyrins as revealed by density functional theory. Journal of Porphyrins and Phthalocyanines, 2013, 17, 954-963.	0.4	3
150	Overview on Theoretical Studies Discriminating the Two-Oxidant Versus Two-State-Reactivity Models for Substrate Monoxygenation by Cytochrome P450 Enzymes. Current Topics in Medicinal Chemistry, 2013, 13, 2218-2232.	1.0	15
151	Cysteine protease inhibition by nitrile-based inhibitors: a computational study. Frontiers in Chemistry, 2013, 1, 39.	1.8	24
152	Nonheme iron-oxo and -superoxo reactivities: O2 binding and spin inversion probability matter. Chemical Communications, 2012, 48, 2189.	2.2	39
153	Predictive studies of H-atom abstraction reactions by an iron(iv)–oxo corrole cation radical oxidant. Chemical Communications, 2012, 48, 3491.	2.2	20
154	Valence Tautomerism in a High-Valent Manganese–Oxo Porphyrinoid Complex Induced by a Lewis Acid. Journal of the American Chemical Society, 2012, 134, 10397-10400.	6.6	155
155	Modeling Flexible Pharmacophores with Distance Geometry, Scoring, and Bound Stretching. Journal of Chemical Information and Modeling, 2012, 52, 577-588.	2.5	5
156	Mechanism of S-Oxygenation by a Cysteine Dioxygenase Model Complex. Journal of Physical Chemistry A, 2012, 116, 582-591.	1.1	38
157	Axial Ligand Effect On The Rate Constant of Aromatic Hydroxylation By Iron(IV)–Oxo Complexes Mimicking Cytochrome P450 Enzymes. Journal of Physical Chemistry B, 2012, 116, 718-730.	1.2	64
158	Regioselectivity of substrate hydroxylation versus halogenation by a nonheme iron(IV)–oxo complex: possibility of rearrangement pathways. Journal of Biological Inorganic Chemistry, 2012, 17, 841-852.	1,1	33
159	Predictive studies of oxygen atom transfer reactions by Compound I of cytochrome P450. Advances in Inorganic Chemistry, 2012, 64, 1-31.	0.4	13
160	Axial and equatorial ligand effects on biomimetic cysteine dioxygenase model complexes. Organic and Biomolecular Chemistry, 2012, 10, 5401.	1.5	17
161	Regioselectivity of aliphatic versus aromatic hydroxylation by a nonheme iron(ii)-superoxo complex. Physical Chemistry Chemical Physics, 2012, 14, 2518.	1.3	11
162	The Accuracy of Density Functional Theory Calculations in Biocatalysis. Journal of Biocatalysis $\&$ Biotransformation, 2012, $1,.$	0.4	4

#	Article	IF	Citations
163	Nonheme ferric hydroperoxo intermediates are efficient oxidants of bromide oxidation. Chemical Communications, 2011, 47, 11044.	2.2	67
164	Oxidative properties of a nonheme Ni(ii)(O2) complex: Reactivity patterns for C–H activation, aromatic hydroxylation and heteroatom oxidation. Chemical Communications, 2011, 47, 10674.	2.2	24
165	Theoretical Study on the Mechanism of the Oxygen Activation Process in Cysteine Dioxygenase Enzymes. Journal of the American Chemical Society, 2011, 133, 3869-3882.	6.6	197
166	van der Waals Equation of State Revisited: Importance of the Dispersion Correction. Journal of Physical Chemistry B, 2011, 115, 4709-4717.	1.2	18
167	Manganese substituted Compound I of cytochrome P450 biomimetics: A comparative reactivity study of MnV-oxo versus MnIV-oxo species. Archives of Biochemistry and Biophysics, 2011, 507, 4-13.	1.4	39
168	Polarizability-based equation of state: Application to CO, N2 and O2. Chemical Physics Letters, 2011, 515, 170-172.	1.2	5
169	A Manganese(V)–Oxo π-Cation Radical Complex: Influence of One-Electron Oxidation on Oxygen-Atom Transfer. Journal of the American Chemical Society, 2011, 133, 15874-15877.	6.6	74
170	The Axial Ligand Effect on Aliphatic and Aromatic Hydroxylation by Nonâ€heme Iron(IV)–oxo Biomimetic Complexes. Chemistry - an Asian Journal, 2011, 6, 493-504.	1.7	44
171	Effect of the Axial Ligand on Substrate Sulfoxidation Mediated by Iron(IV)–Oxo Porphyrin Cation Radical Oxidants. Chemistry - A European Journal, 2011, 17, 6196-6205.	1.7	82
172	A Biomimetic Ferric Hydroperoxo Porphyrin Intermediate. Angewandte Chemie - International Edition, 2010, 49, 2099-2101.	7.2	61
173	Unprecedented Rate Enhancements of Hydrogenâ€Atom Transfer to a Manganese(V)–Oxo Corrolazine Complex. Angewandte Chemie - International Edition, 2010, 49, 5091-5095.	7.2	129
174	What Factors Influence the Rate Constant of Substrate Epoxidation by Compound I of Cytochrome P450 and Analogous Iron(IV)-Oxo Oxidants?. Journal of the American Chemical Society, 2010, 132, 7656-7667.	6.6	163
175	High-Valent Iron-Oxo Porphyrins in Oxygenation Reactions. Handbook of Porphyrin Science, 2010, , 85-139.	0.3	13
176	Trends in Substrate Hydroxylation Reactions by Heme and Nonheme Iron(IV)-Oxo Oxidants Give Correlations between Intrinsic Properties of the Oxidant with Barrier Height. Journal of the American Chemical Society, 2010, 132, 1087-1097.	6.6	177
177	Steric Factors Override Thermodynamic Driving Force in Regioselectivity of Proline Hydroxylation by Prolyl-4-hydroxylase Enzymes. Journal of Physical Chemistry A, 2010, 114, 13234-13243.	1.1	41
178	New insights into the multi-step reaction pathway of the reductive half-reaction catalysed by aromatic amine dehydrogenase: a QM/MM study. Chemical Communications, 2010, 46, 3104.	2.2	10
179	Assignment of the Vibrational Spectra of Enzyme-Bound Tryptophan Tryptophyl Quinones Using a Combined QM/MM Approach. Journal of Physical Chemistry A, 2010, 114, 1212-1217.	1.1	7
180	Nuclear Quantum Tunneling in the Light-activated Enzyme Protochlorophyllide Oxidoreductase. Journal of Biological Chemistry, 2009, 284, 3762-3767.	1.6	80

#	Article	IF	CITATIONS
181	How Does the Axial Ligand of Cytochrome P450 Biomimetics Influence the Regioselectivity of Aliphatic versus Aromatic Hydroxylation?. Chemistry - A European Journal, 2009, 15, 5577-5587.	1.7	82
182	Origin of the Correlation of the Rate Constant of Substrate Hydroxylation by Nonheme Iron(IV)–oxo Complexes with the Bondâ€Dissociation Energy of the CïŁ¿H Bond of the Substrate. Chemistry - A European Journal, 2009, 15, 6651-6662.	1.7	98
183	Structural Characterization and Remarkable Axial Ligand Effect on the Nucleophilic Reactivity of a Nonheme Manganese(III)–Peroxo Complex. Angewandte Chemie - International Edition, 2009, 48, 4150-4153.	7.2	115
184	Elucidating enzyme mechanism and intrinsic chemical properties of short-lived intermediates in the catalytic cycles of cysteine dioxygenase and taurine/α-ketoglutarate dioxygenase. Coordination Chemistry Reviews, 2009, 253, 754-768.	9.5	58
185	Effect of Porphyrin Ligands on the Regioselective Dehydrogenation versus Epoxidation of Olefins by Oxoiron(IV) Mimics of Cytochrome P450. Journal of Physical Chemistry A, 2009, 113, 11713-11722.	1.1	78
186	Carbon Dioxide: A Waste Product in the Catalytic Cycle of $\hat{l}_{\pm}$ -Ketoglutarate Dependent Halogenases Prevents the Formation of Hydroxylated By-Products. Journal of Physical Chemistry B, 2009, 113, 12-14.	1.2	53
187	Why Do Cysteine Dioxygenase Enzymes Contain a 3-His Ligand Motif Rather than a 2His/1Asp Motif Like Most Nonheme Dioxygenases?. Journal of Physical Chemistry A, 2009, 113, 1835-1846.	1.1	54
188	Fundamental Differences of Substrate Hydroxylation by High-Valent Iron(IV)-Oxo Models of Cytochrome P450. Inorganic Chemistry, 2009, 48, 6661-6669.	1.9	37
189	Density functional theory (DFT) and combined quantum mechanical/molecular mechanics (QM/MM) studies on the oxygen activation step in nitric oxide synthase enzymes. Biochemical Society Transactions, 2009, 37, 373-377.	1.6	26
190	Activation of hydrocarbon C–H bonds by iodosylbenzene: how does it compare with iron(iv)–oxo oxidants?. Chemical Communications, 2009, , 1562.	2.2	28
191	Quantum Mechanics/Molecular Mechanics Studies on the Sulfoxidation of Dimethyl Sulfide by Compound I and Compound 0 of Cytochrome P450: Which Is the Better Oxidant?. Journal of Physical Chemistry A, 2009, 113, 11635-11642.	1.1	56
192	Electronic properties of pentacoordinated heme complexes in cytochrome P450 enzymes: search for an Fe(i) oxidation state. Physical Chemistry Chemical Physics, 2009, 11, 10219.	1.3	28
193	Chapter 2. Introduction to Quantum Behaviour – A Primer. RSC Biomolecular Sciences, 2009, , 18-35.	0.4	1
194	Is the μâ€Oxoâ€Î¼â€Peroxodiiron Intermediate of a Ribonucleotide Reductase Biomimetic a Possible Oxidant of Epoxidation Reactions?. Chemistry - A European Journal, 2008, 14, 4533-4541.	1.7	10
195	Theoretical Investigation on the Mechanism of Oxygen Atom Transfer between Two Non-Heme Iron Centres. European Journal of Inorganic Chemistry, 2008, 2008, 1027-1030.	1.0	7
196	Density functional theory studies of oxygen and carbonate binding to a dicopper patellamide complex. Journal of Inorganic Biochemistry, 2008, 102, 2171-2178.	1.5	13
197	How Do Azoles Inhibit Cytochrome P450 Enzymes? A Density Functional Study. Journal of Physical Chemistry A, 2008, 112, 12911-12918.	1.1	76
198	A Valence Bond Modeling of Trends in Hydrogen Abstraction Barriers and Transition States of Hydroxylation Reactions Catalyzed by Cytochrome P450 Enzymes. Journal of the American Chemical Society, 2008, 130, 10128-10140.	6.6	232

#	Article	IF	CITATIONS
199	Is the Bound Substrate in Nitric Oxide Synthase Protonated or Neutral and What Is the Active Oxidant that Performs Substrate Hydroxylation?. Journal of the American Chemical Society, 2008, 130, 12961-12974.	6.6	85
200	The Effect and Influence of <i>cis</i> -Ligands on the Electronic and Oxidizing Properties of Nonheme Oxoiron Biomimetics. A Density Functional Study. Journal of Physical Chemistry A, 2008, 112, 12887-12895.	1.1	18
201	Comparative Quantum Mechanics/Molecular Mechanics (QM/MM) and Density Functional Theory Calculations on the Oxoâ^'lron Species of Taurine/α-Ketoglutarate Dioxygenase. Journal of Physical Chemistry A, 2008, 112, 2464-2468.	1.1	86
202	A Tribute to Sason Shaik. Journal of Physical Chemistry A, 2008, 112, 12721-12723.	1.1	0
203	Combined Experimental and Theoretical Study on Aromatic Hydroxylation by Mononuclear Nonheme Iron(IV)â^'Oxo Complexes. Inorganic Chemistry, 2007, 46, 4632-4641.	1.9	174
204	Can the peroxosuccinate complex in the catalytic cycle of taurine/l±-ketoglutarate dioxygenase (TauD) act as an alternative oxidant?. Chemical Communications, 2007, , 171-173.	2.2	55
205	Preferential Hydroxylation over Epoxidation Catalysis by a Horseradish Peroxidase Mutant:  A Cytochrome P450 Mimic. Journal of Physical Chemistry B, 2007, 111, 12299-12302.	1.2	21
206	The Mechanism of Cysteine Oxygenation by Cysteine Dioxygenase Enzymes. Journal of the American Chemical Society, 2007, 129, 14846-14847.	6.6	129
207	A Density Functional Study of the Factors That Influence the Regioselectivity of Toluene Hydroxylation by Cytochrome P450 Enzymes. European Journal of Inorganic Chemistry, 2007, 2007, 2966-2974.	1.0	32
208	How does the push/pull effect of the axial ligand influence the catalytic properties of Compound I of catalase and cytochrome P450?. Journal of Inorganic Biochemistry, 2007, 101, 1464-1472.	1.5	37
209	What Factors Influence the Ratio of CH Hydroxylation versus CC Epoxidation by a Nonheme Cytochrome P450 Biomimetic?. Journal of the American Chemical Society, 2006, 128, 15809-15818.	6.6	136
210	What External Perturbations Influence the Electronic Properties of Catalase Compound I?. Inorganic Chemistry, 2006, 45, 9551-9557.	1.9	33
211	Ferromagnetic Bonding:Â High Spin Copper Clusters (n+1Cun;n= 2â°'14) Devoid of Electron Pairs but Possessing Strong Bondingâ€. Journal of Physical Chemistry A, 2006, 110, 8510-8518.	1.1	24
212	Can the Replacement of a Single Atom in the Enzyme Horseradish Peroxidase Convert It into a Monoxygenase? A Density Functional Study. Journal of Physical Chemistry B, 2006, 110, 20759-20761.	1.2	13
213	Propene Activation by the Oxo-Iron Active Species of Taurine/α-Ketoglutarate Dioxygenase (TauD) Enzyme. How Does the Catalysis Compare to Heme-Enzymes?. Journal of the American Chemical Society, 2006, 128, 9813-9824.	6.6	193
214	The axial ligand effect of oxo-iron porphyrin catalysts. How does chloride compare to thiolate?. Journal of Biological Inorganic Chemistry, 2006, 11, 168-178.	1.1	55
215	Substitution of Hydrogen by Deuterium Changes the Regioselectivity of Ethylbenzene Hydroxylation by an Oxo–Iron–Porphyrin Catalyst. Chemistry - A European Journal, 2006, 12, 8168-8177.	1.7	99
216	Differences in and Comparison of the Catalytic Properties of Heme and Non-Heme Enzymes with a Central Oxo–Iron Group. Angewandte Chemie - International Edition, 2006, 45, 1790-1793.	7.2	97

#	Article	IF	CITATIONS
217	Theoretical Perspective on the Structure and Mechanism of Cytochrome P450 Enzymes. Chemical Reviews, 2005, 105, 2279-2328.	23.0	1,127
218	Multistate Reactivity in Styrene Epoxidation by Compound I of Cytochrome P450: Mechanisms of Products and Side Products Formation. Chemistry - A European Journal, 2005, 11, 2825-2835.	1.7	108
219	Theoretical Perspective on the Structure and Mechanism of Cytochrome P450 Enzymes. ChemInform, 2005, 36, no.	0.1	3
220	The intrinsic axial ligand effect on propene oxidation by horseradish peroxidase versus cytochrome P450 enzymes. Journal of Biological Inorganic Chemistry, 2005, 10, 181-189.	1.1	60
221	Computational Approaches to Cytochrome P450 Function. , 2005, , 45-85.		22
222	New Features in the Catalytic Cycle of Cytochrome P450 during the Formation of Compound I from Compound 0. Journal of Physical Chemistry B, 2005, 109, 19946-19951.	1.2	52
223	Sulfoxidation Mechanisms Catalyzed by Cytochrome P450 and Horseradish Peroxidase Models:  Spin Selection Induced by the Ligand,. Biochemistry, 2005, 44, 8148-8158.	1.2	74
224	Theory Favors a Stepwise Mechanism of Porphyrin Degradation by a Ferric Hydroperoxide Model of the Active Species of Heme Oxygenase. Journal of the American Chemical Society, 2005, 127, 8204-8213.	6.6	78
225	What Affects the Quartetâ^Doublet Energy Splitting in Peroxidase Enzymes?. Journal of Physical Chemistry A, 2005, 109, 11050-11057.	1.1	53
226	One oxidant, many pathways: a theoretical perspective of monooxygenation mechanisms by cytochrome P450 enzymes. Journal of Biological Inorganic Chemistry, 2004, 9, 661-668.	1.1	86
227	How do aldehyde side products occur during alkene epoxidation by cytochrome P450? Theory reveals a state-specific multi-state scenario where the high-spin component leads to all side productsa †. Journal of Inorganic Biochemistry, 2004, 98, 1183-1193.	1.5	65
228	Porphyrin Traps Its Terminator! Concerted and Stepwise Porphyrin Degradation Mechanisms Induced by Heme-Oxygenase and Cytochrome P450. Angewandte Chemie - International Edition, 2004, 43, 1129-1132.	7.2	60
229	Computer-Generated High-Valent Iron-Oxo and Manganese-Oxo Species with Polyoxometalate Ligands: How do they Compare with the Iron-Oxo Active Species of Heme Enzymes?. Angewandte Chemie - International Edition, 2004, 43, 5661-5665.	7.2	67
230	The "Rebound Controversy― An Overview and Theoretical Modeling of the Rebound Step in Câ^'H Hydroxylation by Cytochrome P450. European Journal of Inorganic Chemistry, 2004, 2004, 207-226.	1.0	156
231	Mechanism of Oxidation Reactions Catalyzed by Cytochrome P450 Enzyme. ChemInform, 2004, 35, no.	0.1	2
232	Radical Clock Substrates, Their Câ^'H Hydroxylation Mechanism by Cytochrome P450, and Other Reactivity Patterns:Â What Does Theory Reveal about the Clocks' Behavior?. Journal of the American Chemical Society, 2004, 126, 1907-1920.	6.6	156
233	External Electric Field Will Control the Selectivity of Enzymatic-Like Bond Activations. Journal of the American Chemical Society, 2004, 126, 11746-11749.	6.6	265
234	Photoactivation of the Photoactive Yellow Protein:Â Why Photon Absorption Triggers a Trans-to-Cis Isomerization of the Chromophore in the Protein. Journal of the American Chemical Society, 2004, 126, 4228-4233.	6.6	265

#	Article	IF	CITATIONS
235	Oxygen Economy of Cytochrome P450:Â What Is the Origin of the Mixed Functionality as a Dehydrogenaseâ^Oxidase Enzyme Compared with Its Normal Function?. Journal of the American Chemical Society, 2004, 126, 5072-5073.	6.6	78
236	A Predictive Pattern of Computed Barriers for Câ <sup>^</sup> H Hydroxylation by Compound I of Cytochrome P450. Journal of the American Chemical Society, 2004, 126, 8362-8363.	6.6	218
237	Mechanism of Oxidation Reactions Catalyzed by Cytochrome P450 Enzymes. Chemical Reviews, 2004, 104, 3947-3980.	23.0	2,048
238	Electrophilic Aromatic Chlorination and Haloperoxidation of Chloride Catalyzed by Polyfluorinated Alcohols:Â A New Manifestation of Template Catalysis. Journal of the American Chemical Society, 2003, 12116-12117.	6.6	94
239	Fluorinated Alcohols Enable Olefin Epoxidation by H2O2:Â Template Catalysis. Journal of Organic Chemistry, 2003, 68, 2903-2912.	1.7	87
240	A REKS Assessment of the Face-Diagonal Bond in 1,3-Didehydrocubane and a Comparison with Benzyne Biradicals. European Journal of Organic Chemistry, 2003, 2003, 4199-4204.	1.2	23
241	A Proton-Shuttle Mechanism Mediated by the Porphyrin in Benzene Hydroxylation by Cytochrome P450 Enzymes. Journal of the American Chemical Society, 2003, 125, 7413-7424.	6.6	324
242	How Does Product Isotope Effect Prove the Operation of a Two-State "Rebound―Mechanism in Câ^'H Hydroxylation by Cytochrome P450?. Journal of the American Chemical Society, 2003, 125, 13024-13025.	6.6	93
243	Is the Ruthenium Analogue of Compound I of Cytochrome P450 an Efficient Oxidant? A Theoretical Investigation of the Methane Hydroxylation Reaction. Journal of the American Chemical Society, 2003, 125, 2291-2300.	6.6	74
244	Active Species of Horseradish Peroxidase (HRP) and Cytochrome P450:Â Two Electronic Chameleons. Journal of the American Chemical Society, 2003, 125, 15779-15788.	6.6	168
245	Can a Single Oxidant with Two Spin States Masquerade as Two Different Oxidants? A Study of the Sulfoxidation Mechanism by Cytochrome P450. Journal of the American Chemical Society, 2003, 125, 8698-8699.	6.6	120
246	Ferromagnetic bonding in high-spin alkali-metal clusters. How does sodium compare to lithium?. Physical Chemistry Chemical Physics, 2003, 5, 158-164.	1.3	27
247	Reply to Comment on "ldentity Hydrogen Abstraction Reactions, X• + Hâ^'X' → Xâ^'H + X'• (X = Xâ	â€~ = CH3, 1.1	, S <u>i</u> H3,) Tj ET
248	What Factors Affect the Regioselectivity of Oxidation by Cytochrome P450? A DFT Study of Allylic Hydroxylation and Double Bond Epoxidation in a Model Reaction. Journal of the American Chemical Society, 2002, 124, 11809-11826.	6.6	289
249	Ferromagnetic Bonding:  Properties of High-Spin Lithium Clusters n+1Lin (n = 2â^'12) Devoid of Electron Pairs. Journal of Physical Chemistry A, 2002, 106, 4961-4969.	1.1	36
250	Searching for the Second Oxidant in the Catalytic Cycle of Cytochrome P450:Â A Theoretical Investigation of the Iron(III)-Hydroperoxo Species and Its Epoxidation Pathways. Journal of the American Chemical Society, 2002, 124, 2806-2817.	6.6	295
251	Hydrogen Bonding Modulates the Selectivity of Enzymatic Oxidation by P450: Chameleon Oxidant Behavior by Compound I The research was supported in parts by the Israel Science Foundation (ISF), the German Israeli Binational Foundation (GIF), and by the Ministry of Science, Culture, and Sports. F.O.	1.6	18
252	thanks the Furopean community for a Marie Cirie Fellowship. Angewands Chemie. 2002 114, 2027. Hydrogen Bonding Modulates the Selectivity of Enzymatic Oxidation by P450: Chameleon Oxidant Behavior by Compound I The research was supported in parts by the Israel Science Foundation (ISF), the German Israeli Binational Foundation (GIF), and by the Ministry of Science, Culture, and Sports. F.O. thanks the European community for a Marie Curie Fellowship Angewandte Chemie - International Edition, 2002, 41, 1947.	7.2	122

#	Article	IF	Citations
253	Two-state reactivity mechanisms of hydroxylation and epoxidation by cytochrome P-450 revealed by theory. Current Opinion in Chemical Biology, 2002, 6, 556-567.	2.8	340
254	The †push†effect of the thiolate ligand in cytochrome P450: a theoretical gauging. Journal of Inorganic Biochemistry, 2002, 91, 554-567.	1.5	139
255	Hydrogen bonding modulates the selectivity of enzymatic oxidation by P450: chameleon oxidant behavior by compound I. Angewandte Chemie - International Edition, 2002, 41, 1947-51.	7.2	21
256	Multi-State Epoxidation of Ethene by Cytochrome P450:Â A Quantum Chemical Study. Journal of the American Chemical Society, 2001, 123, 3037-3047.	6.6	213
257	Myers–Saito and Schmittel cyclization of hepta-1,2,4-triene-6-yne: A theoretical REKS study. Physical Chemistry Chemical Physics, 2001, 3, 1242-1245.	1.3	32
258	Stereospecific oxidation by Compound I of Cytochrome P450 does not proceed in a concerted synchronous manner. Chemical Communications, 2001, , 2322-2323.	2.2	29
259	The Experimentally Elusive Oxidant of Cytochrome P450: A Theoretical "Trapping―Defining More Closely the "Real―Species. ChemBioChem, 2001, 2, 848.	1.3	85
260	What Is the Difference between the Manganese Porphyrin and Corrole Analogues of Cytochrome P450's Compound I?. Chemistry - A European Journal, 2001, 7, 4954-4960.	1.7	88
261	How Does Ethene Inactivate Cytochrome P450 En Route to Its Epoxidation? A Density Functional Study. Angewandte Chemie - International Edition, 2001, 40, 2871-2874.	7.2	89
262	Chameleon States: High-Valent Metal-Oxo Species of Cytochrome P450 and Its Ruthenium Analogue. Angewandte Chemie - International Edition, 2001, 40, 2874-2878.	7.2	114
263	How Does Ethene Inactivate Cytochrome P450 En Route to Its Epoxidation? A Density Functional Study The research is supported in part by the ISF and in part by the Ministry of Science, Culture, and Sport. F.O. acknowledges the European Union for a Marie Curie Fellowship Angewandte Chemie -	7.2	10
264	Chameleon States: High-Valent Metal-Oxo Species of Cytochrome P450 and Its Ruthenium Analogue The research in HU was sponsored by the Binational German Israeli Foundation (GIF) and by the Israeli Ministry of Science, Culture and Sport. Partial support by the US National Science Foundation (CHE-9814301) to J.T.G. is acknowledged. F.O. thanks the EU for a Marie Curie Fellowship Angewandte	7.2	16
265	Chemie - International Edition, 2001, 40, 2874-2878.  A Model "Rebound―Mechanism of Hydroxylation by Cytochrome P450:  Stepwise and Effectively Concerted Pathways, and Their Reactivity Patterns. Journal of the American Chemical Society, 2000, 122, 8977-8989.	6.6	385
266	REKS calculations on ortho-, meta- and para-benzyne. Physical Chemistry Chemical Physics, 2000, 2, 5046-5048.	1.3	46
267	"No-Pair Bonding―in High-Spin Lithium Clusters:Ân+1Lin(n= 2â^'6). Journal of Physical Chemistry A, 2000, 104, 11223-11231.	1.1	30
268	Medium Polarization and Hydrogen Bonding Effects on Compound I of Cytochrome P450:Â What Kind of a Radical Is It Really?. Journal of the American Chemical Society, 2000, 122, 12892-12893.	6.6	171
269	Characterization of isomeric C4H5â^' anions in the gas phase; theory and experiment. Journal of Mass Spectrometry, 1999, 34, 303-310.	0.7	6
270	On the relationship between internal energy and both the polarizability volume and the diamagnetic susceptibility. Physical Chemistry Chemical Physics, 1999, 1, 749-753.	1.3	27

#	ARTICLE	IF	CITATION
271	Sulfur–sulfur three-electron bond dissociation enthalpies of dialkyl sulfide dimer radical cations. International Journal of Mass Spectrometry, 1998, 179-180, 43-54.	0.7	17
272	Nature of the Three-Electron Bond in H2Sâ~SH2+Ââ€. Journal of Physical Chemistry A, 1998, 102, 9549-9553.	1.1	102
273	Chemical and Thermodynamic Properties of Methyl Chloride Dimer Radical Cations in the Gas Phase. Journal of the American Chemical Society, 1998, 120, 1517-1522.	6.6	39
274	Bond dissociation energy of the radical cation dimers of diethyl sulfide, di-n-propyl sulfide and di-n-butyl sulfide. International Journal of Mass Spectrometry and Ion Processes, 1996, 157-158, 283-291.	1.9	14
275	Reactivity and Thermochemical Properties of the Water Dimer Radical Cation in the Gas Phase. The Journal of Physical Chemistry, 1995, 99, 15444-15447.	2.9	65
276	Chapter 1. Experimental and Computational Studies on the Catalytic Mechanism of Non-heme Iron Dioxygenases. , $0$ , , $1$ -41.		3