

Louis Noodleman

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126
papers

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52
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114
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137
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13,856
ext. citations

8
avg, IF

6.26
L-index

#	Paper	IF	Citations
126	Valence bond description of antiferromagnetic coupling in transition metal dimers. <i>Journal of Chemical Physics</i> , 1981 , 74, 5737-5743	3.9	2090
125	Copper(I)-catalyzed synthesis of azoles. DFT study predicts unprecedented reactivity and intermediates. <i>Journal of the American Chemical Society</i> , 2005 , 127, 210-6	16.4	1311
124	Ligand spin polarization and antiferromagnetic coupling in transition metal dimers. <i>Chemical Physics</i> , 1986 , 109, 131-143	2.3	815
123	Orbital interactions, electron delocalization and spin coupling in iron-sulfur clusters. <i>Coordination Chemistry Reviews</i> , 1995 , 144, 199-244	23.2	683
122	Density-Functional Theory of Spin Polarization and Spin Coupling in Iron-Sulfur Clusters. <i>Advances in Inorganic Chemistry</i> , 1992 , 38, 423-470	2.1	513
121	Electronic structure, magnetic properties, ESR, and optical spectra for 2-iron ferredoxin models by LCAO-X.alpha. valence bond theory. <i>Journal of the American Chemical Society</i> , 1984 , 106, 2316-2327	16.4	479
120	The X.alpha. valence bond theory of weak electronic coupling. Application to the low-lying states of Mo2Cl8. <i>Journal of Chemical Physics</i> , 1979 , 70, 4903-4906	3.9	370
119	Quantum chemical studies of intermediates and reaction pathways in selected enzymes and catalytic synthetic systems. <i>Chemical Reviews</i> , 2004 , 104, 459-508	68.1	331
118	Why is tetrazole formation by addition of azide to organic nitriles catalyzed by zinc(II) salts?. <i>Journal of the American Chemical Society</i> , 2003 , 125, 9983-7	16.4	305
117	Models for ferredoxins: electronic structures of iron-sulfur clusters with one, two, and four iron atoms. <i>Journal of the American Chemical Society</i> , 1985 , 107, 3418-3426	16.4	274
116	Mechanisms of tetrazole formation by addition of azide to nitriles. <i>Journal of the American Chemical Society</i> , 2002 , 124, 12210-6	16.4	273
115	Density Functional/Poisson-Boltzmann Calculations of Redox Potentials for Iron-Sulfur Clusters. <i>Journal of the American Chemical Society</i> , 1994 , 116, 11898-11914	16.4	272
114	Calculation of Redox Potentials and pKa Values of Hydrated Transition Metal Cations by a Combined Density Functional and Continuum Dielectric Theory. <i>Inorganic Chemistry</i> , 1996 , 35, 4694-4702	5.1	215
113	Broken symmetry analysis of spin coupling in iron-sulfur clusters. <i>Journal of the American Chemical Society</i> , 1988 , 110, 1001-1005	16.4	204
112	Density functional and reduction potential calculations of Fe4S4 clusters. <i>Journal of the American Chemical Society</i> , 2003 , 125, 1923-36	16.4	189
111	Calculating the electron paramagnetic resonance parameters of exchange coupled transition metal complexes using broken symmetry density functional theory: application to a MnIII/MnIV model compound. <i>Journal of the American Chemical Society</i> , 2004 , 126, 2613-22	16.4	176
110	Incorporating Solvation Effects into Density Functional Electronic Structure Calculations. <i>The Journal of Physical Chemistry</i> , 1994 , 98, 11059-11068		158

109	FeMo cofactor of nitrogenase: a density functional study of states M(N), M(OX), M(R), and M(I). <i>Journal of the American Chemical Society</i> , 2001 , 123, 12392-410	16.4	152
108	Structural, spectroscopic, and redox consequences of a central ligand in the FeMoco of nitrogenase: a density functional theoretical study. <i>Journal of the American Chemical Society</i> , 2003 , 125, 8377-83	16.4	133
107	Density Functional Study of the Valence-Tautomeric Interconversion Low-Spin [CoIII(SQ)(Cat)(phen)] ? High-Spin [CoII(SQ)2(phen)]. <i>Inorganic Chemistry</i> , 1997 , 36, 3966-3984	5.1	132
106	Spin Densities and Spin Coupling in Iron-Sulfur Clusters: A New Analysis of Hyperfine Coupling Constants. <i>Inorganic Chemistry</i> , 1995 , 34, 4347-4359	5.1	131
105	Insights into properties and energetics of iron-sulfur proteins from simple clusters to nitrogenase. <i>Current Opinion in Chemical Biology</i> , 2002 , 6, 259-73	9.7	117
104	Incorporating Protein Environments in Density Functional Theory: A Self-Consistent Reaction Field Calculation of Redox Potentials of [2Fe2S] Clusters in Ferredoxin and Phthalate Dioxygenase Reductase. <i>Journal of Physical Chemistry A</i> , 1998 , 102, 6311-6324	2.8	112
103	A model for the spin states of high-potential iron-sulfur [Fe4S4]3+ proteins. <i>Inorganic Chemistry</i> , 1988 , 27, 3677-3679	5.1	108
102	Density functional calculation of p K(a) values and redox potentials in the bovine Rieske iron-sulfur protein. <i>Journal of Biological Inorganic Chemistry</i> , 2002 , 7, 632-9	3.7	103
101	Electronic structure of 2-Fe ferredoxin models by X.alpha. valence bond theory. <i>Journal of the American Chemical Society</i> , 1980 , 102, 4279-4282	16.4	97
100	Density Functional Calculations of Electronic Structure, Charge Distribution, and Spin Coupling in Manganese-Oxo Dimer Complexes. <i>Inorganic Chemistry</i> , 1997 , 36, 1198-1217	5.1	94
99	Density Functional Study on the Electronic Structures of Model Peroxidase Compounds I and II. <i>Journal of the American Chemical Society</i> , 1997 , 119, 11442-11451	16.4	88
98	Structure, redox, pKa, spin. A golden tetrad for understanding metalloenzyme energetics and reaction pathways. <i>Journal of Biological Inorganic Chemistry</i> , 2006 , 11, 674-94	3.7	80
97	Testing if the interstitial atom, X, of the nitrogenase molybdenum-iron cofactor is N or C: ENDOR, ESEEM, and DFT studies of the S = 3/2 resting state in multiple environments. <i>Inorganic Chemistry</i> , 2007 , 46, 11437-49	5.1	77
96	Exchange coupling and resonance delocalization in reduced iron-sulfur [Fe4S4]+ and iron-selenium [Fe4Se4]+ clusters. 1. Basic theory of spin-state energies and EPR and hyperfine properties. <i>Inorganic Chemistry</i> , 1991 , 30, 246-256	5.1	77
95	A theoretical study of the UV/visible absorption and emission solvatochromic properties of solvent-sensitive dyes. <i>ChemPhysChem</i> , 2003 , 4, 1084-94	3.2	75
94	CuZn Superoxide Dismutase Geometry Optimization, Energetics, and Redox Potential Calculations by Density Functional and Electrostatic Methods. <i>Inorganic Chemistry</i> , 1999 , 38, 940-950	5.1	75
93	A structural model for the high-valent intermediate Q of methane monooxygenase from broken-symmetry density functional and electrostatics calculations. <i>Journal of the American Chemical Society</i> , 2002 , 124, 5890-4	16.4	74
92	Symmetry and bonding in metalloporphyrins. A modern implementation for the bonding analyses of five- and six-coordinate high-spin iron(III)-porphyrin complexes through density functional calculation and NMR spectroscopy. <i>Journal of the American Chemical Society</i> , 2003 , 125, 6774-83	16.4	70

91	Nornicotine aqueous aldol reactions: synthetic and theoretical investigations into the origins of catalysis. <i>Journal of Organic Chemistry</i> , 2004 , 69, 6603-9	4.2	66
90	A fluorogenic aryl fluorosulfate for intraorganellar transthyretin imaging in living cells and in <i>Caenorhabditis elegans</i> . <i>Journal of the American Chemical Society</i> , 2015 , 137, 7404-14	16.4	65
89	Density functional studies of the ground- and excited-state potential-energy curves of stilbene cis-trans isomerization. <i>ChemPhysChem</i> , 2002 , 3, 167-78	3.2	65
88	Coupled redox potentials in manganese and iron superoxide dismutases from reaction kinetics and density functional/electrostatics calculations. <i>Inorganic Chemistry</i> , 2002 , 41, 205-18	5.1	64
87	Density Functional and Electrostatic Calculations of Manganese Superoxide Dismutase Active Site Complexes in Protein Environments. <i>Inorganic Chemistry</i> , 1999 , 38, 929-939	5.1	64
86	Exchange coupling and resonance delocalization in reduced iron-sulfur [Fe ₄ S ₄] ⁺ and iron-selenium [Fe ₄ Se ₄] ⁺ clusters. 2. A generalized nonlinear model for spin-state energies and EPR and hyperfine properties. <i>Inorganic Chemistry</i> , 1991 , 30, 256-264	5.1	64
85	Active site structure of class I ribonucleotide reductase intermediate X: a density functional theory analysis of structure, energetics, and spectroscopy. <i>Journal of the American Chemical Society</i> , 2005 , 127, 15778-90	16.4	62
84	Toward a chemical mechanism of proton pumping by the B-type cytochrome c oxidases: application of density functional theory to cytochrome ba ₃ of <i>Thermus thermophilus</i> . <i>Journal of the American Chemical Society</i> , 2008 , 130, 15002-21	16.4	60
83	Modeling of palmitate transport in the heart. <i>Molecular and Cellular Biochemistry</i> , 1989 , 88, 51-8	4.2	60
82	Calibration of DFT Functionals for the Prediction of Fe Mössbauer Spectral Parameters in Iron-Nitrosyl and Iron-Sulfur Complexes: Accurate Geometries Prove Essential. <i>Journal of Chemical Theory and Computation</i> , 2011 , 7, 3232-3247	6.4	59
81	Symmetry breaking and ionization from symmetry equivalent inner shells and lone pairs in X ₂ theory. <i>Chemical Physics</i> , 1982 , 64, 159-166	2.3	58
80	The determination of optical absorption intensities using the X ₂ scattered wave method. <i>Journal of Chemical Physics</i> , 1976 , 64, 2343	3.9	57
79	Structural Model Studies for the High-Valent Intermediate Q of Methane Monooxygenase from Broken-Symmetry Density Functional Calculations. <i>Inorganica Chimica Acta</i> , 2008 , 361, 973-986	2.7	55
78	Photoisomerization and proton transfer in photoactive yellow protein. <i>Journal of the American Chemical Society</i> , 2003 , 125, 8186-94	16.4	54
77	Selective naked-cluster cryophotochemistry and SCF-X.alpha.-SW calculations for copper (Cu ₂) and silver (Ag ₂). <i>Journal of the American Chemical Society</i> , 1979 , 101, 3504-3511	16.4	54
76	Structural model studies for the peroxo intermediate P and the reaction pathway from P→Q of methane monooxygenase using broken-symmetry density functional calculations. <i>Inorganic Chemistry</i> , 2008 , 47, 2975-86	5.1	52
75	DFT calculations of ⁵⁷ Fe Mössbauer isomer shifts and quadrupole splittings for iron complexes in polar dielectric media: applications to methane monooxygenase and ribonucleotide reductase. <i>Journal of Computational Chemistry</i> , 2006 , 27, 1292-306	3.5	52
74	Density functional theory calculations on Mössbauer parameters of nonheme iron nitrosyls. <i>Inorganic Chemistry</i> , 2009 , 48, 9155-65	5.1	51

73	Ligand-bound S = 1/2 FeMo-cofactor of nitrogenase: hyperfine interaction analysis and implication for the central ligand X identity. <i>Inorganic Chemistry</i> , 2008 , 47, 6162-72	5.1	51
72	Analysis of the ⁵⁷ Fe Hyperfine Coupling Constants and Spin States in Nitrogenase P-Clusters. <i>Inorganic Chemistry</i> , 1994 , 33, 4819-4830	5.1	51
71	Magnetic studies of the high-potential protein model [Fe ₄ S ₄ (S-2,4,6-(iso-Pr) ₃ C ₆ H ₂) ₄]- in the [Fe ₄ S ₄] ³⁺ oxidized state. <i>Inorganic Chemistry</i> , 1990 , 29, 4288-4292	5.1	51
70	Valence electron delocalization in polynuclear iron-sulfur clusters. <i>Journal of Biological Inorganic Chemistry</i> , 1996 , 1, 177-182	3.7	49
69	Metal substitution in the active site of nitrogenase MFe(7)S(9) (M = Mo(4+), V(3+), Fe(3+)). <i>Inorganic Chemistry</i> , 2002 , 41, 5744-53	5.1	48
68	LCAO X.alpha. calculation of the magnetic exchange interactions in a manganese MnIVMn ^{III} cubane complex: relevance to the water oxidation center of photosystem II. <i>Journal of the American Chemical Society</i> , 1992 , 114, 6109-6119	16.4	48
67	Density-Functional and Electrostatic Calculations for a Model of a Manganese Superoxide Dismutase Active Site in Aqueous Solution. <i>The Journal of Physical Chemistry</i> , 1996 , 100, 13498-13505		42
66	Density functional study of the mechanism of a tyrosine phosphatase: I. Intermediate formation. <i>Journal of the American Chemical Society</i> , 2002 , 124, 10225-35	16.4	41
65	FeMo cofactor of nitrogenase: energetics and local interactions in the protein environment. <i>Journal of Biological Inorganic Chemistry</i> , 2002 , 7, 735-49	3.7	40
64	DFT calculations of isomer shifts and quadrupole splitting parameters in synthetic iron-oxo complexes: applications to methane monooxygenase and ribonucleotide reductase. <i>Inorganic Chemistry</i> , 2003 , 42, 5244-51	5.1	40
63	Binding modes for the first coupled electron and proton addition to FeMoco of nitrogenase. <i>Journal of the American Chemical Society</i> , 2002 , 124, 4546-7	16.4	40
62	Relative Acidities of Ortho-Substituted Phenols, as Models for Modified Tyrosines in Proteins. <i>Journal of Physical Chemistry A</i> , 2002 , 106, 8757-8761	2.8	40
61	Density Functional Vertical Self-Consistent Reaction Field Theory for Solvatochromism Studies of Solvent-Sensitive Dyes. <i>Journal of Physical Chemistry A</i> , 2004 , 108, 3545-3555	2.8	38
60	A density functional evaluation of an Fe(III)-Fe(IV) model diiron cluster: comparisons with ribonucleotide reductase intermediate X. <i>Inorganic Chemistry</i> , 2003 , 42, 2751-8	5.1	37
59	Theoretical examination of Mg(2+)-mediated hydrolysis of a phosphodiester linkage as proposed for the hammerhead ribozyme. <i>Journal of the American Chemical Society</i> , 2003 , 125, 9861-7	16.4	35
58	Density functional theory study of the intramolecular [2 + 3] cycloaddition of azide to nitriles. <i>Journal of Organic Chemistry</i> , 2003 , 68, 9076-80	4.2	33
57	Broken symmetry effects in the He(I) valence photoelectron spectrum of Se(CN) ₂ . <i>Molecular Physics</i> , 1982 , 46, 609-620	1.7	32
56	Spin coupling in Roussin's red and black salts. <i>Chemistry - A European Journal</i> , 2010 , 16, 10397-408	4.8	31

55	Density-functional calculations of spin coupling in [Fe ₄ S ₄] ³⁺ clusters. <i>International Journal of Quantum Chemistry</i> , 1995 , 56, 95-102	2.1	31
54	Linking chemical electron-proton transfer to proton pumping in cytochrome c oxidase: broken-symmetry DFT exploration of intermediates along the catalytic reaction pathway of the iron-copper dinuclear complex. <i>Inorganic Chemistry</i> , 2014 , 53, 6458-72	5.1	30
53	Density functional studies of oxidized and reduced methane monooxygenase. Optimized geometries and exchange coupling of active site clusters. <i>Inorganic Chemistry</i> , 2001 , 40, 5251-66	5.1	30
52	Density functional theory analysis of structure, energetics, and spectroscopy for the Mn-Fe active site of <i>Chlamydia trachomatis</i> ribonucleotide reductase in four oxidation states. <i>Inorganic Chemistry</i> , 2010 , 49, 7266-81	5.1	29
51	Seven clues to the origin and structure of class-I ribonucleotide reductase intermediate X. <i>Journal of Inorganic Biochemistry</i> , 2006 , 100, 771-9	4.2	28
50	Density functional theory study of Fe(IV) d-d optical transitions in active-site models of class I ribonucleotide reductase intermediate X with vertical self-consistent reaction field methods. <i>Inorganic Chemistry</i> , 2006 , 45, 8533-42	5.1	26
49	Characterization of [4Fe-4S] ₂ ^{+/3+} high-potential iron-sulfur protein from <i>Chromatium vinosum</i> . <i>Biochemistry</i> , 1988 , 27, 8712-8719	3.2	26
48	Energetics of oxidized and reduced methane monooxygenase active site clusters in the protein environment. <i>Inorganic Chemistry</i> , 2001 , 40, 5267-78	5.1	25
47	Geometric and electrostatic study of the [4Fe-4S] cluster of adenosine-5-phosphosulfate reductase from broken symmetry density functional calculations and extended X-ray absorption fine structure spectroscopy. <i>Inorganic Chemistry</i> , 2011 , 50, 6610-25	5.1	24
46	DFT calculations of comparative energetics and ENDOR/Mössbauer properties for two protonation states of the iron dimer cluster of ribonucleotide reductase intermediate X. <i>Dalton Transactions</i> , 2009 , 6045-57	4.3	24
45	Using antibodies to perturb the coordination sphere of a transition metal complex. <i>Nature</i> , 1996 , 382, 339-41	50.4	24
44	A study of the core electron binding energies of ozone by x-ray photoelectron spectroscopy and the X _{AS} scattered wave method. <i>Chemical Physics Letters</i> , 1977 , 49, 213-217	2.5	24
43	Sulfur [F]luoride Exchange Click Chemistry Enabled Ultrafast Late-Stage Radiosynthesis. <i>Journal of the American Chemical Society</i> , 2021 , 143, 3753-3763	16.4	24
42	DFT calculations for intermediate and active states of the diiron center with a tryptophan or tyrosine radical in <i>Escherichia coli</i> ribonucleotide reductase. <i>Inorganic Chemistry</i> , 2011 , 50, 2302-20	5.1	23
41	Quantum cluster size and solvent polarity effects on the geometries and Mössbauer properties of the active site model for ribonucleotide reductase intermediate X: a density functional theory study. <i>Theoretical Chemistry Accounts</i> , 2010 , 125, 305-317	1.9	21
40	Density functional study of a micro-1,1-carboxylate bridged Fe(III)-O-Fe(IV) model complex. 2. Comparison with ribonucleotide reductase intermediate X. <i>Inorganic Chemistry</i> , 2004 , 43, 613-21	5.1	21
39	Experimental and DFT studies: novel structural modifications greatly enhance the solvent sensitivity of live cell imaging dyes. <i>Journal of Physical Chemistry A</i> , 2007 , 111, 10849-60	2.8	20
38	Density functional study for the bridged dinuclear center based on a high-resolution X-ray crystal structure of ba ₃ cytochrome c oxidase from <i>Thermus thermophilus</i> . <i>Inorganic Chemistry</i> , 2013 , 52, 14072-88	5.1	19

37	On the role of the conserved aspartate in the hydrolysis of the phosphocysteine intermediate of the low molecular weight tyrosine phosphatase. <i>Journal of the American Chemical Society</i> , 2004 , 126, 12677-84	16.4	19
36	The circumsphere as a tool to assess distortion in [4Fe-4S] atom clusters. <i>Journal of Biological Inorganic Chemistry</i> , 2003 , 8, 519-526	3.7	18
35	Trimethylamine, trisilylamine, and trigermylamine: a comparative study of ionization energies, charge distribution, and bonding. <i>Inorganic Chemistry</i> , 1979 , 18, 354-360	5.1	18
34	A broken-symmetry density functional study of structures, energies, and protonation states along the catalytic O-O bond cleavage pathway in ba3 cytochrome c oxidase from <i>Thermus thermophilus</i> . <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 21162-71	3.6	18
33	Broken Symmetry DFT Calculations/Analysis for Oxidized and Reduced Dinuclear Center in Cytochrome c Oxidase: Relating Structures, Protonation States, Energies, and Mössbauer Properties in ba3 <i>Thermus thermophilus</i> . <i>Inorganic Chemistry</i> , 2015 , 54, 7272-90	5.1	17
32	The electronic structure of tetraphosphorus trisulphide. <i>Canadian Journal of Chemistry</i> , 1977 , 55, 669-680	0.9	17
31	Modeling the MoFe nitrogenase system with broken symmetry density functional theory. <i>Methods in Molecular Biology</i> , 2011 , 766, 293-312	1.4	15
30	Use of Broken-Symmetry Density Functional Theory To Characterize the IspH Oxidized State: Implications for IspH Mechanism and Inhibition. <i>Journal of Chemical Theory and Computation</i> , 2014 , 10, 3871-3884	6.4	13
29	Electronic structure in broken space- and spin- symmetry : applications to Fe-s proteins and clusters. <i>Journal De Chimie Physique Et De Physico-Chimie Biologique</i> , 1989 , 86, 743-755		13
28	Water exit pathways and proton pumping mechanism in B-type cytochrome c oxidase from molecular dynamics simulations. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2016 , 1857, 1594-1606	4.6	12
27	X.alpha. scattered-wave calculations of the electronic structures of sulfur dioxide and sulfuryl fluoride. Relationship to .pi. bonding in the cyclic phosphazenes. <i>Inorganic Chemistry</i> , 1978 , 17, 2709-2717	5.1	12
26	Broken-Symmetry DFT Computations for the Reaction Pathway of IspH, an Iron-Sulfur Enzyme in Pathogenic Bacteria. <i>Inorganic Chemistry</i> , 2015 , 54, 6439-61	5.1	11
25	Electronic Structure Calculations: Density Functional Methods for Spin Polarization, Charge Transfer, and Solvent Effects in Transition Metal Complexes. <i>ACS Symposium Series</i> , 1998 , 179-196	0.4	11
24	X.alpha. scattered wave calculations of the ionisation energies of N3P3F6 and N4P4F8. <i>Chemical Physics Letters</i> , 1977 , 47, 265-268	2.5	11
23	The Mössbauer Parameters of the Proximal Cluster of Membrane-Bound Hydrogenase Revisited: A Density Functional Theory Study. <i>Journal of Chemical Theory and Computation</i> , 2016 , 12, 174-87	6.4	10
22	Mössbauer properties of the diferric cluster and the differential iron(II)-binding affinity of the iron sites in protein R2 of class Ia <i>Escherichia coli</i> ribonucleotide reductase: a DFT/electrostatics study. <i>Dalton Transactions</i> , 2011 , 40, 11164-75	4.3	10
21	Density functional and electrostatics study of oxidized and reduced ribonucleotide reductase; comparisons with methane monooxygenase. <i>Journal of Biological Inorganic Chemistry</i> , 2002 , 7, 799-809	3.7	10
20	Local density of states calculated with the X.alpha. scattered wave method for some clusters of silver atoms. <i>Surface Science</i> , 1977 , 69, 714-720	1.8	10

19	Multiple reactive immunization towards the hydrolysis of organophosphorus nerve agents: hapten design and synthesis. <i>Bioorganic and Medicinal Chemistry</i> , 2001 , 9, 3185-95	3.4	8
18	Data for molecular dynamics simulations of B-type cytochrome c oxidase with the Amber force field. <i>Data in Brief</i> , 2016 , 8, 1209-14	1.2	8
17	A Water Dimer Shift Activates a Proton Pumping Pathway in the P → F Transition of ba Cytochrome c Oxidase. <i>Inorganic Chemistry</i> , 2018 , 57, 1048-1059	5.1	7
16	DFT Fe-O/O-O Vibrational Frequency Calculations over Catalytic Reaction Cycle States in the Dinuclear Center of Cytochrome Oxidase. <i>Inorganic Chemistry</i> , 2019 , 58, 13933-13944	5.1	7
15	A Water Molecule Residing in the Fe ^{III} Cu Dinuclear Center of the Resting Oxidized as-Isolated Cytochrome Oxidase: A Density Functional Study. <i>Inorganic Chemistry</i> , 2020 , 59, 8906-8915	5.1	6
14	Temperature-dependent behavior of protein-chromophore interactions: a theoretical study of a blue fluorescent antibody. <i>ChemPhysChem</i> , 2003 , 4, 848-55	3.2	5
13	Ionization energies and electronic structure of N ₃ P ₃ Cl ₆ as determined by UV photoelectron spectroscopy and the X _α scattered wave method. <i>Chemical Physics Letters</i> , 1978 , 58, 252-258	2.5	4
12	Coupled transport of electrons and protons in a bacterial cytochrome oxidase-DFT calculated properties compared to structures and spectroscopies. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 26652-26668	3.6	4
11	Metalloproteins: Mapping elusive electron density. <i>Nature Chemical Biology</i> , 2016 , 12, 391-2	11.7	4
10	EXAFS simulation refinement based on broken-symmetry DFT geometries for the Mn(IV)-Fe(III) center of class I RNR from <i>Chlamydia trachomatis</i> . <i>Dalton Transactions</i> , 2014 , 43, 576-83	4.3	3
9	Correction to Density Functional Theory Calculations on Mossbauer Parameters of Nonheme Iron Nitrosyls. <i>Inorganic Chemistry</i> , 2011 , 50, 4221-4221	5.1	3
8	Broken Symmetry States of Iron-Sulfur Clusters 2009 ,		3
7	Fe(CO) ₄ XXX radical anion: theoretical study of the electronic structure and magnetic properties. <i>Computational and Theoretical Chemistry</i> , 1991 , 226, 251-263		3
6	Stereoelectronic effects in stabilizing protein-N-glycan interactions revealed by experiment and machine learning. <i>Nature Chemistry</i> , 2021 , 13, 480-487	17.6	3
5	Electronic Structure, Bonding, Spin Coupling, and Energetics of Polynuclear Iron-Sulfur Clusters I: A Broken Symmetry Density Functional Theory Perspective 2015 , 297-325		2
4	Iron-Sulfur Clusters: Properties and Functions 2008 , 1		2
3	Modern Computational Approaches to Modeling Polynuclear Transition Metal Complexes 2000 , 19-47		2
2	Local Density Functional Approaches to Spin Coupling in Transition Metal Clusters 1991 , 109-123		1

- 1 The cytochrome b lysine 329 residue is critical for ubihydroquinone oxidation and proton release at the Q site of bacterial cytochrome bc. *Biochimica Et Biophysica Acta - Bioenergetics*, **2019**, 1860, 167-179 4.6 1