Spinning around in Transition-Metal Chemistry

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Citation Report

#	Article	IF	CITATIONS
2	Catalytic Oxidation of Water with High-Spin Iron(IV)–Oxo Species: Role of the Water Solvent. ACS Catalysis, 2017, 7, 4018-4025.	5.5	38
3	Assessment of electronic structure methods for the determination of the ground spin states of Fe(<scp>ii</scp>), Fe(<scp>iii</scp>) and Fe(<scp>iv</scp>) complexes. Physical Chemistry Chemical Physics, 2017, 19, 13049-13069.	1.3	100

4 Structures of dimetallocenes M₂(C₅H₅)₂ (M = Zn, Cu,) Tj ETQq0 0 0 rgBT /Overloch

5	Low-Energy Photoelectron Imaging Spectroscopy of La _{<i>n</i>} (benzene) (<i>n</i> = 1 and) Tj ETQ	q1 1 0.78 1.1	4314 rgBT /
6	NO oxidation catalyzed by Ir4-based nanoclusters: the role of alloying on the catalytic activity. Theoretical Chemistry Accounts, 2017, 136, 1.	0.5	1
7	The role of spin states in the catalytic mechanism of the intra- and extradiol cleavage of catechols by O ₂ . Organic and Biomolecular Chemistry, 2017, 15, 7860-7868.	1.5	9
8	The role of ligand redox non-innocence in ring-opening polymerization reactions catalysed by bis(imino)pyridine iron alkoxide complexes. Dalton Transactions, 2017, 46, 12971-12980.	1.6	43
9	Rational design of Fe catalysts for olefin aziridination through DFT-based mechanistic analysis. Catalysis Science and Technology, 2017, 7, 4388-4400.	2.1	22
10	A Simple Method of Predicting Spin State in Solution. Journal of the American Chemical Society, 2017, 139, 18392-18396.	6.6	68
11	Multireference Electronic Structures of Fe–Pyridine(diimine) Complexes over Multiple Oxidation States. Journal of Physical Chemistry A, 2017, 121, 5932-5939.	1.1	18
12	Understanding the Catalase-Like Activity of a Bioinspired Manganese(II) Complex with a Pentadentate NSNSN Ligand Framework. A Computational Insight into the Mechanism. ACS Catalysis, 2018, 8, 2944-2958.	5.5	9
13	Toward Highly Accurate Spin State Energetics in First-Row Transition Metal Complexes: A Combined CASPT2/CC Approach. Journal of Chemical Theory and Computation, 2018, 14, 2446-2455.	2.3	95
14	Experimental and Theoretical Identification of the Origin of Magnetic Anisotropy in Intermediate Spin Iron(III) Complexes. Chemistry - A European Journal, 2018, 24, 5091-5094.	1.7	11
15	Electronic structure and energy decomposition of binuclear transition metal complexes containing β-diketiminate and imido ligands: spin state and metal's nature effects. Structural Chemistry, 2018, 29, 1307-1320.	1.0	11
16	Calculation of Ligand Dissociation Energies in Large Transition-Metal Complexes. Journal of Chemical Theory and Computation, 2018, 14, 2456-2468.	2.3	62
17	Indirect evidence for a Ni ^{III} –oxyl oxidant in the reaction of a Ni ^{II} complex with peracid. Dalton Transactions, 2018, 47, 246-250.	1.6	14
18	Rotating Iron and Titanium Sandwich Complexes. Chemistry - A European Journal, 2018, 24, 5070-5073.	1.7	1
19	<i>Ab initio</i> investigation of magnetic anisotropy in intermediate spin iron(<scp>iii</scp>) complexes. Journal of Chemical Physics, 2018, 149, 234302.	1.2	10

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20	H ₂ O ₂ Oxidation by Fe ^{III} –OOH Intermediates and Its Effect on Catalytic Efficiency. ACS Catalysis, 2018, 8, 9665-9674.	5.5	53
21	High-Oxidation-State 3d Metal (Ti–Cu) Complexes with <i>N</i> -Heterocyclic Carbene Ligation. Chemical Reviews, 2018, 118, 9930-9987.	23.0	136
22	DFT Study on Fe(IV)-Peroxo Formation and H Atom Transfer Triggered O ₂ Activation by NiFe Complex. Organometallics, 2018, 37, 1534-1545.	1.1	11
23	Projected site-occupation embedding theory. Physical Review B, 2019, 100, .	1.1	13
24	Dispersion Effects in Stabilizing Organometallic Compounds: Tetra-1-norbornyl Derivatives of the First-Row Transition Metals as Exceptional Examples. Journal of Physical Chemistry A, 2019, 123, 9514-9519.	1.1	11
25	Site-occupation Green's function embedding theory: A density functional approach to dynamical impurity solvers. Physical Review B, 2019, 100, .	1.1	4
26	Light-Induced Spin Crossover in an Intermediate-Spin Penta-Coordinated Iron(III) Complex. Journal of Physical Chemistry A, 2019, 123, 9883-9892.	1.1	2
27	Intramolecular substitutions of secondary and tertiary alcohols with chirality transfer by an iron(III) catalyst. Nature Communications, 2019, 10, 3826.	5.8	54
28	Group-transfer chemistry at transition metal centers in bulky alkoxide ligand environments. Coordination Chemistry Reviews, 2019, 400, 213044.	9.5	12
29	Revitalizing Spin Natural Orbital Analysis: Electronic Structures of Mixedâ€Valence Compounds, Singlet Biradicals, and Antiferromagnetically Coupled Systems. Journal of Computational Chemistry, 2019, 40, 1172-1184.	1.5	9
30	The Irony of Manganocene: An Interplay between the Jahn–Teller Effect and Close-Lying Electronic and Spin States. Journal of Chemical Information and Modeling, 2019, 59, 1806-1810.	2.5	4
31	Effect of Exocyclic Substituents and ï€-System Length on the Electronic Structure of Chichibabin Diradical(oid)s. ACS Omega, 2019, 4, 10845-10853.	1.6	10
32	Selective Isomer Formation and Crystallization-Directed Magnetic Behavior in Nitrogen-Confused C-Scorpionate Complexes of Fe(O ₃ SCF ₃) ₂ . Inorganic Chemistry, 2019, 58, 8953-8968.	1.9	3
33	On the Structure, Magnetic Properties, and Infrared Spectra of Iron Pseudocarbynes in the Interstellar Medium. Astrophysical Journal, 2019, 879, 2.	1.6	11
34	Theoretical Identification of the Factors Governing the Reactivity of Câ^'H Bond Activation by Nonâ€Heme Iron(IV)â€Oxo Complexes. ChemPlusChem, 2019, 84, 893-906.	1.3	13
35	Dual Aromaticity in Both the T ₀ and S ₁ States: Osmapyridinium with Phosphonium Substituents. Journal of the American Chemical Society, 2019, 141, 5720-5727.	6.6	62
36	Computational Versus Experimental Spectroscopy for Transition Metals. Challenges and Advances in Computational Chemistry and Physics, 2019, , 161-183.	0.6	1
37	Structure–Activity Relationships That Identify Metal–Organic Framework Catalysts for Methane Activation. ACS Catalysis, 2019, 9, 3576-3587.	5.5	105

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38	Multireference Approaches to Spinâ€State Energetics of Transition Metal Complexes Utilizing the Density Matrix Renormalization Group. Advanced Theory and Simulations, 2019, 2, 1800201.	1.3	50
39	DFT investigation of homotrinuclear and heterotrinuclear [M3(Phz)2], [MM′2(Phz)2], [M3(CO)2(Phz)2], [MM′2(CO)2(Phz)2] sandwich complexes (M = Ti, Cr, Fe and Ni; M′ = V and Mn, Phzâ€% models and electronic structures. Structural Chemistry, 2019, 30, 1859-1871.	₀=£€‰C1	2 년 8N2): pro
40	Metal-metal interactions in binuclear cyclopentadienylmetal carbonyls: Extending insight from experimental work through computational studies. Advances in Inorganic Chemistry, 2019, , 3-32.	0.4	4
41	Benchmarking quantum chemistry methods for spin-state energetics of iron complexes against quantitative experimental data. Physical Chemistry Chemical Physics, 2019, 21, 4854-4870.	1.3	99
42	Understanding the differences between iron and palladium in cross-coupling reactions. Physical Chemistry Chemical Physics, 2019, 21, 9651-9664.	1.3	12
43	Multiconfiguration Pair-Density Functional Theory for Iron Porphyrin with CAS, RAS, and DMRG Active Spaces. Journal of Physical Chemistry A, 2019, 123, 3389-3394.	1.1	39
44	Ketenimine Formation Catalyzed by a High-Valent Cobalt Carbene in Bulky Alkoxide Ligand Environment. Organometallics, 2019, 38, 962-972.	1.1	28
45	Toward accurate spin-state energetics of transition metal complexes. Advances in Inorganic Chemistry, 2019, , 221-264.	0.4	10
46	Introduction to ligand field theory and computational chemistry. , 2020, , 17-67.		2
47	Electronic spectroscopic characterization of the formation of iron(III) metal complexes: The 8-HydroxyQuinoline as ligand case study. Journal of Inorganic Biochemistry, 2020, 203, 110864.	1.5	11
48	Adaptive aromaticity in ruthenacycles. Theoretical Chemistry Accounts, 2020, 139, 1.	0.5	9
49	Spin modification of iron(<scp>ii</scp>) complexes <i>via</i> covalent (dative) and dispersion guided non-covalent bonding with N-heterocyclic carbenes: DFT, DLPNO-CCSD(T) and MCSCF studies. Dalton Transactions, 2020, 49, 164-170.	1.6	5
50	Density functional approximations for consistent spin and oxidation states of oxoiron complexes. International Journal of Quantum Chemistry, 2020, 120, e26121.	1.0	10
51	Energetics of non-heme iron reactivity: can ab initio calculations provide the right answer?. Physical Chemistry Chemical Physics, 2020, 22, 23908-23919.	1.3	16
52	Density Functional Theories and Coordination Chemistry. , 2020, , .		2
53	Ein seltenes Lowâ€Spinâ€Co IV â€Bis(βâ€silyldiamid) mit hoher thermischer Stabilitä Sterische Erzwingung einer Dublettkonfiguration. Angewandte Chemie, 2020, 132, 14242-14246.	1.6	4
54	Spin-resolved charge displacement analysis as an intuitive tool for the evaluation of cPCET and HAT scenarios. Chemical Communications, 2020, 56, 12146-12149.	2.2	6
55	Bond orders in metalloporphyrins. Theoretical Chemistry Accounts, 2020, 139, 1.	0.5	3

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56	Closed Shell Iron(IV) Oxo Complex with an Fe–O Triple Bond: Computational Design, Synthesis, and Reactivity. Angewandte Chemie - International Edition, 2020, 59, 23137-23144.	7.2	10
57	New Directions in the Modeling of Organometallic Reactions. Topics in Organometallic Chemistry, 2020, , .	0.7	1
58	Closed Shell Iron(IV) Oxo Complex with an Fe–O Triple Bond: Computational Design, Synthesis, and Reactivity. Angewandte Chemie, 2020, 132, 23337-23344.	1.6	4
59	A Rare Lowâ€ S pin Co IV Bis(βâ€silyldiamide) with High Thermal Stability: Steric Enforcement of a Doublet Configuration. Angewandte Chemie - International Edition, 2020, 59, 14138-14142.	7.2	11
60	Comparing GGA, GGA+ <i>U</i> , and meta-GGA functionals for redox-dependent binding at open metal sites in metal–organic frameworks. Journal of Chemical Physics, 2020, 152, 224101.	1.2	16
61	Dealing with Spin States in Computational Organometallic Catalysis. Topics in Organometallic Chemistry, 2020, , 191-226.	0.7	9
62	Energetics of paramagnetic oxide clusters: the Fe(iii) oxyhydroxy Keggin ion. Physical Chemistry Chemical Physics, 2020, 22, 4043-4050.	1.3	0
63	Spin state and reactivity of iron(<scp>iv</scp>)oxido complexes with tetradentate bispidine ligands. Dalton Transactions, 2020, 49, 2888-2894.	1.6	24
64	Sc ³⁺ -Promoted O–O Bond Cleavage of a (μ-1,2-Peroxo)diiron(III) Species Formed from an Iron(II) Precursor and O ₂ to Generate a Complex with an Fe ^{IV} ₂ (μ-O) ₂ Core. Journal of the American Chemical Society, 2020, 142, 4285-4297.	6.6	22
65	Accurate computed spin-state energetics for Co(<scp>iii</scp>) complexes: implications for modelling homogeneous catalysis. Dalton Transactions, 2020, 49, 6478-6487.	1.6	28
66	Investigating the (Poly)Radicaloid Nature of Real-World Organic Compounds with DFT-Based Methods. Journal of Physical Chemistry A, 2020, 124, 3590-3600.	1.1	7
67	Ligand conformations and spin states in sandwich-type complexes of the split (3+2) five-electron donor hydrocarbon ligand bicyclo[3.2.1]octa-2,6-dien-4-yl (bcod). New Journal of Chemistry, 2020, 44, 6902-6915.	1.4	4
68	Rational Design of Effective Mg Degradation Modulators. Corrosion, 2021, 77, 204-208.	0.5	9
69	Spin-state energetics of metallocenes: How do best wave function and density functional theory results compare with the experimental data?. Physical Chemistry Chemical Physics, 2021, 23, 151-172.	1.3	22
70	A Pseudotetrahedral Terminal Oxoiron(IV) Complex: Mechanistic Promiscuity in Câ^'H Bond Oxidation Reactions. Angewandte Chemie - International Edition, 2021, 60, 6752-6756.	7.2	16
71	Widening the Window of Spin-Crossover Temperatures in Bis(formazanate)iron(II) Complexes via Steric and Noncovalent Interactions. Inorganic Chemistry, 2021, 60, 2045-2055.	1.9	19
72	A Pseudotetrahedral Terminal Oxoiron(IV) Complex: Mechanistic Promiscuity in Câ^'H Bond Oxidation Reactions. Angewandte Chemie, 2021, 133, 6826-6830.	1.6	3
73	Zeolites at the Molecular Level: What Can Be Learned from Molecular Modeling. Molecules, 2021, 26, 1511.	1.7	6

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74	On the Use of Normalized Metrics for Density Sensitivity Analysis in DFT. Journal of Physical Chemistry A, 2021, 125, 4639-4652.	1.1	7
75	Is the Electrophilicity of the Metal Nitrene the Sole Predictor of Metal-Mediated Nitrene Transfer to Olefins? Secondary Contributing Factors as Revealed by a Library of High-Spin Co(II) Reagents. Organometallics, 2021, 40, 1974-1996.	1.1	8
76	Mechanistic Insights into the Oxygen Atom Transfer Reactions by Nonheme Manganese Complex: A Computational Case Study on the Comparative Oxidative Ability of Manganese-Hydroperoxo vs High-Valent MnIVâ•O and MnIV–OH Intermediates. Inorganic Chemistry, 2021, 60, 12085-12099.	1.9	5
77	Controlling Radical-Type Single-Electron Elementary Steps in Catalysis with Redox-Active Ligands and Substrates. Jacs Au, 2021, 1, 1101-1115.	3.6	31
78	Computational Discovery of Transition-metal Complexes: From High-throughput Screening to Machine Learning. Chemical Reviews, 2021, 121, 9927-10000.	23.0	110
79	Redox Isomerism in the S ₃ State of the Oxygenâ€Evolving Complex Resolved by Coupled Cluster Theory. Chemistry - A European Journal, 2021, 27, 12815-12825.	1.7	20
80	Tetrahedral Cyclopentadienylmetal Carbonyl Clusters of Manganese and Chromium: A Theoretical Study. Inorganic Chemistry, 2021, 60, 14557-14562.	1.9	0
81	Tuning spin-crossover transition temperatures in non-symmetrical homoleptic meridional/facial [Fe(didentate) ₃] ²⁺ complexes: what for and who cares about it?. Dalton Transactions, 2021, 50, 1206-1223.	1.6	9
82	Spin‣tate Energetics of Fe Complexes from an Optimally Tuned Rangeâ€Separated Hybrid Functional. Chemistry - A European Journal, 2018, 24, 5173-5182.	1.7	38
83	Improvement of d–d interactions in density functional tight binding for transition metal ions with a ligand field model: assessment of a DFTB3+ <i>U</i> model on nickel coordination compounds. Physical Chemistry Chemical Physics, 2020, 22, 27084-27095.	1.3	3
84	Mechanistic dichotomies in redox reactions of mononuclear metal–oxygen intermediates. Chemical Society Reviews, 2020, 49, 8988-9027.	18.7	61
85	Magnetic configurations of open-shell molecules on metals: The case of CuPc and CoPc on silver. Physical Review Materials, 2019, 3, .	0.9	4
86	Fate of Sc-Ion Interaction With Water: A Computational Study to Address Splitting Water Versus Solvating Sc Ion. Frontiers in Chemistry, 2021, 9, 738852.	1.8	4
87	Recent progress and application of computational chemistry to understand inorganic photochemistry. , 2021, , .		0
88	CASPT2 molecular geometries of Fe(<scp>ii</scp>) spin-crossover complexes. Physical Chemistry Chemical Physics, 2022, 24, 1390-1398.	1.3	12
89	Antiaromaticity-promoted radical anion stability in α-vinyl heterocyclics. Organic Chemistry Frontiers, 0, , .	2.3	3
90	Rational design of iron catalysts for C $\hat{a} \in `` X$ bond activation. Journal of Computational Chemistry, 2022, , .	1.5	7
91	Density Functional Theory for Transition Metal Catalysis. , 2024, , 562-585.		0

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92	Three Novel Thiazole-Arm Containing 1,3,4-Oxadiazole-Based [HS-HS] Fe(II) Dinuclear Complexes. Crystals, 2022, 12, 404.	1.0	4
93	Electronic states and vibrational structures of sym―and unsymâ€Co ₃ (dipyridylamine) ₄ Cl ₂ using temperatureâ€controlled Raman and surfaceâ€enhanced Raman spectroscopy. Journal of Raman Spectroscopy, 0, , .	1.2	1
94	Ab Initio Methods in Firstâ€Row Transition Metal Chemistry. European Journal of Inorganic Chemistry, 2022, 2022, .	1.0	14
95	Reconciling Local Coupled Cluster with Multireference Approaches for Transition Metal Spin-State Energetics. Journal of Chemical Theory and Computation, 2022, 18, 3538-3548.	2.3	20
96	Data-Driven Mapping of Inorganic Chemical Space for the Design of Transition Metal Complexes and Metal-Organic Frameworks. ACS Symposium Series, 0, , 127-179.	0.5	0
97	Chemoton 2.0: Autonomous Exploration of Chemical Reaction Networks. Journal of Chemical Theory and Computation, 2022, 18, 5393-5409.	2.3	22
98	Reduced density matrix functional theory from an <i>ab initio</i> seniority-zero wave function: Exact and approximate formulations along adiabatic connection paths. Physical Review A, 2022, 106, .	1.0	7
99	Probing the mechanism of adaptive aromaticity in metallapyridiniums. Inorganic Chemistry Frontiers, 2023, 10, 934-941.	3.0	2
100	Coordination and Spin States in Fe ⁺ (C ₂ H ₂) _{<i><i>n</i></i>} Complexes Studied with Selected-Ion Infrared Spectroscopy. Journal of Physical Chemistry A, 2022, 126, 9680-9690.	1.1	3
101	Reductive Coupling of Nitric Oxide by Cu(I): Stepwise Formation of Mono- and Dinitrosyl Species <i>En Route</i> to a Cupric Hyponitrite Intermediate. Journal of the American Chemical Society, 2023, 145, 2230-2242.	6.6	1
102	Photodissociation Spectroscopy and Photofragment Imaging of the Fe ⁺ (Acetylene) Complex. Journal of Physical Chemistry A, 2023, 127, 1244-1251.	1.1	4
103	Design and Mechanism of Rare-Earth Singlet Oxygen Sensing: An Experimental and Quantum Chemical Approach. Journal of Physical Chemistry A, 2023, 127, 1130-1140.	1.1	0
104	Electronic structure of rhombus-shaped nanographenes: system size evolution from closed- to open-shell ground states. Physical Chemistry Chemical Physics, 2023, 25, 11697-11706.	1.3	4
105	The interplay between spin states, geometries and biological activity of Fe(III) and Mn(II) complexes with thiosemicarbazone. Polyhedron, 2023, 237, 116389.	1.0	1
106	Importance of Dispersion in the Molecular Geometries of Mn(III) Spin-Crossover Complexes. Journal of Physical Chemistry A, 2023, 127, 3072-3081.	1.1	4