Kyle M Lancaster

List of Publications by Year
in descending order

98	6,131	101384 36	71532 76
papers	citations	h-index	g-index

100	100	100	7718
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Beyond fossil fuelâ€“driven nitrogen transformations. Science, 2018, 360, .	6.0	1,379
2	X-ray Emission Spectroscopy Evidences a Central Carbon in the Nitrogenase Iron-Molybdenum Cofactor. Science, 2011, 334, 974-977.	6.0	774
3	Nitric oxide is an obligate bacterial nitrification intermediate produced by hydroxylamine oxidoreductase. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 8217-8222.	3.3	334
4	Ultrafast Excited-State Dynamics of Rhenium(I) Photosensitizers [Re(Cl)(CO)₃(N,N)] and [Re(imidazole)(CO)₃(N,N)]⁺: Diimine Effects. Inorganic Chemistry, 2011, 50, 2932-2943.	1.9	171
5	<i>Nitrosomonas europaea</i> cytochrome P460 is a direct link between nitrification and nitrous oxide emission. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14704-14709.	3.3	166
6	Direct Spectroscopic Characterization of a Transitory Dirhodium Donor-Acceptor Carbene Complex. Science, 2013, 342, 351-354.	6.0	165
7	Electrochemical Azidooxygenation of Alkenes Mediated by a TEMPOâ€“N₃ Charge-Transfer Complex. Journal of the American Chemical Society, 2018, 140, 12511-12520.	6.6	140
8	The Myth of d⁸ Copper(III). Journal of the American Chemical Society, 2019, 141, 18508-18520.	6.6	139
9	Synthesis of a copper-supported triplet nitrene complex pertinent to copper-catalyzed amination. Science, 2019, 365, 1138-1143.	6.0	131
10	Experimental Fingerprints for Redox-Active Terpyridine in [Cr(tpy)₂](PF₆)_{<i>n</i>} (<i>n</i> = 3â€“0), and the Remarkable Electronic Structure of [Cr(tpy)₂]^{1â€“}. Inorganic Chemistry, 2012, 51, 3718-3732.	1.9	125
11	Direct Comparison of Câ€“H Bond Amination Efficacy through Manipulation of Nitrogen-Valence Centered Redox: Imido versus Iminyl. Journal of the American Chemical Society, 2017, 139, 14757-14766.	6.6	105
12	Spectroscopic Evidence for a 3d¹⁰ Ground State Electronic Configuration and Ligand Field Inversion in [Cu(CF₃)₄]^{1â€“}. Journal of the American Chemical Society, 2016, 138, 1922-1931.	6.6	99
13	X-ray Spectroscopic Observation of an Interstitial Carbide in NifEN-Bound FeMoco Precursor. Journal of the American Chemical Society, 2013, 135, 610-612.	6.6	98
14	Rh₂(II,III) Catalysts with Chelating Carboxylate and Carboxamidate Supports: Electronic Structure and Nitrene Transfer Reactivity. Journal of the American Chemical Society, 2016, 138, 2327-2341.	6.6	95
15	Type-zero copper proteins. Nature Chemistry, 2009, 1, 711-715.	6.6	93
16	Alternative Bioenergy: Updates to and Challenges in Nitrification Metalloenzymology. Joule, 2018, 2, 421-441.	11.7	87
17	Inner- and outer-sphere metal coordination in blue copper proteins. Journal of Inorganic Biochemistry, 2012, 115, 119-126.	1.5	85
18	Oxygen Activation by Co(II) and a Redox Non-Innocent Ligand: Spectroscopic Characterization of a Radicalâ€“Co(II)â€“Superoxide Complex with Divergent Catalytic Reactivity. Journal of the American Chemical Society, 2016, 138, 1796-1799.	6.6	73

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19	Manganese binding to Rubisco could drive a photorespiratory pathway that increases the energy efficiency of photosynthesis. Nature Plants, 2018, 4, 414-422.	4.7	63
20	Manganese Nitride Complexes in Oxidation States III, IV, and V: Synthesis and Electronic Structure. Journal of the American Chemical Society, 2012, 134, 15538-15544.	6.6	61
21	Switchable Interaction in Molecular Double Qubits. CheM, 2016, 1, 727-752.	5.8	60
22	KÎ² X-ray Emission Spectroscopy Offers Unique Chemical Bonding Insights: Revisiting the Electronic Structure of Ferrocene. Inorganic Chemistry, 2011, 50, 6767-6774.	1.9	57
23	X-ray Spectroscopic Interrogation of Transition-Metal-Mediated Homogeneous Catalysis: Primer and Case Studies. ACS Catalysis, 2017, 7, 1776-1791.	5.5	55
24	Electronic Structural Analysis of Copper(II)â€“TEMPO/ABNO Complexes Provides Evidence for Copper(I)â€“Oxoammonium Character. Journal of the American Chemical Society, 2017, 139, 13507-13517.	6.6	53
25	Discovery and characterization of a Coenzyme A disulfide reductase from Pyrococcus horikoshii. FEBS Journal, 2005, 272, 1189-1200.	2.2	52
26	Electron Transfer Reactivity of Type Zero Pseudomonas aeruginosa Azurin. Journal of the American Chemical Society, 2011, 133, 4865-4873.	6.6	52
27	Cerium(IV) Enhances the Catalytic Oxidation Activity of Single-Site Cu Active Sites in MOFs. ACS Catalysis, 2020, 10, 7820-7825.	5.5	50
28	Structures and Reactivity Patterns of Group 9 Metallocorroles. Inorganic Chemistry, 2009, 48, 9308-9315.	1.9	48
29	Organometallic and radical intermediates reveal mechanism of diphthamide biosynthesis. Science, 2018, 359, 1247-1250.	6.0	48
30	Biological and Bioinspired Inorganic Nâ€“N Bond-Forming Reactions. Chemical Reviews, 2020, 120, 5252-5307.	23.0	48
31	Electronic structures, photophysical properties, and electrochemistry of ruthenium(II)(bpy)2 pyridylimidazole complexes. Coordination Chemistry Reviews, 2010, 254, 1803-1811.	9.5	47
32	Reduction of CO₂ by a masked two-coordinate cobalt(<scp>i</scp>) complex and characterization of a proposed oxodicobalt(<scp>ii</scp>) intermediate. Chemical Science, 2019, 10, 918-929.	3.7	44
33	Synthesis, characterization and Câ€“H amination reactivity of nickel iminyl complexes. Chemical Science, 2020, 11, 1260-1268.	3.7	43
34	Outer-Sphere Contributions to the Electronic Structure of Type Zero Copper Proteins. Journal of the American Chemical Society, 2012, 134, 8241-8253.	6.6	42
35	High-Potential C112D/M121X (X = M, E, H, L) <i>Pseudomonas aeruginosa</i> Azurins. Inorganic Chemistry, 2009, 48, 1278-1280.	1.9	38
36	A Nonheme Thiolate-Ligated Cobalt Superoxo Complex: Synthesis and Spectroscopic Characterization, Computational Studies, and Hydrogen Atom Abstraction Reactivity. Journal of the American Chemical Society, 2019, 141, 3641-3653.	6.6	38

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37	Activation of Dioxygen by a Mononuclear Nonheme Iron Complex: Sequential Peroxo, Oxo, and Hydroxo Intermediates. Journal of the American Chemical Society, 2019, 141, 17533-17547.	6.6	36
38	Outer-Sphere Effects on Reduction Potentials of Copper Sites in Proteins: The Curious Case of High Potential Type 2 C112D/M121E Pseudomonas aeruginosa Azurin. Journal of the American Chemical Society, 2010, 132, 14590-14595.	6.6	33
39	X-ray Absorption Spectroscopy Systematics at the Tungsten L-Edge. Inorganic Chemistry, 2014, 53, 8230-8241.	1.9	32
40	Probing Cu^I in homogeneous catalysis using high-energy-resolution fluorescence-detected X-ray absorption spectroscopy. Chemical Communications, 2015, 51, 9864-9867.	2.2	32
41	Ligand-Sensitive But Not Ligand-Diagnostic: Evaluating Cr Valence-to-Core X-ray Emission Spectroscopy as a Probe of Inner-Sphere Coordination. Inorganic Chemistry, 2015, 54, 205-214.	1.9	32
42	Crystalline Coordination Networks of Zero-Valent Metal Centers: Formation of a 3-Dimensional Ni(0) Framework with <i>m</i>-Terphenyl Diisocyanides. Journal of the American Chemical Society, 2017, 139, 17257-17260.	6.6	30
43	Reversible Ligandâ€Centered Reduction in Lowâ€Coordinate Iron Formazanate Complexes. Chemistry - A European Journal, 2018, 24, 9417-9425.	1.7	30
44	Alkali Cation Effects on Redox-Active Formazanate Ligands in Iron Chemistry. Inorganic Chemistry, 2018, 57, 9580-9591.	1.9	30
45	Determination of coenzyme A levels inPyrococcus furiosusand other Archaea: implications for a general role for coenzyme A in thermophiles. FEMS Microbiology Letters, 2005, 252, 229-234.	0.7	29
46	Scrutinizing metalâ€“ligand covalency and redox non-innocence <i>via</i> nitrogen K-edge X-ray absorption spectroscopy. Chemical Science, 2019, 10, 5044-5055.	3.7	29
47	Enhanced Fe-Centered Redox Flexibility in Feâ€“Ti Heterobimetallic Complexes. Inorganic Chemistry, 2019, 58, 6199-6214.	1.9	29
48	Exploring the limits of redox non-innocence: pseudo square planar [{Îº4-Me2C(CH2NÎ€CHpy)2}Ni]n (n = 2+,) Tj ETQq0 0 0 rgBT /Overloc	3.7	27
49	Study of Iron Dimers Reveals Angular Dependence of Valence-to-Core X-ray Emission Spectra. Inorganic Chemistry, 2014, 53, 10378-10385.	1.9	26
50	Dramatic Influence of an Anionic Donor on the Oxygenâ€Atom Transfer Reactivity of a Mn^Vâ€“Oxo Complex. Chemistry - A European Journal, 2014, 20, 14584-14588.	1.7	26
51	Electronic Structure of Ni₂E₂ Complexes (E = S, Se, Te) and a Global Analysis of M₂E₂ Compounds: A Case for Quantized E₂^{<i>n</i>â€“} Oxidation Levels with <i>n</i> = 2, 3, or 4. Journal of the American Chemical Society, 2015, 137, 4993-5011.	6.6	26
52	Structure, Spectroscopy, and Reactivity of a Mononuclear Copper Hydroxide Complex in Three Molecular Oxidation States. Journal of the American Chemical Society, 2020, 142, 12265-12276.	6.6	25
53	Ancillary Ligand Effects upon Dithiolene Redox Noninnocence in Tungsten Bis(dithiolene) Complexes. Inorganic Chemistry, 2013, 52, 6743-6751.	1.9	24
54	Influences of the heme-lysine crosslink in cytochrome P460 over redox catalysis and nitric oxide sensitivity. Chemical Science, 2018, 9, 368-379.	3.7	24

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55	A di-iron protein recruited as an Fe[II] and oxygen sensor for bacterial chemotaxis functions by stabilizing an iron-peroxy species. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 14955-14960.	3.3	23
56	Electronic Structures and Reactivity Profiles of Aryl Nitrenoid-Bridged Dicopper Complexes. Journal of the American Chemical Society, 2020, 142, 2264-2276.	6.6	18
57	Molecular Redox: Revisiting the Electronic Structures of the Group 9 Metallocorroles. Inorganic Chemistry, 2012, 51, 12473-12482.	1.9	17
58	Controlling a burn: outer-sphere gating of hydroxylamine oxidation by a distal base in cytochrome P460. Chemical Science, 2019, 10, 3756-3764.	3.7	17
59	The influences of carbon donor ligands on biomimetic multi-iron complexes for N₂reduction. Chemical Science, 2020, 11, 12710-12720.	3.7	17
60	[(MeCN)Ni(CF₃)₃]^{âˆ’} and [Ni(CF₃)₄]^{2â€“}: Foundations toward the Development of Trifluoromethylations at Unsupported Nickel. Inorganic Chemistry, 2020, 59, 9143-9151.	1.9	17
61	Spin Delocalization Over Type Zero Copper. Inorganic Chemistry, 2012, 51, 4066-4075.	1.9	16
62	Dramatic Electronic Perturbations of Cu_A Centers via Subtle Geometric Changes. Journal of the American Chemical Society, 2019, 141, 1373-1381.	6.6	16
63	Stabilizing Coordinated Radicals via Metalâ€“Ligand Covalency: A Structural, Spectroscopic, and Theoretical Investigation of Group 9 Tris(dithiolene) Complexes. Inorganic Chemistry, 2015, 54, 3660-3669.	1.9	15
64	Masked Radicals: Iron Complexes of Trityl, Benzophenone, and Phenylacetylene. Organometallics, 2019, 38, 4224-4232.	1.1	15
65	Heme P460: A (Cross) Link to Nitric Oxide. Accounts of Chemical Research, 2020, 53, 2925-2935.	7.6	15
66	A Nonheme Sulfurâ€Ligated {FeNO} 6 Complex and Comparison with Redoxâ€Interconvertible {FeNO} 7 and {FeNO} 8 Analogues. Angewandte Chemie - International Edition, 2018, 57, 13465-13469.	7.2	14
67	An Approach to Carbide-Centered Cluster Complexes. Inorganic Chemistry, 2019, 58, 4812-4819.	1.9	14
68	Heteroleptic Samarium(III) Chalcogenide Complexes: Opportunities for Giant Exchange Coupling in Bridging Ïƒ- and Ï€-Radical Lanthanide Dichalcogenides. Inorganic Chemistry, 2020, 59, 7571-7583.	1.9	14
69	Xâ€ray Absorption Spectroscopic, Crystallographic, Theoretical (DFT) and Chemical Evidence for a Chalcogenâ€“Chalcogen Twoâ€Center/Threeâ€Electron Half Bond in an Unprecedented â€œSubselenideâ€• Se₂^{3âˆ’} Ligand. Chemistry - A European Journal, 2012, 18, 9179-9183.	1.7	13
70	Light-Atom Influences on the Electronic Structures of Ironâ€“Sulfur Clusters. Inorganic Chemistry, 2014, 53, 2591-2597.	1.9	13
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73	The Eponymous Cofactors in Cytochrome P460s from Ammonia-Oxidizing Bacteria Are Iron Porphyrinoids Whose Macrocycles Are Dibasic. Biochemistry, 2018, 57, 334-343.	1.2	12
74	Revving up an artificial metalloenzyme. Science, 2018, 361, 1071-1072.	6.0	12
75	A Mononuclear and High-Spin Tetrahedral Ti^{II} Complex. Inorganic Chemistry, 2020, 59, 17834-17850.	1.9	12
76	Conjugated Microporous Polymers via Solvent-Free Ionothermal Cyclotrimerization of Methyl Ketones. Chemistry of Materials, 2021, 33, 8334-8342.	3.2	12
77	The 4-Electron Cleavage of a Nâ•N Double Bond by a Trimetallic TiNi2 Complex. Inorganic Chemistry, 2019, 58, 11762-11772.	1.9	11
78	An Isolable Mononuclear Palladium(I) Amido Complex. Journal of the American Chemical Society, 2021, 143, 10751-10759.	6.6	11
79	A Mononuclear, Nonheme Fe^{II}â€“Pilotyâ€™s Acid (PhSO₂NHOH) Adduct: An Intermediate in the Production of {FeNO}^{7/8} Complexes from Pilotyâ€™s Acid. Journal of the American Chemical Society, 2019, 141, 7046-7055.	6.6	10
80	A Nonheme Mononuclear {FeNO} 7 Complex that Produces N 2 O in the Absence of an Exogenous Reductant. Angewandte Chemie - International Edition, 2021, 60, 21558-21564.	7.2	10
81	Chalcogen Impact on Covalency within Molecular [Cu₃(Î¼₃-E)]³⁺ Clusters (E = O, S, Se): A Synthetic, Spectroscopic, and Computational Study. Inorganic Chemistry, 2018, 57, 11382-11392.	1.9	9
82	Heteroleptic samarium(<scp>iii</scp>) halide complexes probed by fluorescence-detected L₃-edge X-ray absorption spectroscopy. Dalton Transactions, 2018, 47, 10613-10625.	1.6	8
83	Probing the electronic and mechanistic roles of the Î¼₄-sulfur atom in a synthetic Cu_Z model system. Chemical Science, 2020, 11, 3441-3447.	3.7	8
84	The Hemeâ€“Lys Cross-Link in Cytochrome P460 Promotes Catalysis by Enforcing Secondary Coordination Sphere Architecture. Biochemistry, 2020, 59, 2289-2298.	1.2	7
85	Dph3 Enables Aerobic Diphthamide Biosynthesis by Donating One Iron Atom to Transform a [3Feâ€“4S] to a [4Feâ€“4S] Cluster in Dph1â€“Dph2. Journal of the American Chemical Society, 2021, 143, 9314-9319.	6.6	7
86	Iron Complexes of a Proton-Responsive SCS Pincer Ligand with a Sensitive Electronic Structure. Inorganic Chemistry, 2022, 61, 1644-1658.	1.9	7
87	Comment onâ€œA Critical Review on Nitrous Oxide Production by Ammonia-Oxidizing Archaeaâ€•by Lan Wu, Xueming Chen, Wei Wei, Yiwen Liu, Dongbo Wang, and Bing-Jie Ni. Environmental Science & Technology, 2021, 55, 797-798.	4.6	6
88	Reversible Câ€“C Bond Formation, Halide Abstraction, and Electromers in Complexes of Iron Containing Redox-Noninnocent Pyridine-imine Ligands. Inorganic Chemistry, 2021, 60, 18662-18673.	1.9	6
89	Anomalous orbital admixture in ammine complexes. Journal of Organometallic Chemistry, 2015, 792, 6-12.	0.8	5
90	A Nonheme Sulfurâ€Ligated {FeNO} 6 Complex and Comparison with Redoxâ€Interconvertible {FeNO} 7 and {FeNO} 8 Analogues. Angewandte Chemie, 2018, 130, 13653-13657.	1.6	5

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91	Azaallyl-derived ring formation via redox coupling in first row transition metals. Polyhedron, 2019, 158, 225-233.	1.0	5
92	Scrutinizing â€œLigand Bandsâ€•via Polarized Single-Crystal X-ray Absorption Spectra of Copper(I) and Copper(II) Bis-2,2â€²-bipyridine Species. Inorganic Chemistry, 2020, 59, 13416-13426.	1.9	5
93	Sizing up a supercharged ferryl. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 4532-4534.	3.3	2
94	Electronic Structure of Ru₂⁶⁺ Complexes with Electron-Rich Anilinopyridinate Ligands. Inorganic Chemistry, 2022, 61, 3443-3457.	1.9	2
95	Lithium superoxide encapsulated in a benzoquinone anion matrix. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	1
96	Celebrating the Year of the Periodic Table: Emerging Investigators in Inorganic Chemistry. Inorganic Chemistry, 2019, 58, 10433-10435.	1.9	0
97	Editorial overview: Emergent lessons from the elements of life. Current Opinion in Chemical Biology, 2019, 49, A4-A5.	2.8	0
98	A Nonheme Mononuclear {FeNO} 7 Complex that Produces N 2 O in the Absence of an Exogenous Reductant. Angewandte Chemie, 2021, 133, 21728-21734.	1.6	0