Kyle M Lancaster

List of Publications by Year in Descending Order

94 papers	4,296 citations	31 h-index	64 g-index
100 ext. papers	5,235 ext. citations	11.6 avg, IF	5.81 L-index

#	Paper	IF	Citations
94	Iron Complexes of a Proton-Responsive SCS Pincer Ligand with a Sensitive Electronic Structure.. *Inorganic Chemistry*, **2022**,	5.1	2
93	Comment on"A Critical Review on Nitrous Oxide Production by Ammonia-Oxidizing Archaea" by Lan Wu, Xueming Chen, Wei Wei, Yiwen Liu, Dongbo Wang, and Bing-Jie Ni. *Environmental Science & Technology*, **2021**, 55, 797-798	10.3	3
92	Dph3 Enables Aerobic Diphthamide Biosynthesis by Donating One Iron Atom to Transform a [3Fe-4S] to a [4Fe-4S] Cluster in Dph1-Dph2. *Journal of the American Chemical Society*, **2021**, 143, 9314-9319	16.4	1
91	An Isolable Mononuclear Palladium(I) Amido Complex. *Journal of the American Chemical Society*, **2021**, 143, 10751-10759	16.4	3
90	A Nonheme Mononuclear {FeNO}7 Complex that Produces N2O in the Absence of an Exogenous Reductant. *Angewandte Chemie*, **2021**, 133, 21728-21734	3.6	
89	A Nonheme Mononuclear {FeNO} Complex that Produces N O in the Absence of an Exogenous Reductant. *Angewandte Chemie - International Edition*, **2021**, 60, 21558-21564	16.4	5
88	Heteroleptic Samarium(III) Chalcogenide Complexes: Opportunities for Giant Exchange Coupling in Bridging □and □Radical Lanthanide Dichalcogenides. *Inorganic Chemistry*, **2020**, 59, 7571-7583	5.1	11
87	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	16.4	11
86	The Heme-Lys Cross-Link in Cytochrome P460 Promotes Catalysis by Enforcing Secondary Coordination Sphere Architecture. *Biochemistry*, **2020**, 59, 2289-2298	3.2	5
85	[(MeCN)Ni(CF)] and [Ni(CF)]: Foundations toward the Development of Trifluoromethylations at Unsupported Nickel. *Inorganic Chemistry*, **2020**, 59, 9143-9151	5.1	6
84	Cerium(IV) Enhances the Catalytic Oxidation Activity of Single-Site Cu Active Sites in MOFs. *ACS Catalysis*, **2020**, 10, 7820-7825	13.1	22
83	Biological and Bioinspired Inorganic N-N Bond-Forming Reactions. *Chemical Reviews*, **2020**, 120, 5252-5367	68.1	34
82	Probing the electronic and mechanistic roles of the □sulfur atom in a synthetic Cu model system. *Chemical Science*, **2020**, 11, 3441-3447	9.4	3
81	Electronic Structures and Reactivity Profiles of Aryl Nitrenoid-Bridged Dicopper Complexes. *Journal of the American Chemical Society*, **2020**, 142, 2264-2276	16.4	13
80	A Mononuclear and High-Spin Tetrahedral Ti Complex. *Inorganic Chemistry*, **2020**, 59, 17834-17850	5.1	4
79	Heme P460: A (Cross) Link to Nitric Oxide. *Accounts of Chemical Research*, **2020**, 53, 2925-2935	24.3	7
78	The influences of carbon donor ligands on biomimetic multi-iron complexes for N reduction. *Chemical Science*, **2020**, 11, 12710-12720	9.4	6

77	Scrutinizing "Ligand Bands" via Polarized Single-Crystal X-ray Absorption Spectra of Copper(I) and Copper(II) Bis-2,2Pbipyridine Species. *Inorganic Chemistry*, **2020**, 59, 13416-13426	5.1	3
76	Synthesis of a copper-supported triplet nitrene complex pertinent to copper-catalyzed amination. *Science*, **2019**, 365, 1138-1143	33.3	81
75	Reduction of CO by a masked two-coordinate cobalt(i) complex and characterization of a proposed oxodicobalt(ii) intermediate. *Chemical Science*, **2019**, 10, 918-929	9.4	23
74	Scrutinizing metal-ligand covalency and redox non-innocence nitrogen K-edge X-ray absorption spectroscopy. *Chemical Science*, **2019**, 10, 5044-5055	9.4	16
73	A Mononuclear, Nonheme Fe-PilotyB Acid (PhSONHOH) Adduct: An Intermediate in the Production of {FeNO} Complexes from PilotyB Acid. *Journal of the American Chemical Society*, **2019**, 141, 7046-7055	16.4	7
72	Controlling a burn: outer-sphere gating of hydroxylamine oxidation by a distal base in cytochrome P460. *Chemical Science*, **2019**, 10, 3756-3764	9.4	11
71	An Approach to Carbide-Centered Cluster Complexes. *Inorganic Chemistry*, **2019**, 58, 4812-4819	5.1	11
70	Enhanced Fe-Centered Redox Flexibility in Fe-Ti Heterobimetallic Complexes. *Inorganic Chemistry*, **2019**, 58, 6199-6214	5.1	19
69	The 4-Electron Cleavage of a N?N Double Bond by a Trimetallic TiNi Complex. *Inorganic Chemistry*, **2019**, 58, 11762-11772	5.1	6
68	Celebrating the Year of the Periodic Table: Emerging Investigators in Inorganic Chemistry. *Inorganic Chemistry*, **2019**, 58, 10433-10435	5.1	
67	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	11.5	11
66	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	16.4	28
65	Masked Radicals: Iron Complexes of Trityl, Benzophenone, and Phenylacetylene. *Organometallics*, **2019**, 38, 4224-4232	3.8	7
64	The Myth of d Copper(III). *Journal of the American Chemical Society*, **2019**, 141, 18508-18520	16.4	61
63	Synthesis, characterization and C-H amination reactivity of nickel iminyl complexes. *Chemical Science*, **2019**, 11, 1260-1268	9.4	22
62	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	16.4	21
61	Dramatic Electronic Perturbations of Cu Centers via Subtle Geometric Changes. *Journal of the American Chemical Society*, **2019**, 141, 1373-1381	16.4	9
60	Azaallyl-derived ring formation via redox coupling in first row transition metals. *Polyhedron*, **2019**, 158, 225-233	2.7	2

59	Sizing up a supercharged ferryl. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 4532-4534	11.5	
58	Reversible Ligand-Centered Reduction in Low-Coordinate Iron Formazanate Complexes. *Chemistry - A European Journal*, **2018**, 24, 9417-9425	4.8	23
57	Alkali Cation Effects on Redox-Active Formazanate Ligands in Iron Chemistry. *Inorganic Chemistry*, **2018**, 57, 9580-9591	5.1	22
56	Organometallic and radical intermediates reveal mechanism of diphthamide biosynthesis. *Science*, **2018**, 359, 1247-1250	33.3	32
55	Alternative Bioenergy: Updates to and Challenges in Nitrification Metalloenzymology. *Joule*, **2018**, 2, 421-441	27.8	54
54	Heteroleptic samarium(iii) halide complexes probed by fluorescence-detected L-edge X-ray absorption spectroscopy. *Dalton Transactions*, **2018**, 47, 10613-10625	4.3	5
53	A Nonheme Sulfur-Ligated {FeNO} Complex and Comparison with Redox-Interconvertible {FeNO} and {FeNO} Analogues. *Angewandte Chemie - International Edition*, **2018**, 57, 13465-13469	16.4	10
52	A Nonheme Sulfur-Ligated {FeNO}6 Complex and Comparison with Redox-Interconvertible {FeNO}7 and {FeNO}8 Analogues. *Angewandte Chemie*, **2018**, 130, 13653-13657	3.6	3
51	The Eponymous Cofactors in Cytochrome P460s from Ammonia-Oxidizing Bacteria Are Iron Porphyrinoids Whose Macrocycles Are Dibasic. *Biochemistry*, **2018**, 57, 334-343	3.2	9
50	Influences of the heme-lysine crosslink in cytochrome P460 over redox catalysis and nitric oxide sensitivity. *Chemical Science*, **2018**, 9, 368-379	9.4	18
49	Revving up an artificial metalloenzyme. *Science*, **2018**, 361, 1071-1072	33.3	7
48	Chalcogen Impact on Covalency within Molecular [Cu(E)] Clusters (E = O, S, Se): A Synthetic, Spectroscopic, and Computational Study. *Inorganic Chemistry*, **2018**, 57, 11382-11392	5.1	7
47	Electrochemical Azidooxygenation of Alkenes Mediated by a TEMPO-N Charge-Transfer Complex. *Journal of the American Chemical Society*, **2018**, 140, 12511-12520	16.4	102
46	Beyond fossil fuel-driven nitrogen transformations. *Science*, **2018**, 360,	33.3	772
45	Manganese binding to Rubisco could drive a photorespiratory pathway that increases the energy efficiency of photosynthesis. *Nature Plants*, **2018**, 4, 414-422	11.5	39
44	X-ray Spectroscopic Interrogation of Transition-Metal-Mediated Homogeneous Catalysis: Primer and Case Studies. *ACS Catalysis*, **2017**, 7, 1776-1791	13.1	47
43	Electronic Structural Analysis of Copper(II)-TEMPO/ABNO Complexes Provides Evidence for Copper(I)-Oxoammonium Character. *Journal of the American Chemical Society*, **2017**, 139, 13507-13517	16.4	38
42	Direct Comparison of C-H Bond Amination Efficacy through Manipulation of Nitrogen-Valence Centered Redox: Imido versus Iminyl. *Journal of the American Chemical Society*, **2017**, 139, 14757-14766	16.4	78

41	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	11.5	207
40	Expanding the Scope of Ligand Substitution from [M(SCPh] (M = Ni, Pd, Pt) To Afford New Heteroleptic Dithiolene Complexes. *Inorganic Chemistry*, **2017**, 56, 10257-10267	5.1	9
39	Crystalline Coordination Networks of Zero-Valent Metal Centers: Formation of a 3-Dimensional Ni(0) Framework with m-Terphenyl Diisocyanides. *Journal of the American Chemical Society*, **2017**, 139, 17257-17260	16.4	17
38	Nitrosomonas europaea 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	11.5	108
37	Switchable Interaction in Molecular Double Qubits. *CheM*, **2016**, 1, 727-752	16.2	49
36	Rh2(II,III) Catalysts with Chelating Carboxylate and Carboxamidate Supports: Electronic Structure and Nitrene Transfer Reactivity. *Journal of the American Chemical Society*, **2016**, 138, 2327-41	16.4	82
35	Oxygen Activation by Co(II) and a Redox Non-Innocent Ligand: Spectroscopic Characterization of a Radical-Co(II)-Superoxide Complex with Divergent Catalytic Reactivity. *Journal of the American Chemical Society*, **2016**, 138, 1796-9	16.4	57
34	Spectroscopic Evidence for a 3d(10) Ground State Electronic Configuration and Ligand Field Inversion in [Cu(CF3)4](1-). *Journal of the American Chemical Society*, **2016**, 138, 1922-31	16.4	63
33	Application of 93Nb NMR spectroscopy to (silox)3Nb(Xn/Lm) complexes (silox =tBu3SiO): Where does (silox)3Nb(NN)Nb(silox)3 appear?. *Polyhedron*, **2016**, 103, 105-114	2.7	10
32	Electronic Structure of Ni□□Complexes (E = S, Se, Te) and a Global Analysis of M□□Compounds: A Case for Quantized E□(n-) Oxidation Levels with n = 2, 3, or 4. *Journal of the American Chemical Society*, **2015**, 137, 4993-5011	16.4	23
31	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, 205-14	5.1	25
30	Stabilizing coordinated radicals via metal-ligand covalency: a structural, spectroscopic, and theoretical investigation of group 9 tris(dithiolene) complexes. *Inorganic Chemistry*, **2015**, 54, 3660-9	5.1	12
29	Probing Cu(I) in homogeneous catalysis using high-energy-resolution fluorescence-detected X-ray absorption spectroscopy. *Chemical Communications*, **2015**, 51, 9864-7	5.8	27
28	Anomalous orbital admixture in ammine complexes. *Journal of Organometallic Chemistry*, **2015**, 792, 6-12	2.3	5
27	X-ray absorption spectroscopy systematics at the tungsten L-edge. *Inorganic Chemistry*, **2014**, 53, 8230-41	5.1	23
26	Study of iron dimers reveals angular dependence of valence-to-core X-ray emission spectra. *Inorganic Chemistry*, **2014**, 53, 10378-85	5.1	23
25	Light-atom influences on the electronic structures of iron-sulfur clusters. *Inorganic Chemistry*, **2014**, 53, 2591-7	5.1	12
24	Dramatic influence of an anionic donor on the oxygen-atom transfer reactivity of a Mn(V) -oxo complex. *Chemistry - A European Journal*, **2014**, 20, 14584-8	4.8	24

23	X-ray spectroscopic observation of an interstitial carbide in NifEN-bound FeMoco precursor. *Journal of the American Chemical Society*, **2013**, 135, 610-2	16.4	87
22	Exploring the limits of redox non-innocence: pseudo square planar [{κ4-Me2C(CH2NCHpy)2}Ni]n (n = 2+, 1+, 0, 1−, 2−) favor Ni(II). *Chemical Science*, **2013**, 4, 3636	9.4	23
21	Ancillary ligand effects upon dithiolene redox noninnocence in tungsten bis(dithiolene) complexes. *Inorganic Chemistry*, **2013**, 52, 6743-51	5.1	24
20	Direct spectroscopic characterization of a transitory dirhodium donor-acceptor carbene complex. *Science*, **2013**, 342, 351-4	33.3	146
19	Molecular redox: revisiting the electronic structures of the group 9 metallocorroles. *Inorganic Chemistry*, **2012**, 51, 12473-82	5.1	17
18	Experimental fingerprints for redox-active terpyridine in [Cr(tpy)2](PF6)n (n = 3-0), and the remarkable electronic structure of [Cr(tpy)2]1-. *Inorganic Chemistry*, **2012**, 51, 3718-32	5.1	104
17	Manganese nitride complexes in oxidation states III, IV, and V: synthesis and electronic structure. *Journal of the American Chemical Society*, **2012**, 134, 15538-44	16.4	56
16	Inner- and outer-sphere metal coordination in blue copper proteins. *Journal of Inorganic Biochemistry*, **2012**, 115, 119-26	4.2	65
15	Spin delocalization over type zero copper. *Inorganic Chemistry*, **2012**, 51, 4066-75	5.1	16
14	Outer-sphere contributions to the electronic structure of type zero copper proteins. *Journal of the American Chemical Society*, **2012**, 134, 8241-53	16.4	36
13	X-ray absorption spectroscopic, crystallographic, theoretical (DFT) and chemical evidence for a chalcogen-chalcogen two-center/three-electron half bond in an unprecedented "subselenide" Se2(3-) ligand. *Chemistry - A European Journal*, **2012**, 18, 9179-83	4.8	11
12	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, 2932-43	5.1	155
11	Kβ X-ray emission spectroscopy offers unique chemical bonding insights: revisiting the electronic structure of ferrocene. *Inorganic Chemistry*, **2011**, 50, 6767-74	5.1	55
10	X-ray emission spectroscopy evidences a central carbon in the nitrogenase iron-molybdenum cofactor. *Science*, **2011**, 334, 974-7	33.3	659
9	Electron transfer reactivity of type zero Pseudomonas aeruginosa azurin. *Journal of the American Chemical Society*, **2011**, 133, 4865-73	16.4	44
8	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, 14590-5	16.4	25
7	Electronic structures, photophysical properties, and electrochemistry of ruthenium(II)(bpy)2 pyridylimidazole complexes. *Coordination Chemistry Reviews*, **2010**, 254, 1803-1811	23.2	43
6	Type-zero copper proteins. *Nature Chemistry*, **2009**, 1, 711-5	17.6	73

5	High-potential C112D/M121X (X = M, E, H, L) Pseudomonas aeruginosa azurins. *Inorganic Chemistry*, **2009**, 48, 1278-80	5.1	29
4	Structures and reactivity patterns of group 9 metallocorroles. *Inorganic Chemistry*, **2009**, 48, 9308-15	5.1	42
3	Determination of coenzyme A levels in Pyrococcus furiosus and other Archaea: implications for a general role for coenzyme A in thermophiles. *FEMS Microbiology Letters*, **2005**, 252, 229-34	2.9	28
2	Discovery and characterization of a Coenzyme A disulfide reductase from Pyrococcus horikoshii. Implications for this disulfide metabolism of anaerobic hyperthermophiles. *FEBS Journal*, **2005**, 272, 1189-200	5.7	37
1	Conjugated Microporous Polymers via Solvent-Free Ionothermal Cyclotrimerization of Methyl Ketones. *Chemistry of Materials*,	9.6	4