Craig A Grapperhaus

List of Publications by Year
in descending order

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84	2,649	236925 25	197818 49
papers	citations	h-index	g-index

88	88	88	2061
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The pH and Potential Dependence of Pbâ€Catalyzed Electrochemical CO₂ Reduction to Methyl Formate in a Dual Methanol/Water Electrolyte. ChemSusChem, 2022, 15, .	6.8	17
2	Investigations of Bis(alkylthiocarbamato)copper Linkage Isomers. Inorganic Chemistry, 2022, 61, 7715-7719.	4.0	2
3	Ligand-Centered Hydrogen Evolution with Ni(II) and Pd(II)DMTH. Inorganic Chemistry, 2022, 61, 9792-9800.	4.0	10
4	Antifungal activity of thiosemicarbazones, bis(thiosemicarbazones), and their metal complexes. Journal of Inorganic Biochemistry, 2021, 225, 111620.	3.5	48
5	Copper bis(thiosemicarbazone) Complexes with Pendent Polyamines: Effects of Proton Relays and Charged Moieties on Electrocatalytic HER. European Journal of Inorganic Chemistry, 2021, 2021, 267-275.	2.0	9
6	DNA-induced assembly of gold nanoprisms and polystyrene beads into 3D plasmonic SERS substrates. Nanotechnology, 2021, 32, 025506.	2.6	8
7	DNA-mediated hierarchical organization of gold nanoprisms into 3D aggregates and their application in surface-enhanced Raman scattering. Physical Chemistry Chemical Physics, 2021, 23, 25256-25263.	2.8	2
8	Solvation of NiOx for hole transport layer deposition in perovskite solar cells. Nanotechnology, 2021, 33, .	2.6	2
9	Facet-selective asymmetric functionalization of anisotropic gold nanoprisms for Janus particle synthesis. Journal of Nanoparticle Research, 2020, 22, 1.	1.9	4
10	Synthesis, Characterization, and Biological Activity of Hybrid Thiosemicarbazoneâ€“Alkylthiocarbamate Metal Complexes. Inorganic Chemistry, 2020, 59, 4924-4935.	4.0	40
11	Exploiting Metalâ€“Ligand Cooperativity to Sequester, Activate, and Reduce Atmospheric Carbon Dioxide with a Neutral Zinc Complex. Inorganic Chemistry, 2020, 59, 4835-4841.	4.0	19
12	Electrocatalytic Hydrogen Evolution and Oxidation with Rhenium Tris(thiolate) Complexes: A Competition between Rhenium and Sulfur for Electrons and Protons. ACS Catalysis, 2020, 10, 3778-3789.	11.2	22
13	Synthesis, Characterization, and HER Activity of Pendant Diamine Derivatives of NiATSM. European Journal of Inorganic Chemistry, 2019, 2019, 3782-3790.	2.0	9
14	Photocatalytic hydrogen evolution on Si photocathodes modified with bis(thiosemicarbazonato)nickel(<scp>ii</scp>)/Nafion. Chemical Communications, 2019, 55, 9440-9443.	4.1	12
15	Effect of Stacking Interactions on the Translation of Structurally Related Bis(thiosemicarbazonato)nickel(II) HER Catalysts to Modified Electrode Surfaces. Inorganic Chemistry, 2019, 58, 12025-12039.	4.0	6
16	Utilizing Charge Effects and Minimizing Intramolecular Proton Rearrangement to Improve the Overpotential of a Thiosemicarbazonato Zinc HER Catalyst. Inorganic Chemistry, 2019, 58, 12986-12997.	4.0	14
17	Water wire clusters in isostructural Cu(II) and Ni(II) complexes: Synthesis, characterization, and thermal analyses. Inorganica Chimica Acta, 2019, 492, 268-274.	2.4	2
18	Streams, cascades, and pools: various water cluster motifs in structurally similar Ni(<scp>ii</scp>) complexes. CrystEngComm, 2018, 20, 7071-7081.	2.6	5

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19	Ligand-Assisted Metal-Centered Electrocatalytic Hydrogen Evolution upon Reduction of a Bis(thiosemicarbazonato)Ni(II) Complex. Inorganic Chemistry, 2018, 57, 13486-13493.	4.0	58
20	Syntheses, structures, and electrochemical studies of N,Nâ€²-bis(alkylthiocarbamate)butane-2,3-diimine Cu(II) complexes as pendent alkoxy derivatives of Cu(ATSM). Inorganica Chimica Acta, 2017, 461, 45-51.	2.4	5
21	Translation of Ligand-Centered Hydrogen Evolution Reaction Activity and Mechanism of a Rhenium-Thiolate from Solution to Modified Electrodes: A Combined Experimental and Density Functional Theory Study. Inorganic Chemistry, 2017, 56, 2177-2187.	4.0	16
22	Metal-Assisted Ligand-Centered Electrocatalytic Hydrogen Evolution upon Reduction of a Bis(thiosemicarbazonato)Cu(II) Complex. Inorganic Chemistry, 2017, 56, 11254-11265.	4.0	102
23	Electrocatalytic Hydrogen Evolution and Hydrogen Oxidation with a Ni(PS)₂ Complex. European Journal of Inorganic Chemistry, 2017, 2017, 3714-3719.	2.0	17
24	Copper catalysed aerobic oxidation of benzylic alcohols in an imidazole containing N₄ ligand framework. Dalton Transactions, 2016, 45, 18356-18364.	3.3	12
25	Reversible methanol addition to copper Schiff base complexes: a kinetic, structural and spectroscopic study of reactions at azomethine Cî€N bonds. Dalton Transactions, 2016, 45, 15791-15799.	3.3	11
26	Beyond Metal-Hydrides: Non-Transition-Metal and Metal-Free Ligand-Centered Electrocatalytic Hydrogen Evolution and Hydrogen Oxidation. Journal of the American Chemical Society, 2016, 138, 7844-7847.	13.7	97
27	Proposed Ligand-Centered Electrocatalytic Hydrogen Evolution and Hydrogen Oxidation at a Noninnocent Mononuclear Metalâ€“Thiolate. Journal of the American Chemical Society, 2015, 137, 9238-9241.	13.7	67
28	Metal-centered oxidation decreases nitrile hydration activity of bioinspired (N2S3)Ru-PPh3 precatalysts. Inorganic Chemistry Communication, 2015, 61, 197-199.	3.9	2
29	Kinetic Effects of Sulfur Oxidation on Catalytic Nitrile Hydration: Nitrile Hydratase Insights from Bioinspired Ruthenium(II) Complexes. Inorganic Chemistry, 2014, 53, 12372-12377.	4.0	15
30	Chemiresistive metal-stabilized thiyl radical films as highly selective ethylene sensors. RSC Advances, 2014, 4, 46787-46790.	3.6	14
31	Probing the Reactivity and Radical Nature of Oxidized Transition Metal-Thiolate Complexes by Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2013, 24, 502-512.	2.8	6
32	Reinvestigation of the first structurally characterized metal-coordinated sulfenic acid complex. Inorganic Chemistry Communication, 2013, 37, 186-188.	3.9	1
33	Bioinspired catalytic nitrile hydration by dithiolato, sulfinato/thiolato, and sulfenato/sulfinato ruthenium complexes. Chemical Communications, 2013, 49, 294-296.	4.1	18
34	Addition of polysubstituted alkenes, aromatic alkynes, and dienes to a metal-stabilized thiyl radical via carbonâ€“sulfur bond formation: Electrochemical, chemical, and computational investigations. Inorganica Chimica Acta, 2013, 408, 1-8.	2.4	7
35	Sulfur Oxygenation Enhances Ligand Exchange in Nitrile-Hydratase-Inspired Ruthenium(II) Complexes. ACS Symposium Series, 2013, , 71-87.	0.5	1
36	Selective and Reversible Base-Induced Elimination of a Ruthenium Dithioether Yields a Vinyl Metallosulfonium Complex. Inorganic Chemistry, 2012, 51, 7913-7920.	4.0	8

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37	Kinetic study of nickel-thiolate oxygenation by hydrogen peroxide. Implications for nickel-containing superoxide dismutase. Dalton Transactions, 2012, 41, 364-366.	3.3	16
38	Influence of Sequential Thiolate Oxidation on a Nitrile Hydratase Mimic Probed by Multiedge X-ray Absorption Spectroscopy. Inorganic Chemistry, 2012, 51, 6032-6045.	4.0	24
39	Alkyne Addition to a Metal-Stabilized Thiyl Radical: Carbon-Sulfur Bond Formation between 1-Octyne and [Ru(SP)3]+. European Journal of Inorganic Chemistry, 2012, 2012, 475-478.	2.0	11
40	Metal-Stabilized Thiyl Radicals as Scaffolds for Reversible Alkene Addition via Câ€“S Bond Formation/Cleavage. Inorganic Chemistry, 2011, 50, 9904-9914.	4.0	43
41	N-(2-formyl-1-methylimidazol-4-yl)-2,2-dimethylpropanamide: a versatile reagent for preparing imidazole-amine ligands with variable second-coordination spheres. Tetrahedron Letters, 2011, 52, 4771-4774.	1.4	3
42	Synthesis, Structure, and Solution Properties of [(mim-TASN)FeCl₂]⁺ and Its Î¼-Oxo Derivative. Inorganic Chemistry, 2010, 49, 10427-10435.	4.0	3
43	Controlled Sulfur Oxygenation of the Ruthenium Dithiolate (4,7-Bis-(2â€²-methyl-2â€²-mercaptopropyl)-1-thia-4,7-diazacyclononane)RuPPh₃ under Limiting O₂ Conditions Yields Thiolato/Sulfinato, Sulfenato/Sulfinato, and Bis-Sulfinato Derivatives. Inorganic Chemistry, 2010, 49, 10875-10881.	4.0	24
44	Asymmetric Oxygenation of a Ruthenium Dithiolate Mimics the Mixed Sulfenato/Sulfinato Donor Sets of Nitrile Hydratase and Thiocyanate Hydrolase. Inorganic Chemistry, 2010, 49, 5344-5346.	4.0	26
45	Supramolecular assembly of a dinuclear Ag(I) complex with discreet Ag2S2 centers. Inorganic Chemistry Communication, 2009, 12, 1091-1093.	3.9	2
46	N2S3X-Fe Models of Nitrile Hydratase. ACS Symposium Series, 2009, , 99-113.	0.5	6
47	Redox-Regulated Ethylene Binding to a Rhenium-Thiolate Complex. Journal of the American Chemical Society, 2009, 131, 64-65.	13.7	35
48	Synthesis and Sulfur Oxygenation of a (N₃S)Ni Complex Related to Nickel-Containing Superoxide Dismutase. Inorganic Chemistry, 2009, 48, 9974-9976.	4.0	39
49	Substrate Binding Preferences and pK_aDeterminations of a Nitrile Hydratase Model Complex: Variable Solvent Coordination to [(bmmp-TASN)Fe]OTf. Inorganic Chemistry, 2009, 48, 2300-2308.	4.0	13
50	Spin-state-dependent oxygen sensitivity of iron dithiolates: sulfur oxygenation or disulfide formation. Journal of Biological Inorganic Chemistry, 2008, 13, 1219-1230.	2.6	28
51	Hg(II) and Cd(II) complexes with mixed donor macrocyclic thioethers: The oxophobicity of mercury(II). Polyhedron, 2008, 27, 3097-3104.	2.2	30
52	1,5-Diazacyclooctane, Pendant Arm Thiolato Derivatives and [N,Nâ€² -Bis(2-Mercaptoethyl)-1,5-Diazacyclooctanato]Nickel(II). Inorganic Syntheses, 2007, , 89-98.	0.3	6
53	An Experimental and Computational Study of Sulfur-Modified Nucleophilicity in a Dianionic NiN₂S₂ Complex. Inorganic Chemistry, 2007, 46, 7536-7544.	4.0	30
54	Carbonâ^'Sulfur Bond Formation via Alkene Addition to an Oxidized Ruthenium Thiolate. Inorganic Chemistry, 2007, 46, 8044-8050.	4.0	19

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55	Singlet Diradical Character of an Oxidized Ruthenium Trithiolate: Electronic Structure and Reactivity. Angewandte Chemie - International Edition, 2007, 46, 4085-4088.	13.8	25
56	{3,3â€²-[Ethane-1,2-diylbis(methylimino)]bis(propane-1-thiolato)}nickel(II). Acta Crystallographica Section E: Structure Reports Online, 2007, 63, m2281-m2281.	0.2	1
57	Ethyl 1-methylimidazole-2-carboxylate. Acta Crystallographica Section E: Structure Reports Online, 2006, 62, o1548-o1549.	0.2	1
58	Synthesis and structure of the tetradeca-iron(III) oxideâ€“alkoxide cluster [Bu4N]2[Fe14O8(OCH2CH3)20Cl8]. Inorganic Chemistry Communication, 2006, 9, 1204-1206.	3.9	20
59	Density functional theory investigations of NiN2S2 reactivity as a function of nitrogen donor type and Nâ€“HÂ·Â·Â·S hydrogen bonding inspired by nickel-containing superoxide dismutase. Journal of Biological Inorganic Chemistry, 2006, 11, 617-625.	2.6	42
60	Template synthesis of N2S and N3S chelates via alkylation of bis(2-aminoethanethiolato)Ni: sulfur- and nitrogen-centered alkylations. Inorganica Chimica Acta, 2005, 358, 123-130.	2.4	6
61	Structural comparison of alkylated derivatives of (bmmp-dmed)Ni and (bmmp-dmed)Zn. Inorganica Chimica Acta, 2005, 358, 623-632.	2.4	12
62	Carbon-Sulfur Bond Formation between a Ruthenium-Coordinated Thiyl Radical and Methyl Ketones. Angewandte Chemie - International Edition, 2005, 44, 1883-1887.	13.8	21
63	Oxygenation of a Ruthenium(II) Thiolate to a Ruthenium(II) Sulfinate Proceeds via Ruthenium(III). Inorganic Chemistry, 2005, 44, 8185-8187.	4.0	24
64	Hydrogen-bond networks in the mono- and diprotonated cyclic diamine [9]aneN2S. Journal of Chemical Crystallography, 2004, 34, 5-11.	1.1	6
65	Electrochemical Investigations of the [Tris(2-(diphenylphosphino)thiaphenolato)ruthenate(II)] Monoanion Reveal Metal- and Ligand-Centered Events: Radical, Reactivity, and Rate. Inorganic Chemistry, 2004, 43, 3292-3298.	4.0	23
66	Synthesis and Oxygenation of a Nickel(II) and Zinc(II) Dithiolate:Â An Experimental and Theoretical Comparison. Inorganic Chemistry, 2004, 43, 2859-2866.	4.0	70
67	Structural, Spectroscopic, and Computational Study of an Octahedral, Non-Heme {Feâ€NO}6-8Series:Â [Fe(NO)(cyclam-ac)]2+/+/0. Journal of the American Chemical Society, 2004, 126, 5138-5153.	13.7	195
68	Synthesis and Characterization of N2S3Xâ€Fe Models of Iron-Containing Nitrile Hydratase. Inorganic Chemistry, 2003, 42, 4382-4388.	4.0	43
69	Unique Reactivity of a Tetradentate N2S2Complex of Nickel:Â Intermediates in the Production of Sulfur Oxygenates. Inorganic Chemistry, 2002, 41, 1837-1844.	4.0	61
70	First {Feâ€NO}6Complex with an N2S3Feâ€NO Core as a Model of NO-Inactivated Iron-Containing Nitrile Hydratase. Are Thiolates and Thioethers Equivalent Donors in Low-Spin Iron Complexes?. Inorganic Chemistry, 2002, 41, 1039-1041.	4.0	47
71	Dichloromethane Alkylates a Trithiolato-Ruthenium Complex to Yield a Methylene-Bridged Thioether Core. Synthesis and Structural Comparison to the Thiolato-Ruthenium Precursor. Inorganic Chemistry, 2002, 41, 4309-4311.	4.0	33
72	1,5-Bis(benzothiazolyl)-3-thiapentane and its asymmetric dinuclear Ag(i) complex with three distinct intermolecular-stacking interactionsElectronic supplementary information (ESI) available: 3D rotatable structures of 2 and 3. See http://www.rsc.org/suppdata/cc/b2/b204843d/. Chemical Communications, 2002, , 1792-1793.	4.1	7

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73	cis-Dioxocyclam. Acta Crystallographica Section C: Crystal Structure Communications, 2002, 58, o226-o227.	0.4	4
74	Molecular and Electronic Structure of [MnVN(cyclamâˆ'acetato)]PF6. A Combined Experimental and DFT Study. Inorganic Chemistry, 2001, 40, 4191-4198.	4.0	24
75	Subtle Bite-Angle Influences on N2S2Ni Complexes. Inorganic Chemistry, 2001, 40, 3601-3605.	4.0	50
76	Correlation of electrochemistry, nucleophilicity and density functional calculations of the cis-dithiolate (bme*-daco)Ni. Inorganica Chimica Acta, 2000, 300-302, 73-81.	2.4	17
77	Mononuclear (Nitrido)iron(V) and (Oxo)iron(IV) Complexes via Photolysis of [(cyclam-acetato)FeIII(N3)]+ and Ozonolysis of [(cyclam-acetato)FeIII(O3SCF3)]+ in Water/Acetone Mixtures. Inorganic Chemistry, 2000, 39, 5306-5317.	4.0	301
78	Synthesis and Dimer Cleavage Reactions of the N2S Thiolate Bridged Dimer [(mmp-dach)2Ni2]Cl2. Inorganic Chemistry, 1999, 38, 3698-3703.	4.0	16
79	Alkylation-Induced O-Atom Rearrangement in Nickel S-Oxygenates. Organometallics, 1998, 17, 4813-4821.	2.3	8
80	Methylation of Tethered Thiolates in [(bme-daco)Zn]2 and [(bme-daco)Cd]2 as a Model of Zinc Sulfur-Methylation Proteins. Inorganic Chemistry, 1998, 37, 4052-4058.	4.0	88
81	Oxygen Capture by Sulfur in Nickel Thiolates. Accounts of Chemical Research, 1998, 31, 451-459.	15.6	321
82	Singlet Oxygen and the Production of Sulfur Oxygenates of Nickel(II) and Palladium(II) Thiolates. Inorganic Chemistry, 1997, 36, 1860-1866.	4.0	56
83	Template Effect for O2Addition acrosscis-Sulfur Sites in Nickel Dithiolates. Journal of the American Chemical Society, 1996, 118, 1791-1792.	13.7	57
84	Direct Deposition of Nonaqueous SnO2 Dispersion by Blade Coating on Perovskites for the Scalable Fabrication of pâ€“iâ€“n Perovskite Solar Cells. ACS Applied Energy Materials, 0, , .	5.1	12