Frantisek Hartl

List of Publications by Year
in descending order

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92 papers	3,055 citations	186265 28 h-index	175258 52 g-index
94 all docs	94 docs citations	94 times ranked	3084 citing authors

#	Article	IF	Citations
1	Electrocatalytic Reduction of CO2Using the Complexes [Re(bpy)(CO)3L]n(n= +1, L = P(OEt)3, CH3CN;n= 0,) Tj ETQq1 1 0.784314 rgBT Spectroelectrochemical Investigation. Organometallics, 1996, 15, 3374-3387.	2.3	291
2	Photochromic Dithienylethene Derivatives Containing Ru(II) or Os(II) Metal Units. Sensitized Photocyclization from a Triplet State. Inorganic Chemistry, 2004, 43, 2779-2792.	4.0	229
3	Consequences ofN,C,Nâ€²- andC,N,Nâ€²-Coordination Modes on Electronic and Photophysical Properties of Cyclometalated Aryl Ruthenium(II) Complexes. Inorganic Chemistry, 2009, 48, 1887-1900.	4.0	159
4	Simultaneous Bridge-Localized and Mixed-Valence Character in Diruthenium Radical Cations Featuring Diethynylaromatic Bridging Ligands. Journal of the American Chemical Society, 2011, 133, 18433-18446.	13.7	138
5	Ruthenium Complexes ofC,Câ€˜-Bis(ethynyl)carboranes:â€‰ An Investigation of Electronic Interactions Mediated by Spherical Pseudo-aromatic Spacers. Journal of the American Chemical Society, 2008, 130, 3566-3578.	13.7	116
6	Electrochemical Single-Molecule Transistors with Optimized Gate Coupling. Journal of the American Chemical Society, 2015, 137, 14319-14328.	13.7	94
7	Syntheses, Structures, Some Reactions, and Electrochemical Oxidation of Ferrocenylethynyl Complexes of Iron, Ruthenium, and Osmium. Organometallics, 2005, 24, 5241-5255.	2.3	87
8	Wavelength-dependent photosubstitution and excited-state dynamics of [Cr(CO)4(2,2'-bipyridine)]: a quantum yield and picosecond absorption study. Journal of the American Chemical Society, 1992, 114, 10903-10910.	13.7	85
9	Origin of electronic absorption spectra of MLCT-excited and one-electron reduced 2,2â€²-bipyridine and 1,10-phenanthroline complexes. Inorganica Chimica Acta, 2011, 374, 578-585.	2.4	67
10	Electrocatalytic Reduction of Carbon Dioxide with a Manganese(I) Tricarbonyl Complex Containing a Nonaromatic Î±-Diimine Ligand. Organometallics, 2014, 33, 5002-5008.	2.3	66
11	Electronic transitions and bonding properties in a series of five-coordinate â€œ16-electronâ€•complexes [Mn(CO)3(L2)]â˜ (L2=chelating redox-active Ï€-donor ligand). Coordination Chemistry Reviews, 2007, 251, 557-576.	18.8	63
12	Some transition metal complexes derived from mono- and di-ethynyl perfluorobenzenes. Dalton Transactions, 2008, , 6763.	3.3	63
13	A Novel Organometallic Polymer of Osmium(0), [Os(2,2â€²-bipyridine)(CO)2]n: Its Electrosynthesis and Electrocatalytic Properties Towards CO2 Reduction. European Journal of Inorganic Chemistry, 2001, 2001, 613-617.	2.0	61
14	[M(CO)₄(2,2â€²â€bipyridine)] (M=Cr, Mo, W) Complexes as Efficient Catalysts for Electrochemical Reduction of CO₂ at a Gold Electrode. ChemElectroChem, 2015, 2, 213-217.	3.4	61
15	Synthesis, Spectroscopy and Spectroelectrochemistry of Chlorocarbonyl {1,2-Bis[(2,6-diisopropylphenyl)imino]acenaphthene-Î²2-N,N'}rhodium(I). Collection of Czechoslovak Chemical Communications, 2003, 68, 1687-1709.	1.0	58
16	Electronic Properties of 4,4â€˜,5,5â€˜-Tetramethyl-2,2â€˜-biphosphinine (tmbp) in the Redox Series fac-[Mn(Br)(CO)3(tmbp)], [Mn(CO)3(tmbp)]2, and [Mn(CO)3(tmbp)]-:â€‰ Crystallographic, Spectroelectrochemical, and DFT Computational Study. Inorganic Chemistry, 2003, 42, 4442-4455.	4.0	56
17	Electrochemical and IR/UVâ˜Vis Spectroelectrochemical Studies offac-[Mn(X)(CO)3(iPr-DAB)]n(n= 0, X =) Tj ETQq1 1 0.784314 rgBT Variable Temperatures:Â Relation between Electrochemical and Photochemical Generation of [Mn(CO)3(Î±-diimine)]-. Organometallics, 1997, 16, 4675-4685.	2.3	53
18	The spectroscopic, electrochemical and photophysical effects of the b1/a2 Ï€* lowest unoccupied molecular orbital switching in [M(CO)4(N,N)] (Mâ€…=â€…Cr or W; N,Nâ€…=â€…1,10-phenanthroline or) Tj ETQq0 0 0 rgBT /Overlock 1 Transactions RSC, 2000, , 4323-4331.	2.3	52

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19	Redox Chemistry and Electronic Properties of 2,3,5,6-Tetrakis(2-pyridyl)pyrazine-Bridged Diruthenium Complexes Controlled by N,C,Nâ€²-BisCyclometalated Ligands. Inorganic Chemistry, 2009, 48, 5685-5696.	4.0	51
20	Diruthenium Complexes with Bridging Diethynyl Polyaromatic Ligands: Synthesis, Spectroelectrochemistry, and Theoretical Calculations. Organometallics, 2015, 34, 3967-3978.	2.3	49
21	Manganese Tricarbonyl Complexes with Asymmetric 2-Iminopyridine Ligands: Toward Decoupling Steric and Electronic Factors in Electrocatalytic CO₂ Reduction. Inorganic Chemistry, 2016, 55, 12568-12582.	4.0	46
22	Structure and Spectroelectrochemical Response of Areneâ€“Ruthenium and Areneâ€“Osmium Complexes with Potentially Hemilabile Noninnocent Ligands. Organometallics, 2014, 33, 4973-4985.	2.3	44
23	Photochemistry of the Triangular Clusters Os3(CO)10(Î±-diimine): Homolysis of an Osâ^'Os Bond and Solvent-Dependent Formation of Biradicals and Zwitterions. Inorganic Chemistry, 1998, 37, 661-668.	4.0	39
24	Unraveling the Electronic Structures of Low-Valent Naphthalene and Anthracene Iron Complexes: X-ray, Spectroscopic, and Density Functional Theory Studies. Inorganic Chemistry, 2012, 51, 6719-6730.	4.0	34
25	New Multiresponsive Chromic Soft Materials: Dynamic Interconversion of Short 2,7â€Dicyanomethylenecarbazoleâ€Based Biradicaloid and the Corresponding Cyclophane Tetramer. Chemistry - A European Journal, 2017, 23, 13776-13783.	3.3	33
26	Rhenium(I) carbonyl dioxolene complexes: electrochemical and spectroelectrochemical (resonance) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	4.0	31
27	Bridgeâ€Localized HOMOâ€Binding Character of Divinylanthraceneâ€Bridged Dinuclear Ruthenium Carbonyl Complexes: Spectroscopic, Spectroelectrochemical, and Computational Studies. Chemistry - an Asian Journal, 2014, 9, 1152-1160.	3.3	30
28	Bonding and Electronic Properties of Linear Diethynyl Oligothienoacene-Bridged Diruthenium Complexes and Their Oxidized Forms. Inorganic Chemistry, 2017, 56, 11074-11086.	4.0	30
29	Spectroelectrochemical study of complexes [Mo(CO)2(Î·3-allyl)(Î±-diimine)(NCS)] (Î±-diimineÂ=Âbis(2,6-dimethylphenyl)-acenaphthenequinonediimine and 2,2â€²-bipyridine) exhibiting different molecular structure and redox reactivity. Journal of Organometallic Chemistry, 2014, 760, 30-41.	1.8	28
30	Electrochemistry of different types of photoreactive ruthenium(II) dicarbonyl Î±-diimine complexes. Coordination Chemistry Reviews, 2002, 230, 107-125.	18.8	27
31	Localized Mixedâ€Valence and Redox Activity within a Triazoleâ€Bridged Dinucleating Ligand upon Coordination to Palladium. Chemistry - A European Journal, 2016, 22, 13965-13975.	3.3	26
32	Notable differences between oxidized diruthenium complexes bridged by four isomeric diethynyl benzodithiophene ligands. Dalton Transactions, 2016, 45, 6503-6516.	3.3	25
33	Multistep Oxidation of Diethynyl Oligophenylamine-Bridged Diruthenium and Diiron Complexes. Inorganic Chemistry, 2017, 56, 1001-1015.	4.0	25
34	Reversible Addition of CO to Coordinatively Unsaturated High-Spin Iron(II) Complexes. Organometallics, 2011, 30, 6587-6601.	2.3	23
35	RuII(Î±-diimine) or RuIII(Î±-diimineÂ·-)? Structural, Spectroscopic, and Theoretical Evidence for the Stabilization of a Prominent Metal-to-Ligand Charge-Transfer Excited-State Configuration in the Ground State. European Journal of Inorganic Chemistry, 2014, 2014, 110-119.	2.0	23
36	Î·3-Allyl carbonyl complexes of group 6 metals: Structural aspects, isomerism, dynamic behaviour and reactivity. Coordination Chemistry Reviews, 2017, 335, 103-149.	18.8	23

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37	Effects of Electrodeâ€“Molecule Binding and Junction Geometry on the Single-Molecule Conductance of bis-2,2â€²:6â€²,2â€³-Terpyridine-based Complexes. Inorganic Chemistry, 2016, 55, 2691-2700.	4.0	22
38	Strong Impact of Intramolecular Hydrogen Bonding on the Cathodic Path of [Re(3,3â€²-dihydroxy-2,2â€²-bipyridine)(CO)3Cl] and Catalytic Reduction of Carbon Dioxide. Inorganic Chemistry, 2020, 59, 5564-5578.	4.0	22
39	Electrochemical Reductive Deprotonation of an Imidazole Ligand in a Bipyridine Tricarbonyl Rhenium(I) Complex. European Journal of Inorganic Chemistry, 2012, 2012, 471-474.	2.0	21
40	Syntheses, Spectroelectrochemical Studies, and Molecular and Electronic Structures of Ferrocenyl Ene-diynes. Organometallics, 2013, 32, 6022-6032.	2.3	21
41	Electrochemical and Catalytic Properties of Novel Manganese(III) Complexes with Substituted 2-(2â€²-Hydroxyphenyl)oxazoline Ligands â^' X-ray Structures of Tris[5-methyl-2-(2â€²-oxazolinyl)phenolato]manganese(III) and Tris[5-chloro-2-(2â€²-oxazolinyl)phenolato]manganese(III). European Journal of Inorganic Chemistry, 2002, 2002, 377-387.	2.0	20
42	Strongly Nucleophilic RhI Centre in Square-Planar Complexes with Terdentate (Î³3) 2,2â€²:6â€²,2â€²â€²-Terpyridine Ligands: Crystallographic, Electrochemical and Density Functional Theoretical Studies. European Journal of Inorganic Chemistry, 2004, 2004, 1675-1686.	2.0	20
43	Light-Induced Insertion of a CO Ligand into an Osâ^'N Bond of the Clusters Os3(CO)10(L), Where L Represents a Potentially TerdentateN,Nâ€˜-Chelating Î±-Diimine. Organometallics, 1999, 18, 4380-4389.	2.3	19
44	Efficient access to conjugated 4,4â€²-bipyridinium oligomers using the Zincke reaction: synthesis, spectroscopic and electrochemical properties. Organic and Biomolecular Chemistry, 2016, 14, 980-988.	2.8	19
45	Asymmetric oxidation of vinyl- and ethynyl terthiophene ligands in triruthenium complexes. Dalton Transactions, 2016, 45, 768-782.	3.3	19
46	Diphenylamineâ€Substituted Osmanaphthalyne Complexes: Structural, Bonding, and Redox Properties of Unusual Donorâ€“Bridgeâ€“Acceptor Systems. Chemistry - A European Journal, 2018, 24, 18998-19009.	3.3	19
47	Redox Control of Light-Induced Charge Separation in a Transition Metal Cluster:Â Photochemistry of a Methyl Viologen-Substituted [Os3(CO)10(Î±-diimine)] Cluster. Inorganic Chemistry, 2005, 44, 1319-1331.	4.0	18
48	Soluble Redox-Active Polymetallic Chains [{Ru0(CO)(L)(bpy)}m]n(bpy = 2,2â€²-bipyridine, L = PrCN, Clâ^';m= 0,) Tj ETQq0 0 0 rgBT /Ove	4.0	17
49	Elucidating the Structure of Chiral Molecules by using Amplified Vibrational Circular Dichroism: From Theory to Experimental Realization. ChemPhysChem, 2015, 16, 3363-3373.	2.1	17
50	Solvent and Ligand Substitution Effects on the Electrocatalytic Reduction of CO₂ with [Mo(CO)₄(x,xâ€²â€dimethylâ€2,2â€²â€bipyridine)] (x=4â€“6) Enhanced at a Gold Cathodic Surface. ChemElectroChem, 2018, 5, 3155-3161.	3.4	17
51	Unprecedented Coordination of 4,4â€²,5,5â€²-Tetramethyl-2,2â€²-biphosphinine Doubly Bridging over an Open Triosmium Core. European Journal of Inorganic Chemistry, 2000, 2000, 843-845.	2.0	16
52	Synthesis and Electronic Structure of Dissymmetrical, Naphthalene-Bridged Sandwich Complexes [Cpâ€²Fe(Î¼-C₁₀H₈)MCp*]^x (x = 0, +1; M = Fe, Ru; Cpâ€² =) Tj ETQq0 0 0 rgBT /C	2.3	16
53	Structural Variability of 4f and 5f Thiocyanate Complexes and Dissociation of Uranium(III)â€“Thiocyanate Bonds with Increased Ionicity. Inorganic Chemistry, 2017, 56, 14426-14437.	4.0	16
54	Theoretical Studies of [Os3(CO)10(Î±-Diimine)]: Structures, Frontier Orbitals and Bonding. European Journal of Inorganic Chemistry, 2001, 2001, 223-231.	2.0	14

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55	Novel Complexes trans(Cl)-[Os(bpy)(CO)(CH3CN)Cl2]n (n = 0, +1; bpy = 2,2â€²-Bipyridine): Photo- and Electrochemical Syntheses and Comparative Study of Their Bonding and Redox Properties. European Journal of Inorganic Chemistry, 2002, 2002, 2850-2856.	2.0	14
56	Redox Control of Conformation and Luminescence of a Dinuclear Ruthenium(II) Complex with a Bis-dipyridophenazine Bridging Ligand. European Journal of Inorganic Chemistry, 2002, 2002, 335-339.	2.0	14
57	Group 6 Metal Complexes as Electrocatalysts of CO₂ Reduction: Strong Substituent Control of the Reduction Path of [Mo(Î·³-allyl)(CO)₂(x,xâ€²-dimethyl-2,2â€²-bipyridine)(NCS)] (x =) Tj ETQq1 1 0.784314	2.3	14
58	Photoâ€Assisted Electrocatalytic Reduction of CO 2 : A New Strategy for Reducing Catalytic Overpotentials. ChemCatChem, 2020, 12, 386-393.	3.7	14
59	Sandwich and half-sandwich metal complexes derived from cross-conjugated 3-methylene-penta-1,4-diynes. Dalton Transactions, 2017, 46, 5522-5531.	3.3	13
60	On the structure, carbonyl-stretching frequencies and relative stability of trans- and cis-[W(CO)4(Î·2-alkene)2]0/+: a theoretical and IR spectroelectrochemical study. New Journal of Chemistry, 2002, 26, 145-152.	2.8	12
61	Bis(azidophenyl)phosphole Building Block for Extended Ï€â€Conjugated Systems. European Journal of Organic Chemistry, 2012, 2012, 6711-6721.	2.4	12
62	Redoxâ€Active, Dinuclear Sandwich Compounds [Cp*Fe(Î¼â€‰-)FeCp*] (L = Naphthalene and Anthracene). European Journal of Inorganic Chemistry, 2012, 2012, 1632-1638.	2.0	12
63	Multistep Ï€ Dimerization of Tetrakis(nâ€decyl)heptathienoacene Radical Cations: A Combined Experimental and Theoretical Study. Chemistry - A European Journal, 2014, 20, 10351-10359.	3.3	12
64	Diacenaphthylene-fused benzo[1,2-b:4,5-bâ€²]dithiophenes: polycyclic heteroacenes containing full-carbon five-membered aromatic rings. Chemical Communications, 2017, 53, 751-754.	4.1	12
65	Mechanistic study of the photoisomerization of Os3(CO)10(L) in which L (L=1,4-di-R-1,4-diazabutadiene) Tj ETQq1 1 0.784314 rgBT / Î·2-C˜...Nâ€². Journal of Organometallic Chemistry, 1999, 572, 271-281.	1.8	11
66	Marked influence of the bridging carbonyl ligands on the photo- and electrochemistry of the clusters [Ru3(CO)8(Î¼-CO)2(Î±-diimine)] (Î±-diimine = 2,2â€²-bipyridine, 4,4â€²-dimethyl-2,2â€²-bipyridine and) Tj ETQq0 0 0 rgBT /Ove	1.8	11
67	Solvent-Dependent Formation of Os(0) Complexes by Electrochemical Reduction of [Os(CO)(2,2â€²-bipyridine)(L)Cl2]; L = Clâ€“, PrCN. Inorganic Chemistry, 2014, 53, 1382-1396.	4.0	11
68	Tetrakis(ferrocenylethynyl)ethene: Synthesis, (Spectro)electrochemical and quantum chemical characterisation. Journal of Organometallic Chemistry, 2016, 821, 40-47.	1.8	11
69	Dynamic Covalent Properties of a Novel Indolo[3,2â€²-b]carbazole Diradical. Chemistry - A European Journal, 2021, 27, 5509-5520.	3.3	11
70	Biomimics of [FeFe]-hydrogenases incorporating redox-active ligands: synthesis, redox properties and spectroelectrochemistry of diiron-dithiolate complexes with ferrocenyl-diphosphines as Fe₄S₄ surrogates. Dalton Transactions, 2022, 51, 9748-9769.	3.3	11
71	Anodic electrochemistry of mono- and dinuclear aminophenylferrocene and diphenylaminoferrocene complexes. Dalton Transactions, 2018, 47, 6112-6123.	3.3	10
72	Temperature-Dependent Photophysical, Photochemical and Redox Properties of Novel Complexes (CO)2CpRuâ€“Ru(Ln)â€“RuCp(CO)2 and (CO)2CpRuâ€“Ru(Ln)â€“SnPh3 [Ln = (CO)2(N,Nâ€²-diisopropyl-1,4-diaza-1,3-butadiene)]. European Journal of Inorganic Chemistry, 2000, 2000, 847-855.	2.0	9

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73	Ï€-dimerization of pleiadiene radical cations at low temperatures revealed by UVâ€“vis spectroelectrochemistry and quantum theory. Journal of Solid State Electrochemistry, 2011, 15, 2107-2117.	2.5	9
74	Radical cations of end-capped tetrathienoacenes and their Ï€-dimerization controlled by the nature of Î±-substituents and counterion concentration. RSC Advances, 2013, 3, 25644.	3.6	9
75	Conjugated, rod-like viologen oligomers: Correlation of oligomer length with conductivity and photoconductivity. Synthetic Metals, 2018, 241, 31-38.	3.9	9
76	Spectro-electrochemical Studies on [Ru(TAP)₂(dppz)]²⁺â€”Insights into the Mechanism of its Photosensitized Oxidation of Oligonucleotides. Inorganic Chemistry, 2019, 58, 663-671.	4.0	9
77	Heterosite Effects in Novel Heteronuclear Clusters [Os2Ru(CO)11(PPh3)] and [Os2Ru(CO)10(2-acetylpyridine-N-isopropylimine)]. European Journal of Inorganic Chemistry, 2005, 2005, 2206-2222.	2.0	8
78	Prediction of cathodic E 1/2 1 and E 1/2 2 values for viologen-containing conjugated unimers and dimers from calculated p K b values of the aromatic substituents. Tetrahedron Letters, 2017, 58, 1859-1862.	1.4	8
79	Temperature-dependent reduction pathways of complexes fac-[Re(CO)3(N-R-imidazole)(1,10-phenanthroline)]+ (R=H, CH3). Electrochimica Acta, 2013, 110, 702-708.	5.2	7
80	Light-induced formation of zwitterions and biradicals from the cluster [Os3(CO)10(iPr-AcPy)] studied with picosecond UVâ€“vis and nanosecond IR spectroscopies. Coordination Chemistry Reviews, 2002, 229, 107-112.	18.8	6
81	A macrocyclic receptor containing two viologen species connected by conjugated terphenyl groups. Organic and Biomolecular Chemistry, 2018, 16, 5006-5015.	2.8	6
82	Electronic Properties of Oxidized Cyclometalated Diiridium Complexes: Spin Delocalization Controlled by the Mutual Position of the Iridium Centers. Chemistry - A European Journal, 2020, 26, 4567-4575.	3.3	6
83	Synthesis, electronic structure and redox properties of the diruthenium sandwich complexes [Cp*Ru(Î¼-C₁₀H₈)RuCp*]^x (x = 0, 1+; Cp* =) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 2018, 47, 11058-11069.	3.3	5
84	Optical and Infrared Spectroelectrochemical Studies of CN-Substituted Bipyridyl Complexes of Ruthenium(II). Inorganic Chemistry, 2021, 60, 3514-3523.	4.0	4
85	Isomeric Olefin Tetracarbonyl Complexes of Tungsten(I):â€‰ An Infrared Spectroelectrochemical Study at Low Temperatures. Organometallics, 2007, 26, 4066-4071.	2.3	3
86	Accurate Description of Low-Lying Excited States in a Series of Photoreactive Clusters [Os₃(CO)₁₀(Î±-diimine)] by DFT Calculations. Inorganic Chemistry, 2018, 57, 11704-11716.	4.0	3
87	Effect of the 2-R-Allyl and Chloride Ligands on the Cathodic Paths of [Mo(Î·3-2-R-allyl)(Î±-diimine)(CO)2Cl] (R = H, CH3; Î±-diimine = 6,6â€²-Dimethyl-2,2â€²-bipyridine, Bis(p-tolylimino)acenaphthene). Organometallics, 2021, 40, 1598-1613.	2.3	2
88	Elucidating the Structure of Chiral Molecules by using Amplified Vibrational Circular Dichroism: From Theory to Experimental Realization. ChemPhysChem, 2015, 16, 3347-3347.	2.1	1
89	Excited-State Electronic Asymmetry Prevents Photoswitching in Terthiophene Compounds. Inorganic Chemistry, 2018, 57, 9039-9047.	4.0	1
90	Unprecedented Coordination of 4,4â€²,5,5â€²-Tetramethyl-2,2â€²-biphosphinine Doubly Bridging over an Open Triosmium Core. European Journal of Inorganic Chemistry, 2000, 2000, 843.	2.0	1

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91	Electrochemical and Photochemical Conversion of [Ru3Ir(Î¼3-H)(CO)13] into [Ru3Ir(Î¼-H)3(CO)12]. Journal of Cluster Science, 2004, 15, 47-59.	3.3	0
92	Mononuclear piano-stool iron 2-ethynylbenzo[b]thiophene complex: crystal structure and reversible oxidation studied by spectro-electrochemical and DFT methods. Journal of Coordination Chemistry, 2017, 70, 722-733.	2.2	0