James M Boncella

List of Publications by Year
in descending order

98 papers	8,094 citations	61984 43 h-index	46799 89 g-index
100 all docs	100 docs citations	100 times ranked	7736 citing authors

#	Article	IF	Citations
1	An Allyl Uranium(IV) Sandwich Complex: Are Ï• Bonding Interactions Possible?. Chemistry - A European Journal, 2022, , e202200114.	3.3	7
2	Manganeseâ€Mediated Formic Acid Dehydrogenation. Chemistry - A European Journal, 2019, 25, 10557-10560.	3.3	31
3	Oxidation of uranium(<scp>iv</scp>) mixed imidoâ€“amido complexes with PhEEPh and to generate uranium(<scp>vi</scp>) bis(imido) dichalcogenolates, U(NR)₂(EPh)₂(L)₂. Dalton Transactions, 2019, 48, 10865-10873.	3.3	9
4	Synthesis and Characterization of a Neutral U(II) Arene Sandwich Complex. Journal of the American Chemical Society, 2018, 140, 17369-17373.	13.7	78
5	Investigation of Nitrile Hydration Chemistry by Two Transition Metal Hydroxide Complexes: Mnâ€“OH and Niâ€“OH Nitrile Insertion Chemistry. Organometallics, 2018, 37, 4675-4684.	2.3	19
6	A Pseudotetrahedral Uranium(V) Complex. Inorganic Chemistry, 2018, 57, 8106-8115.	4.0	16
7	Reversible 1,2-Addition of Water To Form a Nucleophilic Mn(I) Hydroxide Complex: A Thermodynamic and Reactivity Study. Organometallics, 2017, 36, 4179-4183.	2.3	24
8	Network Dimensionality of Selected Uranyl(VI) Coordination Polymers and Octopus-like Uranium(IV) Clusters. Crystal Growth and Design, 2017, 17, 5568-5582.	3.0	16
9	Reactivity of Silanes with (^{tBu}PONOP)Ruthenium Dichloride: Facile Synthesis of Chloroâ€Silyl Ruthenium Compounds and Formic Acid Decomposition. Chemistry - A European Journal, 2017, 23, 13617-13622.	3.3	15
10	Extending Stannyl Anion Chemistry to the Actinides: Synthesis and Characterization of a Uraniumâ€“Tin Bond. Inorganic Chemistry, 2016, 55, 5534-5539.	4.0	30
11	A Tertiary Carbonâ€“Iron Bond as an Fe^ICl Synthon and the Reductive Alkylation of Diphosphine-Supported Iron(II) Chloride Complexes to Low-Valent Iron. Organometallics, 2016, 35, 1643-1651.	2.3	10
12	The synthesis of PNP-supported low-spin nitro manganese(I) carbonyl complexes. Polyhedron, 2016, 116, 96-104.	2.2	54
13	1,2-Addition of Formic or Oxalic Acid to ^{â€“}N{CH₂CH₂(PiPr₂)}₂-Supported Mn(I) Dicarbonyl Complexes and the Manganese-Mediated Decomposition of Formic Acid. Organometallics, 2016, 35, 2049-2052.	2.3	90
14	A Linear trans-Bis(imido) Neptunium(V) Actinyl Analog: Np^V(NDipp)₂(^tBu₂bipy)₂Cl (Dipp = 2,6-ⁱPr₂C₆H₃). Journal of the American Chemical Society, 2015, 137, 9583-9586.	13.7	33
15	[2 + 2] cycloaddition reactions at terminal imido uranium(IV) complexes to yield isolable cycloadducts. Inorganica Chimica Acta, 2014, 422, 78-85.	2.4	14
16	Energy landscape of self-assembled superlattices of PbSe nanocrystals. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 9054-9057.	7.1	29
17	Preparation and Reactivity of the Versatile Uranium(IV) Imido Complexes U(NAr)Cl₂(R₂bpy)₂ (R = Me, ^tBu) and U(NAr)Cl₂(tppo)₃. Inorganic Chemistry, 2014, 53, 9818-9826.	4.0	31
18	Tetrahalide Complexes of the [U(NR)₂]²⁺ Ion: Synthesis, Theory, and Chlorine K-Edge X-ray Absorption Spectroscopy. Journal of the American Chemical Society, 2013, 135, 2279-2290.	13.7	87

#	Article	IF	Citations
19	Phototriggered DNA Phosphoramidate Ligation in a Tandem 5â€²-Amine Deprotection/3â€²-Imidazole Activated Phosphate Coupling Reaction. Bioconjugate Chemistry, 2012, 23, 2014-2019.	3.6	4
20	A Direct Route to Bis(imido)uranium(V) Halides via Metathesis of Uranium Tetrachloride. Journal of the American Chemical Society, 2012, 134, 9876-9878.	13.7	50
21	Hydroxide based decomposition pathways of alkyltrimethylammonium cations. Journal of Membrane Science, 2012, 399-400, 49-59.	8.2	121
22	Prebiotically relevant mixed fatty acid vesicles support anionic solute encapsulation and photochemically catalyzed trans-membrane charge transport. Chemical Science, 2011, 2, 661.	7.4	62
23	A General and Modular Synthesis of Monoimidouranium(IV) Dihalides. Inorganic Chemistry, 2011, 50, 4235-4237.	4.0	56
24	Photorelease of Primary Aliphatic and Aromatic Amines by Visible-Light-Induced Electron Transfer. Organic Letters, 2011, 13, 6156-6159.	4.6	49
25	Interactions between Catalysts and Amphiphilic Structures and their Implications for a Protocell Model. ChemPhysChem, 2011, 12, 828-835.	2.1	26
26	Uranium(VI) bis(imido) disulfonamide and dihalide complexes: Synthesis density functional theory analysis. Comptes Rendus Chimie, 2010, 13, 758-766.	0.5	16
27	Density Functional Theory Study of Degradation of Tetraalkylammonium Hydroxides. Journal of Physical Chemistry C, 2010, 114, 11977-11983.	3.1	216
28	Exploring the coordination modes of pyrrolyl ligands in bis(imido) uranium(vi) complexes. Dalton Transactions, 2010, 39, 6841.	3.3	40
29	Cationâ€“Cation Interactions, Magnetic Communication, and Reactivity of the Pentavalent Uranium Ion [U(NtBu)₂]⁺. Angewandte Chemie - International Edition, 2009, 48, 3795-3798.	13.8	127
30	Nucleobase Mediated, Photocatalytic Vesicle Formation from an Ester Precursor. Journal of the American Chemical Society, 2009, 131, 931-933.	13.7	65
31	Oxidative Addition to U(V)â^'U(V) Dimers: Facile Routes to Uranium(VI) Bis(imido) Complexes. Inorganic Chemistry, 2009, 48, 11615-11623.	4.0	77
32	Uranium(VI) Bis(imido) Chalcogenate Complexes: Synthesis and Density Functional Theory Analysis. Inorganic Chemistry, 2009, 48, 2693-2700.	4.0	71
33	Decomposition pathways of an alkaline fuel cell membrane material component via evolved gas analysis. Journal of Thermal Analysis and Calorimetry, 2008, 93, 225-229.	3.6	78
34	Uranium gets a reaction. Nature, 2008, 451, 250-251.	27.8	19
35	Mechanism of Tetraalkylammonium Headgroup Degradation in Alkaline Fuel Cell Membranes. Journal of Physical Chemistry C, 2008, 112, 3179-3182.	3.1	329
36	Low-Valent Molecular Plutonium Halide Complexes. Inorganic Chemistry, 2008, 47, 8412-8419.	4.0	36

#	Article	IF	Citations
37	Synthesis and reactivity of bis(imido) uranium(vi) cyclopentadienyl complexes. Chemical Communications, 2008, , 4986.	4.1	66
38	Imido Exchange in Bis(imido) Uranium(VI) Complexes with Aryl Isocyanates. Journal of the American Chemical Society, 2008, 130, 2930-2931.	13.7	68
39	Scientific Aspects of Polymer Electrolyte Fuel Cell Durability and Degradation. Chemical Reviews, 2007, 107, 3904-3951.	47.7	2,976
40	Stability of Cations for Anion Exchange Membrane Fuel Cells. ECS Transactions, 2007, 11, 1173-1180.	0.5	52
41	Exchange of an Imido Ligand in Bis(imido) Complexes of Uranium. Journal of the American Chemical Society, 2006, 128, 12622-12623.	13.7	77
42	Synthesis and Reactivity of Molybdenum Imido Diamido Metallacyclopentenes and Metallacyclopentadienes and the Mechanism of Ethylene Exchange with Metallacyclopentane Complexes. Organometallics, 2006, 25, 1557-1564.	2.3	28
43	Synthesis and Reactivity of the Imido Analogues of the Uranyl Ion. Journal of the American Chemical Society, 2006, 128, 10549-10559.	13.7	122
44	Synthesis of Imido Analogs of the Uranyl Ion. Science, 2005, 310, 1941-1943.	12.6	211
45	Synthesis and Reactivity of Molybdenum(IV) Complexes with Alkyl and Aryl Isocyanides. Organometallics, 2005, 24, 6310-6318.	2.3	8
46	Coupling of an Aldehyde or Ketone to Pyridine Mediated by a Tungsten Imido Complex. Inorganic Chemistry, 2005, 44, 9506-9517.	4.0	18
47	Synthesis and mechanistic investigations of the decomposition of Î²-hydrogen containing W(VI) dialkyl complexes: Î²-H elimination vs. Î²-H abstraction. Polyhedron, 2004, 23, 2733-2749.	2.2	14
48	Synthesis, Structure, and Dynamics of Molybdenum Imido Alkyne Complexes. Organometallics, 2004, 23, 4070-4076.	2.3	11
49	Alkylaluminum-Induced Diamide Transfer from Group 6 Imido Diamido Complexes. Organometallics, 2004, 23, 929-931.	2.3	12
50	Near-Infrared Photo- and Electroluminescence of Alkoxy-Substituted Poly(p-phenylene) and Nonconjugated Polymer/Lanthanide Tetraphenylporphyrin Blends. Chemistry of Materials, 2004, 16, 2938-2947.	6.7	75
51	Facile Preparation and Photophysics of Near-Infrared Luminescent Lanthanide(III) Monoporphyrinate Complexes. Inorganic Chemistry, 2003, 42, 5023-5032.	4.0	104
52	Near-Infrared Light-Emitting Diodes (LEDs) Based on Poly(phenylene)/Yb-tris(Î²-Diketonate) Complexes. Advanced Functional Materials, 2003, 13, 205-210.	14.9	109
53	Near-Infrared Electroluminescence from Lanthanide Tetraphenylporphyrin:Polystyrene Blends. Advanced Materials, 2003, 15, 1093-1097.	21.0	119
54	Synthesis and reactivity of hydridotris(1-pyrazolyl)borate tungsten(VI) amido alkylidyne complexes. Inorganica Chimica Acta, 2003, 345, 103-112.	2.4	6

#	Article	IF	Citations
55	Near-infrared organic light emitting diodes. Synthetic Metals, 2003, 137, 1013-1014.	3.9	68
56	Near-infrared display materials. , 2003, , .		1
57	Preparation of Coordination Compounds of Cp*2Yb with Heterocyclic Nitrogen Bases:Â Examples of Antiferromagnetic Exchange Coupling across Bridging Ligands. Organometallics, 2002, 21, 4622-4631.	2.3	94
58	Synthesis of Ln(III) Chloride Tetraphenylporphyrin Complexes. Inorganic Chemistry, 2002, 41, 1704-1706.	4.0	27
59	The Synthesis and Reactivity of a Molybdenum (IV) Stretched-Dihydrogen Complex. Journal of the American Chemical Society, 2002, 124, 922-923.	13.7	24
60	Coordination of 2,2â€˜-Bipyridyl and 1,10-Phenanthroline to Substituted Ytterbocenes:Â An Experimental Investigation of Spin Coupling in Lanthanide Complexes. Organometallics, 2002, 21, 460-472.	2.3	171
61	Synthesis and characterization of tantalum(V) complexes containing bis-sulfamide ligands: X-ray crystal structure of Ta[N(Me)2]3[SO2(NCMe3)2]. Polyhedron, 2002, 21, 1051-1055.	2.2	11
62	Fluorescent Polyacetylene Thin Film Sensor for Nitroaromatics. Langmuir, 2001, 17, 7452-7455.	3.5	159
63	Unusual molybdenum mediated Câ€“N bond activation. Chemical Communications, 2001, , 1224-1225.	4.1	38
64	The synthesis of Mo(iv) arene complexes by the hydrogenation of Mo(iv) olefin complexes. Chemical Communications, 2001, , 247-248.	4.1	17
65	Synthesis and Reactivity of a Molybdenum(IV) Î·4-Butadiene Complex. Organometallics, 2001, 20, 4378-4383.	2.3	21
66	Coordinatively Unsaturated W(IV)â^'Bis(pyridine) Complexes, a Reactive Source of W(IV). Inorganic Chemistry, 2001, 40, 5077-5082.	4.0	9
67	Near-infrared electroluminescence from conjugated polymer/lanthanide porphyrin blends. Applied Physics Letters, 2001, 79, 3770-3772.	3.3	116
68	Synthesis and Reactivity of Molybdenum(IV) Olefin Complexes Supported by a Chelating Ancillary Ligand. Organometallics, 2001, 20, 2032-2039.	2.3	30
69	Molybdenum Î·2-imine complex formation and the reductive coupling of imines. Chemical Communications, 2000, , 573-574.	4.1	16
70	Synthesis of d2 Tungsten Arene Complexes and Their Reaction with Diphenylacetylene. Organometallics, 2000, 19, 2953-2955.	2.3	18
71	The synthesis of tungsten imido hydride complexes by the hydrogenolysis of dialkyl complexes. Journal of Organometallic Chemistry, 1999, 591, 8-13.	1.8	9
72	Synthesis of Chelate-Supported Dialkyl and Alkylidene Complexes of Molybdenum(VI). Organometallics, 1999, 18, 4253-4260.	2.3	43

#	Article	IF	Citations
73	Synthesis and reactivity of Î·6-arene ruthenium anilide complexes. Polyhedron, 1998, 17, 725-736.	2.2	29
74	Metallacyclopentane Formation:â€‰ A Deactivation Pathway for a Tungsten(VI) Alkylidene Complex in Olefin Metathesis Reactions. Organometallics, 1998, 17, 2628-2635.	2.3	49
75	Synthesis, Characterization, and Structure of Novel Borane- and Borate-Containing Ruthenocenes. Organometallics, 1997, 16, 1628-1634.	2.3	2
76	Ligand-Induced Î²-H Transfer in W(VI) Dialkyl Complexes. Journal of the American Chemical Society, 1997, 119, 11990-11991.	13.7	35
77	Synthesis, characterization, and X-ray crystal structures of W(VI) alkyl complexes with chelating diamide and imido co-ligands. Journal of Organometallic Chemistry, 1997, 530, 59-70.	1.8	42
78	Competition between Ï€ Donation and Î±-Câ‹¯H Agostic Interactions in Complexes of the Type Tpâ€˜Ta(CH-t-Bu)(X)(Y) (X = Halide; Y = Halide, NR2, OR; Tpâ€˜ = Hydrotris(3,5-dimethylpyrazolyl)borate). Organometallics, 1996, 15, 1905-1912.	2.3	48
79	Synthesis and crystal structures of hydridotris(3,5-dimethylpyrazolyl) borate tantalum(V)(=N-2,6-Pr2C6H3) (X)Cl (X = Cl, BunO). Polyhedron, 1996, 15, 2071-2078.	2.2	28
80	Synthesis of a tris(pyrazolyl) borate-stabilized molybdenum alkylidene and its hydrolysis products. Crystal structures of TpMo(CH2C(Me)2Ph) (NAr)(O) and [TpMo(NAr)(O)]2O. Journal of Organometallic Chemistry, 1995, 485, 37-43.	1.8	40
81	Mechanism of the Formation of a Tungsten(VI) Alkylidene Complex Which Undergoes Reversible Metalation of an Ancillary Ligand. Journal of the American Chemical Society, 1995, 117, 11015-11016.	13.7	26
82	Synthesis and Reactivity of Tris(pyrazolyl)borate-Stabilized Molybdenum Imido Alkylidene Complexes. Organometallics, 1995, 14, 1567-1577.	2.3	47
83	Reactions of unsaturated electrophiles with trans-(PMe3)2Pd(Ph)(NHPh). Journal of Organometallic Chemistry, 1994, 465, 297-304.	1.8	37
84	Synthesis of a Square Pyramidal Tungsten(VI) Alkylidene Complex with a Bis(Amide) Chelate Ligand. Organometallics, 1994, 13, 3378-3380.	2.3	42
85	Facile synthesis of cationic tungsten(VI) alkylidene complexes. Organometallics, 1993, 12, 2814-2819.	2.3	44
86	Synthesis of stable tungsten(VI) imido alkylidene complexes: crystal structure of an air-stable cationic alkylidene complex. Organometallics, 1992, 11, 2342-2344.	2.3	47
87	Progress toward new catalysts for acyclic diene metathesis (ADMET) polymerization reactions. Journal of Molecular Catalysis, 1992, 76, 229-237.	1.2	14
88	Acyclic diene metathesis polymerizations of ferrocene monomers. Die Makromolekulare Chemie Rapid Communications, 1992, 13, 109-115.	1.1	41
89	Synthesis of an air-stable, moisture-stable, and thermally stable tungsten(VI) oxo alkylidene complex. Precursor to an air- and moisture-stable ROMP catalyst. Journal of the American Chemical Society, 1991, 113, 7066-7068.	13.7	104
90	Acyclic diene metathesis (ADMET) polymerization. Synthesis of an unsaturated polyester. Die Makromolekulare Chemie Rapid Communications, 1991, 12, 413-417.	1.1	21

#	Article	IF	Citations
91	The key to successful acyclic diene metathesis polymerization chemistry. Die Makromolekulare Chemie, 1990, 191, 365-374.	1.1	63
92	The chemistry of iron-tris(dimethylphosphinomethyl)methylsilane complexes: crystal structure of the compound [{Fe((Me2PCH2)3SiMe)}2(Î¼-H)2(Î¼-Cî—»CH2)] with a vinylidene group which is derived from ethylene. Journal of Organometallic Chemistry, 1987, 325, 217-231.	1.8	19
93	Formation of a di-iron-Âµ-vinylidine group from ethylene: synthesis and crystal structure of {MeSi(CH2PMe2)3}Fe(Âµ-Cî€†CH2)(Âµ-H)2Fe{(PMe2CH2)3SiMe}. Journal of the Chemical Society Chemical Communications, 1986, , 618-619.	2.0	17
94	Electronic structure of bis(cyclopentadienyl) lanthanide compounds: photoelectron spectra and molecular orbital calculations. Journal of the Chemical Society Chemical Communications, 1986, , 405-407.	2.0	34
95	The molecular structures of bis(pentamethylcyclopentadienyl)-calcium and -ytterbium in the gas phase; two bent metallocenes. Journal of Organometallic Chemistry, 1986, 312, C49-C52.	1.8	96
96	Preparation of [{Yb(C5Me5)2}2{Co3(C5H4R)2(Âµ3-CO)4}], R = H, Me, SiMe3; an example of a 47-electron transition metal fragment containing a cobalt atom with hexagonal planar co-ordination. Journal of the Chemical Society Chemical Communications, 1984, , 809-810.	2.0	30
97	Reaction of M(C5Me5)2(OEt2), M = Eu or Yb, with phenylacetylene; formation of mixed-valence Yb3(C5Me5)4(Âµ-Cî€,CPh)4and Eu2(C5Me5)2(Âµ-Cî€,CPh)2(tetrahydrofuran)4. Journal of the Chemical Society Chemical Communications, 1984, .	2.0	59
98	Bis(pentamethylcyclopentadienyl)ytterbium(II) as a Lewis acid and electron-transfer ligand. Preparation and crystal structures of [Yb(Me5C5)2(.mu.-CO)xMn(CO)5-x]y (x, y = 2; x = 3, y = .infin.). Inorganic Chemistry, 1984, 23, 432-437.	4.0	96