

# JosÃ© A LÃ³pez

## List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Synthesis, reactivity, molecular structure, and catalytic activity of the novel dichlorodihydridoosmium(IV) complexes OsH <sub>2</sub> Cl <sub>2</sub> (PR <sub>3</sub> ) <sub>2</sub> (PR <sub>3</sub> = P-i-Pr <sub>3</sub> , PMe-t-Bu <sub>2</sub> ). Inorganic Chemistry, 1991, 30, 288-293.	4.0	175
2	Structural and Luminescence Studies on $\text{Pt}^{\text{II}}\text{-Ag}$ and $\text{Pt}^{\text{II}}\text{-Pt}$ Interactions in Mixed Chloro-Isocyanide Cyclometalated Platinum(II) Complexes. Inorganic Chemistry, 2010, 49, 3239-3251.	4.0	119
3	New Water Soluble and Luminescent Platinum(II) Compounds, Vapochromic Behavior of $[\text{K}(\text{H}_2\text{O})_2\text{Pt}(\text{bzq})(\text{CN})_2]$ , New Examples of the Influence of the Counterion on the Photophysical Properties of d <sup>8</sup> Square-Planar Complexes. Inorganic Chemistry, 2008, 47, 7166-7176.	4.0	109
4	Highly Luminescent Half-Lantern Cyclometalated Platinum(II) Complex: Synthesis, Structure, Luminescence Studies, and Reactivity.. Inorganic Chemistry, 2012, 51, 3427-3435.	4.0	98
5	(Pyrazolato)gold Complexes Showing Room-Temperature Columnar Mesophases. Synthesis, Properties, and Structural Characterization. Inorganic Chemistry, 1998, 37, 2960-2967.	4.0	96
6	Synthesis and Luminescence of Cyclometalated Compounds with Nitrile and Isocyanide Ligands. Organometallics, 2009, 28, 1705-1718.	2.3	96
7	Cooperative Bimetallic Effects on New Iridium(III) Pyrazolate Complexes: Hydrogen-Hydrogen, Carbon-Hydrogen, and Carbon-Chlorine Bond Activations. Organometallics, 1998, 17, 683-696.	2.3	79
8	Preparation, x-ray molecular structure, and electronic structure of the first 16-electron ruthenium dihydrogen complexes RuH(H <sub>2</sub> )X(PCy <sub>3</sub> ) <sub>2</sub> . Journal of the American Chemical Society, 1991, 113, 2314-2316.	13.7	76
9	Synthesis, molecular structure, and reactivity of octahedral alkylhydridoosmium(II) complexes [OsH(R)(CO) <sub>2</sub> (PR' <sub>3</sub> ) <sub>2</sub> ]. Organometallics, 1992, 11, 2034-2043.	2.3	73
10	A Hexanuclear Iridium Chain. Angewandte Chemie - International Edition, 2003, 42, 529-532.	13.8	66
11	Chiral rhodium complexes as catalysts in Diels-Alder reactions. Chemical Communications, 1996, , 1247-1248.	4.1	56
12	Reactivity of ruthenium trihydrides with Broensted and Lewis acids. X-ray crystal structures of {Cp*Ru[C <sub>6</sub> H <sub>9</sub> P(C <sub>6</sub> H <sub>11</sub> ) <sub>2</sub> ]}BF <sub>4</sub> and {{Cp*RuH[P(C <sub>6</sub> H <sub>11</sub> ) <sub>3</sub> ]}.(mu.-H)2Cu(.mu.-Cl)} <sub>2</sub> . Evidence for exchange coupling between two hydrogen atoms. Organometallics, 1991, 10, 1888-1896.	2.3	52
13	Platinum-assisted addition of carbonyl-stabilized phosphorus ylides to benzonitrile to give iminophosphorane complexes of platinum(II). Crystal and molecular structure of trans-[PtCl <sub>2</sub> {E-N(:PPh <sub>3</sub> )C(Ph):CHCO <sub>2</sub> Et}(NCPH)].cntdot.1/2Me <sub>2</sub> CO. Inorganic Chemistry, 1991, 30, 3617-3620.	4.0	49
14	Dynamic Behavior, Redistribution Reactions, and Intermetallic Distances of Dinuclear Bis( $\text{l}/4$ -pyrazolato)rhodium(I) Complexes. Organometallics, 1996, 15, 2967-2978.	2.3	48
15	Rhodium and Iridium Pyrazolato Blues. Angewandte Chemie - International Edition, 1998, 37, 1542-1545.	13.8	47
16	Nucleophilic attack at the central allyl carbon atom in [(eta.3-allyl)ML <sub>2</sub> ] <sup>+</sup> complexes (M = palladium,) Tj ETQq0 0 0 <sub>2.8</sub> rgBT /Overlock 10 Tf <sub>46</sub>		
17	Pt-Ag clusters and their neutral mononuclear Pt(II) starting complexes: structural and luminescence studies. Dalton Transactions, 2011, 40, 2898.	3.3	46
18	Binuclear Oxidative Addition of Hydrogen in Diamidonaphthalene-Bridged Diiridium Complexes. Chemistry - A European Journal, 1998, 4, 1398-1410.	3.3	44

#	ARTICLE	IF	CITATIONS
19	Discrete Mixed-Valence Metal Chains: Iridium Pyridonate Blues The generous financial support from DGES and MCyT-PNI (Projects PB98-641 and BQU2000-1170) is gratefully acknowledged.. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 4084.	13.8	44
20	Mechanistic Investigations of Imine Hydrogenation Catalyzed by Dinuclear Iridium Complexes. <i>Chemistry - A European Journal</i> , 2006, 12, 4057-4068.	3.3	44
21	Labile Hydrido Complexes of Iridium(III): Synthesis, Dynamic Behavior in Solution, and Reactivity toward Alkenes. <i>Organometallics</i> , 1999, 18, 3534-3546.	2.3	43
22	Structural and NMR spectroscopic characterization of 1,3-Benzyl palladium(II) complexes. <i>Journal of Organometallic Chemistry</i> , 1994, 483, 77-89.	1.8	42
23	Synthesis and Reactivity of Mononuclear (Pentachlorophenyl)rhodium(II) Complexes. Structural Relevance of Rhodium <sup>3+</sup> -o-Chlorine Secondary Bonding. <i>Organometallics</i> , 1997, 16, 1026-1036.	2.3	40
24	New Dihydride <sup>+</sup> and Alkene <sup>1-6</sup> -Arene Complexes of Iridium. <i>Organometallics</i> , 2001, 20, 2716-2724.	2.3	40
25	An investigation of the Lewis acid mediated 1,3-dipolar cycloaddition between N-benzyl-C-(2-pyridyl)nitrone and allylic alcohol. Direct entry to isoxazolidinyl C-nucleosides Electronic supplementary information (ESI) available: optimized geometries (PDB) Tj ETQq1 1 0.78431.4 rgBT /Overlock 1, 2336.	1.4	39
26	A pictorial MO description of Buckminsterfullerene and its interactions with transition metal fragments. <i>Journal of Organometallic Chemistry</i> , 1994, 478, 161-171.	1.8	35
27	Stabilization of the Hydroperoxido Ligand: A 1 <sup>1</sup> <i>O</i> ,2 <sup>1</sup> <i>O</i> Dimetallic Coordination Mode. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 2093-2096.	13.8	35
28	Selective Hydrogenation of Cinnamaldehyde and Other 1 <sup>1</sup> ,2 <sup>1</sup> -Unsaturated Substrates Catalyzed by Rhodium and Ruthenium Complexes. <i>Organometallics</i> , 2009, 28, 3193-3202.	2.3	35
29	New Perspective on the Formation and Reactivity of Metal <sup>2+</sup> -Metal-Bonded Dinuclear Rhodium and Iridium Complexes. <i>Organometallics</i> , 1997, 16, 4718-4727.	2.3	34
30	Terminal Imido Rhodium Complexes. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 5614-5618.	13.8	33
31	Transmission of Trans Effects in Dinuclear Complexes. <i>Journal of the American Chemical Society</i> , 2001, 123, 11925-11932.	13.7	32
32	C-H Bond Activations by New Labile 1,6-Arene Complexes of Iridium. <i>Journal of the American Chemical Society</i> , 1999, 121, 10632-10633.	13.7	31
33	Oxidative-addition reactions of MeI or CH <sub>2</sub> I <sub>2</sub> to [M <sub>2</sub> ( $\mu$ -pz)( $\mu$ -SBut)(CO) <sub>2</sub> {P(OMe) <sub>3</sub> } <sub>2</sub> ](M = Rh or Ir) complexes. X-Ray structure of [Ir <sub>2</sub> ( $\mu$ -pz)( $\mu$ -SBut)( $\mu$ -CH <sub>2</sub> )I <sub>2</sub> (CO) <sub>2</sub> {P(OMe) <sub>3</sub> } <sub>2</sub> ](pz = pyrazolate). <i>Journal of the Chemical Society Dalton Transactions</i> , 1991, , 1391-1395.	1.1	29
34	Oxidation of Substrates by an Iridium Dioxygen Complex: Intramolecular Oxidation of Carbon Monoxide and Activation of a Carbonyl Group by Attack of a Heterocyclic Nitrogen. <i>Organometallics</i> , 1995, 14, 4764-4775.	2.3	29
35	Rhodium(I) and Iridium(I) Complexes Containing 1,2-Diketonate or Pyrazole Ligands. Liquid Crystal and Nonlinear Optical Properties. <i>Inorganic Chemistry</i> , 1999, 38, 3085-3092.	4.0	29
36	Oxidative-Addition of Organic Monochloro Derivatives to Dinuclear Iridium Complexes: The Detection of Tautomeric Equilibria and Their Implications on the Reactivity. <i>Organometallics</i> , 2000, 19, 4977-4984.	2.3	29

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37	Encapsulation of Thallium(I) by Tetranuclear Rhodium or Iridium Complexes: Synthesis and Molecular Structure of Heterobimetallic Complexes Stabilized by $s2\pi^*d8$ Bonding Interactions. Inorganic Chemistry, 1999, 38, 2482-2488.	4.0	28
38	Synthesis of $[Ir_2(\text{Pz})_2(\text{CH}_3)(\text{CO})_2(\text{PiPr}_3)_2]^+$ . A key intermediate in SN2 oxidative addition of halocarbons to dinuclear complexes. Inorganic Chemistry Communication, 1998, 1, 64-67.	3.9	27
39	One-Electron versus Two-Electron Mechanisms in the Oxidative Addition Reactions of Chloroalkanes to Amido-Bridged Rhodium Complexes. Chemistry - A European Journal, 2007, 13, 2044-2053.	3.3	26
40	Dinuclear Rhodium and Iridium Complexes with Mixed Amido/Methoxo and Amido/Hydroxo Bridges. Inorganic Chemistry, 2002, 41, 2348-2355.	4.0	25
41	Structural and Dynamic Studies on Amido-Bridged Rhodium and Iridium Complexes. Chemistry - A European Journal, 2002, 8, 3128.	3.3	25
42	Protonation Reactions of Dinuclear Pyrazolato Iridium(I) Complexes. Inorganic Chemistry, 2003, 42, 4750-4758.	4.0	25
43	Oxidative addition of I <sub>2</sub> , MeI, and CH <sub>2</sub> I <sub>2</sub> to the naphthalene-1,8-diamide bridged complex $[Ir_2\{\mu-\text{NH}\}(\text{C}_10\text{H}_6)_2](\text{CO})_2(\text{PPh}_3)_2]$ . X-Ray crystal structure of $[Ir_2\text{I}_2\{\mu-\text{CH}_2\}\{\mu-\text{NH}\}(\text{C}_10\text{H}_6)_2](\text{CO})_2(\text{PPh}_3)_2]\text{CH}_2\text{Cl}_2$ . Journal of the Chemical Society Dalton Transactions, 1990, , 2587-2591.	1.1	24
44	Multiple Bonds between Main-Group Elements and Transition Metals. 123. Re-C Bond Homolysis in Alkyl- and Arylrhenium Trioxides: A Qualitative MO Interpretation. Inorganic Chemistry, 1994, 33, 1139-1143.	4.0	24
45	Rhodium Dithiocarbamate Compounds as Metallocigands: A Controlled Way for the Construction of Binuclear Complexes. Inorganic Chemistry, 1998, 37, 824-829.	4.0	24
46	Unusual Tautomers in Dinuclear Metal Chemistry and Their Role in Oxidative-Addition Reactions of Chlorocarbons. Organometallics, 1998, 17, 1449-1451.	2.3	23
47	Developing Synthetic Approaches with Noninnocent Metallocigands: Easy Access to Ir <sup>+</sup> /Pd <sup>+</sup> O and Ir <sup>+</sup> I <sup>-</sup> /Pd <sup>+</sup> O/I <sup>-</sup> Cores. Angewandte Chemie - International Edition, 2011, 50, 8839-8843.	13.8	23
48	MO architectures of octahedral metal clusters. Inorganica Chimica Acta, 1993, 213, 199-212.	2.4	22
49	Supramolecular Structures and Columnar Mesophase Induction in Nondiscoid Pyrazoles by Complexation to Rhodium(I). Inorganic Chemistry, 2006, 45, 10363-10370.	4.0	22
50	Formation of a Bridging-Imido d <sup>6</sup> Rhodium Compound by Nitrene Capture. Insertion and Cycloaddition Reactions. Inorganic Chemistry, 2008, 47, 10220-10222.	4.0	21
51	A Hexanuclear Iridium Chain. Angewandte Chemie, 2003, 115, 547-550.	2.0	19
52	Synthesis of Coinage Metal Cation Adducts of Nb(C <sub>5</sub> H <sub>4</sub> SiMe <sub>3</sub> ) <sub>2</sub> H(CO). X-ray Crystal Structure of $[\{\text{Nb}(\text{C}_5\text{H}_4\text{SiMe}_3)_2(\text{CO})\}_2(\mu\text{-H})_2\text{Cu}]PF_6$ . Organometallics, 1995, 14, 1297-1301.	2.3	17
53	Easy Access to Hydride Chemistry on a Tripodal P-Based Rhodium Scaffold. Organometallics, 2012, 31, 2895-2906.	2.3	16
54	Oxidative addition of methyl iodide and iodine to new binuclear rhodium(I) and iridium(I) compounds containing diaminoanthraquinonate-bridging ligands. Crystal structure of $[\text{Rh}_2(\text{DA})_2(\text{CO})_2(\text{PPh}_3)_2]$ (1,4-H <sub>2</sub> DA = 1,4-diaminoanthraquinone). Inorganica Chimica Acta, 1998, 274, 15-23.	2.4	15

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55	Snapshots of a Reversible Metalâ€“Ligand Two-electron Transfer Step Involving Compounds Related by Multiple Types of Isomerism. <i>European Journal of Inorganic Chemistry</i> , 2012, 2012, 512-519.	2.0	15
56	Synthesis of Paramagnetic Tetranuclear Rhodium and Iridium Complexes with the 2,6-Pyridinedithiolate Ligand. Redox-Induced Degradation to Diamagnetic Triiridium Compounds. <i>Inorganic Chemistry</i> , 2001, 40, 4785-4792.	4.0	14
57	Connecting C½C Bonds to Tetrairidium Chains. <i>Chemistry - A European Journal</i> , 2013, 19, 4707-4711.	3.3	14
58	Extended linear metalâ€“metal interactions in an anionic rhodium(I) complex. X-Ray structure of NMe4[Rh(ox)(CO)2](ox = oxalato). <i>Journal of the Chemical Society Chemical Communications</i> , 1989, , 1889-1890.	2.0	13
59	Facile preparation, characterization, and X-ray crystal structure of [Ru3{Åµ3-l-7-C5Me3(CH2)2}({Åµ3-O})({Åµ2-H})(l-5-C5Me5)2(l-2-SO4)], a highâ€“valent hydridoâ€“oxo cluster of ruthenium. <i>Journal of the Chemical Society Chemical Communications</i> , 1990, .	2.0	13
60	Preparation, X-ray crystal and electronic structure of the novel raft cluster [NbAuH2{C5H4(SiMe3)}2]3. <i>Journal of the Chemical Society Chemical Communications</i> , 1990, , 17.	2.0	13
61	Tris(pentafluorophenyl) neutral and anionic five-co-ordinate complexes of rhodium(III). Crystal structures of [Rh(C6F5)3(PEt3)2] and [Rh(C6F5)3(AsPh3)2]. <i>Journal of the Chemical Society Dalton Transactions</i> , 1990, , 1503-1508.	1.1	13
62	Reactivity of binuclear heterobridged iridium complexes with SnCl2. <i>Journal of the Chemical Society Dalton Transactions</i> , 1992, , 2389-2393.	1.1	13
63	Oxidative Addition Reactions to Novel Heterotrinuclear Iridium Complexes with Mixed Bridging Ligands. Crystal Structure of [{Ir(mu-pz)(mu-StBu)I2(CO)[P(OMe)3]}2Pd]. <i>Inorganic Chemistry</i> , 1995, 34, 111-115.	4.0	13
64	Rhodium Complexes in Pâ”H Bond Activation Reactions. <i>Chemistry - A European Journal</i> , 2019, 25, 15915-15928.	3.3	13
65	Reactivity of ruthenium and niobium trihydrides with gold fragments. Crystal structure of the hexanuclear raft cluster [Au3Nb3(Åµ-H)6(l-C5H4SiMe3)6]. <i>Journal of the Chemical Society Dalton Transactions</i> , 1991, , 1861-1866.	1.1	12
66	Rhodium Mediated Cï¿½H Bond Functionalisation Leading to Carboxylate Derivatives. <i>Chemistry - A European Journal</i> , 2010, 16, 11261-11265.	3.3	12
67	Rhodium and Iridium Complexes with a New Scorpionate Phosphane Ligand. <i>Inorganic Chemistry</i> , 2013, 52, 7593-7607.	4.0	12
68	Terminal Imido Rhodium Complexes. <i>Angewandte Chemie</i> , 2014, 126, 5720-5724.	2.0	12
69	Rhodium Complexes in Pâ€“C Bond Formation: Key Role of a Hydrido Ligand. <i>Journal of the American Chemical Society</i> , 2021, 143, 349-358.	13.7	11
70	Tris(diphenylthiophosphinoyl)methanide as tripod ligand in rhodium(III), iridium(III) and ruthenium(II) complexes. Crystal structures of [(l-5-C5Me5)Ir{l-3-(SPPh2)3C-S, Sâ€², Sâ€³}]BF4 and [(l-6-MeC6H4Pri)Ru{l-3-(SPPh2)3C-S, Sâ€², Sâ€³}]BPh4. <i>Journal of Organometallic Chemistry</i> , 1997, 545-546, 507-517.	1.8	10
71	Synthesis of the homoleptic rhodium(III) complex [Rh(C6Cl5)3]. Molecular structures of [Rh(C6Cl5)3] and [Rh(C6Cl4â€“C6Cl4)(C6Cl5)(SC4H8)2]. <i>Journal of the Chemical Society Dalton Transactions</i> , 1998, , 4211-4214.	1.1	10
72	Diastereoselective formation of chiral iridium hydrides containing the chiral P,N-chelate ligand (4S)-2-(2-(diphenylphosphino)phenyl)-4-isopropyl-1,3-oxazolineElectronic supplementary information (ESI) available: selected analytical and spectroscopic data for 1. See http://www.rsc.org/suppdata/cc/b2/b200518b/. <i>Chemical Communications</i> , 2002, , 870-871.	4.1	10

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73	Intervalent Bis( $\frac{1}{4}$ -aziridinato)M <sup>II</sup> M <sup>I</sup> Complexes (M=Rh, Ir): Delocalized Metalloâ€Radicals or Delocalized Aminyl Radicals?. <i>Chemistry - A European Journal</i> , 2008, 14, 10985-10998.	3.3	10
74	Binuclear pentamethylcyclopentadienyl rhodium(III) compounds with pyrazolate and thiolate bridging ligands. <i>Journal of Organometallic Chemistry</i> , 1998, 551, 55-65.	1.8	9
75	Pseudotetrahedral Rhodium(I) Complexes. <i>Chemistry - A European Journal</i> , 2014, 20, 2732-2736.	3.3	9
76	Nucleophilicity and Pâ€“C Bond Formation Reactions of a Terminal Phosphanido Iridium Complex. <i>Inorganic Chemistry</i> , 2016, 55, 828-839.	4.0	9
77	Rhodium Complexes Promoting Câ”O Bond Formation in Reactions with Oxygen: The Role of Superoxo Species. <i>Chemistry - A European Journal</i> , 2017, 23, 5232-5243.	3.3	9
78	Activating a Peroxo Ligand for Câ”O Bond Formation. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 3037-3041.	13.8	9
79	The (NHEt <sub>3</sub> )[Rh(C <sub>6</sub> Cl <sub>2</sub> O <sub>4</sub> )(CO) <sub>2</sub> ] complex: an example of the adverse counterion influence in the formation of metallic stacks. <i>Inorganic Chemistry Communication</i> , 1999, 2, 414-418.	3.9	7
80	Aerobic Oxidation of Carbon Monoxide in a Tetrametallic Complex. <i>Chemistry - A European Journal</i> , 2012, 18, 15250-15253.	3.3	7
81	Pseudoâ€tetrahedral Rhodium and Iridium Complexes: Catalytic Synthesis of <i>&lt; i&gt;E&lt;/i&gt;</i> â€Enynes. <i>Chemistry - A European Journal</i> , 2018, 24, 17545-17556.	3.3	7
82	Innerâ€Sphere Oxygen Activation Promoting Outerâ€Sphere Nucleophilic Attack on Olefins. <i>Chemistry - A European Journal</i> , 2019, 25, 14546-14554.	3.3	7
83	Rhodium-Rhodium Bonds in Edge-Sharing Coplanar Dinuclear Complexes. <i>Angewandte Chemie - International Edition</i> , 2000, 39, 2336-2339.	13.8	6
84	Threeâ€Coordinate Rhodium Complexes in Low Oxidation States. <i>Chemistry - A European Journal</i> , 2020, 26, 3270-3274.	3.3	6
85	Agostic versus Terminal Ethyl Rhodium Complexes: A Combined Experimental and Theoretical Study. <i>Organometallics</i> , 2016, 35, 799-808.	2.3	5
86	Half-sandwich complexes of iridium and ruthenium containing cysteine-derived ligands. <i>Dalton Transactions</i> , 2017, 46, 962-976.	3.3	4
87	Half-sandwich complexes of rhodium containing cysteine-derived ligands. <i>Dalton Transactions</i> , 2016, 45, 14203-14215.	3.3	3
88	Activating a Peroxo Ligand for Câ”O Bond Formation. <i>Angewandte Chemie</i> , 2019, 131, 3069-3073.	2.0	2
89	Binuclear Oxidative Addition of Hydrogen in Diamidonaphthalene-Bridged Diiridium Complexes. <i>Chemistry - A European Journal</i> , 1998, 4, 1398-1410.	3.3	1
90	Rhodiumâ€Rhodium Bonds in Edge-Sharing Coplanar Dinuclear Complexes. <i>Angewandte Chemie - International Edition</i> , 2000, 39, 2336-2339.	13.8	1