

Jose A Mata

List of Publications by Year in descending order

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94
papers

6,067
citations

76326

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69250

77
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106
all docs

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docs citations

106
times ranked

4806
citing authors

#	ARTICLE	IF	CITATIONS
1	A simple, safe and robust system for hydrogenation “without high-pressure gases” under batch and flow conditions using a liquid organic hydrogen carrier. <i>Green Chemistry</i> , 2022, 24, 2036-2043.	9.0	11
2	Tailoring graphene-supported Ru nanoparticles by functionalization with pyrene-tagged N-heterocyclic carbenes. <i>Catalysis Science and Technology</i> , 2022, 12, 1257-1270.	4.1	9
3	Gold nanoparticle-catalysed functionalization of carbon “hydrogen bonds by carbene transfer reactions. <i>Dalton Transactions</i> , 2022, 51, 5250-5256.	3.3	2
4	Visible-Light-Promoted Iridium(III)-Catalyzed Acceptorless Dehydrogenation of N-Heterocycles at Room Temperature. <i>ACS Catalysis</i> , 2022, 12, 6238-6245.	11.2	15
5	Unraveling a Biomass-Derived Multiphase Catalyst for the Dehydrogenative Coupling of Silanes with Alcohols under Aerobic Conditions. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 2912-2928.	6.7	8
6	Ligand effects in the stabilization of gold nanoparticles anchored on the surface of graphene: Implications in catalysis. <i>Journal of Catalysis</i> , 2021, 394, 113-120.	6.2	23
7	Introducing Catalysis to Undergraduate Chemistry Students: Testing a Ru “NHC Complex in the Selective Dehydrogenative Coupling of Hydrosilanes and Alcohols. <i>Journal of Chemical Education</i> , 2021, 98, 2638-2642.	2.3	3
8	Reduced Graphene Oxides as Carbocatalysts in Acceptorless Dehydrogenation of <i>N</i> -Heterocycles. <i>ACS Catalysis</i> , 2021, 11, 14688-14693.	11.2	15
9	A Platinum Molecular Complex Immobilised on the Surface of Graphene as Active Catalyst in Alkyne Hydrosilylation. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 4254-4262.	2.0	8
10	Selective Conversion of Various Monosaccharides into Sugar Acids by Additive-Free Dehydrogenation in Water. <i>ChemCatChem</i> , 2020, 12, 3746-3752.	3.7	9
11	The non-innocent role of graphene in the formation/immobilization of ultra-small gold nanoparticles functionalized with N-heterocyclic carbene ligands. <i>Journal of Catalysis</i> , 2019, 375, 419-426.	6.2	16
12	Improving Catalyst Activity in Hydrocarbon Functionalization by Remote Pyrene “Graphene Stacking. <i>Chemistry - A European Journal</i> , 2019, 25, 9534-9539.	3.3	12
13	High Production of Hydrogen on Demand from Silanes Catalyzed by Iridium Complexes as a Versatile Hydrogen Storage System. <i>ACS Catalysis</i> , 2018, 8, 2558-2566.	11.2	57
14	Stabilization of Nanoparticles Produced by Hydrogenation of Palladium “N-Heterocyclic Carbene Complexes on the Surface of Graphene and Implications in Catalysis. <i>ACS Omega</i> , 2018, 3, 15217-15228.	3.5	22
15	Iridium complexes catalysed the selective dehydrogenation of glucose to gluconic acid in water. <i>Green Chemistry</i> , 2018, 20, 4094-4101.	9.0	21
16	Enhancement of gold catalytic activity and stability by immobilization on the surface of graphene. <i>Journal of Catalysis</i> , 2017, 352, 498-504.	6.2	26
17	Catalytic Dehydrogenative Coupling of Hydrosilanes with Alcohols for the Production of Hydrogen On-demand: Application of a Silane/Alcohol Pair as a Liquid Organic Hydrogen Carrier. <i>Chemistry - A European Journal</i> , 2017, 23, 10815-10821.	3.3	46
18	Ruthenium molecular complexes immobilized on graphene as active catalysts for the synthesis of carboxylic acids from alcohol dehydrogenation. <i>Catalysis Science and Technology</i> , 2016, 6, 8024-8035.	4.1	44

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19	Catalytic Hydrogen Production by Ruthenium Complexes from the Conversion of Primary Amines to Nitriles: Potential Application as a Liquid Organic Hydrogen Carrier. <i>Chemistry - A European Journal</i> , 2016, 22, 17758-17766.	3.3	37
20	In situ decoration of graphene sheets with gold nanoparticles synthesized by pulsed laser ablation in liquids. <i>Scientific Reports</i> , 2016, 6, 30478.	3.3	84
21	Multiple Metal (De)Hydrogenation Catalysed Processes. <i>European Journal of Inorganic Chemistry</i> , 2016, 2016, 2667-2675.	2.0	14
22	Catalytic applications of magnetic nanoparticles functionalized using iridium N-heterocyclic carbene complexes. <i>New Journal of Chemistry</i> , 2015, 39, 6437-6444.	2.8	21
23	Immobilization of Pyrene-Tagged Palladium and Ruthenium Complexes onto Reduced Graphene Oxide: An Efficient and Highly Recyclable Catalyst for Hydrodefluorination. <i>Organometallics</i> , 2015, 34, 1186-1190.	2.3	76
24	Catalyst Enhancement and Recyclability by Immobilization of Metal Complexes onto Graphene Surface by Noncovalent Interactions. <i>ACS Catalysis</i> , 2014, 4, 2038-2047.	11.2	137
25	Heterometallic complexes, tandem catalysis and catalytic cooperativity. <i>Chemical Science</i> , 2014, 5, 1723-1732.	7.4	285
26	Highly Active Cp*Ir Catalyst at Low Temperatures Bearing an N-Heterocyclic Carbene Ligand and a Chelated Primary Benzylamine in Transfer Hydrogenation. <i>Organometallics</i> , 2014, 33, 6830-6839.	2.3	34
27	Stereoisomerization of 1-hydroxy-2-sulphenyl-1,2-dimethyl naphthoquinones controlled by nonbonded sulfur-oxygen interactions. <i>Tetrahedron</i> , 2013, 69, 2098-2101.	1.9	2
28	Hydrodefluorination of carbon-fluorine bonds by the synergistic action of a ruthenium-palladium catalyst. <i>Nature Communications</i> , 2013, 4, 2553.	12.8	141
29	Coordination Singularities of a Bis(p-xylyl)bis(benzimidazolylidene) Ligand and the Bis-iridium and -rhodium-Related Complexes. <i>Organometallics</i> , 2013, 32, 6613-6619.	2.3	5
30	Synthesis of Heterodimetallic Iridium-Palladium Complexes Containing Two Axes of Chirality: Study of Sequential Catalytic Properties. <i>European Journal of Inorganic Chemistry</i> , 2013, 2013, 4764-4769.	2.0	22
31	Chiral Palladacycles with N-Heterocyclic Carbene Ligands as Catalysts for Asymmetric Hydrophosphination. <i>Organometallics</i> , 2013, 32, 1112-1120.	2.3	41
32	Palladium N-Heterocyclic Carbene Catalysts for the Ultrasound-Promoted Suzuki-Miyaura Reaction in Glycerol. <i>Advanced Synthesis and Catalysis</i> , 2013, 355, 1107-1116.	4.3	38
33	Y-Shaped Tris-N-Heterocyclic-Carbene Ligand for the Preparation of Multifunctional Catalysts of Iridium, Rhodium, and Palladium. <i>Organometallics</i> , 2012, 31, 5606-5614.	2.3	69
34	Alternative Energy Input for Transfer Hydrogenation using Iridium NHC Based Catalysts in Glycerol as Hydrogen Donor and Solvent. <i>Organometallics</i> , 2012, 31, 3911-3919.	2.3	84
35	Rhodium and Iridium Complexes with Chelating <i>N</i> -Imidazolylidene-Pyridylidene Ligands: Systematic Approach to Normal, Abnormal, and Remote Coordination Modes. <i>Organometallics</i> , 2012, 31, 5169-5176.	2.3	22
36	Heterobimetallic Iridium-Ruthenium Assemblies through an Ambidentate Triazole-Diylidene Ligand: Electrochemical Properties and Catalytic Behavior in a Cascade Reaction. <i>Organometallics</i> , 2012, 31, 6450-6456.	2.3	73

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37	Unconventional Reactivity of Imidazolylidene Pyridylidene Ligands in Iridium(III) and Rhodium(III) Complexes. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 10841-10845.	13.8	46
38	Dual Catalysis with an Ir ^{III} –Au ^I Heterodimetallic Complex: Reduction of Nitroarenes by Transfer Hydrogenation using Primary Alcohols. <i>Chemistry - A European Journal</i> , 2012, 18, 6380-6385.	3.3	73
39	A Y-Shaped Tris-N-Heterocyclic Carbene for the Synthesis of Simultaneously Chelate-Monodentate Dipalladium Complexes. <i>Organometallics</i> , 2011, 30, 5985-5990.	2.3	36
40	Enantiomerically Pure Cyclopentadienyl- and Indenyl-Functionalized N-Heterocyclic Carbene Complexes of Iridium and Rhodium. <i>Organometallics</i> , 2011, 30, 4437-4442.	2.3	16
41	Iridium NHC Based Catalysts for Transfer Hydrogenation Processes Using Glycerol as Solvent and Hydrogen Donor. <i>Organometallics</i> , 2011, 30, 5532-5536.	2.3	76
42	Synthesis and Properties of Chelating N-Heterocyclic Carbene Rhodium(I) Complexes: Synthetic Experiments in Current Organometallic Chemistry. <i>Journal of Chemical Education</i> , 2011, 88, 822-824.	2.3	2
43	Mechanism of the Catalytic Hydrodefluorination of Pentafluoropyridine by Group Six Triangular Cluster Hydrides Containing Phosphines: A Combined Experimental and Theoretical Study. <i>Organometallics</i> , 2011, 30, 290-297.	2.3	57
44	Recent Developments in the Applications of Palladium Complexes Bearing N-Heterocyclic Carbene Ligands. <i>Current Organic Chemistry</i> , 2011, 15, 3309-3324.	1.6	58
45	Shvo's Catalyst and [IrCp*Cl ₂ (amidine)] Effectively Catalyze the Formation of Tertiary Amines from the Reaction of Primary Alcohols and Ammonium Salts. <i>Advanced Synthesis and Catalysis</i> , 2011, 353, 2078-2084.	4.3	44
46	A Simple Route to Chelating, Structurally Different Triazole-Based Bis(N-heterocyclic carbene) Ligands and Their Coordination to PtII. <i>European Journal of Inorganic Chemistry</i> , 2011, 2011, 416-421.	2.0	13
47	Double C–H Bond Activation of C(sp ³)H ₂ Groups for the Preparation of Complexes with Back-Bisimidazolynylidenes. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 7666-7669.	13.8	44
48	Intramolecular Oxidation of the Alcohol Functionalities in Hydroxyalkyl-N-Heterocyclic Carbene Complexes of Iridium and Rhodium. <i>Chemistry - A European Journal</i> , 2011, 17, 10453-10461.	3.3	35
49	Catalytic 1,3-Difunctionalisation of Organic Backbones through a Highly Stereoselective, One-Pot, Boron Conjugate Addition/Reduction/Oxidation Process. <i>Chemistry - A European Journal</i> , 2011, 17, 14248-14257.	3.3	35
50	Perceptible Influence of Pd and Pt Heterocyclic Carbene–Pyridyl Complexes in Catalytic Diboration of Cyclic Alkenes. <i>Chemistry - an Asian Journal</i> , 2010, 5, 261-264.	3.3	19
51	One-Pot Preparation of Imines from Nitroarenes by a Tandem Process with an Ir–Pd Heterodimetallic Catalyst. <i>Chemistry - A European Journal</i> , 2010, 16, 10502-10506.	3.3	124
52	An Ir–Pt Catalyst for the Multistep Preparation of Functionalized Indoles from the Reaction of Amino Alcohols and Alkynyl Alcohols. <i>Chemistry - A European Journal</i> , 2010, 16, 13109-13115.	3.3	78
53	Preparation of Cp-Functionalized N-Heterocyclic Carbene Complexes of Ruthenium. Resolution of Chiral Complexes and Catalytic Studies. <i>Organometallics</i> , 2010, 29, 1832-1838.	2.3	52
54	Palladium Complexes with Triazolylidene. Structural Features and Catalytic Applications. <i>Organometallics</i> , 2009, 28, 1480-1483.	2.3	58

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55	Domino Approach to Benzofurans by the Sequential Sonogashira/Hydroalkoxylation Couplings Catalyzed by New N-Heterocyclic-Carbene-Palladium Complexes. <i>Organometallics</i> , 2009, 28, 4335-4339.	2.3	113
56	Complexes with Poly(N-heterocyclic carbene) Ligands: Structural Features and Catalytic Applications. <i>Chemical Reviews</i> , 2009, 109, 3677-3707.	47.7	797
57	Well-Defined Ir/Pd Complexes with a Triazolyl-diylidene Bridge as Catalysts for Multiple Tandem Reactions. <i>Journal of the American Chemical Society</i> , 2009, 131, 14531-14537.	13.7	159
58	Alkenyl-functionalized NHC iridium-based catalysts for hydrosilylation. <i>New Journal of Chemistry</i> , 2008, 32, 120-126.	2.8	54
59	Homo- and Heterodinuclear Complexes with Triazolyl-diylidene. An Easy Approach to Tandem Catalysts. <i>Organometallics</i> , 2008, 27, 3570-3576.	2.3	135
60	The active role of NHC ligands in platinum-mediated tandem hydroboration- α -cross coupling reactions. <i>Chemical Communications</i> , 2007, , 2184-2186.	4.1	51
61	Enantioselective Preparation of a Chiral-at-Metal Cp*Ir(NHC) Complex and Its Application in the Catalytic Diboration of Olefins. <i>Organometallics</i> , 2007, 26, 4350-4353.	2.3	59
62	Aliphatic versus Aromatic C-H Activation in the Formation of Abnormal Carbenes with Iridium: A Combined Experimental and Theoretical Study. <i>Organometallics</i> , 2007, 26, 5304-5314.	2.3	94
63	Triazole-diylidenes: A Versatile Class of Ligands for the Preparation of Discrete Molecules of Homo- and Hetero-Binuclear Complexes for Improved Catalytic Applications. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 3729-3731.	13.8	131
64	Structural and catalytic properties of chelating bis- and tris-N-heterocyclic carbenes. <i>Coordination Chemistry Reviews</i> , 2007, 251, 841-859.	18.8	447
65	Catalytic Diboration of Unsaturated Molecules with Platinum(0)-NHC: Selective Synthesis of 1,2-Dihydroxysulfones. <i>Organometallics</i> , 2006, 25, 5829-5831.	2.3	78
66	Synthesis and Characterization of MoO ₂ (PMe ₃) ₃ and Use of MoOX ₂ (PMe ₃) ₃ (X = Cl, I) in Controlled Radical Polymerization. <i>European Journal of Inorganic Chemistry</i> , 2006, 2006, 2624-2633.	2.0	18
67	Donor/acceptor organotriiron(II) hydrazone chromophores: structural, spectroscopic and electrochemical properties. <i>Journal of Organometallic Chemistry</i> , 2005, 690, 1265-1272.	1.8	11
68	Design of single cyanide-bridged tetranuclear bimetallic rectangles exhibiting ferromagnetic coupling. <i>Inorganic Chemistry Communication</i> , 2005, 8, 382-385.	3.9	29
69	An Experimental and Computational Study on the Effect of Al(OiPr) ₃ on Atom-Transfer Radical Polymerization and on the Catalyst-Dormant-Chain Halogen Exchange. <i>Chemistry - A European Journal</i> , 2005, 11, 2537-2548.	3.3	35
70	The Radical Trap in Atom Transfer Radical Polymerization Need Not Be Thermodynamically Stable. A Study of the MoX ₃ (PMe ₃) ₃ Catalysts. <i>Journal of the American Chemical Society</i> , 2005, 127, 5946-5956.	13.7	66
71	Novel ferrocenyl-oxazoline ligands: first preparation of non-symmetrical bis(oxazoline). <i>Polyhedron</i> , 2004, 23, 611-616.	2.2	3
72	Reactivity Differences in the Syntheses of Chelating N-Heterocyclic Carbene Complexes of Rhodium Are Ascribed to Ligand Anisotropy. <i>Organometallics</i> , 2004, 23, 1253-1263.	2.3	199

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73	Preparation, characterization and electrochemical and X-ray structural studies of new conjugated 1,1-ferrocenediyl-ended [CpFe-arylhydrazone]+salts. <i>New Journal of Chemistry</i> , 2004, 28, 134-144.	2.8	14
74	Pd-mediated synthesis of linked conjugated tri- and penta-ferrocenyl complexes. <i>Inorganica Chimica Acta</i> , 2003, 343, 175-182.	2.4	6
75	New Ruthenium(II) CNC-Pincer Bis(carbene) Complexes: Synthesis and Catalytic Activity. <i>Organometallics</i> , 2003, 22, 1110-1114.	2.3	249
76	Synthesis of a Dirhodium(I) Bisimidazolium Carbene Complex and Catalytic Activity toward Hydroformylation of Olefins. High-Pressure NMR Spectroscopy of the Catalyst under Catalytic Conditions. <i>Organometallics</i> , 2003, 22, 440-444.	2.3	111
77	A methylene-bis-triazolium ligand precursor in an unusual rearrangement of norbornadiene to nortricyclyl. Electronic supplementary information (ESI) available: ^1H and $^{13}\text{C}\{^1\text{H}\}$ NMR data for 3a and 3b. See http://www.rsc.org/suppdata/cc/b2/b210726k/ . <i>Chemical Communications</i> , 2003, , 184-185.	4.1	23
78	X-RAY CRYSTAL AND MOLECULAR STRUCTURE OF AN ORGANOMETALLIC HYDRAZONE CONTAINING A ZIGZAG p-CONJUGATED SPACER: $[\text{CpFe}(\text{h}6\text{-C}_6\text{H}_5)\text{-N}(\text{Me})\text{N}=\text{CH-C}_6\text{H}_4\text{-4-NMe}_2]^+\text{PF}_6^-$. <i>Journal of the Chilean Chemical Society</i> , 2003, 48, .	1.2	5
79	Ortho-Metalated Benzenethiolate Bridging Dinuclear Palladium(II) Complexes. X-ray Structures of $[\text{Sn}_2(\text{C}_6\text{H}_4\text{S})_2(\text{tBu})_4]$ and $[\text{Pd}_2(\text{C}_6\text{H}_4\text{S})(\text{dppm})_2\text{Cl}_2]$. <i>Organometallics</i> , 2002, 21, 121-126.	2.3	15
80	Palladium Complexes with Tridentate Pincer Bis-Carbene Ligands as Efficient Catalysts for $\text{C}\text{-C}$ Coupling. <i>Organometallics</i> , 2002, 21, 700-706.	2.3	364
81	Facile synthesis of first generation ferrocene dendrimers by a convergent approach using ditopic conjugated dendrons. Electronic supplementary information (ESI) available: molecular structure of 2. See http://www.rsc.org/suppdata/nj/b1/b108142j/ . <i>New Journal of Chemistry</i> , 2002, 26, 291-297.	2.8	32
82	Homodimetallic iron(II) hydrazones: syntheses, spectroscopic, electrochemical, and theoretical investigations. X-Ray crystal structure of both syn- and anti- rotamers of $[(\text{I-5-Cp})\text{Fe}(\text{I-6-C}_6\text{H}_5)\text{-NHN}(\text{Me})\text{-C}(\text{Me})\text{-N}(\text{I-5-C}_5\text{H}_4)\text{Fe}(\text{I-5-Cp})]^+\text{PF}_6^-$. <i>New Journal of Chemistry</i> , 2002, 26, 213-221.	2.8	17
83	Organodiiron(II)-complexes containing a long conjugated hydrazone spacer. Synthesis, characterization, electrochemical and structural studies. <i>Journal of Organometallic Chemistry</i> , 2002, 660, 71-77.	1.8	11
84	ORGANOMETALLIC IRON(II) COMPLEXES CONTAINING P-SUBSTITUTED ACETOPHENONE-ARYLHYDRAZONE LIGANDS. <i>Journal of the Chilean Chemical Society</i> , 2002, 47, .	0.1	3
85	$[\text{Cr}(\text{dpa})(\text{ox})_2]^{2+}$: a new bis-oxalato building block for the design of heteropolymetallic systems. Crystal structures and magnetic properties of $\text{PPh}_4[\text{Cr}(\text{dpa})(\text{ox})_2]$, $\text{AsPh}_4[\text{Cr}(\text{dpa})(\text{ox})_2]$, $\text{Hdpa}[\text{Cr}(\text{dpa})(\text{ox})_2]\cdot 4\text{H}_2\text{O}$, $\text{Rad}[\text{Cr}(\text{dpa})(\text{ox})_2]\cdot \text{H}_2\text{O}$ and $\text{Sr}[\text{Cr}(\text{dpa})(\text{ox})_2]_2\cdot 8\text{H}_2\text{O}$ (dpa = 2,2'-dipyridylamine). <i>New Journal of Chemistry</i> , 2001, 25, 1224-1235.	2.8	42
86	Syntheses, crystal structures and electrochemical studies of bi- and trimetallic conjugated ferrocene-based complexes. <i>Dalton Transactions RSC</i> , 2001, , 3634-3640.	2.3	19
87	Large second-order NLO properties of new conjugated oligomers with a pendant ferrocenyl and an end-capped pyridine. <i>New Journal of Chemistry</i> , 2001, 25, 1043-1046.	2.8	38
88	Syntheses, characterization and second-order nonlinear optical behavior of new ferrocenyl-terminated phenylethenyl oligomers with a pendant nitro group. <i>New Journal of Chemistry</i> , 2001, 25, 299-304.	2.8	37
89	Preparation and properties of new ferrocenyl heterobimetallic complexes with counterion dependent NLO responses. <i>Polyhedron</i> , 2001, 20, 2083-2088.	2.2	23
90	Facile synthesis of bidimensional ferrocenyl-based branched oligomers by palladium-catalyzed coupling reactions. <i>Journal of Organometallic Chemistry</i> , 2001, 637-639, 191-197.	1.8	15

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91	High yield synthesis of trinuclear $[M_3S_4X_3(\text{diphos})_3]^+$ (M=Mo, W; X=Cl, Br and diphos=dmpe, dppe) molecular clusters from solid state materials. Synthesis and structure of $[W_3S_4H_3(\text{dppe})_3](\text{BPh}_4)$. Polyhedron, 2001, 20, 527-535.	2.2	53
92	Preparation, properties and coordination of new conjugated ferrocenyl-based ligands with an end-capped nitrile. Journal of Organometallic Chemistry, 2000, 616, 80-88.	1.8	24
93	Preparation, Properties, and Crystal Structure of New Conjugated Oligomers with a Pendant Ferrocenyl and an End-Capped Pyridine. Organometallics, 2000, 19, 3797-3802.	2.3	40
94	IR Spectroscopic study of hydrogen bonding using a metal carbonyl probe. Journal of the Chemical Society Dalton Transactions, 1999, , 3893-3898.	1.1	16