Antonio Leyva-PÃ©rez

List of Publications by Year
in descending order

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109 papers	7,482 citations	50276 46 h-index	54911 84 g-index
128 all docs	128 docs citations	128 times ranked	7797 citing authors

#	Article	IF	Citations
1	Gold-Catalyzed Carbonâ˘Heteroatom Bond-Forming Reactions. Chemical Reviews, 2011, 111, 1657-1712.	47.7	1,222
2	Small Gold Clusters Formed in Solution Give Reaction Turnover Numbers of 10 ⁷ at Room Temperature. Science, 2012, 338, 1452-1455.	12.6	383
3	The MOF-driven synthesis of supported palladium clusters with catalytic activity for carbene-mediated chemistry. Nature Materials, 2017, 16, 760-766.	27.5	230
4	Isolable Gold(I) Complexes Having One Low-Coordinating Ligand as Catalysts for the Selective Hydration of Substituted Alkynes at Room Temperature without Acidic Promoters. Journal of Organic Chemistry, 2009, 74, 2067-2074.	3.2	215
5	Theoretical and Experimental Insights into the Origin of the Catalytic Activity of Subnanometric Gold Clusters: Attempts to Predict Reactivity with Clusters and Nanoparticles of Gold. Accounts of Chemical Research, 2014, 47, 834-844.	15.6	210
6	Oxime Carbapalladacycle Covalently Anchored to High Surface Area Inorganic Supports or Polymers as Heterogeneous Green Catalysts for the Suzuki Reaction in Water. Journal of Organic Chemistry, 2004, 69, 439-446.	3.2	203
7	Selective Gold Recovery and Catalysis in a Highly Flexible Methionine-Decorated Metalâ€“Organic Framework. Journal of the American Chemical Society, 2016, 138, 7864-7867.	13.7	196
8	Catalytic activity of palladium supported on single wall carbon nanotubes compared to palladium supported on activated carbon. Journal of Molecular Catalysis A, 2005, 230, 97-105.	4.8	192
9	Similarities and Differences between the â€œRelativisticâ€•Triad Gold, Platinum, and Mercury in Catalysis. Angewandte Chemie - International Edition, 2012, 51, 614-635.	13.8	184
10	A periodic mesoporous organosilica containing a carbapalladacycle complex as heterogeneous catalyst for Suzuki cross-coupling. Journal of Catalysis, 2005, 229, 322-331.	6.2	168
11	An oximeâ€“carbapalladacycle complex covalently anchored to silica as an active and reusable heterogeneous catalyst for Suzuki cross-coupling in water. Chemical Communications, 2003, , 606-607.	4.1	143
12	Waterâ€Stabilized Threeâ€•and Fourâ€Atom Palladium Clusters as Highly Active Catalytic Species in Ligandâ€Free Cï£¿C Crossâ€Coupling Reactions. Angewandte Chemie - International Edition, 2013, 52, 11554-11559.	13.8	123
13	Nickel phosphide nanocatalysts for the chemoselective hydrogenation of alkynes. Nano Today, 2012, 7, 21-28.	11.9	120
14	Polyethyleneglycol as scaffold and solvent for reusable CC coupling homogeneous Pd catalysts. Journal of Catalysis, 2006, 240, 87-99.	6.2	119
15	MOFs as Multifunctional Catalysts: Synthesis of Secondary Arylamines, Quinolines, Pyrroles, and Arylpyrrolidines over Bifunctional MILâ€101. ChemCatChem, 2013, 5, 538-549.	3.7	117
16	Synthesis of Densely Packaged, Ultrasmall Pt⁰₂ Clusters within a Thioetherâ€Functionalized MOF: Catalytic Activity in Industrial Reactions at Low Temperature. Angewandte Chemie - International Edition, 2018, 57, 6186-6191.	13.8	115
17	Base-Controlled Heck, Suzuki, and Sonogashira Reactions Catalyzed by Ligand-Free Platinum or Palladium Single Atom and Sub-Nanometer Clusters. Journal of the American Chemical Society, 2019, 141, 1928-1940.	13.7	107
18	Comparison between polyethylenglycol and imidazolium ionic liquids as solvents for developing a homogeneous and reusable palladium catalytic system for the Suzuki and Sonogashira coupling. Tetrahedron, 2005, 61, 9848-9854.	1.9	101

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19	An imidazolium ionic liquid having covalently attached an oxime carbapalladacycle complex as ionophilic heterogeneous catalysts for the Heck and Suzukiâ€“Miyaura cross-coupling. Tetrahedron, 2004, 60, 8553-8560.	1.9	94
20	Total Synthesis of the Anti-Apoptotic Agents Iso- and Bongkrekic Acids. Organic Letters, 2010, 12, 340-343.	4.6	90
21	Bifunctional palladium-basic zeolites as catalyst for Suzuki reaction. Applied Catalysis A: General, 2002, 236, 179-185.	4.3	88
22	Basic zeolites containing palladium as bifunctional heterogeneous catalysts for the Heck reaction. Applied Catalysis A: General, 2003, 247, 41-49.	4.3	83
23	Alkali-exchanged sepiolites containing palladium as bifunctional (basic sites and noble metal) catalysts for the Heck and Suzuki reactions. Applied Catalysis A: General, 2004, 257, 77-83.	4.3	83
24	Gold Redox Catalytic Cycles for the Oxidative Coupling of Alkynes. ACS Catalysis, 2012, 2, 121-126.	11.2	82
25	Gold catalysts and solid catalysts for biomass transformations: Valorization of glycerol and glycerolâ€“water mixtures through formation of cyclic acetals. Journal of Catalysis, 2010, 271, 351-357.	6.2	81
26	Metalâ€“Organic Frameworks as Chemical Nanoreactors: Synthesis and Stabilization of Catalytically Active Metal Species in Confined Spaces. Accounts of Chemical Research, 2020, 53, 520-531.	15.6	81
27	Assessment of the suitability of imidazolium ionic liquids as reaction medium for base-catalysed reactions Case of Knoevenagel and Claisenâ€“Schmidt reactions. Journal of Molecular Catalysis A, 2004, 214, 137-142.	4.8	80
28	Regioselective Hydration of Alkynes by Iron(III) Lewis/BrÃ¸nsted Catalysis. Chemistry - A European Journal, 2012, 18, 11107-11114.	3.3	80
29	Isolated Fe(III)â€“O Sites Catalyze the Hydrogenation of Acetylene in Ethylene Flows under Front-End Industrial Conditions. Journal of the American Chemical Society, 2018, 140, 8827-8832.	13.7	74
30	Soluble/MOF-Supported Palladium Single Atoms Catalyze the Ligand-, Additive-, and Solvent-Free Aerobic Oxidation of Benzyl Alcohols to Benzoic Acids. Journal of the American Chemical Society, 2021, 143, 2581-2592.	13.7	74
31	Stabilized Naked Sub-nanometric Cu Clusters within a Polymeric Film Catalyze Câ€“N, Câ€“C, Câ€“O, Câ€“S, and Câ€“P Bond-Forming Reactions. Journal of the American Chemical Society, 2015, 137, 3894-3900.	13.7	71
32	Mixed component metal-organic frameworks: Heterogeneity and complexity at the service of application performances. Coordination Chemistry Reviews, 2022, 451, 214273.	18.8	70
33	Regioâ€•and Stereoselective Intermolecular Hydroalkoxylation of Alkynes Catalysed by Cationic Gold(I) Complexes. Advanced Synthesis and Catalysis, 2010, 352, 1701-1710.	4.3	67
34	Well-Defined Noble Metal Single Sites in Zeolites as an Alternative to Catalysis by Insoluble Metal Salts. Journal of the American Chemical Society, 2015, 137, 11832-11837.	13.7	66
35	Ironâ€Catalysed Markovnikov Hydrothiolation of Styrenes. Advanced Synthesis and Catalysis, 2012, 354, 678-687.	4.3	65
36	Synthesis of Supported Planar Iron Oxide Nanoparticles and Their Chemo- and Stereoselectivity for Hydrogenation of Alkynes. ACS Catalysis, 2017, 7, 3721-3729.	11.2	63

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37	Reusable Gold(I) Catalysts with Unique Regioselectivity for Intermolecular Hydroamination of Alkynes. Advanced Synthesis and Catalysis, 2009, 351, 2876-2886.	4.3	61
38	Few layer 2D pnictogens catalyze the alkylation of soft nucleophiles with esters. Nature Communications, 2019, 10, 509.	12.8	61
39	Lattice Opening upon Bulk Reductive Covalent Functionalization of Black Phosphorus. Angewandte Chemie - International Edition, 2019, 58, 5763-5768.	13.8	60
40	Partial Reduction and Selective Transfer of Hydrogen Chloride on Catalytic Gold Nanoparticles. Angewandte Chemie - International Edition, 2017, 56, 6435-6439.	13.8	58
41	A soluble polyethyleneglycol-anchored phosphine as a highly active, reusable ligand for Pd-catalyzed couplings of aryl chlorides: comparison with cross and non-cross-linked polystyrene and silica supports. Tetrahedron, 2007, 63, 7097-7111.	1.9	55
42	Confined Pt₁¹⁺ Water Clusters in a MOF Catalyze the Lowâ€Temperature Waterâ€“Gas Shift Reaction with both CO₂ Oxygen Atoms Coming from Water. Angewandte Chemie - International Edition, 2018, 57, 17094-17099.	13.8	54
43	Unique distal size selectivity with a digold catalyst during alkyne homocoupling. Nature Communications, 2015, 6, 6703.	12.8	51
44	Self-Assembly of Catalytically Active Supramolecular Coordination Compounds within Metalâ€“Organic Frameworks. Journal of the American Chemical Society, 2019, 141, 10350-10360.	13.7	50
45	Chemoselective hydroboration of alkynes vs. alkenes over gold catalysts. Chemical Communications, 2009, , 4947.	4.1	48
46	Gold(I) Catalyzes the Intermolecular Hydroamination of Alkynes with Imines and Produces Î±,Î±â€²,<i>N</i>-Triarylbisenamines: Studies on Their Use As Intermediates in Synthesis. Journal of Organic Chemistry, 2010, 75, 7769-7780.	3.2	48
47	Ironâ€Catalysed Regioâ€•and Stereoselective Headâ€toâ€Tail Dimerisation of Styrenes. Advanced Synthesis and Catalysis, 2010, 352, 1571-1576.	4.3	46
48	A Ligandâ€Free Pt₃ Cluster Catalyzes the Markovnikov Hydrosilylation of Alkynes with up to 10⁶ Turnover Frequencies. Chemistry - A European Journal, 2017, 23, 1702-1708.	3.3	45
49	Very Small (3â€“6 Atoms) Gold Cluster Catalyzed Carbonâ€“Carbon and Carbonâ€“Heteroatom Bondâ€Forming Reactions in Solution. ChemCatChem, 2013, 5, 3509-3515.	3.7	43
50	Multisite Organicâ€“Inorganic Hybrid Catalysts for the Direct Sustainable Synthesis of GABAergic Drugs. Angewandte Chemie - International Edition, 2014, 53, 8687-8690.	13.8	43
51	Heterogeneous Baylisâ€“Hillman using a polystyrene-bound 4-(N-benzyl-N-methylamino)pyridine as reusable catalyst. Chemical Communications, 2003, , 2806-2807.	4.1	42
52	Reactivity of Electron-Deficient Alkynes on Gold Nanoparticles. ACS Catalysis, 2013, 3, 1865-1873.	11.2	42
53	Regioirregular and catalytic Mizorokiâ€“Heck reactions. Nature Catalysis, 2021, 4, 293-303.	34.4	42
54	Copper(I)-catalyzed hydrophosphination of styrenes. Journal of Organometallic Chemistry, 2011, 696, 362-367.	1.8	41

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55	A fluoride-catalyzed solâ€“gel route to catalytically active non-ordered mesoporous silica materials in the absence of surfactants. Journal of Materials Chemistry, 2005, 15, 1742.	6.7	39
56	Beyond Acid Strength in Zeolites: Soft Framework Counteranions for Stabilization of Carbocations on Zeolites and Its Implication in Organic Synthesis. Angewandte Chemie - International Edition, 2015, 54, 5658-5661.	13.8	39
57	Generation and Reactivity of Electron-Rich Carbenes on the Surface of Catalytic Gold Nanoparticles. Journal of the American Chemical Society, 2018, 140, 3215-3218.	13.7	39
58	Facile Synthesis of Surface-Clean Monodispersed CuOx Nanoparticles and Their Catalytic Properties for Oxidative Coupling of Alkynes. ACS Catalysis, 2016, 6, 2211-2221.	11.2	38
59	Synthesis of Organicâˆ’Inorganic Hybrid Solids with Copper Complex Framework and Their Catalytic Activity for the S-Arylation and the Azideâˆ’Alkyne Cycloaddition Reactions. ACS Catalysis, 2011, 1, 147-158.	11.2	37
60	Cationic Gold Catalyzes Ï‰-Bromination of Terminal Alkynes and Subsequent Hydroaddition Reactions. ACS Catalysis, 2011, 1, 601-606.	11.2	34
61	Iron(III) Triflimide as a Catalytic Substitute for Gold(I) in Hydroaddition Reactions to Unsaturated Carbonâ€“Carbon Bonds. Chemistry - A European Journal, 2013, 19, 8627-8633.	3.3	34
62	Bifunctional solid catalysts for chemoselective hydrogenationâ€“cyclisationâ€“amination cascade reactions of relevance for the synthesis of pharmaceuticals. Tetrahedron, 2010, 66, 8203-8209.	1.9	33
63	Hydrolaseâ€“like catalysis and structural resolution of natural products by a metalâ€“organic framework. Nature Communications, 2020, 11, 3080.	12.8	33
64	Oxyhalogenation of Activated Arenes with Nanocrystalline Ceria. ACS Catalysis, 2013, 3, 250-258.	11.2	32
65	Stabilized Ru[(H₂O)₆]³⁺ in Confined Spaces (MOFs and Zeolites) Catalyzes the Imination of Primary Alcohols under Atmospheric Conditions with Wide Scope. ACS Catalysis, 2018, 8, 10401-10406.	11.2	31
66	Partially oxidized gold nanoparticles: A catalytic base-free system for the aerobic homocoupling of alkynes. Journal of Catalysis, 2014, 315, 6-14.	6.2	30
67	Synthesis of the <i>ortho</i>/<i>meta</i>/<i>para</i> Isomers of Relevant Pharmaceutical Compounds by Coupling a Sonogashira Reaction with a Regioselective Hydration. ACS Catalysis, 2014, 4, 722-731.	11.2	30
68	Intermolecular Carbonylâ€“olefin Metathesis with Vinyl Ethers Catalyzed by Homogeneous and Solid Acids in Flow. Angewandte Chemie - International Edition, 2020, 59, 3846-3849.	13.8	30
69	Total Synthesis of Isoâ€•and Bongkrekic Acids: Natural Antibiotics Displaying Potent Antiapoptotic Properties. Chemistry - A European Journal, 2011, 17, 329-343.	3.3	29
70	Formation and stability of 3â€“5 atom gold clusters from gold complexes during the catalytic reaction: dependence on ligands and counteranions. Chemical Communications, 2013, 49, 7782.	4.1	29
71	Selective semi-hydrogenation of internal alkynes catalyzed by Pdâ€“CaCO3 clusters. Journal of Catalysis, 2022, 408, 43-55.	6.2	29
72	A bifunctional palladium/acid solid catalyst performs the direct synthesis of cyclohexylanilines and dicyclohexylamines from nitrobenzenes. Chemical Communications, 2013, 49, 8160.	4.1	27

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73	Electrochemiluminescence of a Periodic Mesoporous Organosilica Containing 9,10-Diarylanthracene Units. Journal of Physical Chemistry C, 2007, 111, 7532-7538.	3.1	26
74	Synthesis of Densely Packaged, Ultrasmall Pt⁰₂ Clusters within a Thioetherâ€Functionalized MOF: Catalytic Activity in Industrial Reactions at Low Temperature. Angewandte Chemie, 2018, 130, 6294-6299.	2.0	22
75	One pot synthesis of cyclohexanone oxime from nitrobenzene using a bifunctional catalyst. Chemical Communications, 2014, 50, 1645-1647.	4.1	21
76	Cyclic metal(oid) clusters control platinum-catalysed hydrosilylation reactions: from soluble to zeolite and MOF catalysts. Chemical Science, 2020, 11, 8113-8124.	7.4	20
77	Bimetallic nanosized solids with acid and redox properties for catalytic activation of Câ€“C and Câ€“H bonds. Chemical Science, 2017, 8, 689-696.	7.4	18
78	Sub-nanometre metal clusters for catalytic carbonâ€“carbon and carbonâ€“heteroatom cross-coupling reactions. Dalton Transactions, 2017, 46, 15987-15990.	3.3	15
79	Controlling the softness?hardness of Pd by strong metal?zeolite interaction: cyclisation of diallylmalonate as a test reaction. Journal of Catalysis, 2004, 225, 350-358.	6.2	14
80	Palladium catalyzed cycloisomerization of 2,2-diallylmalonates in imidazolium ionic liquids. Journal of Organometallic Chemistry, 2005, 690, 3529-3534.	1.8	14
81	Ship-in-a-bottle synthesis of triphenylamine inside faujasite supercages and generation of the triphenylamminium radical ion. Tetrahedron, 2005, 61, 791-796.	1.9	14
82	Fewâ€layer Black Phosphorous Catalyzes Radical Additions to Alkenes Faster than Lowâ€valence Metals. ChemCatChem, 2020, 12, 2226-2232.	3.7	14
83	A Career in Catalysis: Avelino Corma. ACS Catalysis, 2022, 12, 7054-7123.	11.2	14
84	A new synthesis of (âˆ’)-epipyriculol: a phytotoxic metabolite. Tetrahedron, 2008, 64, 4711-4717.	1.9	13
85	The wet synthesis and quantification of ligand-free sub-nanometric Au clusters in solid matrices. Chemical Communications, 2017, 53, 1116-1119.	4.1	13
86	GitterÃ¶ffnung durch reduktive kovalente Volumenâ€Funktionalisierung von schwarzem Phosphor. Angewandte Chemie, 2019, 131, 5820-5826.	2.0	12
87	Acid Catalysis with Alkane/Water Microdroplets in Ionic Liquids. Jacs Au, 2021, 1, 786-794.	7.9	12
88	Parts-Per-Million of Soluble Pd⁰ Catalyze the Semi-Hydrogenation Reaction of Alkynes to Alkenes. Journal of Organic Chemistry, 2023, 88, 18-26.	3.2	12
89	Electrochemical monitoring of the oxidative coupling of alkynes catalyzed by triphenylphosphine gold complexes. Electrochemistry Communications, 2012, 19, 145-148.	4.7	11
90	Functionalised butanediacetal-protected 1,2-diols as suitable partners for Pd-catalysed cross-coupling reactions. Tetrahedron, 2008, 64, 2348-2358.	1.9	10

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91	Partial Reduction and Selective Transfer of Hydrogen Chloride on Catalytic Gold Nanoparticles. Angewandte Chemie, 2017, 129, 6535-6539.	2.0	10
92	Nanoceria as a recyclable catalyst/support for the cyanosilylation of ketones and alcohol oxidation in cascade. Journal of Catalysis, 2020, 392, 21-28.	6.2	9
93	Radical Î±â€"alkylation of ketones with unactivated alkenes under catalytic and sustainable industrial conditions. Applied Catalysis A: General, 2021, 613, 118021.	4.3	9
94	Disassembling Metal Nanocrystallites into Subâ€nanometric Clusters and Lowâ€faceted Nanoparticles for Multisite Catalytic Reactions. ChemCatChem, 2017, 9, 1429-1435.	3.7	8
95	Partsâ€"perâ€"million of ruthenium catalyze the selective chainâ€"walking reaction of terminal alkenes. Nature Communications, 2022, 13, .	12.8	8
96	Supercritical CO2 as a superior solvent for the cyclization of diallylmalonate catalyzed by palladium-containing zeolites. Tetrahedron, 2004, 60, 8131-8135.	1.9	7
97	Intermolecular Carbonylâ€"olefin Metathesis with Vinyl Ethers Catalyzed by Homogeneous and Solid Acids in Flow. Angewandte Chemie, 2020, 132, 3874-3877.	2.0	7
98	Crystallographic Visualization of a Double Water Molecule Addition on a Pt 1 â€MOF during the Lowâ€temperature Waterâ€Gas Shift Reaction. ChemCatChem, 2021, 13, 1195-1200.	3.7	7
99	Preparation and photochemical properties of p-phenylene oligomers encapsulated within faujasite Y. Physical Chemistry Chemical Physics, 2004, 6, 201-204.	2.8	6
100	MOFâ€Stabilized Perfluorinated Palladium Cages Catalyze the Additiveâ€Free Aerobic Oxidation of Aliphatic Alcohols to Acids. Chemistry - A European Journal, 2022, 28, .	3.3	6
101	Nanotitania catalyzes the chemoselective hydration and alkoxylation of epoxides. Molecular Catalysis, 2021, 515, 111927.	2.0	5
102	Confined Pt₁¹⁺ Water Clusters in a MOF Catalyze the Lowâ€Temperature Waterâ€"Gas Shift Reaction with both CO₂ Oxygen Atoms Coming from Water. Angewandte Chemie, 2018, 130, 17340-17345.	2.0	4
103	Zeolites Catalyze the Nazarov Reaction and the tert-Butylation of Alcohols by Stabilization of Carboxonium Intermediates. Synthesis, 2020, 52, 2031-2037.	2.3	3
104	Epoxidation vs. dehydrogenation of allylic alcohols: Heterogenization of the VO(acac)2 catalyst in a metal-organic framework. Chemical Communications, 2022, , .	4.1	2
105	Ligand-free subnanometre gold metal clusters and their applications. Catalysis, 0, , 21-40.	1.0	2
106	Solidâ€"catalyzed esterification reaction of longâ€"chain acids and alcohols in fixedâ€"bed reactors at pilot plant scale. Chemical Engineering and Processing: Process Intensification, 2022, 178, 109038.	3.6	2
107	Ligand-Free Sub-Nanometer Metal Clusters in Catalysis. Molecular Catalysis, 2020, , 1-37.	1.3	0
108	Zeolites catalyze selective reactions of large organic molecules. Advances in Catalysis, 2021, 69, 59-102.	0.2	0

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109	Click amidations, esterifications and oneâ€“pot reactions catalyzed by Cu salts and multimetalâ€“organic frameworks (Mâ€“MOFs). Molecular Catalysis, 2022, 522, 112228.	2.0	0