alain Roucoux

List of Publications by Year
in descending order

108 papers	5,105 citations	109311 35 h-index	91872 69 g-index
124 all docs	124 docs citations	124 times ranked	4701 citing authors

#	Article	IF	Citations
1	Reduced Transition Metal Colloids:â€‰ A Novel Family of Reusable Catalysts?. Chemical Reviews, 2002, 102, 3757-3778.	47.7	1,783
2	Stabilized Rhodium(0) Nanoparticles: A Reusable Hydrogenation Catalyst for Arene Derivatives in a Biphasic Water-Liquid System. Chemistry - A European Journal, 2000, 6, 618-624.	3.3	188
3	Arene Hydrogenation with a Stabilised Aqueous Rhodium(0) Suspension: A Major Effect of the Surfactant Counter-Anion. Advanced Synthesis and Catalysis, 2003, 345, 222-229.	4.3	122
4	Surfactant-Stabilized Aqueous Iridium(0) Colloidal Suspension: An Efficient Reusable Catalyst for Hydrogenation of Arenes in Biphasic Media. Advanced Synthesis and Catalysis, 2004, 346, 72-76.	4.3	120
5	Unprecedented efficient hydrogenation of arenes in biphasic liquidâ€"liquid catalysis by re-usable aqueous colloidal suspensions of rhodium. Chemical Communications, 1999, , 535-536.	4.1	85
6	Supramolecular shuttle and protective agent: a multiple role of methylated cyclodextrins in the chemoselective hydrogenation of benzene derivatives with ruthenium nanoparticles. Chemical Communications, 2006, , 296-298.	4.1	84
7	Cyclodextrin-based systems for the stabilization of metallic(0) nanoparticles and their versatile applications in catalysis. Catalysis Today, 2014, 235, 20-32.	4.4	83
8	A simple and reproducible method for the synthesis of silica-supported rhodium nanoparticles and their investigation in the hydrogenation of aromatic compounds. New Journal of Chemistry, 2006, 30, 1214-1219.	2.8	77
9	Nanoheterogeneous Catalytic Hydrogenation of Arenes: Evaluation of the Surfactantâ€Stabilized Aqueous Ruthenium(0) Colloidal Suspension. Advanced Synthesis and Catalysis, 2007, 349, 2326-2330.	4.3	71
10	Rhodium Nanocatalysts Stabilized by Various Bipyridine Ligands in Nonaqueous Ionic Liquids: Influence of the Bipyridine Coordination Modes in Arene Catalytic Hydrogenation. Inorganic Chemistry, 2008, 47, 9090-9096.	4.0	70
11	Synthesis of Bipyridineâ€Stabilized Rhodium Nanoparticles in Nonâ€Aqueous Ionic Liquids: A New Efficient Approach for Arene Hydrogenation with Nanocatalysts. Advanced Synthesis and Catalysis, 2008, 350, 153-159.	4.3	67
12	Experimental and theoretical evidences of the influence of hydrogen bonding on the catalytic activity of a series of 2-hydroxy substituted quaternary ammonium salts in the styrene oxide/CO2 coupling reaction. Journal of Catalysis, 2016, 333, 29-39.	6.2	66
13	Amidophosphineâˆ'Phosphinites:â€‰ Synthesis and Use in Rhodium-Based Asymmetric Hydrogenation of Activated Keto Compounds. Crystal Structure of Bis[(Î¼-chloro)((S)-2-((diphenylphosphino)oxy)-2-phenyl-) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 252 Td (N-(diphenylphosphino)	2.3	65
14	Methylated cyclodextrins: an efficient protective agent in water for zerovalent ruthenium nanoparticles and a supramolecular shuttle in alkene and arene hydrogenation reactions. Dalton Transactions, 2007, , 5714.	3.3	65
15	Diphosphite ligands derived from carbohydrates as stabilizers for ruthenium nanoparticles: promising catalytic systems in arene hydrogenation. Chemical Communications, 2008, , 2759.	4.1	65
16	Catalytically active nanoparticles stabilized by hostâ€"guest inclusion complexes in water. Chemical Communications, 2009, , 1228.	4.1	59
17	Rh(0) colloids supported on TiO2: a highly active and pertinent tandem in neat water for the hydrogenation of aromatics. Green Chemistry, 2011, 13, 1766.	9.0	57
18	Aqueous Rhodium Colloidal Suspension in Reduction of Arene Derivatives in Biphasic System: a Significant Physico-chemical Role of Surfactant Concentration on Catalytic Activity. Advanced Synthesis and Catalysis, 2002, 344, 266-269.	4.3	54

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19	Carbohydrateâ€Derived 1,3â€Diphosphite Ligands as Chiral Nanoparticle Stabilizers: Promising Catalytic Systems for Asymmetric Hydrogenation. ChemSusChem, 2009, 2, 769-779.	6.8	54
20	PTAâ€Stabilized Ruthenium and Platinum Nanoparticles: Characterization and Investigation in Aqueous Biphasic Hydrogenation Catalysis. European Journal of Inorganic Chemistry, 2012, 2012, 1229-1236.	2.0	51
21	New ammonium surfactant-stabilized rhodium(0) colloidal suspensions: Influence of novel counter-anions on physico-chemical and catalytic properties. Dalton Transactions, 2011, 40, 6524.	3.3	48
22	About the Use of Rhodium Nanoparticles in Hydrogenation and Hydroformylation Reactions. Current Organic Chemistry, 2013, 17, 364-399.	1.6	47
23	Enantioselective hydrogenation of ethyl pyruvate in biphasic liquid?liquid media by reusable surfactant-stabilized aqueous suspensions of platinum nanoparticles. Journal of Catalysis, 2004, 225, 1-6.	6.2	46
24	Stabilized Noble Metal Nanoparticles: An Unavoidable Family of Catalysts for Arene Derivative Hydrogenation. , 0, , 261-279.		43
25	TiO2-supported Rh nanoparticles: From green catalyst preparation to application in arene hydrogenation in neat water. Green Chemistry, 2010, 12, 1167.	9.0	42
26	New alkylarylamidophosphinephosphinites as chiral diphosphines for asymmetric hydrogenation of activated keto compounds. Tetrahedron: Asymmetry, 1993, 4, 2279-2282.	1.8	41
27	Organic phase stabilization of rhodium nanoparticle catalyst by direct phase transfer from aqueous solution to room temperature ionic liquid based on surfactant counter anion exchange. Chemical Communications, 2005, , 2838.	4.1	41
28	Highly Efficient Asymmetric Hydrogenation of Activated and Unactivated Ketones Catalyzed by Rhodium(I) Aminophosphine- and Amidophosphine-Phosphinite Complexes. Beneficial Effect of the Non Chiral Ligand. Synlett, 1995, 1995, 358-360.	1.8	40
29	Polyhydroxylated ammonium chloride salt: a new efficient surfactant for nanoparticles stabilisation in aqueous media. Characterization and application in catalysis. Dalton Transactions, 2009, , 7356.	3.3	40
30	Competitive hydrogenation/dehalogenation of halogenoarenes with surfactant-stabilized aqueous suspensions of rhodium and palladium colloids: A major effect of the metal nature. Journal of Molecular Catalysis A, 2007, 266, 221-225.	4.8	39
31	N-Donor ligands based on bipyridine and ionic liquids: an efficient partnership to stabilize rhodium colloids. Focus on oxygen-containing compounds hydrogenation. Physical Chemistry Chemical Physics, 2011, 13, 13510.	2.8	39
32	Synthesis and Characterization of the â€œSulfur-Richâ€• Bis(perthiobenzoato)(dithiobenzoato)technetium(III) Heterocomplex. Inorganic Chemistry, 2002, 41, 598-601.	4.0	38
33	Nanoheterogeneous catalytic hydrogenation of N-, O- or S-heteroaromatic compounds by re-usable aqueous colloidal suspensions of rhodium(0). Inorganica Chimica Acta, 2004, 357, 3099-3103.	2.4	38
34	Alkyl sulfonated diphosphines-stabilized ruthenium nanoparticles as efficient nanocatalysts in hydrogenation reactions in biphasic media. Catalysis Today, 2012, 183, 34-41.	4.4	38
35	Magnetically Recoverable Palladium(0) Nanocomposite Catalyst for Hydrogenation Reactions in Water. ChemCatChem, 2015, 7, 309-315.	3.7	37
36	Reduced forms of Rh(III) containing MCM-41 silicas as hydrogenation catalysts for arene derivatives. Journal of Molecular Catalysis A, 2006, 259, 91-98.	4.8	36

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37	Imidazolium-functionalized bipyridine derivatives: a promising family of ligands for catalytical Rh(0) colloids. Tetrahedron Letters, 2009, 50, 6531-6533.	1.4	36
38	Methylated Î²â€Cyclodextrinâ€Capped Ruthenium Nanoparticles: Synthesis Strategies, Characterization, and Application in Hydrogenation Reactions. ChemCatChem, 2013, 5, 1497-1503.	3.7	36
39	Cyclodextrins as growth controlling agents for enhancing the catalytic activity of PVP-stabilized Ru(0) nanoparticles. Chemical Communications, 2012, 48, 3451.	4.1	35
40	Ruthenium colloids: A new catalyst for alkane oxidation by tBHP in a biphasic water-organic phase system. Tetrahedron Letters, 1998, 39, 1353-1356.	1.4	34
41	Carbonâ€Supported Ruthenium Nanoparticles Stabilized by Methylated Cyclodextrins: A New Family of Heterogeneous Catalysts for the Gasâ€Phase Hydrogenation of Arenes. Chemistry - A European Journal, 2008, 14, 8090-8093.	3.3	34
42	Rhodium Colloidal Suspensions Stabilised by Polyâ€Nâ€donor Ligands in Nonâ€Aqueous Ionic Liquids: Preliminary Investigation into the Catalytic Hydrogenation of Arenes. ChemSusChem, 2008, 1, 984-987.	6.8	33
43	Toluene total oxidation over Pd and Au nanoparticles supported on hydroxyapatite. Comptes Rendus Chimie, 2016, 19, 525-537.	0.5	33
44	A surfactant-assisted preparation of well dispersed rhodium nanoparticles within the mesopores of AlSBA-15: characterization and use in catalysis. Chemical Communications, 2008, , 2920.	4.1	32
45	Development and biodistribution of 188 Re-SSS lipiodol following injection into the hepatic artery of healthy pigs. European Journal of Nuclear Medicine and Molecular Imaging, 2004, 31, 542-546.	6.4	31
46	Chiral Ammoniumâ€Capped Rhodium(0) Nanocatalysts: Synthesis, Characterization, and Advances in Asymmetric Hydrogenation in Neat Water. ChemSusChem, 2012, 5, 91-101.	6.8	30
47	Efficient Ruthenium Nanocatalysts in Liquidâ€"Liquid Biphasic Hydrogenation Catalysis: Towards a Supramolecular Control through a Sulfonated Diphosphineâ€"Cyclodextrin Smart Combination. ChemCatChem, 2013, 5, 3802-3811.	3.7	29
48	Ca(CF3COO)2: An efficient Lewis acid catalyst for chemo- and regio-selective enamination of Î²-dicarbonyl compounds. Catalysis Communications, 2010, 11, 442-446.	3.3	28
49	Simple procedure for vacant POM-stabilized palladium (0) nanoparticles in water: structural and dispersive effects of lacunary polyoxometalates. RSC Advances, 2014, 4, 26491-26498.	3.6	28
50	Magnetically Retrievable Rh(0) Nanocomposite as Relevant Catalyst for Mild Hydrogenation of Functionalized Arenes in Water. ACS Sustainable Chemistry and Engineering, 2016, 4, 1834-1839.	6.7	28
51	Model arenes hydrogenation with silica-supported rhodium nanoparticles: The role of the silica grains and of the solvent on catalytic activities. Catalysis Communications, 2009, 10, 1235-1239.	3.3	27
52	Moving from surfactant-stabilized aqueous rhodium (0) colloidal suspension to heterogeneous magnetite-supported rhodium nanocatalysts: Synthesis, characterization and catalytic performance in hydrogenation reactions. Catalysis Today, 2012, 183, 124-129.	4.4	27
53	Rhodium(I) bis(aminophosphane) complexes as catalysts for asymmetric hydrogenation of activated ketones. Tetrahedron: Asymmetry, 1996, 7, 379-382.	1.8	25
54	Tandem dehalogenationâ€"hydrogenation reaction of halogenoarenes as model substrates of endocrine disruptors in water: Rhodium nanoparticles in suspension vs. on silica support. Applied Catalysis A: General, 2011, 394, 215-219.	4.3	25

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55	Chemically modified cyclodextrins as supramolecular tools to generate carbon-supported ruthenium nanoparticles: An application towards gas phase hydrogenation. Applied Catalysis A: General, 2011, 391, 334-341.	4.3	24
56	Water soluble polymerâ€“surfactant complexes-stabilized Pd(0) nanocatalysts: Characterization and structureâ€“activity relationships in biphasic hydrogenation of alkenes and Î±,Î²-unsaturated ketones. Journal of Catalysis, 2016, 340, 144-153.	6.2	23
57	Efficient catalytic ozonation by ruthenium nanoparticles supported on SiO 2 or TiO 2 : Towards the use of a non-woven fiber paper as original support. Chemical Engineering Journal, 2016, 289, 374-381.	12.7	23
58	Novel access to verbenone via ruthenium nanoparticles-catalyzed oxidation of Î±-pinene in neat water. Applied Catalysis A: General, 2018, 550, 266-273.	4.3	23
59	Synthesis of new hydrophilic phosphines by addition of diphenylphosphine on activated alkenes: characterization of their rhodium complexes. Journal of Organometallic Chemistry, 1996, 509, 9-14.	1.8	22
60	Catalytic Oxidation Processes for the Upgrading of Terpenes: State-of-the-Art and Future Trends. Catalysts, 2019, 9, 893.	3.5	21
61	Synthesis of new functionalized polymers and their use as stabilizers of Pd, Pt, and Rh nanoparticles. Preliminary catalytic studies. Journal of Applied Polymer Science, 2007, 105, 2772-2782.	2.6	20
62	Rhodium colloidal suspension deposition on porous silica particles by dry impregnation: Study of the influence of the reaction conditions on nanoparticles location and dispersion and catalytic reactivity. Chemical Engineering Journal, 2009, 151, 372-379.	12.7	18
63	Noble Metal Nanoparticles Stabilized by Cyclodextrins: A Pertinent Partnership for Catalytic Applications. Current Organic Chemistry, 2010, 14, 1266-1283.	1.6	18
64	Using click chemistry to access mono- and ditopic Î²-cyclodextrin hosts substituted by chiral amino acids. Carbohydrate Research, 2011, 346, 210-218.	2.3	18
65	From Hydroxyalkylammonium Salts to Protected-Rh(0) Nanoparticles for Catalysis in Water: Comparative Studies of the Polar Heads. Topics in Catalysis, 2013, 56, 1220-1227.	2.8	18
66	Catalytic Synthesis of (R) and (S) citronellol by homogeneous hydrogenation over amidophosphinephosphinite and diaminodiphosphine rhodium complexes. Tetrahedron: Asymmetry, 1995, 6, 369-370.	1.8	17
67	Synthesis, properties and spectroscopic studies of rhenium(v) complexes stabilized by tridentate Schiff bases derived from S-methyl dithiocarbazate. Dalton Transactions RSC, 2001, , 3603-3610.	2.3	17
68	Novel six-coordinate oxorhenium(V) â€˜3+2â€™ mixed-ligand complexes carrying the SNO/SN donor atom set. Inorganica Chimica Acta, 2002, 332, 30-36.	2.4	17
69	<i>N</i>â€Methylephedrium Salts as Chiral Surfactants for Asymmetric Hydrogenation in Neat Water with Rhodium(0) Nanocatalysts. ChemSusChem, 2010, 3, 1276-1279.	6.8	17
70	Ruthenium Trichloride Catalyst in Water: Ru Colloids versus Ru Dimer Characterization Investigations. Inorganic Chemistry, 2019, 58, 4141-4151.	4.0	16
71	Rhenium-188 and technetium-99m nitridobis(N-ethoxy-N-ethyldithiocarbamate) leucocyte labelling radiopharmaceuticals: [188ReN(NOET)2] and [99mTcN(NOET)2], NOET = Et(EtO)NCS2: Their in vitro localization and chemical behaviour. Nuclear Medicine and Biology, 1997, 24, 701-705.	0.6	15
72	Synthesis and characterization of the bis(trithioperoxybenzoate)(dithiobenzoate)rhenium(III) hetero complex. Inorganic Chemistry Communication, 1999, 2, 230-233.	3.9	15

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73	Î²-Cyclodextrins grafted with chiral amino acids: A promising supramolecular stabilizer of nanoparticles for asymmetric hydrogenation?. Applied Catalysis A: General, 2013, 467, 497-503.	4.3	15
74	Odyssey in Polyphasic Catalysis by Metal Nanoparticles. Chemical Record, 2016, 16, 2127-2141.	5.8	15
75	Development of 99mTc labelled Lipiodol: biodistribution following injection into the hepatic artery of the healthy pig. Nuclear Medicine Communications, 2004, 25, 291-297.	1.1	14
76	N-(2-hydroxyethyl)ammonium derivatives as protective agents for Pd(0) nanocolloids and catalytic investigation in Suzuki reactions in aqueous media. Catalysis Communications, 2008, 10, 68-70.	3.3	14
77	Importance of counter-ion nature in aryl sulfonated ligands: An improvement in two-phase catalysis. Journal of Molecular Catalysis A, 1997, 118, 153-159.	4.8	12
78	Highly Selective Cycloalkane Oxidation in Water with Ruthenium Nanoparticles. ChemCatChem, 2016, 8, 357-362.	3.7	10
79	Selective palladium nanoparticles-catalyzed hydrogenolysis of industrially targeted epoxides in water. Journal of Catalysis, 2021, 396, 261-268.	6.2	10
80	The complex [ReO{HNN(CH3)CS2CH3}2]Cl, a suitable precursor for the preparation of bis(dithiocarbamato)nitridorhenium(V) species. Journal of Organometallic Chemistry, 1999, 575, 145-148.	1.8	9
81	Synthesis, spectroscopic studies and molecular structure of original halogeno-[S-methyl 3-(2-hydroxyphenylethylidene)dithiocarbazato]oxoâ€"rhenium(V) complexes. Polyhedron, 1999, 18, 2537-2541.	2.2	9
82	Chelated Hydrazido(3âˆ')rhenium(V) Complexes:Â On the Way to the Nitridoâˆ'M(V) Core (M = Tc, Re). Inorganic Chemistry, 2002, 41, 1591-1597.	4.0	9
83	New and tunable hydroxylated driving agents for the production of tailor-made gold nanorods. RSC Advances, 2013, 3, 18292.	3.6	9
84	Tunable hydroxylated surfactants: an efficient toolbox towards anisotropic gold nanoparticles. RSC Advances, 2014, 4, 25875-25879.	3.6	9
85	Active hydrogenation Rh nanocatalysts protected by new self-assembled supramolecular complexes of cyclodextrins and surfactants in water. RSC Advances, 2016, 6, 108125-108131.	3.6	9
86	Multigram Scale-up of the Selective Hydrogenation of Î±-Pinene with Ruthenium Nanoparticles in Water. ACS Sustainable Chemistry and Engineering, 2020, 8, 5985-5993.	6.7	9
87	Sensory and motor attentional modulation during the manual gap effect in humans: a high-density ERP study. Experimental Brain Research, 2002, 142, 385-394.	1.5	8
88	From hydroxycetylammonium salts to their chiral counterparts. A library of efficient stabilizers of Rh(0) nanoparticles for catalytic hydrogenation in water. Catalysis Today, 2015, 247, 90-95.	4.4	8
89	Catalytic carbon-carbon coupling reaction in biphasic liquid-liquid systems: Mechanistic aspects in vitamin E precursor synthesis. Applied Catalysis A: General, 1997, 156, 347-357.	4.3	7
90	Synthesis and characterization of new99mTc-radiopharmaceuticals with dithiobenzoate derivatives for the study of septic inflammatory processes. Journal of Labelled Compounds and Radiopharmaceuticals, 2003, 46, 319-331.	1.0	7

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91	2-Aminopyridineâ€"a label for bridging of oligosaccharides HPLC profiling and glycoarray printing. Glycoconjugate Journal, 2008, 25, 11-14.	2.7	7
92	Development of a Sustainable Heterogeneous Catalyst Based on an Open-Cell Glass Foam Support: Application in Gas-Phase Ozone Decomposition. ACS Sustainable Chemistry and Engineering, 2020, 8, 2854-2864.	6.7	7
93	Studies of technetium-99m nitridobisdithiocarboxylate leucocyte specific radiopharmaceutical: [99mTcN(DTCX)2], DTCX = CH3(CH2)8CS2. the cellular and subcellular distribution in human blood cells, and chemical behaviour. synthesis of the analogous rhenium-188 radiopharmaceutical. Nuclear Medicine and Biology, 1999, 26, 225-231.	0.6	6
94	Calcium trifluoroacetate as an efficient catalyst for ring-opening of epoxides by amines under solvent-free conditions. Acta Chimica Slovenica, 2014, 61, 67-72.	0.6	6
95	Novel and Sustainable Catalytic Ruthenium-Doped Glass Foam for Thermocatalytic Oxidation of Volatile Organic Compounds: An Experimental and Modeling Study. Industrial & Engineering Chemistry Research, 2020, 59, 14758-14766.	3.7	5
96	New Bis(dithiocarboxylato)Nitridotechnetium-99m Radiopharmaceuticals for Leucocyte Labelling: In Vitro and In Vivo Studies. Nuclear Medicine and Biology, 1997, 24, 439-445.	0.6	5
97	Synthesis, characterization and blood cell labelling evaluation of new 99mTc nitrido radiopharmaceuticals with thioamide [R1C(=S)NHR2] derivatives. Journal of Labelled Compounds and Radiopharmaceuticals, 1998, 41, 863-869.	1.0	4
98	CHAPTER 6. Ammonium Surfactant-capped Rh(0) Nanoparticles for Biphasic Hydrogenation. RSC Catalysis Series, 0, , 99-111.	0.1	4
99	Simulation and optimization of the removal of toluene in air by ozonation with a catalytic open-cell foam. Chemical Engineering Research and Design, 2021, 168, 453-464.	5.6	3
100	Impact of the charge transfer process on the Fe2+/Fe3+distribution at Fe3O4 magnetic surface induced by deposited Pd clusters. Surface Science, 2021, 712, 121879.	1.9	3
101	Stabilized Rhodium(0) Nanoparticles: A Reusable Hydrogenation Catalyst for Arene Derivatives in a Biphasic Water-Liquid System. Chemistry - A European Journal, 2000, 6, 618-624.	3.3	3
102	Highly Selective and Multigram Hydrogenation of Citral into Citronellal by Palladium Nanoparticles in Water. ACS Sustainable Chemistry and Engineering, 2022, 10, 5500-5506.	6.7	3
103	Organometallic synthesis of water-soluble ruthenium nanoparticles in the presence of sulfonated diphosphines and cyclodextrins. Materials Research Society Symposia Proceedings, 2014, 1675, 219-225.	0.1	2
104	Reduced Transition Metal Colloids: A Novel Family of Reusable Catalysts?. ChemInform, 2003, 34, no.	0.0	1
105	Remediation of Diethyl Phthalate in Aqueous Effluents with TiO2-Supported Rh0 Nanoparticles as Multicatalytic Materials. Catalysts, 2021, 11, 1166.	3.5	1
106	The Solubility of Some Azafullerene Derivatives. Fullerenes, Nanotubes, and Carbon Nanostructures, 1999, 7, 757-768.	0.6	0
107	Influence of the location of Rh(0) particles within MCM-41 materials on the selectivity of hydrogenation reactions. Studies in Surface Science and Catalysis, 2007, 165, 729-732.	1.5	0
108	Investigation of the role of stabilizing agent molecules in the heterogeneous nucleation of rhodium(0) nanoparticles onto Al-SBA-15 supports. Studies in Surface Science and Catalysis, 2010, , 145-152.	1.5	0