Sebastien Tilloy

List of Publications by Year
in descending order

100 papers	3,602 citations	101384 36 h-index	155451 55 g-index
115 all docs	115 docs citations	115 times ranked	3030 citing authors

#	Article	IF	Citations
1	Cyclodextrins as Supramolecular Hosts for Organometallic Complexes. Chemical Reviews, 2006, 106, 767-781.	23.0	394
2	Recent breakthroughs in aqueous cyclodextrin-assisted supramolecular catalysis. Catalysis Science and Technology, 2014, 4, 1899.	2.1	100
3	A further breakthrough in biphasic, rhodium-catalyzed hydroformylation: the use of Per(2,6-di-O-methyl)-Î²-cyclodextrin as inverse phase transfer catalyst. Tetrahedron Letters, 1995, 36, 9481-9484.	0.7	97
4	Cyclodextrins as Emerging Therapeutic Tools in the Treatment of Cholesterol-Associated Vascular and Neurodegenerative Diseases. Molecules, 2016, 21, 1748.	1.7	94
5	Behavior of Î±-, Î²-, and Î³-Cyclodextrins and Their Derivatives on an in Vitro Model of Blood-Brain Barrier. Journal of Pharmacology and Experimental Therapeutics, 2004, 310, 745-751.	1.3	93
6	Cyclodextrins and their applications in aqueous-phase metal-catalyzed reactions. Comptes Rendus Chimie, 2011, 14, 149-166.	0.2	92
7	Biphasic aqueous organometallic catalysis promoted by cyclodextrins: Can surface tension measurements explain the efficiency of chemically modified cyclodextrins?. Journal of Colloid and Interface Science, 2007, 307, 481-487.	5.0	77
8	Unconventional media and technologies for starch etherification and esterification. Green Chemistry, 2018, 20, 1152-1168.	4.6	75
9	Rhodium catalyzed hydroformylation of water insoluble olefins in the presence of chemically modified Î²-cyclodextrins: evidence for ligand-cyclodextrin interactions and effect of various parameters on the activity and the aldehydes selectivity. Journal of Molecular Catalysis A, 2001, 176, 105-116.	4.8	70
10	Sulfonated Xantphos Ligand and Methylated Cyclodextrin:Â A Winning Combination for Rhodium-Catalyzed Hydroformylation of Higher Olefins in Aqueous Medium. Organometallics, 2005, 24, 2070-2075.	1.1	66
11	Deep eutectic solvents as green absorbents of volatile organic pollutants. Environmental Chemistry Letters, 2017, 15, 747-753.	8.3	66
12	High-Pressure31P{1H}â€...NMR Studies of RhH(CO)(TPPTS)3 in the Presence of Methylated Cyclodextrins: New Light on Rhodium-Catalyzed Hydroformylation Reaction Assisted by Cyclodextrins. Advanced Synthesis and Catalysis, 2004, 346, 425-431.	2.1	59
13	Wacker oxidation of various olefins in the presence of per(2,6-di-O-methyl)-Î²-cyclodextrin: mechanistic investigations of a multistep catalysis in a solvent-free two-phase system. Journal of Molecular Catalysis A, 1996, 109, 27-35.	4.8	58
14	Chemically Modified Cyclodextrins: An Attractive Class of Supramolecular Hosts for the Development of Aqueous Biphasic Catalytic Processes. Sustainability, 2009, 1, 924-945.	1.6	55
15	Chemically modified Î²-cyclodextrins in biphasic catalysis: a fruitful contribution of the hostâ€"guest chemistry to the transition-metal catalyzed reactions. Catalysis Today, 1999, 48, 245-253.	2.2	54
16	Cyclodextrins as inverse phase transfer catalysts for the biphasic catalytic hydrogenation of aldehydes: a green and easy alternative to conventional mass transfer promoters. Green Chemistry, 2002, 4, 188-193.	4.6	53
17	Cyclodextrins or Calixarenes: What is the Best Mass Transfer Promoter for Suzuki Cross-Coupling Reactions in Water?. Advanced Synthesis and Catalysis, 2004, 346, 83-89.	2.1	53
18	Self-Assembled Supramolecular Bidentate Ligands for Aqueous Organometallic Catalysis. Angewandte Chemie - International Edition, 2007, 46, 3040-3042.	7.2	53

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19	An N-heterocyclic carbene ligand based on a Î²-cyclodextrinâ€“imidazolium salt: synthesis, characterization of organometallic complexes and Suzuki coupling. New Journal of Chemistry, 2011, 35, 2061.	1.4	53
20	Rhodium-Catalyzed Hydroformylation Promoted by Modified Cyclodextrins:Current Scope and Future Developments. Current Organic Synthesis, 2008, 5, 162-172.	0.7	50
21	Low melting mixtures based on Î²-cyclodextrin derivatives and N,Nâ€²-dimethylurea as solvents for sustainable catalytic processes. Green Chemistry, 2014, 16, 3876-3880.	4.6	50
22	Effects of Î³- and Hydroxypropyl-Î³-cyclodextrins on the Transport of Doxorubicin across an in Vitro Model of Blood-Brain Barrier. Journal of Pharmacology and Experimental Therapeutics, 2004, 311, 1115-1120.	1.3	48
23	Methylated Î²-cyclodextrin as P-gp modulators for deliverance of doxorubicin across an in vitro model of bloodâ€“brain barrier. Bioorganic and Medicinal Chemistry Letters, 2006, 16, 2154-2157.	1.0	48
24	First evidence of molecular recognition between cyclodextrins and a water-soluble ligand used in aqueous phase organometallic catalysis. New Journal of Chemistry, 1999, 23, 469-472.	1.4	47
25	Cyclodextrinâ€“phosphane possessing a guest-tunable conformation for aqueous rhodium-catalyzed hydroformylation. Chemical Communications, 2012, 48, 753-755.	2.2	47
26	Catalysis in Cyclodextrin-Based Unconventional Reaction Media: Recent Developments and Future Opportunities. ACS Sustainable Chemistry and Engineering, 2017, 5, 3598-3606.	3.2	46
27	Aqueous rhodium-catalyzed hydroformylation of 1-decene in the presence of randomly methylated Î²-cyclodextrin and 1,3,5-triaza-7-phosphaadamantane derivatives. Applied Catalysis A: General, 2009, 362, 62-66.	2.2	44
28	Functionalized Cyclodextrins as First and Second Coordination Sphere Ligands for Aqueous Organometallic Catalysis. European Journal of Inorganic Chemistry, 2012, 2012, 1571-1578.	1.0	44
29	A very useful and efficient Wacker oxidation of higher Î±-olefins in the presence of per(2,6-di-O-methyl)-Î²-cyclodextrin. Tetrahedron Letters, 1995, 36, 387-388.	0.7	42
30	Chemically modified Î²-cyclodextrins: Efficient supramolecular carriers for the biphasic hydrogenation of water-insoluble aldehydes. Tetrahedron Letters, 1998, 39, 2959-2960.	0.7	41
31	Cyclodextrins as Mass Transfer Additives in Aqueous Organometallic Catalysis. Current Organic Chemistry, 2010, 14, 1296-1307.	0.9	41
32	First Evidence of Cyclodextrin Inclusion Complexes in a Deep Eutectic Solvent. ACS Sustainable Chemistry and Engineering, 2019, 7, 6345-6351.	3.2	41
33	Diametrically Opposed Carbenes on an Î±â€Cyclodextrin: Synthesis, Characterization of Organometallic Complexes and Suzukiâ€“Miyaura Coupling in Ethanol and in Water. European Journal of Organic Chemistry, 2013, 2013, 3691-3699.	1.2	40
34	Thermodynamic insight into the origin of the inclusion of monosulfonated isomers of triphenylphosphine into the Î²-cyclodextrin cavity. Carbohydrate Research, 2002, 337, 281-287.	1.1	39
35	Heptakis(2,3-di-O-methyl-6-O-sulfopropyl)-Î²-cyclodextrin: A Genuine Supramolecular Carrier for Aqueous Organometallic Catalysis. Advanced Synthesis and Catalysis, 2006, 348, 379-386.	2.1	38
36	Hydroformylation of 1-decene in aqueous medium catalysed by rhodiumâ€“alkyl sulfonated diphosphines system in the presence of methylated cyclodextrins. How the flexibility of the diphosphine backbone influences the regioselectivity. New Journal of Chemistry, 2006, 30, 377.	1.4	37

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37	Aqueous hydroformylation reaction mediated by randomly methylated Î²-cyclodextrin: How substitution degree influences catalytic activity and selectivity. Journal of Molecular Catalysis A, 2009, 303, 72-77.	4.8	37
38	Rhodium catalyzed hydroformylation of 1-decene in low melting mixtures based on various cyclodextrins and N,Nâ€²-dimethylurea. Catalysis Communications, 2015, 63, 62-65.	1.6	37
39	Ruthenium-containing Î²-cyclodextrin polymer globules for the catalytic hydrogenation of biomass-derived furanic compounds. Green Chemistry, 2015, 17, 2444-2454.	4.6	37
40	Biphasic Aqueous Organometallic Catalysis Promoted by Cyclodextrins: How to Design the Waterâ€Soluble Phenylphosphane to Avoid Interaction with Cyclodextrin. Advanced Synthesis and Catalysis, 2008, 350, 609-618.	2.1	36
41	Title is missing!. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2000, 38, 361-379.	1.6	35
42	Easily Accessible Monoâ€•and Polytopic ÂÎ²â€Cyclodextrin Hosts by Click Chemistry. European Journal of Organic Chemistry, 2008, 2008, 5723-5730.	1.2	35
43	A convenient synthesis of phenylpropanoic acids: the palladium catalyzed hydrocarboxylation of styrene derivatives in a two-phase system. Journal of Molecular Catalysis A, 1999, 138, 53-57.	4.8	33
44	One and Two-dimensional NMR Investigations of the Inclusion of the Monosulfonated Triphenylphosphine in the Î²-cyclodextrin. Supramolecular Chemistry, 2002, 14, 11-20.	1.5	33
45	Molecular Recognition Between a Water-Soluble Organometallic Complex and a ?-Cyclodextrin: First Example of Second-Sphere Coordination Adducts Possessing a Catalytic Activity. Advanced Synthesis and Catalysis, 2004, 346, 1449-1456.	2.1	33
46	Synthesis, Rhodium Complexes and Catalytic Applications of a New Waterâ€Soluble Triphenylphosphaneâ€Modified Î²â€Cyclodextrin. Advanced Synthesis and Catalysis, 2011, 353, 1325-1334.	2.1	32
47	Chemically ModifiedÎ²-Cyclodextrins as Supramolecular Carriers in the Biphasic Palladium-Catalyzed Cleavage of Allylic Carbonates: Activity Enhancement and Substrate-Selective Catalysis. European Journal of Organic Chemistry, 1999, 1999, 3127-3129.	1.2	31
48	Rhodium Complexes Non-Covalently Bound to Cyclodextrins: Novel Water-Soluble Supramolecular Catalysts for the Biphasic Hydroformylation of Higher Olefins. Chemistry - A European Journal, 2005, 11, 6228-6236.	1.7	31
49	Water-Soluble Triphenylphosphane-3,3â€²,3â€²â€²-tricarboxylate (m-TPPTC) Ligand and Methylated Cyclodextrins: A New Combination for Biphasic Rhodium-Catalyzed Hydroformylation of Higher Olefins. Advanced Synthesis and Catalysis, 2006, 348, 1547-1552.	2.1	30
50	Cyclodextrin/Amphiphilic Phosphane Mixed Systems and their Applications in Aqueous Organometallic Catalysis. Advanced Synthesis and Catalysis, 2012, 354, 1337-1346.	2.1	30
51	New Phosphane Based on a Î²â€Cyclodextrin, Exhibiting a Solventâ€Tunable Conformation, and its Catalytic Properties. Chemistry - A European Journal, 2010, 16, 10195-10201.	1.7	29
52	Complexation of Phosphine Ligands with Peracetylated Î²-Cyclodextrin in Supercritical Carbon Dioxide:Â Spectroscopic Determination of Equilibrium Constants. Journal of Physical Chemistry B, 2007, 111, 2573-2578.	1.2	28
53	A cyclodextrin dimer as a supramolecular reaction platform for aqueous organometallic catalysis. Chemical Communications, 2013, 49, 6989.	2.2	28
54	Î²-Cyclodextrins Decrease Cholesterol Release and ABC-Associated Transporter Expression in Smooth Muscle Cells and Aortic Endothelial Cells. Frontiers in Physiology, 2016, 7, 185.	1.3	28

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55	Unexpected Effect of Cyclodextrins on Water-Soluble Rhodium Complexes. European Journal of Inorganic Chemistry, 2003, 2003, 595-599.	1.0	27
56	Properties and Catalytic Activities of New Easilyâ€Made Amphiphilic Phosphanes for Aqueous Organometallic Catalysis. Advanced Synthesis and Catalysis, 2010, 352, 1193-1203.	2.1	27
57	Recent developments in cyclodextrinâ€mediated aqueous biphasic hydroformylation and tsujiâ€"trost reactions. Applied Organometallic Chemistry, 2015, 29, 580-587.	1.7	26
58	Convenient synthesis of new amphiphilic triphenylphosphine analogues for aqueous biphasic catalysis. Tetrahedron Letters, 2001, 42, 8837-8840.	0.7	24
59	Aqueous biphasic hydroformylation in the presence of cyclodextrins mixtures: evidence of a positive synergistic effect. Dalton Transactions, 2012, 41, 8643.	1.6	24
60	Î²-Cyclodextrins modified by alkyl and poly(ethylene oxide) chains: A novel class of mass transfer additives for aqueous organometallic catalysis. Journal of Molecular Catalysis A, 2010, 318, 8-14.	4.8	23
61	Carboxylated polymers functionalized by cyclodextrins for the stabilization of highly efficient rhodium(0) nanoparticles in aqueous phase catalytic hydrogenation. Dalton Transactions, 2012, 41, 13359.	1.6	23
62	Phosphane-Based Cyclodextrins as Mass Transfer Agents and Ligands for Aqueous Organometallic Catalysis. Molecules, 2012, 17, 13062-13072.	1.7	21
63	Enhance the rheological and mechanical properties of clayey materials by adding starches. Construction and Building Materials, 2017, 139, 602-610.	3.2	21
64	Synthesis and characterization of a new photoinduced switchable Î²-cyclodextrin dimer. Beilstein Journal of Organic Chemistry, 2014, 10, 2874-2885.	1.3	20
65	Water-soluble phosphane-substituted cyclodextrin as an effective bifunctional additive in hydroformylation of higher olefins. Catalysis Science and Technology, 2017, 7, 3823-3830.	2.1	20
66	A Propertyâ€Matched Waterâ€Soluble Analogue of the Benchmark Ligand PPh₃. ChemSusChem, 2008, 1, 631-636.	3.6	19
67	Robust Mesoporous CoMo/Î³-Al₂O₃ Catalysts from Cyclodextrin-Based Supramolecular Assemblies for Hydrothermal Processing of Microalgae: Effect of the Preparation Method. ACS Applied Materials & Interfaces, 2018, 10, 12562-12579.	4.0	18
68	Rhodium-Catalyzed Aqueous Biphasic Olefin Hydroformylation Promoted by Amphiphilic Cyclodextrins. Catalysts, 2020, 10, 56.	1.6	18
69	Continuous hydroformylation of 1-decene in an aqueous biphasic system enabled by methylated cyclodextrins. Green Chemistry, 2020, 22, 3809-3819.	4.6	18
70	Hydrohydroxymethylation of Ethyl Ricinoleate and Castor Oil. ACS Sustainable Chemistry and Engineering, 2021, 9, 9444-9454.	3.2	18
71	Comparative Raman spectroscopy study of sulfonate-substituted triphenylphosphines. Vibrational Spectroscopy, 1999, 20, 165-172.	1.2	17
72	Complexation of Monosulfonated Triphenylphosphine with Chemically Modified Î²-Cyclodextrins: Effect of Substituents on the Stability of Inclusion Complexes. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2005, 51, 79-85.	1.6	17

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73	Ring opening polymerization of Îµ-caprolactone in the presence of wet Î²-cyclodextrin: effect of the operative pressure and of water molecules in the Î²-cyclodextrin cavity. RSC Advances, 2016, 6, 90290-90299.	1.7	17
74	Rhodium catalyzed hydroformylation assisted by cyclodextrins in biphasic medium: Can sulfonated naphthylphosphanes lead to active, selective and recyclable catalytic species?. Catalysis Today, 2015, 247, 47-54.	2.2	15
75	Supramolecular Trapping of Phosphanes by Cyclodextrins: A General Approach to Generate Phosphane Coordinatively Unsaturated Organometallic Complexes. European Journal of Inorganic Chemistry, 2006, 2006, 1611-1619.	1.0	14
76	Cyclodextrins Modified by Metal-Coordinating Groups for Aqueous Organometallic Catalysis: What Remains to be Done?. Current Organocatalysis, 2015, 3, 24-31.	0.3	14
77	Title is missing!. Journal of Inclusion Phenomena and Macrocyclic Chemistry, 2002, 42, 269-274.	1.6	13
78	New Lipidyl-Cyclodextrins Obtained by Ring Opening of Methyl Oleate Epoxide Using Ball Milling. Biomolecules, 2020, 10, 339.	1.8	13
79	Multiscale Structure of Starches Grafted with Hydrophobic Groups: A New Analytical Strategy. Molecules, 2020, 25, 2827.	1.7	13
80	Complexation of monosulfonated triphenylphosphine oxides with Î²-cyclodextrin: spectroscopic study and consequence on the behaviour of cyclodextrins in aqueous-phase organometallic catalysis. New Journal of Chemistry, 2003, 27, 1603-1608.	1.4	12
81	Reductive Hydroformylation of Isosorbide Diallyl Ether. Molecules, 2021, 26, 7322.	1.7	11
82	Adamantoylated monosaccharides: new compounds for modification of the properties of cyclodextrin-containing materials. Carbohydrate Research, 2005, 340, 1461-1468.	1.1	10
83	Water-soluble diphosphadiazacyclooctanes as ligands for aqueous organometallic catalysis. Catalysis Communications, 2012, 29, 77-81.	1.6	10
84	Hydroformylation in Aqueous Biphasic Media Assisted by Molecular Receptors. Topics in Current Chemistry, 2013, 342, 49-78.	4.0	8
85	Anionic Amphiphilic Cyclodextrins Bearing Oleic Grafts for the Stabilization of Ruthenium Nanoparticles Efficient in Aqueous Catalytic Hydrogenation. ChemCatChem, 2020, 12, 1013-1018.	1.8	8
86	New water-soluble Schiff base ligands based on Î²-cyclodextrin for aqueous biphasic hydroformylation reaction. Pure and Applied Chemistry, 2018, 90, 845-855.	0.9	7
87	Aqueous Biphasic Hydroaminomethylation Enabled by Methylated Cyclodextrins: Sensitivity Analysis for Transfer into a Continuous Process. ACS Sustainable Chemistry and Engineering, 2021, 9, 273-283.	3.2	7
88	Interesterification of triglycerides with methyl acetate for biodiesel production using a cyclodextrin-derived SnO@Î³-Al2O3 composite as heterogeneous catalyst. Fuel, 2022, 321, 124026.	3.4	7
89	Interaction of waterâ€soluble triphenylphosphines with Î²â€cyclodextrin: a quantum chemistry study. Journal of Physical Organic Chemistry, 2011, 24, 1129-1135.	0.9	6
90	Oleic Acid Based Cyclodextrins for the Development of New Hydrosoluble Amphiphilic Compounds. European Journal of Organic Chemistry, 2019, 2019, 1236-1241.	1.2	6

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91	Synthesis of 2-Hydroxydodecyl Starch Ethers: Importance of the Purification Process. Industrial & Engineering Chemistry Research, 2019, 58, 2437-2444.	1.8	5
92	Transition Metal Complexes Coordinated by Water Soluble Phosphane Ligands: How Cyclodextrins Can Alter the Coordination Sphere?. Molecules, 2017, 22, 140.	1.7	4
93	Highly Waterâ€Soluble Amphiphilic Cyclodextrins Bearing Branched and Cyclic Oleic Grafts. European Journal of Organic Chemistry, 2019, 2019, 4863-4868.	1.2	4
94	Unnatural cyclodextrins can be accessed from enzyme-mediated dynamic combinatorial libraries. Chemical Communications, 2022, 58, 2287-2290.	2.2	4
95	Tetrasulfonated 1,2â€Bis(diphenylphosphanyl)ethane as a Building Block for the Synthesis of Disulfonated Alkyldiphenylphosphanes. European Journal of Organic Chemistry, 2015, 2015, 5509-5512.	1.2	2
96	Cleavage of Benzyl Phosphonium Salts as Efficient Bypass for the Synthesis of Disulfonated Alkyldiphenylphosphanes Bearing an Oleumâ€Sensitive Alkyl Group. European Journal of Organic Chemistry, 2016, 2016, 3322-3325.	1.2	2
97	Epimerization of isosorbide catalyzed by homogeneous ruthenium-phosphine complexes: A new step towards an industrial process. Inorganica Chimica Acta, 2021, 515, 120094.	1.2	2
98	Asymmetric hydrogenation of ethyl pyruvate over aqueous dispersed Pt nanoparticles stabilized by a cinchonidine-functionalized Î²-cyclodextrin. Catalysis Communications, 2021, 150, 106272.	1.6	2
99	Rhodium-Catalyzed Hydroformylation Promoted by Modified Cyclodextrins: Current Scope and Future Developments. , 2013, , 36-63.		2
100	Phosphocontaining Cyclodextrins as a New Class of Supramolecular Structures. Phosphorus, Sulfur and Silicon and the Related Elements, 2002, 177, 1489-1492.	0.8	0