

Thibault Cantat

List of Publications by Year in descending order

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112
papers

7,546
citations

50276

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137
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137
docs citations

137
times ranked

5875
citing authors

#	ARTICLE	IF	CITATIONS
1	A Diagonal Approach to Chemical Recycling of Carbon Dioxide: Organocatalytic Transformation for the Reductive Functionalization of CO ₂ . <i>Angewandte Chemie - International Edition</i> , 2012, 51, 187-190.	13.8	487
2	Cover Picture: A Diagonal Approach to Chemical Recycling of Carbon Dioxide: Organocatalytic Transformation for the Reductive Functionalization of CO ₂ (Angew. Chem. Int. Ed. 1/2012). <i>Angewandte Chemie - International Edition</i> , 2012, 51, 1-1.	13.8	454
3	Reductive functionalization of CO ₂ with amines: an entry to formamide, formamidine and methylamine derivatives. <i>Green Chemistry</i> , 2015, 17, 157-168.	9.0	339
4	Recycling of Carbon and Silicon Wastes: Room Temperature Formylation of N-H Bonds Using Carbon Dioxide and Polymethylhydrosiloxane. <i>Journal of the American Chemical Society</i> , 2012, 134, 2934-2937.	13.7	337
5	CO ₂ as a C1-building block for the catalytic methylation of amines. <i>Chemical Science</i> , 2013, 4, 2127.	7.4	310
6	Uranium azide photolysis results in C-H bond activation and provides evidence for a terminal uranium nitride. <i>Nature Chemistry</i> , 2010, 2, 723-729.	13.6	202
7	Carbon Dioxide Reduction to Methylamines under Metal-Free Conditions. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 12186-12190.	13.8	171
8	The U-C Double Bond: Synthesis and Study of Uranium Nucleophilic Carbene Complexes. <i>Journal of the American Chemical Society</i> , 2009, 131, 963-972.	13.7	163
9	Iron-catalyzed hydrosilylation of CO ₂ : CO ₂ conversion to formamides and methylamines. <i>Catalysis Science and Technology</i> , 2014, 4, 1529-1533.	4.1	152
10	Convergent reductive depolymerization of wood lignin to isolated phenol derivatives by metal-free catalytic hydrosilylation. <i>Energy and Environmental Science</i> , 2015, 8, 2734-2743.	30.8	146
11	Metal-Free Reduction of CO ₂ with Hydroboranes: Two Efficient Pathways at Play for the Reduction of CO ₂ to Methanol. <i>Chemistry - A European Journal</i> , 2014, 20, 7098-7106.	3.3	145
12	Redox control of a polymerization catalyst by changing the oxidation state of the metal center. <i>Chemical Communications</i> , 2011, 47, 9897.	4.1	138
13	New mono- and bis-carbene samarium complexes: synthesis, X-ray crystal structures and reactivity. <i>Chemical Communications</i> , 2005, , 5178.	4.1	130
14	Structural and kinetic effects of chloride ions in the palladium-catalyzed allylic substitutions. <i>Journal of Organometallic Chemistry</i> , 2003, 687, 365-376.	1.8	125
15	Complete Catalytic Deoxygenation of CO ₂ into Formamidine Derivatives. <i>ChemCatChem</i> , 2013, 5, 117-120.	3.7	124
16	Exploring the Uranyl Organometallic Chemistry: From Single to Double Uranium-Carbon Bonds. <i>Journal of the American Chemical Society</i> , 2011, 133, 6162-6165.	13.7	123
17	A Bis(thiophosphinoyl)methanediide Palladium Complex: Coordinated Dianion or Nucleophilic Carbene Complex?. <i>Angewandte Chemie - International Edition</i> , 2004, 43, 6382-6385.	13.8	118
18	Evidence for the Involvement of 5f Orbitals in the Bonding and Reactivity of Organometallic Actinide Compounds: Thorium(IV) and Uranium(IV) Bis(hydrazonato) Complexes. <i>Journal of the American Chemical Society</i> , 2008, 130, 17537-17551.	13.7	118

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19	Bis-phosphorus stabilised carbene complexes. Dalton Transactions, 2008, , 1957.	3.3	117
20	Bridging Amines with CO ₂ : Organocatalyzed Reduction of CO ₂ to Aminals. ACS Catalysis, 2015, 5, 3983-3987.	11.2	115
21	Creating Added Value with a Waste: Methylation of Amines with CO ₂ and H ₂ . Angewandte Chemie - International Edition, 2014, 53, 2543-2545.	13.8	110
22	Phosphorus-Stabilized Geminal Dianions. Organometallics, 2006, 25, 4965-4976.	2.3	108
23	Convenient access to the anhydrous thorium tetrachloride complexes ThCl ₄ (DME) ₂ , ThCl ₄ (1,4-dioxane) ₂ and ThCl ₄ (THF) _{3.5} using commercially available and inexpensive starting materials. Chemical Communications, 2010, 46, 919.	4.1	107
24	U ₄ (1,4-dioxane) ₂ , [U ₄ (1,4-dioxane)] ₂ , and U ₃ (1,4-dioxane) _{1.5} : Stable and Versatile Starting Materials for Low- and High-Valent Uranium Chemistry. Organometallics, 2011, 30, 2031-2038.	2.3	106
25	Depolymerization of Waste Plastics to Monomers and Chemicals Using a Hydrosilylation Strategy Facilitated by Brookhart's Iridium(III) Catalyst. ACS Sustainable Chemistry and Engineering, 2018, 6, 10481-10488.	6.7	106
26	Efficient metal-free hydrosilylation of tertiary, secondary and primary amides to amines. Chemical Communications, 2014, 50, 9349-9352.	4.1	104
27	Thulium Alkylidene Complexes: Synthesis, X-ray Structures, and Reactivity. Organometallics, 2006, 25, 1329-1332.	2.3	101
28	Catalytic methylation of aromatic amines with formic acid as the unique carbon and hydrogen source. Chemical Communications, 2014, 50, 14033-14036.	4.1	95
29	Room Temperature Organocatalyzed Reductive Depolymerization of Waste Polyethers, Polyesters, and Polycarbonates. ChemSusChem, 2015, 8, 980-984.	6.8	92
30	Unprecedented organocatalytic reduction of lignin model compounds to phenols and primary alcohols using hydrosilanes. Chemical Communications, 2014, 50, 862-865.	4.1	79
31	Synthesis, Reactivity, and DFT Studies of S ² C ² S Zirconium(IV) Complexes. Organometallics, 2006, 25, 6030-6038.	2.3	78
32	A Bis(thiophosphinoyl)methylene Ruthenium Carbene Complex: Synthesis, X-ray Crystal Structure, and DFT Calculations of Its Thermally Promoted Reverse σ -Hydride Migration Process. Organometallics, 2005, 24, 4838-4841.	2.3	77
33	Uranium(IV) Nucleophilic Carbene Complexes. Organometallics, 2011, 30, 2957-2971.	2.3	77
34	Efficient Disproportionation of Formic Acid to Methanol Using Molecular Ruthenium Catalysts. Angewandte Chemie - International Edition, 2014, 53, 10466-10470.	13.8	77
35	Synthesis of Aromatic Sulfones from SO ₂ and Organosilanes Under Metal-free Conditions. Angewandte Chemie - International Edition, 2017, 56, 5616-5619.	13.8	77
36	Challenging the Metallocene Dominance in Actinide Chemistry with a Soft PNP Pincer Ligand: New Uranium Structures and Reactivity Patterns. Angewandte Chemie - International Edition, 2009, 48, 3681-3684.	13.8	76

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37	A Viewpoint on Chemical Reductions of Carbon–Oxygen Bonds in Renewable Feedstocks Including CO ₂ and Biomass. ACS Catalysis, 2017, 7, 2107-2115.	11.2	75
38	From a Stable Dianion to a Stable Carbenoid. Angewandte Chemie - International Edition, 2007, 46, 5947-5950.	13.8	72
39	A Mild Protocol To Generate Uranium(IV) Mixed-Ligand Metallocene Complexes using Copper(I) Iodide. Organometallics, 2008, 27, 5371-5378.	2.3	63
40	Actinide Redox-Active Ligand Complexes: Reversible Intramolecular Electron-Transfer in U(dpp-BIAN) ₂ /U(dpp-BIAN) ₂ (THF). Inorganic Chemistry, 2010, 49, 924-933.	4.0	62
41	Metal-free dehydrogenation of formic acid to H ₂ and CO ₂ using boron-based catalysts. Chemical Science, 2015, 6, 2938-2942.	7.4	60
42	A six-carbon 10 π -electron aromatic system supported by group 3 metals. Nature Communications, 2013, 4, 1448.	12.8	57
43	A Joint Experimental and Theoretical Study of the Palladium-Catalyzed Electrophilic Allylation of Aldehydes. Journal of Organic Chemistry, 2007, 72, 4228-4237.	3.2	47
44	Revisiting the Chemistry of the Actinocenes [(f ⁸ -C ₈ H ₈) ₂ An] (An = U, Th) with Neutral Lewis Bases. Access to the Bent Sandwich Complexes [(f ⁸ -C ₈ H ₈) ₂ An(L)] with Thorium (L = py, 4,4'-bipy, Tj ETQq0 0 0 rgBT /Overlock	13.7	44
45	Dynamic Carbon Isotope Exchange of Pharmaceuticals with Labeled CO ₂ . Journal of the American Chemical Society, 2019, 141, 780-784.	13.7	44
46	Transition-Metal-Free Carbon Isotope Exchange of Phenyl Acetic Acids. Angewandte Chemie - International Edition, 2020, 59, 13490-13495.	13.8	44
47	What a Difference a 5f Element Makes: Trivalent and Tetravalent Uranium Halide Complexes Supported by One and Two Bis[2-(diisopropylphosphino)-4-methylphenyl]amido (PNP) Ligands. Inorganic Chemistry, 2009, 48, 2114-2127.	4.0	42
48	Complexes of the tripodal phosphine ligands PhSi(XPPH ₂) ₃ (X =) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 307 Td CO ₂ . Dalton Transactions, 2016, 45, 14774-14788.	3.3	40
49	Titanium(IV) Trifluoromethyl Complexes: New Perspectives on Bonding from Organometallic Fluorocarbon Chemistry. Organometallics, 2012, 31, 1484-1499.	2.3	37
50	Synergistic effects in ambiphilic phosphino-borane catalysts for the hydroboration of CO ₂ . Chemical Communications, 2016, 52, 7553-7555.	4.1	35
51	Structural Insights into the Nature of Fe ⁰ and Fe ^I Low-Valent Species Obtained upon the Reduction of Iron Salts by Aryl Grignard Reagents. Inorganic Chemistry, 2017, 56, 3834-3848.	4.0	34
52	Efficient reductive depolymerization of hardwood and softwood lignins with Brookhart's iridium(III) catalyst and hydrosilanes. Green Chemistry, 2018, 20, 1981-1986.	9.0	32
53	Titanocene and zirconocene complexes of a phosphorus analog of an Arduengo's carbene: Application in the synthesis of 1,3-diphosphafulvenes. Chemical Communications, 2004, , 1274-1275.	4.1	29
54	Silyl Formates as Surrogates of Hydrosilanes and Their Application in the Transfer Hydrosilylation of Aldehydes. Angewandte Chemie - International Edition, 2016, 55, 14096-14100.	13.8	29

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55	CO ₂ Conversion into Esters by Fluoride-Mediated Carboxylation of Organosilanes and Halide Derivatives. <i>Chemistry - A European Journal</i> , 2016, 22, 2930-2934.	3.3	29
56	Experimental and theoretical study of phosphinine sulfides. <i>New Journal of Chemistry</i> , 2007, 31, 1493.	2.8	28
57	A N-aryloxy- λ^2 -diketiminato ligand in 4d, 4f and 5f-metals complexes. <i>Dalton Transactions</i> , 2012, 41, 11980.	3.3	28
58	Pushing Back the Limits of Hydrosilylation: Unprecedented Catalytic Reduction of Organic Ureas to Formamidines. <i>ChemCatChem</i> , 2013, 5, 3552-3556.	3.7	28
59	Breaking C=O Bonds with Uranium: Uranyl Complexes as Selective Catalysts in the Hydrosilylation of Aldehydes. <i>ACS Catalysis</i> , 2019, 9, 9025-9033.	11.2	28
60	A Bis(thiophosphinoyl)methanediide Palladium Complex: Coordinated Dianion or Nucleophilic Carbene Complex?. <i>Angewandte Chemie</i> , 2004, 116, 6542-6545.	2.0	27
61	EPR and DFT studies of the one-electron reduction product of phospholium cations. <i>Physical Chemistry Chemical Physics</i> , 2006, 8, 862-868.	2.8	27
62	Carbonylation of C ^N Bonds in Tertiary Amines Catalyzed by Low-Valent Iron Catalysts. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 10884-10887.	13.8	27
63	Arene-Bridged Dithorium Complexes: Inverse Sandwiches Supported by a δ Bonding Interaction. <i>Journal of the American Chemical Society</i> , 2020, 142, 21292-21297.	13.7	27
64	Bimetallic Cleavage of Aromatic C-H Bonds by Rare-Earth-Metal Complexes. <i>Journal of the American Chemical Society</i> , 2014, 136, 17410-17413.	13.7	26
65	Formation and Structure of a Stable Monoradical Cation by Reduction of a Diphosphafulvenium Salt. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 7036-7039.	13.8	24
66	Synthesis of <i>N</i> -Aryloxy- λ^2 -diketiminato Ligands and Coordination to Zirconium, Ytterbium, Thorium, and Uranium. <i>Organometallics</i> , 2013, 32, 1328-1340.	2.3	24
67	Selective Reduction of Secondary Amides to Imines Catalysed by Schwartz's Reagent**. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	24
68	The Effect of Chloride Ions on the Mechanism of the Oxidative Addition of Cyclic Allylic Carbonates to Pd ⁰ Complexes by Formation of Neutral[(η -1-allyl)PdClL ₂] Complexes. <i>European Journal of Organic Chemistry</i> , 2005, 2005, 4277-4286.	2.4	23
69	Synthesis of a stable radical anion via the one electron reduction of a 1,1-bis-phosphinosulfide alkene derivative. <i>Chemical Communications</i> , 2008, , 874-876.	4.1	22
70	Activation of SO ₂ by N/Si ⁺ and N/B Frustrated Lewis Pairs: Experimental and Theoretical Comparison with CO ₂ Activation. <i>Chemistry - A European Journal</i> , 2019, 25, 8118-8126.	3.3	22
71	Nitrite complexes of uranium and thorium. <i>Chemical Communications</i> , 2013, 49, 2412.	4.1	20
72	Metal-free disproportionation of formic acid mediated by organoboranes. <i>Chemical Science</i> , 2016, 7, 5680-5685.	7.4	20

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73	Catalytic hydrosilylation of oxalic acid: chemoselective formation of functionalized C ₂ -products. <i>Catalysis Science and Technology</i> , 2014, 4, 2230-2234.	4.1	18
74	Silylation of O-H bonds by catalytic dehydrogenative and decarboxylative coupling of alcohols with silyl formates. <i>Chemical Communications</i> , 2017, 53, 11697-11700.	4.1	18
75	SO ₂ conversion to sulfones: development and mechanistic insights of a sulfonylative Hiyama cross-coupling. <i>Chemical Communications</i> , 2019, 55, 12924-12927.	4.1	18
76	Additive-Free Formic Acid Dehydrogenation Catalyzed by a Cobalt Complex. <i>Organometallics</i> , 2021, 40, 565-569.	2.3	18
77	Reductive depolymerization of polyesters and polycarbonates with hydroboranes by using a lanthanum(III) tris(amide) catalyst. <i>Chemical Communications</i> , 2022, 58, 2830-2833.	4.1	17
78	Metal-Free and Alkali-Metal-Catalyzed Synthesis of Isooureas from Alcohols and Carbodiimides. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 3084-3088.	13.8	16
79	New anionic and dianionic polydentate systems featuring ancillary phosphinosulfides as ligands in coordination chemistry and catalysis. <i>Comptes Rendus Chimie</i> , 2007, 10, 573-582.	0.5	15
80	A Strained σ -C ^{1/4} C ^{1/4} S Ir Pincer Complex: Intramolecular C-H Activation of an Aromatic Ring. <i>Organometallics</i> , 2009, 28, 1969-1972.	2.3	15
81	Direct Carbon Isotope Exchange of Pharmaceuticals via Reversible Decyanation. <i>Journal of the American Chemical Society</i> , 2021, 143, 5659-5665.	13.7	15
82	Catalytic challenges and strategies for the carbonylation of C-F bonds. <i>Green Chemistry</i> , 2021, 23, 723-739.	9.0	14
83	2,2'-Biphosphinines and 2,2'-Bipyridines in Homoleptic Dianionic Group...4 Complexes and Neutral 2,2'-Biphosphinine Group...6 d ₆ Metal Complexes: Octahedral versus Trigonal-Prismatic Geometries. <i>Chemistry - A European Journal</i> , 2007, 13, 2953-2965.	3.3	13
84	Coordination Behavior of the S-C-S Monoanion and O-C-O and S-C-S Dianions toward Coll. <i>European Journal of Inorganic Chemistry</i> , 2011, 2011, 2540-2546.	2.0	13
85	Synthesis of Aromatic Sulfones from SO ₂ and Organosilanes Under Metal-Free Conditions. <i>Angewandte Chemie</i> , 2017, 129, 5708-5711.	2.0	13
86	Catalytic Disproportionation of Formic Acid to Methanol by using Recyclable Silylformates. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 14019-14023.	13.8	13
87	A Copper(I)-Catalyzed Sulfonylative Hiyama Cross-Coupling. <i>Chemistry - A European Journal</i> , 2021, 27, 18047-18053.	3.3	12
88	Iron-Catalyzed Silylation of Alcohols by Transfer Hydrosilylation with Silyl Formates. <i>Synlett</i> , 2017, 28, 2473-2477.	1.8	11
89	Catalytic Metal-Free Deoxygenation of Nitrous Oxide with Disilanes. <i>ACS Catalysis</i> , 2019, 9, 11563-11567.	11.2	11
90	Copper-Ligand Cooperativity in H ₂ Activation Enables the Synthesis of Copper Hydride Complexes. <i>Organometallics</i> , 2021, 40, 2064-2069.	2.3	11

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91	Reactivity and Structural Diversity in the Reaction of Guanidine 1,5,7-triazabicyclo[4.4.0]decane with CO ₂ , CS ₂ , and Other Heterocumulenes. <i>European Journal of Organic Chemistry</i> , 2017, 2017, 676-686.	2.4	10
92	Carbonylation of C ^N Bonds in Tertiary Amines Catalyzed by Low-Valent Iron Catalysts. <i>Angewandte Chemie</i> , 2019, 131, 11000-11003.	2.0	10
93	Photocatalytic deoxygenation of N=O bonds with rhenium complexes: from the reduction of nitrous oxide to pyridine N-oxides. <i>Chemical Science</i> , 2021, 12, 10266-10272.	7.4	10
94	Silyl Formates as Surrogates of Hydrosilanes and Their Application in the Transfer Hydrosilylation of Aldehydes. <i>Angewandte Chemie</i> , 2016, 128, 14302-14306.	2.0	9
95	Transition-Metal-Free Acceptorless Decarbonylation of Formic Acid Enabled by a Liquid Chemical Looping Strategy. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 17215-17219.	13.8	9
96	Coupling Electrocatalytic CO ₂ Reduction with Thermocatalysis Enables the Formation of a Lactone Monomer. <i>ChemSusChem</i> , 2021, 14, 2198-2204.	6.8	9
97	Unlocking the Catalytic Hydrogenolysis of Chlorosilanes into Hydrosilanes with Superbases. <i>ACS Catalysis</i> , 2021, 11, 10855-10861.	11.2	9
98	Nitrite complexes of the rare earth elements. <i>Dalton Transactions</i> , 2014, 43, 4415-4425.	3.3	8
99	Synthesis, structure and electrochemical behavior of new R _{PONOP} (R = <i>i</i> -Bu, <i>i</i> Pr) pincer complexes of Fe ²⁺ , Co ²⁺ , Ni ²⁺ , and Zn ²⁺ ions. <i>Comptes Rendus Chimie</i> , 2016, 19, 57-70.	0.5	8
100	Metal-Free and Alkali-Metal-Catalyzed Synthesis of Isooureas from Alcohols and Carbodiimides. <i>Angewandte Chemie</i> , 2018, 130, 3138-3142.	2.0	7
101	The Role of (<i>i</i> -t-Bu) ₃ POCOP)Ir(I) and Iridium(III) Pincer Complexes in the Catalytic Hydrogenolysis of Silyl Triflates into Hydrosilanes. <i>Organometallics</i> , 2022, 41, 1786-1796.	2.3	6
102	Additive-free selective methylation of secondary amines with formic acid over a Pd/In ₂ O ₃ catalyst. <i>Catalysis Science and Technology</i> , 2022, 12, 57-61.	4.1	6
103	Transition-Metal-Free Acceptorless Decarbonylation of Formic Acid Enabled by a Liquid Chemical Looping Strategy. <i>Angewandte Chemie</i> , 2019, 131, 17375-17379.	2.0	5
104	Silyl formates as hydrosilane surrogates for the transfer hydrosilylation of ketones. <i>Chemical Communications</i> , 2022, 58, 6308-6311.	4.1	5
105	Uranyl(VI) Triflate as Catalyst for the Meerwein-Ponndorf-Verley Reaction. <i>Inorganic Chemistry</i> , 2021, 60, 16140-16148.	4.0	4
106	Metal-Free Catalytic Hydrogenolysis of Silyl Triflates and Halides into Hydrosilanes**. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	4
107	Catalytic Disproportionation of Formic Acid to Methanol by using Recyclable Silylformates. <i>Angewandte Chemie</i> , 2020, 132, 14123-14127.	2.0	3
108	Transition-Metal-Free Carbon Isotope Exchange of Phenyl Acetic Acids. <i>Angewandte Chemie</i> , 2020, 132, 13592-13597.	2.0	3

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109	Selective Reduction of Secondary Amides to Imines Catalysed by Schwartzâ€™s Reagent. <i>Angewandte Chemie</i> , , .	2.0	3
110	Innentitelbild: Challenging the Metallocene Dominance in Actinide Chemistry with a Soft PNP Pincer Ligand: New Uranium Structures and Reactivity Patterns (<i>Angew. Chem.</i> 20/2009). <i>Angewandte Chemie</i> , 2009, 121, 3594-3594.	2.0	0
111	Inside Cover: Challenging the Metallocene Dominance in Actinide Chemistry with a Soft PNP Pincer Ligand: New Uranium Structures and Reactivity Patterns (<i>Angew. Chem. Int. Ed.</i> 20/2009). <i>Angewandte Chemie - International Edition</i> , 2009, 48, 3542-3542.	13.8	0
112	Metalâ€™Free Catalytic Hydrogenolysis of Silyl Triflates and Halides into Hydrosilanes**. <i>Angewandte Chemie</i> , , .	2.0	0